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To-day the sway of large-scale production and of relatively large establishments is well-nigh absolute in the Sieg district. Rhenish-Westphalian furnaces have also entered this section, some with the assistance of the banks. Here, too, the activity of the coal syndicate has led to the establishment of larger and larger furnaces in combination with mines. The same tendency resulted also in the formation on October 27, 1894, of the association for the sale of Siegerland pig iron (*Verein für den Verkauf von Siegerländer Roheisen*), which in the very same year established secure relations to the Rhenish-Westphalian Pig Iron Syndicate.¹⁸ In other districts, the small blast furnaces and rolling mills were more and more consolidated with the help of the banks, and transformed into "mixed" works. The small concerns in the Sieg district which did not follow their example, and still survive as "pure" works, are engaged in a desperate struggle for mere existence, hovering between life and death. Similar conditions are found in the Lahn and Dill district consisting of parts of Upper Hessa, the administrative districts of Wiesbaden, and the circuit of Wetzlar.¹⁹ The large coal production of the Aix-la-Chapelle region affords a strong basis for the iron furnaces of this region. These, however, draw part of their coal supply also from the Ruhr district. Adjoining the Aix-la-Chapelle district on the east is the Eschweiler coal district, and on the north the Wurm district, the latter, however, presenting less advantages for furnaces.

The adoption of the Bessemer process at the close of the seventies led to the rapid development of the *Aachener Hütten-Aktienverein Rote Erde* into a powerful "mixed"

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steel-making establishment. On the other hand the Hoesch Iron and Steel Company of Dortmund abandoned its plants in the district almost entirely and transferred the main part of its works to Dortmund. In the same way the Phoenix made no progress with its furnace in the Aix-la-Chapelle district. Under the direction of the A. Schaaffhausen'scher Bankverein both works were amalgamated into one establishment in 1903.²⁰

With the continuous assistance of the banks, coal mining in the Ruhr district has developed from small beginnings to a dominant industry in the Rhenish-Westphalian territory, a section well provided both with industrial establishments and banks. Here, as elsewhere, the higher prices, established by the coal and coke syndicates and particularly by the Rhenish-Westphalian coal syndicate founded March 1, 1893, were the immediate occasion for the furnaces to acquire their own coal mines, a movement which won for them their increasing supremacy over the concerns which have remained "pure" iron works. In 1896 the Phoenix acquired the Westende mine; the Dortmunder Union—the Adolf von Hanseemann mine (*Mengeder Bergwerksgesellschaft*); in 1897 the *Gelsenkirchener Bergwerksaktiengesellschaft*, the leader of the coal syndicate, acquired the Westhausen mine; the *Aktiengesellschaft Kannengiesser*—the Roland mine. All these mines had been independent of the syndicate.

Hoesch, Krupp, and the Rhenish Steel Works followed suit by buying up syndicate mines, a movement in which the banks were often the intermediaries. At first they attempted to secure through legal proceedings the right to divert the coal production of their newly acquired

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properties for their own use. When this proved ineffective they were soon able to secure this right by agreement. The syndicate had to yield, for these works were in a position to cause it great annoyance.

When the coal syndicate agreement was renewed in 1903—a result brought about largely by the activity of the banks in the open and behind the scenes—all the mines owned by the iron and steel works, except those belonging to the Government, joined the syndicate. The former, however, arranged it so that under the new agreement the syndicate provisions did not apply to their entire output but only to the portion over and above that which was consumed in their own works. On the other hand, however, the owners of the coal mines were prohibited from selling coal fields or pits to other than members of the syndicate without first securing permission from the general convention of coal mine owners.

There remained, however, a point in dispute as to what should be done in the case of the sale of coal mines to furnace owners, for the purpose of supplementing the inadequate supply of coal for use of their own furnaces. The contention of the syndicate was that in such cases the entire output of the newly purchased mines was to be subject to the regulations of the syndicate. The German-Luxemburg Mine and Smelting Stock Company, having bought the Kaiser Friedrich mine for its own use, brought suit against the coal syndicate, and the contention of the syndicate was not upheld by the imperial supreme court. The court took the position of the company, namely, that as much of the output of the newly acquired mine as was needed by the furnace proper might be used without

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restriction. Another case, not regulated directly, is that of a mining company erecting a furnace "in order to find a more profitable use for its coal in the manufacture of pig iron or steel than in the sale of its product to the syndicate."²¹

It should be mentioned, however, that when the syndicate was extended it itself included among its purposes the acquisition of coal fields and mining shares. On the other hand, the syndicate was protected against the sale of coal fields or mining shares to outsiders by the International Exploration Company, through the "benevolent neutrality" of the A. Schaaffhausen'scher Bankverein, which controlled this corporation, a policy which the bank had to adopt, on account of its relations to the companies which dominated the syndicate. There are no coal deposits of any importance in the district which are not held by the International Exploration Company, nor any sites to be had for new plants or for extensions, not even at fanciful prices. Furthermore, for a long time most of the ore has had to be imported from abroad. Here, again, the German banks have repeatedly tried to procure for friendly industrial interests ore mines or ore deliveries at reasonable prices, as, for example, from Sweden.

In the same fashion the banks were active in many ways in the consolidations, out of which sprang the great "mixed" works that to-day dominate the Ruhr district, though some of these, such as *Krupp*, *Bochumer Verein*, *Phoenix*, *Hörder Bergwerks-und-Hüttenverein*, and the *Gute Hoffnungshütte*, were founded as early as the fifties. In the early seventies the *Dortmunder Union*, which enjoyed the patronage of the *Disconto-Gesellschaft*, absorbed the

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Heinrichshütte and the *Neu-Schottland* works, which even then were mixed works. Similarly, it absorbed the Strousberg Works, in which the Disconto-Gesellschaft was likewise interested. In the same way the *Westfälische Union* and the *Westfälischer Drahtindustrie-Verein* absorbed a number of wire works of this district.

The part played by the banks in these consolidations had not been unimportant, but around the middle and toward the end of the seventies their services were called in on a much larger scale. The iron industry was then in a state of prostration, and for years not even the Phoenix and the Bochumer Union paid dividends. The Hörder Verein became involved in great difficulties, and both the Gute Hoffnungshütte and the Rheinische Stahlwerke had to resort to a heavy reduction of their capital. The Westfälische Union was saved from extinction only by the assistance of banks and a reorganization.

In Upper Silesia capitalist production did not begin to make progress before the fifties, and even then its advance was slow. For the most part the land and the iron ores were in the hands of the large feudal landowners. Here Borsig was the pioneer in evolving a machine factory into enormous mixed steel works by acquiring or erecting blast furnaces and rolling mills. This example was followed later by the machine factory of Henschel & Son, in Kassel. In the seventies the *Vereinigte Königs- und Laurahütte* and the *Donnersmarck-Hütte* passed out of the ownership of the magnates, who continued, however, to hold by far the larger proportion of the iron furnaces and coal mines. With the aid of the banks, the newly acquired furnace works were organized as stock companies.

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In the same manner "pure" rolling mills were started, as, for instance, the *Bismarckhütte*.

At present the center of gravity of the industry in Upper Silesia is not in its iron production, but in its output of coal and coke.²² This is regulated by the Upper Silesian Coal Convention of 1890. Of the total product approximately two-thirds is sold by two Berlin firms, *Cæsar Wollheim*, intimately connected with the Dresdner Bank, and *Emanuel Friedländer & Co.*, closely allied with the Berliner Handels-Gesellschaft.

In this district, too, it is scarcely possible to-day to acquire coal mines or coal fields. Free competition has been well-nigh "banished from Upper Silesia."²³ Here the mining and metallurgical concerns have always been mixed works. It is therefore only in the works recently established that the movement toward concentration and combination has been closely interwoven with the cartel movement. The concentration and cartel movements have been on a smaller scale in this region than in the Rhenish-Westphalian district, but here, too, the stimulus has come from the banks, which are behind the different establishments. Of these the Borsig Works is the only undertaking still owned privately.

Of the concerns established in recent times the one deserving special mention is the Upper Silesian Iron Manufacturing Stock Company (Caro Hegenscheidt). This company developed in 1887 out of the Caro Works, and is closely related to the Berliner Handels-Gesellschaft. In 1899 it absorbed the Upper Silesian Wire Manufacturing Stock Company, from which it had hitherto been obliged to purchase 25,000 tons of pig iron. Thereafter it was

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able to obtain its pig iron more cheaply, for the wire company had in 1888 contracted for the entire output of the Count Henckel-Siemianowitz Works for a period of twenty years. Since 1889 the Upper Silesian Iron Manufacturing Company has been closely allied by contract with the *Oberschlesische Eisenbahnbedarfs-Gesellschaft* (Upper Silesian Railroad Equipment Company), which is on intimate terms with the Breslauer Disconto-Bank, and through it with the Darmstädter Bank. This equipment company (the so-called *Oberbedarfs-Gesellschaft*) in turn united in 1904 with the *Huldchinsky* furnaces. To all appearances the alliance was made for purely business and technical reasons, and did not call for any significant help from the banks. Similar business policies and technical reasons seem to have been the determining factors in bringing about the community of interest in 1903 between the Bismarckhütte and the Upper Silesian Iron Manufacturing Company, extended in 1904 so as to include the Donnersmarck Bethlen-Falva Hütte.

The same may be said of the community of interest founded in 1904 between the Königs-und Laurahütte (with which are affiliated the banking house of S. Bleichröder and the Dresdner Bank), the Upper Silesian Railway Equipment Company (*Friedenshütte*) (closely related to the Breslauer Disconto-Bank and the Darmstädter Bank), and the *Kattowitzer (Tiele-Winckler'sche) Aktiengesellschaft für Bergbau- und Hüttenbetrieb (Marthahütte)*. In such cases the services of the friendly banks often take but the form of removing obstacles and hindrances, or refraining from interference when the interests of other clients might call for such interference.

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Occurrences of this kind are, however, to be regarded as exceptional. Moreover, it is not a matter of chance that they have happened in the district of Upper Silesia. For here there was little room for banks or their initiative and assistance, for the reason that the land, the coal mines, and the ore rights were in the hands of feudal owners, and that from early times mixed works predominated.

The conditions in the Saar district are similar. There the family ownership of the iron furnaces by the Stumm, the de Wendel, and the Röchling families held back bank domination, which usually asserts itself in connection with stock companies. Furthermore, here the Government was in control of the coal, and the entire district gradually became dependent on Lorraine for its coke and ore. More and more it is becoming clear, in all essentials, that the fate of the mining and metallurgical industries as a whole will be decided not in Upper Silesia or on the Saar, but in the two districts in which primarily the great banks are contending for financial control—the Rhenish-Westphalian and the Lorraine-Luxemburg districts. Between the latter and the former there are close connections. Largely through the help of the banks the Lorraine-Luxemburg district has recently attained a position of more dominating importance, its extensive ownership of mines in the Ruhr section giving it large influence also in the Rhenish-Westphalian territory. In the main it was the mixed iron works of the two districts which were able to impose their will upon and have their interests taken care of by a syndicate primarily devoted to the interests of coal at the time when the second coal syndicate was formed (in September, 1903). Coal had to yield to iron.

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These two districts, which may be regarded the capital seats of the mining and iron industries, witness at present the great struggle for industrial supremacy between the leading mining concerns and for financial supremacy between the leading banks. It is highly interesting to watch the turns in this battle, the numerous ups and downs, surprises, and combinations which present themselves in varied and exciting array to the attentive observer as the contending parties maneuver and clash in the combat. There is no lack of either large and comprehensive plans or of scenes of petty jealousy in these campaigns. Here a great part is played by two captains of industry whose power is constantly growing in the two opposing camps contending for mastery—August Thyssen, of the firm of Thyssen & Co., in Mülheim on-the-Rhine, and Hugo Stinnes, of the firm of Mathias Stinnes, of Mülheim on-the-Rhine. Thus far both have, as far as possible, pursued the policy of maintaining the friendliest relations with a number of banks without wedding themselves to any one.

It is not, however, the first time that such captains of industry have played the leading rôle in the industrial evolution of Germany. One need only recall the names of Strousberg and Friedrich Grillo, whose enterprises either failed or were dispersed on their death and were liquidated or sold by the Disconto-Gesellschaft. Part of the Grillo works passed into the hands of August Thyssen, of whom we shall have more to say here. The modest steel and rolling mill of Thyssen & Co., in Mülheim on-the-Rhine, founded in the early seventies, has gradually grown into the very important Thomas and Martin Steel

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and Rolling Mills of that firm. It annexed first the *Gewerkschaft Deutscher Kaiser*, a mine and furnace company in Bruckhausen-Hamborn, and developed it into powerful mixed steel works especially noteworthy for its highly efficient blast furnaces. In 1903 the latter works joined the Rhenish-Westphalian Pig Iron Syndicate. The two establishments employ more than 17,000 men and insure Thyssen an important place both in the pig iron syndicate and in the Steel Works Union.

Thyssen has also a controlling interest in the *Schalcker Gruben-und Hüttenverein*, which owns large coal mines and blast furnaces and operates the largest iron foundry in existence in Germany. He also controls the Victor Mining Company, which was organized by the former concern. In Lorraine he owns the Minette mines and holds a considerable interest in the mixed steel works of the Sambre et Moselle Mining Corporation. In the coal territory his control is even wider than in the iron region. This is due as much to the extensive coal properties of the *Gewerkschaft Deutscher Kaiser* as to his large interests in the Mülheim Coal Company which is jointly controlled by him and Stinnes.

With Stinnes he shares also in the control of the *Friedlicher Nachbar* Mining Company. Early in 1904 he joined the supervisory board of the *Gelsenkirchner Bergwerksgesellschaft*, the coal properties of which adjoin those of the *Schalcker Gruben-und Hüttenverein*, having acquired a large part, perhaps a majority, of the shares of that company, either individually or through the *Mülheimer Bergwerksverein* (3,000,000 marks). Finally, in 1903, he acquired the development company *Bohrge-*

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sellschaft Lippermulde and thereby extended and rounded out his coal properties, until they reached on the east of the Rhine as far as the government mines and on the south as far as the properties of the *Gewerkschaft Deutscher Kaiser* and *Gute-Hoffnungshütte*. After the purchase of the development company *Tiefbohrgesellschaft Lubisch* his holdings extended east of the Rhine as far north as the Dutch border. His present ownership of coal properties is about twice as large as that of the Government in the same region.

While Stinnes is closely allied with Thyssen, as is evident from the above, and owns jointly with him the Mülheimer and the Sambre et Mosselle mining companies, he owns also in his own right the coal mines *Mathias Stinnes*, *Victoria Mathias*, *Graf Beust*, *Carolus Magnus*, *Friedrich*, and *Ernestine*. He owned also the *Friedlicher Nachbar* mine (transferred in 1904 to the *Deutsch-Luxemburgische Bergwerks-und Hüttenaktiengesellschaft*). In the southern part of the Ruhr district he is almost in sole control; in the rest of this territory he shares control with Thyssen. Stinnes likewise joined the supervisory board of the *Gelsenkirchener Bergwerksgesellschaft*. In addition he is on the board of the *Nordstern* and of the *Mittelrheinische Bank* in Koblenz and Duisburg. The latter is closely related to Spaeter & Co., in Koblenz.

The supremacy of Thyssen and Stinnes in the Ruhr district is disputed in the main only by the *Haniel* family and by *Karl Funke*, of Essen. The Haniel family owns the *Rheinpreussen* Mines and the *Gute Hoffnungs* Mines, adjoining the Thyssen coal mines. Karl Funke owns the

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König Ludwig mines. The Haniel family is allied with the *Duisburg-Ruhrorter Bank*, and Funke with the *Essener Bankverein*. As both of these banks have communities of interest with the Deutsche Bank, both Haniel and Funke are now in close touch with the Deutsche Bank. Stinnes's relations with the firm of Spaeter & Co., of Koblenz, are particularly close through their common shipping interests on the Rhine, both of them being large river carriers of coal.

In some cases both Thyssen and Stinnes have been fighting the syndicates. In the majority of cases, however, their attitude toward them was more friendly, resembling their attitude toward the banks, maintained successfully for a number of years.

From the beginning the *Schalcker Gruben-und Hüttenverein* controlled by Thyssen, was a member of the Rhenish-Westphalian Pig Iron Syndicate, while his *Gewerkschaft Deutscher Kaiser* with its blast furnaces did not join this syndicate until 1903. The *Schalcker Verein* with its *Pluto* mines, and its subsidiary company Victor, as well as the *Mülheimer Bergwerksverein*, in which Stinnes was also interested, were members of the coal syndicate, while at the same time Thyssen's *Deutscher Kaiser* mines were most active in fighting the syndicate.

Stinnes, on the contrary, joined the coal syndicate with nearly all his mines. However, he kept outside of the syndicate his *Friedlicher Nachbar* mines. The intolerable conditions thus produced have, however, in the main, been ended by the syndicate regulations.

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Their relations to the banks we have characterized before. Thus Thyssen was at first on close terms with the Disconto-Gesellschaft. Particularly in the eighties and nineties it was this bank which floated the securities of the *Schalken Gruben- und Hüttenverein* and of the *Gewerkschaft Deutscher Kaiser*. Later his relations became intimate with the Dresdner Bank, after it had reorganized in 1902 and entered into a community of interest with the Rheinische Bank in Mülheim, an institution with which Thyssen was affiliated.

Hugo Stinnes had some relations with the Dresdner Bank, having participated with it in the reorganization of the Saar- und Moselle Mining Company. He established relations also with the A. Schaaffhausen'scher Bankverein, after the latter had founded a community of interest with the Mittelrheinische Bank in Koblenz, of which Stinnes was a board member. In 1901 Stinnes established relations also with the Darmstädter Bank, when he became vice-president of the board of the *Deutsch-Luxemburgische Bergwerks- und Hütten-Aktiengesellschaft*, which owes its financial strength and high technical standing to the Darmstädter Bank. The concern combined both mining and smelting operations after the acquisition in 1904 of the Stinnes mines, *Friedlicher Nachbar*.

On January 1, 1905, a community of interest was entered into between the *Gelsenkirchener Bergwerks-Aktiengesellschaft*, the *Aachener Hüttenverein Rote Erde* and the Thyssen concern *Schalken Gruben- und Hüttenverein*. By this step a group of competing banks, viz,

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the Disconto-Gesellschaft, the Deutsche Bank, the Dresdner Bank and the A. Schaaffhausen'scher Bankverein were brought together in a joint undertaking. This event served also to enhance the power of Hugo Stinnes and August Thyssen, who became members of the "joint committee" of this community of interests.

This combination seems to have brought about some sort of equilibrium in the Rhenish-Westphalian industrial territory, and simplified certain complex relationships in the banking and industrial field. On the other hand, there are already evident the beginnings of new conflicts in another field.

As we saw, the Lorraine-Luxemburg iron industry has in recent times been coming to the front more and more and is beginning to overshadow even the Rhenish-Westphalian industry. One reason of this development is the far lower cost at which it can produce pig iron as compared with the Rhenish-Westphalian district. Another reason is that owing to the electrical process recently introduced in the manufacture of steel the value of Luxemburg-Lorraine ores, which formerly were hard to work, because they were rich in phosphorus, has been greatly enhanced. These can be utilized most cheaply and advantageously by the works located close to the ore beds.²⁴ The quantity of such ore is estimated at about 2,000,000,000 tons.

Realizing that a serious movement of the German pig iron industry toward the southwest has set in, the leading captains of industry and the leading banks alike have felt obliged to increase their influence in the Lorraine-Luxemburg region.

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In this territory the position of the firm, Spaeter & Co., in Koblenz, is very powerful. It is the founder of the *Rombacher Hüttenwerke*, which have bought up the *Moselhüttenwerke* and dominate the blast furnaces in Rodingen, Rümelingen, and the *Eisenhüttenaktienverein Düdelingen*. In this district Thyssen has thus far gained a foothold practically only through his interest in the *Hüttenverein Sambre et Moselle*, while Stinnes's hold in this territory is only through his membership in the Supervisory board of what is now a very important company—the *Deutsch-Luxemburgische Bergwerks- und Hütten-Aktiengesellschaft*, and his rather unimportant connection with Spaeter & Co.²⁵ As recently as April, 1909, a step was taken which is certain to affect deeply the relations of the different industrial groups and their relative positions. In all likelihood it will also exert a powerful influence on the relations of the different bank groups which are dependent on these industrial groupings, and on the general movement toward concentration. An enormous increase was made in the capitalization of the *Gelsenkirchener Bergwerks-Gesellschaft*. Its capital stock was increased by 26,000,000 marks to a nominal amount of 156,000,000 marks, and its bonded debt by 20,000,000 marks to 70,000,000 marks. The latter increase was made in spite of the fact that there was still available an unissued amount of 9,325,000 marks in 4 per cent bonds authorized in 1906.

This move attracted attention not only by the size of the capital increase but also because it was made at a time of money stringency and unfavorable market conditions. The company justified this step on the ground that

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the additional resources were indispensable for the erection of new blast furnaces and steel works in Esch and in Deutsch-Oth. It was also given out officially that the measure was necessary to insure an "adequate position" for the company in case the Steel Works' Union, which terminates June 30, 1912, were not renewed. Doubtless this had reference to an increase of its quota in the syndicate. The Gelsenkirchener Bergwerksgesellschaft had originally been a producer of coal and coke only. After it had entered into a community of interest with the *Rote Erde* and the Schalke Works it became also a producer of pig iron, steel, semimanufactures of iron and steel, beams and rails, but it nevertheless continued to hold the largest production quota in the coal syndicate. Through its action of April, 1909, however, it entirely shifted its center of gravity away from the production of coal to that of iron and steel.

This step was in keeping with the movement of the iron industry to the southwest. The new resources were to be expended for the purpose of operating its steel and rolling mills in combination with its blast furnaces, where conditions made possible the cheapest cost of production, i. e., in the heart of the Lorraine-Luxemburg Minette district, where it owned extensive ore beds.

Through this action, however, the Gelsenkirchener Bergwerksgesellschaft became a direct competitor of August Thyssen, who had been a member of its board. He at once accepted the logical consequence of the situation and resigned from the board. Earlier he had withdrawn also from the board of the Phoenix. The Thyssen

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concern Deutscher Kaiser owns very important ore rights in the Lorraine-Luxemburg district, and he himself, as was shown above, is interested in the *Saar-und Moselbergwerksgesellschaft* in Karlingen. Moreover, early in 1909 he invested several million marks in land in this section and acquired the patent rights to produce electro-steel in all his works.

In the near future the struggle for supremacy is likely to be fought out in the Lorraine-Luxemburg district. The trial of strength between the leading interests will come as soon as negotiations begin with a view to renewing the Steel Works' Union at the expiration of the present agreement.

The progress of the conflict and its outcome and the industrial concentration that is likely to precede or follow it will undoubtedly be influenced by the banks and groups of banks that stand back of the captains of industry and their enterprises. This influence may indeed not be decisive, but it is likely to be in the direction of new combinations and the avoidance of further conflicts which must prove harmful to all. So far as we can foresee, the important part will be taken by those banks which now possess, or by that time will have attained, a controlling influence over the industrial concerns which dominate the Lorraine-Luxemburg district. It will be of the utmost interest to watch further developments. These will reveal many different combinations and changes in industrial and banking concentration, and new group alignments in both fields.

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III. THE INFLUENCE OF INDUSTRY AND INDUSTRIAL CONCENTRATION ON CONCENTRATION IN BANKING.

A detailed account of the tremendous effects which industrial development and concentration have exerted on the growth of the great banks and on concentration in banking would involve a repetition of practically everything discussed in previous chapters of this book. At every step in the development of the banks and at every stage of their growth the mighty influence of industrial progress may be seen. We showed this connection particularly in discussing the current business of the banks as well as their activity in the field of floating securities, forming new corporations, and converting firms into corporations. This influence is equally apparent in the activities of the banks both at home and abroad.

The far-reaching influence of the cartel movement in industry and of the national export policy on the extent and the rapidity of the movement of concentration in banking, also the ways in which concentration in banking was brought about and the forms it assumed, have been shown in great detail. The reader is therefore referred to the previous chapters for an account of these subjects.

PART VI. THE SITUATION RESULTING FROM
CONCENTRATION; ADVANTAGES AND DAN-
GERS OF CONCENTRATION—THE OUTLOOK
FOR THE FUTURE.

By far the most serviceable of the tools employed by modern capitalism have been first the machine and second the corporation. Machinery made possible the elimination of the personal element of labor and the utmost concentration of mechanical forces. The corporation eliminated the personal element of the entrepreneur, and led to the utmost concentration of the forces of capital.

The cooperation of these two factors, i. e., machine production and the corporation, has made possible the culmination of capitalist development in the shape of centralized management of combined forces and enterprises.

The abundance and variety of detail revealed in the history of the development of concentration may, on superficial observation, fill one with dismay. On closer inspection we find, however, that the successive stages of this development are subject to remarkable regularity, partaking almost of the character of natural law.

At first sight there is a confused mass of complicated events, so intricately interlaced that it seems impossible to grasp them in their entirety. Upon closer examination three stages of development become discernible. In the first stage we find a large number of weak, independent enterprises, incapable of much resistance. In the second stage we notice the transition to a large number of far

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more complicated enterprises, better organized and capable of greater resistance. In the third stage we have the situation again simplified by the formation of a small number of powerful groups of enterprises.

In the economic struggle for existence, as shown in the movement toward industrial concentration, we see first a large number of weak individual establishments. Out of these by a thousand devices and in seemingly roundabout ways, and through as many types and forms, there emerges gradually the fewest practicable number of strong and unified groups of enterprises, i. e., increasingly simple industrial formations.

This process of evolution can be traced in every domain of industry. In the most modern of industries, the electrical industry, the process is revealed most clearly. At the outset numerous companies were organized in feverish haste. By 1900, as we saw (p. 715 et seq.), there had developed out of them seven groups, which dominated the field, comprising in all 28 allied companies. After some of these groups had lost much of their power and others had been absorbed, two groups remained more powerful than the others—the Siemens-Schuckert group and the General Electric (A. E. G.). From present indications these will be able to ally with themselves the remaining groups or companies either through price agreements or by more efficient means. They will also be in a position to hold in check international competition by means of mutual understandings, the beginnings of which may be seen even at present.

In the chemical industry we see the same development. There is on the one side the union of the Höchst Dye

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Works and the firm of Leopold Cassella & Co. in the form of a community of interest, and on the other a similar community of interest among the *Badische Anilin-und Sodafabrik*, the dye works formerly *Friedrich Bayer & Co.*, and the *Aktiengesellschaft für Anilinfabrikation*. These are in a position to bring about a consolidation of all the remaining dye works, as far as it may become necessary, and to enable the German aniline dye industry to meet successfully foreign competition.

In the mining and metallurgical industry a light has appeared in the darkness of the "cartel chaos" since the organization of the Steel Works' Union. The latter combines establishments engaged in every stage of the process of production. It is, therefore, in a better position to carry out a sound cartel policy at home and to arrange for the elimination of international competition by bringing about agreements for a division of the export trade to important foreign markets among the competing countries on the basis of the amount of their past sales in these markets. Meanwhile, more rapidly than ever, there is going on in the mining and iron industries a movement of concentration and consolidation among the different groups of enterprises, and in this process the weaker and smaller establishments are being absorbed or eliminated.

The shipping industry is dominated by two companies, the Hamburg-American Packet Line Company and the North German Lloyd. These are united by agreement between themselves and also with a British-American combination.

Finally, in banking, out of a large number of independent banks, there have been developed five powerful groups,

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comprising, in all, 41 "concern" banks (*Konzernbanken*). In this field, however, the process of concentration has by no means yet ended. It will, in all probability, not stop until it has come nearer its goal than to-day, by developing the smallest number of bank groups practicable, each embracing the largest possible number of "concern" banks, under centralized management. Until the groups of banks shall have reached a point of fairly equal strength, so that each one will respect the other's domain, we can not look to a halt in the movement of concentration. However, even now it is possible to realize many of its advantages and dangers.

To begin with the advantages of concentration. Unquestionably the business policy of a great bank, and notably of one standing at the head of a chain of banks (*Konzernbanken*), can and will be carried out more in accordance with a uniform program, which takes into account the general economic interests including those of the nation and of the Government. Such a business policy can be pursued by it much more readily than by a moderate-size or small bank or by a large number of small scattered banks, which are compelled by the increasing struggle for existence to shape their policy merely with a view to dividends. Experience has taught that the great German banks realized the necessity of supporting a vigorous policy in encouraging the exports of manufactures (see p. 527 et seq.). They accepted the logical demands of the situation and acted accordingly, as shown by their attitude toward industry and the export trade, the investment of German capital in foreign commercial and industrial enterprises and securities¹, and in promoting actively the national policies in

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regard to shipping, colonies, the building of canals, and the laying of cables.

Neither will it be denied that the administration of the great German banks is far more subject to control by the special press and the public than a large number of isolated small or moderately large banks. Furthermore, it is clear that powerful banks and groups of banks of this kind, under centralized control, can serve the German Empire as one of its most potent agencies in both its economic and world policies. This is true, at least so long as the leaders of the banks continue, as they have done, to regard their duty to the state as one of their important obligations.

The Government and its various organs, moreover, regard it as a great help to carry on negotiations with a few great banks, having their center in Berlin, when it is a question of measures the execution of which is to be intrusted to private capital, or such as require haste or confidential treatment, or, as in the case of cable lines or colonial enterprises, such as necessitate the tying up of large amounts of capital for a considerable period.

Greater concentration of banking capital facilitates a more elastic extension of credit by eliminating to a large extent reckless granting of credit, on the one hand, and "panic sales" (*Angstverkäufe*), on the other. Through their better knowledge of the general economic and financial situation the great banks are often able to prognosticate the approach of industrial, commercial, and bourse crises. While powerless to ward off such crises, they may, by timely warnings and preventive measures, lessen the effects and duration of the calamity. Concentration of banking carries with it also the

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extension of check, giro, and clearing operations—i. e., those factors which lessen the need of cash for payments, and thus broaden the basis for credit transactions.

In turn, concentration results in a number of important advantages to the private economic interests of the banks. This is true alike of that form of concentration which is attained through control of other enterprises or the creation of communities of interest (through the acquisition of stock, the establishment of subsidiary companies, and trust companies, through agreement or the interchange of stock), as of the other form attained by means of decentralization of operations through the establishment of commandites, branches, agencies, and deposit offices.

All these forms of concentration of capital and power secure to the central institution a more complete view of the general industrial situation and of the varying needs and conditions in the different branches of industry, and a detailed knowledge of the financial standing of a large number of clients, their trustworthiness in general, and with regard to credit in particular. This information is based on the objective expert advices of reporting agencies which are thoroughly familiar with local conditions and, on the other hand, intimately related to the central institution and acting in its interests. From such a comprehensive and accurate survey of the general situation and the detailed information, the central institution derives in an ever-increasing manner the following advantages:

(a) It is able to find a wider and safer market for the sale of securities which it proposes to float. It can, therefore, acquire such securities on a larger scale and with greater confidence, knowing beforehand that such securities will go into good hands as permanent investments,

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and not be thrown back at once upon the market, to be taken up again by the bank.

(b) Its current banking business is extended. This extension usually means increased dividends. This leads to the enhancing of its own credit both at home and abroad, particularly of its acceptance credit. It also means greater power of intervention in critical times and larger freedom of action in the money market.

(c) Its deposit business is increased in proportion as those of its clients, who belong to the class of small capitalists and tradesmen, are becoming accustomed to leave on deposit with the bank even small amounts of available funds to be applied to productive uses. In this way a stimulus is afforded to such clients to save and accumulate reserves—which is highly desirable from the point of view of business—and to turn over to the bank the receiving and making of payments on their account (*geordnete Kassenführung*). The effect of this development is an improvement of conditions attending settlements by the more extensive and intensive use of checks. Credit transactions are facilitated, the circulation of cash is diminished, the bank's freedom of action is increased, and its dividends become more stable.

(d) The bank is enabled to furnish its clients with reliable information and to help them in every way in their business undertakings, especially with regard to bills, foreign exchange, and payments.

As against these advantages, the movement of concentration in Germany² has thus far not brought with it a reduction of the cost of conducting business or of the expenses of administration, such as was often the case when foreign trusts and analogous combinations were formed.

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One reason for this lies in the fact that, unlike the situation produced where trusts were formed, the independence of the original establishments was maintained, except in case of mergers. As a result, there could hardly be any saving in the cost of operation or administration.

On the contrary, we were able to show (on p. 467 et seq.) that as a general rule both the absolute amounts of expenses of operation and the percentage of expenses to gross profits have steadily risen among the banks that have been in the forefront in the movement toward concentration.³ Jörgens has pointed out the increase in taxes, due to the permanent ownership of stock in one corporation by another.⁴

Attention has also been called to the various dangers arising from concentration in banking. With reference to this subject the following points may be made: Thus far there has been no manifestation of a monopolistic tendency, as regards the treatment of the public in the so-called current business, and this in spite of what would seem to be the natural tendency in view of the extent to which concentration has gone. On the contrary, in their competition the banks have undertaken the greatest services and responsibilities for the lowest commissions ever known in German banking, commissions so slight as to fall below the point of fair remuneration. On the other hand, there are unmistakable signs of such tendencies in the competitive struggle against private bankers; also within the domain of underwriting and of tenders for the taking over of public loans or of securities of public or private undertakings. As we saw before (p. 407 et seq.), outside competition in this field may occasionally underbid the tenders of large banks or groups of banks, but must fail in the long

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run unless it is in a position to offer the same security for making payment, for taking over the securities, or for carrying out the undertaking. Many of the syndicates in this field have been in the nature of price conventions and have often assumed a monopolistic character.

It is, furthermore, undeniable that concentration in German banking has been accompanied by marked injury to the sound and vigorous elements among the class of the smaller private bankers. I am convinced that even today, as I shall show further on, this class performs economically useful and even necessary functions, and that the decline of the private banker class represents one of the dark sides of the progress of concentration. As we saw (p. 618 et seq.), the decline of this class was hastened and intensified by faulty stock exchange and stamp-tax legislation; essentially, however, it was due to the movement of concentration.

It may, indeed, be said that the decline of private banking, which showed itself in very acute form before the passing of the supplementary bourse act, is only one phase of the modern struggle for existence, which had its origin in the capitalist system, and will come to an end only with the triumph of large-scale enterprise and concentration. It is part of the same conflict in which, it seems, the small farmer and the small miller are succumbing before the large landowner and large miller, the craftsmen and the home industries before the factory, the retail store before the large dealer and particularly before the department store. However, in the other branches of industrial life it has been policy to protect the middle class in every possible way and to prevent its decline. Where this was manifestly

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unavoidable, the effort has been to retard it and to mitigate its effects, so as to allow those injured gradually to change their economic position and to prepare them to face the new problems presented by the altered situation. In the attitude taken toward the middle class and small banker an opposite policy was apparently followed both in the various provisions of the bank-deposit law and in the stock exchange and the imperial stamp-tax legislation. (See p. 618 et seq.) As a result of these measures the rapidity of the concentration movement was greatly enhanced and the situation resulting from this tendency was made much harder for the private banker. What is even worse, the vitality of this class was regrettably lowered. There seems, however, to be no good reason why the decline of private banking should have been permitted to assume the proportions that it really did.

There are to-day, as much as ever, certain necessary and legitimate economic functions for the smaller banker, and there is still a broad field of profitable activity open to him.⁵ The situation here is similar to that among the handicrafts, where the reasons for the decay are similar.⁶ The latter can maintain themselves where the bond between producer and consumer is not dissolved and where local or individual adaptation is still necessary.⁷ In the same way the small banker can hope to compete successfully wherever he may operate, if he will adopt from the outset as his motto in business specialization and adaptation to local conditions and needs. He has here an advantage over the decentralized banks in the fact that his expenses of operation are relatively smaller. Such specialization has already set in

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in several fields, although it is not of a kind altogether desirable, in case, for instance, the smaller bankers devote themselves particularly to the purchase and sale of mining stocks or unlisted securities.

The primary and normal function of the small banker will always continue to be that of adviser to the large public in their financial affairs in general, and more particularly in the matter of investments. This, of course, presupposes that he will continue to give the necessary time and study to this function. In his capacity of general adviser he may be able to carry on dealings in securities for customers' account, where the latter give special security, in accordance with the provisions of the stock-exchange law. On the other hand, in view of the low commissions and the taxes imposed on the *contango* business, it would be better policy for the small bankers to engage less in security business on own account, to which they seem to have been giving special attention during recent years.

Knowing intimately the personal standing of his clients, the smaller banker will always be professionally best fitted to foster personal credit, and more particularly blank credit—a field of banking that calls for specialization, based on knowledge of individual conditions.

Where there are no deposit offices or general banks, the smaller banker is in a position to carry on successfully also a general banking business with the smaller tradesmen, extending to them the facilities of check accounts, current accounts, and bill discounting.

On the bourse his legitimate functions are trading in unlisted securities (*Kulisse*), the arbitrage business, and

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profiting by the fluctuation of daily quotations on the different exchanges whenever bid and ask prices do not accord.

He is in a position best to understand the needs of small manufacturers and to know thoroughly the intrinsic value of solid securities, both stocks and bonds, issued by them, and to find a wide market for them. Under this head belong also debentures of smaller industrial establishments, which, while of undoubted solidity, are issued in amounts too small to be listed on German exchanges (in case the amount is less than 1,000,000 or 500,000 marks, respectively).⁸

On the other hand the recent practice, due to the faults of the stock exchange legislation, of the smaller banker assuming the functions of industrial entrepreneur by means of permanent acquisitions on a large scale of stock or of other participations, seems to us of rather doubtful wisdom.

Finally there is no reason why the development toward more powerful enterprises in the shape of joint-stock or limited liability companies, large beginnings of which may be seen even at present by cooperation with the great banks, and even independently of them, should not prove successful on an equally large scale in the case of other provincial banking concerns either singly or in combination with others of the same class. A few recent examples of this development are the following:

Thus with the assistance of the *Hannoversche Bank* and its subsidiaries, the *Osnabrücker* and *Hildesheimer* banks, the private banking firm of *Ludwig Peters Nachfolger* was transformed in 1905 into the *Braunschweiger Privatbank*

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Aktiengesellschaft (with a total capital of 6,000,000 marks). In the same way, with the cooperation of the Disconto-Gesellschaft and the Berliner Handels-Gesellschaft, the banking firm of Perls & Co. in Breslau was transformed into the *Schlesische Handelsbank Aktiengesellschaft*, Breslau, which in 1909 opened in turn a branch in Beuthen and one in Striegau. In 1906 the banking house Johann Ohligschlaeger of Aix-la-Chapelle, of the Rheinisch-Westfälische Disconto-Gesellschaft group, was converted into a limited liability association, with a capital of 5,500,000 marks. In 1908 the banking house of Doertenbach & Co., Stuttgart, was changed to a limited liability association with a capital of 4,000,000 marks. In 1908 the *Hessischer Bankverein Aktiengesellschaft* in Kassel was organized through the merger of the banking firm of Leopold Plaut & Co., of Kassel, and J. C. Plaut & Co. in Eschwege.

In 1907 the Berlin banking firm Carl Neuburger was transformed into a stock company *en commandite*, and by the end of 1908 the latter had established eight branches in different localities besides five deposit offices. In addition it had absorbed two banking firms (C. Fähndrich & Co. in Fürstenwalde and the Westfälische Bank M. Hirschfeld in Iserlohn). Early in 1909 it added a branch in Deutsch-Krone.

The banking house of L. & E. Wertheimer, of Frankfort-on the Main, adopted an original procedure. It founded a separate enterprise under the name of *Bank- und Wechselstuben-Gesellschaft m. b. H.*, to operate exchange offices in Frankfort. The entire capital stock of the concern, 2,000,000 marks, was retained by the banking house of L. & E. Wertheimer, which continued operations as before.

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Finally there is no doubt that what has been done successfully in other countries is also possible in Germany (⁹), viz: To unite smaller bankers into syndicates or groups which will act not only without any antagonism toward the great banks, but rather enter into definite agreements and thus act in concert with them.

The future activity of private bankers in receiving deposits is indeed threatened by the voluntary publication of periodic financial statements by the joint-stock banks since 1909. In order to save this branch of business for the private banker, we might well resort to the joint liability idea of the Roman *societas argentariorum*, i. e., bankers' associations with unlimited liability, adapting, of course, the principle to present day conditions.^a

So much for the effect of concentration on the smaller banker.

We have repeatedly called attention to certain disadvantages of concentration for the central banks. There is on the one hand danger that their ability to maintain their assets in liquid form may be impaired particularly at critical times by excessive demands for credit and funds, on the part of subsidiary companies, trust companies, branches, commandites, agencies, and institutions joined with them in a community of interest. It was also pointed out that it is becoming increasingly more difficult for the central banks to control the proper use of their credit and funds. As we saw, with the progress of concentration the condition of the banks from the point of view of the liquidity of their assets has steadily grown worse to an extent that can no

^aThere are some indications that since the enactment of the supplementary bourse law (May 8, 1908) an improvement in the condition of private banking has set in, which finds expression also in a considerable increase in the number of newly founded private banking firms.

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longer be lightly passed over. Unless an improvement is brought about by natural causes or by criticism either from within or by the general public, a situation might be created in which the banks' freedom of action would be impaired in critical periods, particularly in the event of war, and the institutions placed in a perilous condition at a most critical moment. Public attention has been drawn to this situation particularly since 1908, when the great banks of their own accord began the publication of bi-monthly financial statements which indicate but a slow improvement in this regard. Furthermore, it must be admitted that with the growth and decentralization of the operations of the great banks and their groups it becomes increasingly difficult to gain an adequate comprehension of the financial reports and balance sheets issued, as these no longer represent a clear and full picture of the condition of the banks.

The effects of concentration on the bank employees may be summed up as follows: It goes without saying that in the course of the concentration movement both the absolute number of employees in the large banks as well as their proportion to those in the smaller establishments has increased greatly—a tendency which is, however, common to other branches of business. According to the census of 1882, there were 28 banks employing 50 or more persons, with a total number of 2,697 employed by them. Thirteen years later the census of 1895 showed 66 banks employing each 50 or more persons, with a total force of 7,802. In the thirteen years the number of employees in the large banks had increased 189.3 per cent. On the other hand the number employed in banking establishments

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with less than 5 employees had increased only 59.9 per cent, and in middle-sized institutions, with 6 to 50 employees, only 34.5 per cent.¹⁰

The data of the 1907 census are not yet available on this point, but it is probable that the number employed in the large banks in 1907 represented one-third of all gainfully employed in "financial and credit" institutions, while in 1895 this number still constituted but a little over one-fifth (21.60 per cent), and in 1882 only a little over one-tenth (11.8 per cent) of the persons so employed.

From these figures we may conclude that with the progress of concentration there has been a great increase in the number of persons who have but slight prospects of ever being able to start an independent banking business of their own. With the increasing domination of banks with huge capital on the one hand and the diminishing power and sphere of activity of the private banker, the opportunities of building up a private banking business have now become considerably smaller.

In many respects the standing of the bank employee, as such, has not improved with the growth of concentration. This is true particularly of his position within the bank. The number of employees in the large banks is steadily growing. Thus, for instance, at the close of 1908 the Deutsche Bank had a force of 4,860 as compared with 4,439 at the end of 1907. As the number of bank clerks increases and the bank's duties become more manifold, there is naturally introduced a greater specialization in the work of each employé. As a result there is no chance for a rounded development or a general training in the profession. This involves a twofold danger. The situation

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may result in a gradual loss of interest in the work, and may also rob the employee of the broader view of things which in turn makes it harder for him to enter another department or profession. It is only a relatively small number of banks which have introduced a periodic change of work for their employees, a practice highly desirable not only in the interest of the employees, but also of the banks themselves.

Furthermore, whenever an employee is discharged it is harder for him to find employment in another bank, particularly in one of the ever-increasing number belonging to the same group. This is in the nature of things, and not due to any mutual agreement among the banks. This does not apply, however, to the freedom of bank officials of voluntarily changing employment from one bank to another. After the removal of temporary doubts and objections this freedom has been generally conceded, though even at present it is subject to certain limitations in the interests of both parties.

It was feared that the numerous bank mergers and absorptions of private banks would make it possible to dispense with the services of many employees and lead to their discharge. This fear has fortunately proved unfounded, there having been no reduction of the force worth mentioning. This I can say on reliable authority, having made inquiry also of the leaders of the associations of bank employees. On the contrary, in all such cases the common rule has been to take over undiminished the entire available force. Where mergers took place or where branches were established in place of absorbed private banks, there was usually an extension of the business

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which made it necessary to increase rather than to reduce the existing personnel.

As the power and capital of the banks have grown, the cases have become increasingly rare where a complete prostration of business or a crisis has resulted in the discharge of employees. Moreover, in the course of the concentration movement more and more attention is paid by the banks to the social obligations toward their employees. The measures taken in this field are due to the common labors of banks, bankers, and the Central Federation of German Banks and Bankers (*Centralverband des Deutschen Bank-und Bankier-gewerbes*).

The federation began an extensive and laborious investigation of the question of pensions and death benefits¹¹ for bank employees as early as 1903, i. e., before the Imperial Government undertook a similar inquiry with regard to all salaried persons in private employ. Through the cooperation of many persons in banking circles and among the bank employees themselves there was organized in Berlin, on July 11, 1909, the *Beamtenversicherungsverein des deutschen Bank- und Bankiergewerbes* (a. G.) (Insurance Association of the employees of German Banks and Bankers). The association assures to all employees, members of the association, a pension in case they become incapacitated after ten years' service, and provides benefits for widows and pensions for orphans in case of death. This association is the first of its kind in Germany, and on its board of honorary directors there are both the heads of banks and bank employees. The author of this book is chairman of the supervisory board. In the case of the German great banks such insurance had been instituted

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even before, in the form of independent funds, funds controlled by the bank, or special insurance. The same is true also of many other credit banks and likewise of a number of the larger private banking houses.

On the subject of salaries authentic data have been collected for the first time in a paper of the business manager of the Centralverband Wittner, so far as it was possible to secure this information through the inquiry instituted by the Centralverband. For a proper appreciation of the following figures it is well to bear in mind that they refer only to the regular salaries and do not include the customary incidental income of the employees, such as Christmas', or New Year's bonuses, which usually amount to several times the monthly salary.

In the following table there are given the average salaries of bank employees, exclusive of minor employees, according to the investigation of the Central Federation of German Banks and Bankers, of March, 1906. For the sake of comparison, there are shown also the corresponding average yearly incomes of all salaried employees in private employment.

Age.	Average salary of bank employees.	Average annual income for all salaried employees.
	<i>Marks.</i>	<i>Marks.</i>
Under 20	1, 210	1, 064
20-24	1, 459	1, 467
25-29	2, 085	1, 954
30-34	2, 783	2, 265
35-39	3, 351	2, 380
40-44	3, 638	2, 413
45-49	3, 746	2, 404
50-54	4, 044	2, 358
55-59	3, 899	2, 264
60-64	3, 806	2, 175
65-69	3, 525	2, 007
70 and over	2, 592	1, 879

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The salaries here shown are higher throughout (except for the age group 20-24), and in part very much higher than the average salaries as given in the report of the Department of the Interior of March 14, 1907,¹² for salaries in all private establishments. Their present level was reached gradually during the progress of concentration. On the average they are also higher than the salaries paid to the clerical help in the smaller private banks.

Whether the increase in salaries has only kept pace with the increased cost of living and expenditures of the employees of the banks, or whether it has gone beyond this point and means a real improvement in their conditions, this question can not be answered even with an approximate degree of assurance.

So far as my experience and knowledge go, there has never been among the German credit banks any exploitation of unpaid help through the use of apprentices, as the Berlin great banks take in apprentices only in exceptional cases.

As in all large establishments advancement of employees to independent positions within the bank has on the whole been slow. In this respect, however, concentration has brought about a marked improvement. The establishment of numerous branches, commandites, deposit offices, agencies, and subsidiary banks at home and abroad has created opportunities for the promotion of efficient employees more numerous than before.

The Central Federation of German Banks and Bankers has ever been in sympathy with the efforts to bring about certain improvements in the conditions of the working

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staff, as, for example, the extension of Sunday rest, early closing on Saturday, and better regulation of vacations. The reforms proposed, while not yet commonly adopted, are, however, nearer realization, as the result of progressive concentration and the introduction of greater uniformity in the internal management of banks.

The part of the heads and leading personalities in the banks has now become much more important, since the former under certain circumstances are called upon to determine uniform business policies for entire groups of banks. It is primarily they who must decide whether the banks entrusted to their management shall pursue other and higher aims than merely those of large dividends. With the growth of the large establishments on the one hand and the disappearance of so many important private banking houses, it will be increasingly difficult to fill these positions with men who possess the necessary breadth of view, the powerful initiative, and the organizing ability to which Germany's great enterprises in trade, industry and banking are so greatly indebted. Failure to find and recognize the work of such men would involve serious consequences not only for the concentration movement, but for our entire economic development.¹³

It remains now to consider the effect of concentration on the development of the stock exchange. There is a large number of buying and selling orders coming to the great banks which they can offset against each other, thus taking over the function of the exchange. Only such orders as can not be offset are taken to the stock exchange. This applies equally to the business in securities,

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i. e., the capital market and to the discount business,
i. e., the money market.

The result has been that the bourse, in addition to the disorganizing effects of the stock exchange legislation, has suffered also the loss of ever increasing amounts of business. This impaired its most vital function, that of proper price determination, and led to most serious consequences, especially during critical times, as may be proved by very lamentable examples.¹⁴

There is danger that the bourse may gradually cease to serve as the most sensitive instrument for measuring the movements of trade or to act as "the almost automatic regulator of the economic currents converging toward it."¹⁵ It is also becoming evident that more and more it is losing its capacity by means of its quotations to reflect or influence public opinion as regards the credit and management of the large majority of States, communes, stock companies, and other corporations, all of which functions were regarded as indispensable for the business community as a whole and the trade in securities in particular.

The system of price determinations and quotations prevailing at the bourses, which in former years represented the fullest and truest possible reflex of existing supply and demand as well as other "economic factors, which nowhere else were subject to such comprehensive perception and accurate measurement," is bound to lose much of its former accuracy, steadiness, and reliability, all of which is highly regrettable from the point of view of public interests.

There is furthermore ground for apprehension that this movement which also involves the elimination of middle-

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men (brokers, etc.) may develop a state of constantly growing differences between bank and bourse. These differences may express themselves in more than a certain tension between banking and bourse interests, which is frequently noticeable even at present. They may also come to affect the most characteristic function of the bourse, the determination of prices. As a matter of fact, in the opinion of some recent writers, there is a direct antithesis between bank and bourse.¹⁶ I regard this view as erroneous, but not more so than that of other writers, who seem to regard the two as practically identical.¹⁷

Certain socialists contend that the inevitable result of the concentration movement now manifest in all branches of trade and industry will be to cumulate in an increasing volume on one side all the capital and income and on the other all the misery and poverty. Such has not been the outcome, nor is it likely to be. On the contrary, the socialistic theory of the progressive impoverishment of the masses has been completely refuted by the progress of concentration in industry and banking. The purchasing power and the standard of living of the laboring classes have improved, the income of the middle and of the lower classes has risen relatively more than that of the upper classes, and to an increasing extent members of the lower classes have joined the ranks of the upper classes.¹⁸

We have now a valuable work on the "Development of wages in industry since the establishment of the German Empire." Under this title R. Kuczynski, the director of the statistical bureau of the city of Schöneberg (Berlin, George Reiner, 1909), presents an extremely valuable collection of comprehensive and reliable data covering wages

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paid during this period in Germany in mining (coal, lignite, salt, and ore), in the building trades (masons, carpenters, painters, fitters), in the stone and woodworking trades (joiners, cabinet makers, pattern makers, and makers of window blinds), in the metal trades, the book trade, and finally in transportation (vehicular, railroad, and sea transportation).

It is impracticable here to reproduce even the leading features of a work which is bound to retain a permanent place in the literature of the subject. Suffice it to say, that the movement of all wages paid during the second period shows a strong upward tendency, more or less marked according to the branch of industry, the state of general prosperity, the location of the enterprise, the difference between city and country, the kind of product, and the hours of work. In the case of corporate undertakings the movement of wages manifestly is also influenced by the variations in dividends. A tabular statement showing the influence of the last named factor in each particular instance would be of special interest. I therefore refrain from citing typical instances from the mass of material presented, since it might always be objected that they had been chosen arbitrarily.

Even more important would be complementary tables on the movement of prices of necessities of life during the same period. For one thing this would serve to test the theory, which I believe to be correct, that "every increase in the prices of the necessities of life gives rise to an effort on the part of the workers to secure higher wages."¹⁸ To be sure these efforts do not always overcome the just or unjust opposition offered, and hence it may be

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difficult to prove the theory satisfactorily by statistical evidence.²⁰

Such complementary tables would also enable us to answer the further question whether and to what extent the gain to the workmen through higher wages has been offset by the simultaneous or preceding rise in the cost of living. This much is certain, that the increase of wages in general and in most trades has been greater than the increase since 1879 in the prices of necessaries caused by the import duties on foodstuffs, such as cereals, flour, animals, meat, bacon, and lard.

In the absence of such parallel investigations, the conclusions drawn from the wage statistics must necessarily be incomplete and open to attack. They have to be supplemented by reliable investigations of the growth of prosperity and of the changes in the condition of the working classes. On this point valuable information is available in the shape of the *Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter* (materials for estimating the growth of prosperity in Germany during the past generation), constituting Part III of the appendices to the draft of the imperial financial reforms act of 1908.

Evidence in the same direction is furnished by Troeltsch.²¹ Taking the contributions due from those who come under the old-age and disability insurance provisions, he points out that there has been a relative decrease in the contributions collected from the lowest wage classes. This is especially noteworthy in view of the fact that any wage increases within the lowest wage groups do not at all affect the rate of contribution, while wage

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increases in the higher wage groups either do not result in correspondingly larger contributions or do so only after some delay. It is noteworthy, moreover, that the lowest wage group has grown by the accession of a large number of low-paid home workers who during that period first became liable to insurance contributions. Another fact of some importance is cited by Troeltsch,²² viz, that 25 per cent of all workmen have deposits in the Wurttemberg district savings banks, the average deposits for each depositor belonging to that class amounting to 525.1 marks in 1892 and 571.7 marks in 1896.

Another prediction made by socialists is that the final outcome of concentration will be the socialization of the means of production, for which they are striving and which is to be consummated in the "state of the future." This prediction has not been realized in Germany, nor is it likely to be realized, if only for the one reason that individual independence still constitutes a cherished ideal in the minds of most Germans. It was this sentiment chiefly which prevented German cartels from assuming the form of trusts proper, despite the great technical advantages which go with this type of organization.

Finally, the movement of concentration has thus far not resulted in a comprehensive system of state-owned industries, a policy regarded by many as necessary and highly desirable; nor is this likely to happen unless wholly unforeseen developments take place. Nationalization of industry is practicable only in case of industries in which operation is more or less automatic. Unless demanded by imperative reasons in some special branch of industry in the interests of national self-preservation, or of the safety,

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rapidity, and extension of traffic, such nationalization represents but a backward step from the economic point of view.

Government operation does not leave adequate scope for personal initiative, which is indispensable for general economic progress, nor for the needful spirit of enterprise on the part of the managers. The taking over by the Government of private enterprises beyond the bounds mentioned above is in keeping with the tenets of collectivist industrial organization advocated by social democracy. It would tend to weaken the motive of private gain, the most powerful stimulus of all economic progress. Moreover, it would make impossible the free development of the enterprising, efficient, and far-sighted personalities to whose energetic and untrammelled initiative Germany owes so much.

The tendency toward state socialism, represented particularly by Adolph Wagner, which advocates state monopolies and the tightening of the screws of taxation to the point of expropriation, in my opinion is likely to do more harm to Germany than could ever be done by the purely individualistic tendency, little as I am disposed to favor the latter.

In Germany, particularly, where the mere possibility of danger or of excesses²³ is sufficient to create a demand for state interference, one thing above all should be borne in mind. What holds good for the cartels is also true of all movements toward concentration—all of them are, if not the products of distress, at any rate products of necessity. It is the general opinion in industrial circles that they are the most effective weapons in the struggle for

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existence, especially in competition with foreign countries. The coincidence of similar movements in nearly all civilized countries on the same level of economic development of itself makes it probable that this view is correct and that legislative interference, which is urged at times without any definite purpose in view, merely to impede the movement toward concentration, represents a one-sided economic disarmament, a policy highly profitable—to other countries.

In Germany we have special cause for holding our weapons ready.

We know that our agriculture is far from able to supply our rapidly growing population with the necessary food. This remains true even after allowance is made for the improvement in its position through the recent commercial treaties and for a considerable increase both of the productivity of the land and of the area under cultivation. We know, further, that we depend at present and shall depend in the future on importation for a large part of our raw material, both in the shape of tropical products and of iron ore, lumber, fodder, and fertilizers.²⁴ Finally, we know that in many branches of industry our exports have declined, though only temporarily, let us hope, and that the general field for export is seriously threatened, one example being our sugar exports, in which agriculture is directly interested. Some foreign countries which heretofore were among our best customers are developing industries of their own, which make them more and more independent of our manufactures. Again, we have to reckon with the possible introduction of high import duties or preferential duties in favor of the mother country, or,

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finally, with more intense and dangerous competition on the part of other countries, such as the United States in the South American markets. Meanwhile the growth of our investments of capital abroad, with the income from which we have to pay an important part of our unfavorable trade balance, has not kept pace with that of the excess of our imports over exports. In view of these facts, and of the greater extent and strength of concentration abroad, I do not believe that we in Germany are as yet justified in putting a check on the further progress of concentration, except so far as relates to measures aiming merely at greater publicity²⁵ in the case of cartels, or such as are dictated by considerations of social policy under conditions mentioned above.

The view expressed is confirmed by another consideration. Up to 1907 the movement of concentration in German industry and banking was continuously upward. We must, however, reckon also with unfavorable conditions in German trade and industry. Reasonable dividends on the greatly increased capital of the banks depend on general prosperity in trade and industry, and it is inevitable that the banks will suffer from adverse conditions in the branches of industries with which they are allied. Unfavorable trade conditions must result in bringing concentration to a standstill. This happened, indeed, in 1907 and 1908 in the case of the great banks for this and other reasons. The movement may even be reversed, as happened more than once in the history of banking, a recent example being the dissolution of the community of interest between the Dresdner Bank and the A. Schaaffhausen'scher Bankverein.²⁶

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Exceptional legislation of the kind mentioned can best be avoided if the leaders of our great enterprises will keep more and more in close touch with the active social conscience of our people.

At a general meeting of the Verein für Sozialpolitik²⁷ Brentano reported that when in December, 1903, one of the largest English mine owners proposed to consolidate all English coal mines into a single trust he accompanied this plan with the proposal that representatives of the labor organizations should be called in and given a place not merely in the discussion of wages and conditions of labor, but even as regular members of the board of directors. This idea was certainly in accord with the true conception that such a policy would not only confer rights but also impose duties on the workmen, and that we cannot justly hold anyone responsible for his conduct in economic matters so long as we have not given him an opportunity to develop a sense of personal responsibility.

This proposal was expressive alike of business shrewdness and socio-political insight, and represents an attitude from which we are still far removed in Germany. German employers still largely cling to the belief that they can indefinitely postpone the recognition of the right of workmen to combine and to bargain with them through representatives, whereas a more liberal policy is called for in view of the combinations that have taken place among the employers. It is my conviction that even mere passive resistance to these demands tends both to sharpen the antagonism and to increase the number and vehemence of the demands.

The German Great Banks

Our economic development in many respects will depend on the degree of socio-political insight possessed by the leaders of our great enterprises, the extent to which they appreciate the social duties and obligations that devolve upon them, and the economic self-restraint which they will impose upon themselves. A state within the state can not and will not be tolerated.

The future of German banking will depend essentially on the character of the men at the head of the leading enterprises. All will be well if these leaders possess the necessary caution, knowing that it is not safe to overstrain the bow or overheat the boilers.

I feel confident that German banking by its own efforts will prove strong enough to keep out of leading positions men who have what Waentig²⁸ calls "robust consciences," and who cast overboard, as useless ballast, all ethical and social considerations. Should, however, the contrary come to pass, in spite of our hopes and expectations, public opinion watching, as it does, our largest enterprises with the greatest attention, will surely react more quickly and effectively than it ever did in any other period of our economic development.

One of the most hopeful features characteristic of our economic development has been a growth of public sentiment and sensitiveness against encroachments of any kind, a growth which in extent and rapidity has equaled, nay, exceeded, the movement of concentration.

The German Central Bank

The economic development in many respects will depend on the degree to which the central bank is able to maintain a stable position in the market for the issue of the bank's currency. The central bank must be able to regulate the issue of the bank's currency and to maintain a stable position in the market for the issue of the bank's currency. The central bank must be able to regulate the issue of the bank's currency and to maintain a stable position in the market for the issue of the bank's currency.

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Part I.

1. "Capitalistic economics," in the popular sense of the expression, signifies not only production tending toward the formation of capital goods, but also production "carried on under the rule and direction of the owner of the capital, or the capitalist" (E. von Böhm-Bawerk, "Kapital," in the *Handwörterbuch der Staatswissenschaften*, 2d ed., vol. 5, p. 25). Ruhland, it is true, in his "System der Politischen Ökonomie" (Berlin, 1908), Vol. III, p. 302, ventures to say that "the word capitalism denotes to-day a social system in which the liberty to practice usury is more or less completely legalized." Capitalists are to him "usurers in the widest sense of the word," and by usury he, like Franz Schaub, understands "every contractual appropriation of an evident surplus value." The symptoms of such capitalism, according to Ruhland, are "that money interests predominate, and that trade and robbery, gain, usury, and extortion merge into each other" (*ibid.*, p. 116, No. 7aa).

2. Carl Menger: Contribution to the theory of capital. (*Jahrbücher für Nationalökonomie und Statistik*, 2d series, Vol. XVII, pp. 1-49.)

3. I have used the expression "to turn to good account" in place of "to distribute" on becoming acquainted with Rob. Liefmann's suggestion ("Beteiligungs- und Finanzierungsgesellschaften;" Jena, Gustav Fischer, 1909, p. 476) that it is better to say "to place at disposal" than "to distribute." I am sure Liefmann will not object to the expression "to turn to good account," which I am now using, especially since "to place at disposal" only represents one way of turning to good account.

4. See especially Rich. Ehrenberg: *Der Handel. Seine wirtschaftliche Bedeutung, seine nationalen Pflichten und sein Verhältnis zum Staate*, Jena, G. Fischer, 1887.

5. See Ad. Wagner, *Beiträge zur Lehre von den Banken*, Leipzig, Leop. Voss, 1857, p. 70.

6. See Heinr. Rauchberg: *Der Clearing- u. Giro-Verkehr in Oesterreich-Ungarn u. im Auslande* (Vienna, Alfred Hölder, 1897), especially: *Die Bedeutung der geldlosen Ausgleichungen für die Abwicklung des volkswirtschaftlichen Zahlungsprozesses u. die Reform des österreichischen Zahlungsverkehrs*, p. 180 seq.

7. See Heinrich Rauchberg, *loc. cit.*, p. 204.

8. This is expressly attested for Saxony by Rud. Banck (*Geschichte der Sächsischen Banken*, p. 5). It was, however, in nowise peculiar of that country.

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9. The names and years of foundation of the German note-issuing banks existing up to 1859 were as follows: 1765, the Preussische Bank; 1824, the Ritterschaftliche Privatbank of Pomerania, at Stettin; 1835, the Bayerische Hypotheken- und Wechselbank at Munich; 1839, the Leipziger Bank; 1847, the Anhalt-Dessauische Landesbank; 1850, the Bank of the Berliner Kassenverein; 1853, the Weimarerische Bank; 1854, the Frankfurter Bank at Frankfort-on-the-Main; 1855, the Bank für Süddeutschland, at Darmstadt; the Thüringische Bank, at Sondershausen; the Kölnische Privatbank, at Cologne and the Landgräfllich Hessische Konzessionierte Landesbank at Homburg v. d. Höhe; 1856, the Mitteldeutsche Kreditbank, at Meiningen; the Bremer Bank, the Hannoversche Bank, the Gothaer Privatbank, the Magdeburger Privatbank, the Lübecker Privatbank; 1859, the Niedersächsische Bank, at Bueckeburg, and the Commerzbank, at Lübeck.

10. See Alfr. Lansburgh in "Die Bank," November, 1908, pp. 1079 and 1083, and in a special work bearing the (much too comprehensive) title of *Das deutsche Bankwesen*, Charlottenburg, 1909, pp. 48, 49, and 52. He draws attention to the fact that Krupp acquired the name of a "cannon king" without having required the help of an industrial and credit bank. The fact is that the development of the Krupp works proceeded with extreme slowness in the early days, when there was no banking assistance. See Otto Jeidels "Das Verhältnis der deutschen Grossbanken zur Industrie," Leipzig, Duncker & Humblot, p. 2.

11. Rud. Banck, loc. cit., pp. 5-6. See Herm. Schumacher: *Die Ursachen und Wirkungen der Konzentration im deutschen Bankwesen*, in *Schmollers Jahrb.*, xxx, No. 3, p. 5. For the particular reasons why the establishment of the *Crédit Mobilier* in France was at that time welcomed and promoted far and wide and even by the Government, see text, p. 50.

12. Thus for Saxony by Rud. Banck, loc. cit., p. 6.

13. For instance, in the petition for the concession of the *Frankfurter Vereinsbank* in 1864 (*Geschichte der Handelskammer zu Frankfurt a. M.*, 1707-1908, p. 669); see sec. 1 of the statutes of the *Bank für Handel und Industrie (Darmstädter Bank)* in Darmstadt, 1853.

14. *Das heutige Aktienwesen im Zusammenhang mit der neueren Entwicklung der Volkswirtschaft (Deutsche Vierteljahrsschrift, Heft 3, 1856, J. G. Cotta, pp. 296-297).*

15. In this matter there is permanent cooperation on the part of the supervisory boards; a fact which has, by the way, been questioned by Warschauer (*Zur Aufsichtsratsfrage in Conrad's Jahrbücher*, III series, Vol. XXVII, pp. 794-795.) The "great banks," the very ones to which Warschauer refers to show the complete impotence of the supervisory board as regards the drawing up of inventories, make it a practice to submit at each meeting (held nearly every month) a general inventory, which is not only examined, but if necessary discussed in detail during the meeting.

The German Great Banks

16. See below Part III, chap. III, sec. 2, sub. IA: The deposit business, p. 191.

17. To propound a theory of crises does not lie within the scope of this work. On this subject the following works should be consulted: Michael von Tugan-Baranowsky, *Studien zur Theorie und Geschichte der Handelskrisen in England* (Jena, 1901, Gustav Fischer), and Ludwig Pohle, *Bevölkerungsbewegung, Kapitalbildung und periodische Wirtschaftskrisen* (Goettingen, 1902, Vandenhoeck & Ruprecht), as well as the criticism of both theories by Arthur Spiethoff (*Schmoller's Jahrbücher für Gesetzgebung*, etc., Vol. XXVII, No. 2, p. 331 et seq.).

For a very detailed list of works published up to 1899 on the subject of crises, see Theodore E. Burton, *Financial Crises and Periods of Industrial and Commercial Depression* (New York, 1902, D. Appleton & Co.), pp. 347-377. Unfortunately that list includes a number of perfectly worthless works.

18. See the very instructive book by J. W. Gilbart (a former director of the London and Westminster Bank): "The History, Principles, and Practice of Banking" (ed. 1901, London, George Bell & Sons); concerning the crisis of 1825, *ibid.*, I, pp. 310-311; the crisis of 1836, *ibid.*, I, p. 311 seq.; the crisis of 1857, *ibid.*, II, p. 361, seq., and the crisis of 1866, *ibid.*, II, p. 342 seq.

In 1836 over 70 new companies of every possible description were founded in three months, in Liverpool and Manchester alone. The facility with which credit was obtained, and the encouragement thus given to speculation, led to increases of from 25 to 100 per cent in the prices of all the chief articles of consumption, and of the raw materials of industry. In July, 1836, the Bank of England raised its rate of discount to 4½ per cent and in September to 5 per cent. Simultaneously it refused to discount a large number of American bills on first-rate houses, a proceeding that caused some excitement. Prices fell, and a number of firms, mostly second-class houses, failed. The banks withheld their resources, and thus increased the crisis. The joint stock banks had increased enormously, had raised their capitals considerably, and promoted speculation. This was referred to in very harsh terms in a "Report of the Select Committee of the House of Commons," which, in conjunction with the prevalent depression, awakened the suspicion of the general public. In November, 1836, the Agricultural and Commercial Bank of Ireland suspended payments, which caused restrictive measures to be taken against the joint stock banks, which were accustomed to rediscount their bills in London. In December, 1836, the Northern and Central Bank of Manchester, with a paid-up capital of £800,000, had to apply to the Bank of England for assistance. One London private bank, three large branches of American firms, and many respectable trading firms followed suit.

In 1857 (*ibid.*, II, p. 361), 30 houses failed in England with liabilities of about £9,080,000. First of all the Borough Bank at Liverpool (October, 1857), with deposits amounting to £1,200,000, whereof £800,000 were at

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call; then on November 9, 1857, the Western Bank of Scotland, a very important Scotch deposit bank with 161 branches in Scotland, which had paid a dividend of 9 per cent in 1856. It had claims of £1,603,000 on 4 trading firms that had become insolvent, whereas its entire nominal capital amounted to £1,500,000 only, and an item of £260,000 had figured in its published balance sheet under "good assets," which the managers themselves, according to notes found afterwards, had described as bad. The bills of one of the 4 insolvent firms had been accepted by 124 different persons; inquiries had been made by the bank only concerning 37 of these persons, and of these latter 21 had been found either unsatisfactory or positively bad.

In 1864, that is to say, shortly before the credit and speculation crisis of 1866 (*ibid.*, II, pp. 342-357), 263 companies with a nominal capital of £78,135,000 had been formed in England, including 27 banks and 15 "discount companies." The rate of bank discount, which up to the middle of 1865 stood at 3 per cent, went up on October 2, 1865, to 5 per cent and on October 7, 1865, to 7 per cent, the Bank of France at the same time raising its discount rate from 4 per cent to 5 per cent. The Joint Stock Discount Company failed in the beginning of 1866; in April, 1866, Barned's Bank at Liverpool, with liabilities amounting to £3,500,000, a failure that caused a panic. The Bank of England raised its discount rate on May 8, 1866, to 8 per cent, and on the 9th to 9 per cent. On May 10, 1866, the great discount house of Messrs. Overend, Gurney & Co. failed with liabilities amounting to £10,000,000; the bank rate was raised to 10 per cent. Then, in rapid succession, came the failures of the Bank of London, the Consolidated Bank, the Agrar and Masterman's Bank—all deposit banks; further, the English Joint-Stock Bank, the Imperial Mercantile Credit Company, the European Bank, etc. Within a period of ten days the Bank of England had granted advances on bills and discounted bills to the extent of £12,225,000; permission was granted to it to issue notes in excess of the legal limit. The doors of the most respectable banking firms were besieged, and the reports circulating did not stop at the most respectable names, and augmented the evil. Credit had been granted without discrimination, and the banks had either favored or themselves carried on speculation in every direction. "Men are in haste to become rich. This is no new thing; it has been so at all times and in all countries. But the fact is more patent now than ever. Men live as they journey—at railroad pace" (*ibid.*, II, p. 356). See also Max Wirth, *Geschichte der Handelskrisen*, 2d ed., Frankfurt-on-the-Main, 1874. For the crisis of 1857, see Otto Michaelis, *Volkswirtschaftliche Fragen*, vol. 1 (Berlin, F. A. Herbig, 1873), pp. 237-372; and *Die Handelskrisis von 1857* (this last article was written between March, 1858, and May, 1859).

The similarity with corresponding German crises is evident. Recollections of such crises, however, seem to disappear more rapidly than the injuries they inflict. This remarkable but firmly established fact, however, should not apply to the directors of banks, who should and must gain experience from every crisis.

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19. This was especially noticeable in the German crisis of 1900, and in the German and American crises of 1873. Regarding the latter, Theodore E. Burton (loc. cit., p. 287) remarks: "There was an enormous absorption of circulating capital in fixed capital. Railways as well as docks, buildings, factories, had been constructed on an unprecedented scale. All the equipment for future production was increasing at a more rapid pace than ever before. In these expenditures we have the effect of capital invested for objects not immediately remunerative."

20. *Der deutsche Geldmarkt, 1895-1902*, in the *Schriften des Vereins für Sozialpolitik*, Vol. CX (*Die Störungen im deutschen Wirtschaftsleben während der Jahre 1900, ff.*, Vol. VI; *Geldmarkt, Kreditbanken*) pp. 3-80.

21. See especially the fundamental essay, *Die Krisis auf dem Arbeitsmarkt* (Vol. CLX of the *Schriften des Vereins für Sozialpolitik*, and Vol. V of the exceedingly valuable inquiry by this society regarding *Die Störungen im deutschen Wirtschaftsleben während der Jahre 1900 ff.*) with contributions by J. Jastrow, A. Heinecke, R. Calwer, K. Singer, L. Cohn, Landsberg, and W. Bloch. See also diagram on page 140 of the above-cited (note 17) work by Theodore Burton (according to George H. Wood in the *Journal of the Royal Statistical Society*, 1899) for the employment statistics in the United Kingdom for 1860-1900, as well as the *Annual Extracts of Labor Statistics*, official documents compiled by the Labor Department of the Board of Trade.

22. See Walter Bagehot, *Lombard Street*, ed. 1896, p. 199: "What is wanted, and what is necessary to stop a panic is to diffuse the opinion that, though money may be dear, still money is to be had."

23. See Ernst Kritzler, *Preussische Hypotheken-Aktien-Bank, Deutsche Grundschuld-Bank, Pommersche Hypotheken-Aktien-Bank, Krisis und Sanierung*. *Schriften des Vereins für Sozialpolitik*, Vol. CXI; *Krisen-enquete*, Vol. II; *Störungen im deutschen Wirtschaftsleben*, Vol. VII, 1903, pp. 1-82.

24. See *Kreuzzeitung* of June 30, 1901, No. 301 (1st Supplement): "It can not be denied that the Haute banque through its speedy and energetic protection of the legitimate commercial credit, especially in Saxony, greatly lessened the consequences of the Leipzig catastrophe. For this action it should be accorded all thanks and recognition."

25. See Moritz Ströll *Über das deutsche Geldwesen im Kriegsfall* (*Schmoller's Jahrbuch*, Vol. XXIII, 1899, pp. 173-195 and pp. 197-226), also *Die finanzielle Mobilmachung der deutschen Wehrkraft*, by Col. Dr. Ritter v. Renauld (Leipzig, 1901, Duncker & Humblot), and the article *Finanzielle Mobilmachung* by the same author in the *Bank-Archiv*, fourth year, No. 3, of December, 1904, together with the objections in the *Deutscher Ökonomist* of January 14, 1903 (twenty-third year, No. 1151); Karl Helfferich, *Das Geld im russisch-japanischen Kriege* (Ernst Siegfried Mittler & Sohn, Berlin, 1906) and *Die finanzielle Seite des russisch-japanischen Krieges* (*Marine-Rundschau*, Oct. 1904); Max Schinckel, *Nationale Pflichten der Banken und Kapitalisten im Kriegsfall* (*Bank-Archiv*, fifth

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year, No. 4, p. 41 et seq., Nov. 15, 1905); General v. Blume, *Militärpolitische Aufsätze* (Berlin, 1906, Ernst Siegfr. Mittler & Sohn), Chapter I, 4: *Mobilmachung. Soziale und wirtschaftliche Folgen*, pp. 14-30; Max Warburg, *Finanzielle Kriegsbereitschaft u. Börsengesetz*, paper read at the 3d General Congress of German Bankers at Hamburg, Sept. 7, 1907); and Riesser, *Finanzielle Kriegsbereitschaft und Kriegsführung*, Jena, Gust. Fischer, 1909.

26. See Riesser, *ibidem*, p. 54.

27. See, among others, Max Schinckel: *Nationale Pflichten der Banken und Kapitalisten im Kriegsfall* (Bankarchiv, Vol. V, No. 4, Nov. 15, 1905), pp. 42-43; Riesser, *loc. cit.*, pp. 25-26, and the discussion in Part III, chapter III, Gd, of this book.

28. See Moritz Ströll, *Über das deutsche Geldwesen im Kriegsfall*. (*Schmoller's Jahrbuch für Gesetzgebung*, etc., XXIII, p. 176); Riesser, *loc. cit.*, pp. 2-4 and p. 41.

29. Riesser, *Finanzielle Kriegsbereitschaft und Kriegsführung*, 1909, pp. 55-75.

30. Riesser, *loc. cit.*, pp. 45-55.

31. Immediately after the declaration of war, this war treasure is to be delivered to the Reichsbank, which, according to section 17 of the bank law of March 14, 1876, may issue the threefold amount in bank notes—namely, 360,000,000 marks.

As an increase of this war treasure in gold is scarcely feasible at present, I have broached the question (*loc. cit.*, p. 45, note 1) whether a further war reserve fund of 120,000,000 marks might not be accumulated in silver.

32. Riesser, *loc. cit.*, pp. 41-42.

33. Riesser, *loc. cit.*, pp. 49-50.

34. In contrast with Japan, which endeavored at the very outset "to raise as large a possible share of the necessary money for the war by means of increased taxation" (Helfferich, *Das Geld im russisch-japanischen Kriege*, Berlin, Siegfr. Mittler & Sohn, 1906, p. 143), Russia limited herself to loans, to drawing on the considerable resources available in her treasury, and to diminishing her expenditure, resorting to increased taxation only in order to cover the interest on the war loans. See also Riesser, *loc. cit.*, pp. 96-101.

35. See Riesser, *loc. cit.*, pp. 5-11, especially p. 10.

36. In this matter the correct determination of the type and issue price of the loan is of the greatest importance. (See Riesser, *loc. cit.*, pp. 98-99, pp. 77-92.) In Germany, unfortunately, even in normal and prosperous times, the success of a loan subscription has frequently been jeopardized, to the detriment of government credit, by the failure "to make momentary sacrifices in order to secure permanent advantages," as Russia has frequently done to her own advantage during times of peace and war (Helfferich, *loc. cit.*, p. 89). The failure of the 5 per cent war loan of 100,000,000 marks in July, 1870, was due as much to the time of issue as to the injudicious selection of the type and issue price of the loan (the

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latter against the emphatic advice of the representatives of the banking world consulted); further, it was ill advised not to make the banks subscription offices, although they only represented at that time a relatively small financial power. (See Riesser, loc. cit., 102-103.)

37. See Riesser, loc. cit., p. 28.

38. Important conclusions in all these respects may be drawn from the financial policy pursued by England during the Boer war (October, 1899, to May, 1902), and by Russia and Japan during the Russo-Japanese war (February, 1904, to the end of August, 1905). (See Riesser, loc. cit., pp. 75-79, and p. 79, 2, to p. 93.) I refer here especially to the "system skilfully adopted by the Russian financial administration of procuring at home the money required for war expenses at home and at the scene of war, and of procuring by foreign loans the money necessary for payments abroad, thus neither depriving the internal commerce of Russia of its necessary currency by sending money abroad, nor menacing the foreign money market on whose good feeling she depended, by drawing on it for large amounts of gold. (Helfferich, loc. cit., p. 219.)

39. The note banks, mortgage banks (including the "mixed" mortgage banks), the building, brokers', and insurance banks, also establishments exclusively devoted to the promotion of industrial undertakings are not included in this discussion.

As regards the remaining "banks" quite a variety of designations have been applied to them. The most customary term is probably "credit bank," a name which I shall, as a rule, adhere to in the following pages. Other names have been used, however, such as: "industrial" banks (a name largely used during the last century); "investment" banks (Plenge); "security" banks (Schmoller and Sattler); "banks of emission" (Loeb); "enterprise" banks (Schäffle); "speculation" banks (Weber); "crédit mobilier" banks (Max Wirth). Knies (in "Geld und Kredit," 2nd part, 1879, p. 223) enumerates still more specialised designations: "It has become customary to classify the banks themselves as 'loan' banks, 'giro' banks, 'bill' or 'discount' banks, 'deposit', 'account current', and 'cheque' banks", etc. To my mind, however, none of these designations can lay claim to a complete characterisation of the activity of German banks as historically developed. The one or the other designation applies to a bank only in as far as the activity implied by the title (speculation, investment, emission, or security transactions) predominates in the total range of its business. Even this, however, does not generally apply to the whole development of each individual bank, for not only has each bank developed quite differently, but within one and the same bank the character and tendency of its activity during the different phases of its development, constituted sometimes a radical departure from that pursued by the former management according to the business policy pursued by the new management.

If we proceed from the distinction between simple deposit banks and the German banks which by reason of their historical development are of a different nature, that is to say, if we desire to emphasise that the latter are

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not simply deposit banks (as is A. Weber's evident intention in his comparison between "deposit" and "speculation" banks), it would seem more appropriate to do as has been done in the case of the mortgage banks, for which, since the mortgage bank law of July 13, 1899, a distinction is drawn between mortgage banks proper, and those carrying on miscellaneous transactions, which latter, in virtue of article 46, section 1, are exempt from the restrictive regulations of article 5.

From this standpoint, therefore, the existing German credit banks might be designated also as banks transacting miscellaneous business ("combined" or "mixed" banks). More important, however, than the mere formal question of definition, is the conclusion resulting from the above, that the general opinions and deductions expressed in the following pages regarding German banks, particularly German great banks, are invariably given with the tacit understanding that the general description, when applied in detail, i. e., with regard to each individual bank, may be subject to extensive modifications.

40. This has been the case hitherto only with the Disconto-Gesellschaft. See *Die Disconto Gesellschaft, 1851-1901, Denkschrift zum 50 jährigen Jubiläum*, Berlin, 1901.

Part II.

1. See (in addition to other works cited): Werner Sombart, *Die deutsche Volkswirtschaft im neunzehnten Jahrhundert*, 7th ed. (Berlin, Georg Bondi), 1909, and Ludwig Pohle, *Die Entwicklung des deutschen Wirtschaftslebens im letzten Jahrhundert*, 2nd ed. (Leipzig, B. G. Teubner), 1908.

2. Gustav Schmoller, *Grundriss der allgemeinen Volkswirtschaftslehre*, Bd. II (1st to 6th edition, Leipzig, 1904, Duncker & Humblot), pp. 182 and 183. Schmoller thinks, however, that this estimate of Prussia's capital is too low.

3. In Frankfort-on-the-Main for home-manufactured goods, notions, and hardware, according to an interesting book by Hugo Kanter: *Die Entwicklung des Handels mit gebrauchsfertigen Waren von der Mitte des 18. Jahrhunderts bis 1866 zu Frankfurt a. M.* (Tübingen and Leipzig, 1902, J. C. B. Mohr), p. 125.

4. Werner Sombart, *Der moderne Kapitalismus*, I, pp. 429, 424-425. 585,815 looms were used in the home-weaving industry, and only 217,388 in factories.

5. Von Reden, *Erwerbs- u. Verkehrsstatistik (1853)*, p. 281, and Sombart, *Der mod. Kapitalismus*, I, pp. 424-425.

6. In the weaving trade 754,735 workmen were employed in home industry, 325,277 in factories. (W. Sombart, *Der moderne Kapitalismus*, I, pp. 424-425.)

7. W. Oechelhäuser, *Vergleichende Statistik der Eisenindustrie aller Länder u. Erörterung ihrer ökonomischen Lage im Zollverein*, 1852, pp. 124 and 128.

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8. W. Sombart, *Der mod. Kapitalismus*, vol. I, p. 462.
9. E. Engel, *Das Zeitalter des Dampfes*, 2 ed., 1881, p. 130.
10. Karl Lamprecht, *Zur jüngsten deutschen Vergangenheit*, (Vol. I, 1st half of his *Deutsche Geschichte*, Freiburg i. B., Herm. Heyfelder, 1903), p. 153.
11. Von Reden, *loc. cit.*, p. 281.
12. W. Oechelhäuser, *loc. cit.*
13. With regard to the following remarks see Max Sering, *Geschichte der preuss.-deutschen Eisenzölle von 1818 bis zur Gegenwart*, in *Schmoller's Staats u. Sozialwissenschaftl. Forschungen*, vol. III (1882), pp. 53-62. On pp. 94-95 he points out the interesting fact that the financial crisis of 1847 interrupted the transition to coke fuel.
14. According to Lürmann in *Die Fortschritte im Hochofenbetrieb seit 50 Jahren*, Düsseldorf, 1902, the output of blasting furnaces has increased sevenfold since 1852 (in capacity expressed in tons). According to Peter Mischler, *Das deutsche Eisenhüttengewerbe*, vol. I (1852), p. 150, the average English blasting furnace produced in the middle of the nineteenth century 70,000 quintals annually, whereas German blasting furnaces only averaged 7,000 quintals annually, as compared with 618,000 in 1899.
15. W. Sombart, *Der mod. Kapitalismus*, II, pp. 13-14.
16. "In the district of Siegen, therefore, the iron ore production has in 50 years increased twenty-five-fold in quantity, thirty-one-fold in value." (See Mollat, *Zur Würdigung der Siegerländer Industrie*, Siegen, September, 1908.)
17. Von Reden: *Vergleichende Kulturstatistik*, 1848, p. 412, seq.
18. W. Sombart, *Der mod. Kapitalismus*, vol. II, pp. 176-7.
19. See Ludwig Geiger, *Berlin, 1688-1840*. (Berlin, Gebr. Paetel, 1903), Vol. I (1903), p. 463, Note*.
20. See *Beiträge zur Geschichte des Berliner Handels- und Gewerbeleisses aus der ältesten Zeit bis auf unsere Tage*. A memorial in commemoration of the fiftieth anniversary of the corporation of the Berlin Merchants on March 2, 1870, p. 83. In December, 1908, the number of persons contributing to sickness insurance funds in Berlin was 738,858.
21. W. Sombart: *Der mod. Kapitalismus*, II, pp. 176-177.
22. W. Sombart, II, p. 214. Concerning the population of to-day see pp. 90 and 91.
23. Matches were introduced only in 1834, and sewing machines were first used in Germany at the beginning of the sixties.
24. Max Wirth, *Geschichte der Handelskrisen*, (2nd ed.), 1874, p. 292.
25. See Sombart: *D. mod. Kap. II*. pp. 284-7, and Otto Bähr *Eine deutsche Stadt (Kassel) vor 60 Jahren*, Leipzig, Fr. Wilh. Grunow, 1884, p. 64 and following.
26. See K. Knies: *Der Telegraph als Verkehrsmittel*, 1857, p. 161, et seq.

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27. Geschichte der Frankfurter Zeitung 1856-1906, p. 17.

28. See Th. Bauer: Die Aktienunternehmungen in Baden (Karlsruhe, 1903, Macklotsche Buchhandlung), pp. 14 and 15, for the conditions prevailing in Baden, where there was a law concerning stock companies already at the beginning of the nineteenth century. It appears that the number of joint-stock companies in Baden before the middle of the nineteenth century was very limited. They were the following: The spinning and weaving mills, at Ettlingen, founded in 1835; the Badische Gesellschaft f. Zuckerfabrikation in Waghäusel founded in 1836; the Mechanische Weberei," at Thiengen, founded in 1843; the Badische Gasaktiengesellschaft, founded in 1845, and the Karlsruher Gasgesellschaft, founded in 1848. Beginning with 1853 came the following: Aktiengesellschaft für Uhrenfabrikation, at Lenzkirch, founded in 1853; Verein chemischer Fabriken, at Mannheim, founded in 1854; the French Compagnie de Manufactures de Glaces, etc., founded in 1854, for the manufacture of plate-glass; the Badische Zinkgesellschaft, at Mannheim, founded in 1855; the wire and screw factory, of Falkau, founded in 1856; the Badische Gesellschaft für Tabakproduktion und Handel, at Karlsruhe, founded in 1857; and some other companies of minor importance. Bauer only mentions one large concern converted into a joint-stock company, namely the Maschinenbaugesellschaft Karlsruhe, founded in 1848 and converted in 1852.

The formation of companies became more active after the introduction of the industrial law of 1862, which was based on freedom of trade and freedom to move about from place to place. The well-known Badische Anilin- und Sodafabrik, at Mannheim-Ludwigshafen, was founded about this period (1865).

29. Engel, Die erwerbstätigen juristischen Personen, etc. Berlin, published by the Royal Statistical Bureau, 1876, pp. 10-11.

30. See Geschichte der Frankfurter Zeitung, 1856-1906, p. 15.

31. Karl Helfferich, Geschichte der Deutschen Geldreform (Leipzig, 1898, Fincker & Humblot), p. 6 seq., and also his Beiträge zur Geschichte der Deutschen Geldreform, p. 78 seq.

32. Hugo Kanter, loc. cit., pp. 112-113.

33. Hugo Kanter, loc. cit., p. 41.

34. Rud. Kaulla, Die Organisation des Bankwesens im Königreich Württemberg, 1908, p. 6.

35. W. Sombart, Die Deutsche Volkswirtschaft, 2d ed., pp. 190-191.

36. "Geschichte d. Handelskammer zu Frankfurt a. M.," (1767-1908). Jos. Baer & Co., Frankfort-on-the-Main, 1908, p. 659.

37. W. Sombart, "Die Deutsche Volkswirtschaft," 2. Aufl., p. 196.

38. On October 1, 1851, even the Prussian Bank gave notice to depositors to withdraw their deposits, because, according to W. Sombart (Deutsche Volksw., 2d ed., p. 85), "it did not know what to do with the money." At the commencement of the second period (1870) the deposits

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at the Prussian Bank amounted to only 15,770,000 thalers=47,310,000 marks.

39. See Lexis, "Banken" (in *Handwörterbuch der Staatswissenschaften*, 1903, 3d ed., Vol. II, p. 400).

40. Karl Lamprecht, loc. cit., p. 183.

41. Walter Troeltsch, *Über die neuesten Veränderungen im deutschen Wirtschaftsleben*. Stuttgart, W. Kohlhammer, 1899, pp. 32 and 45.

42. New investigations, and the remarks made by Ludwig Pohle, loc. cit., p. 23, suggested this modified statement as compared with the one in the second edition.

43. Vide Karl Lamprecht loc. cit., p. 43.

44. W. Sombart, *Der mod. Kapitalismus*, II, pp. 148-151.

45. Ludwig Pohle, loc. cit., p. 27.

46. "In the coal and iron deposits of Germany lies * * * the explanation why the German economic world turned so decisively to industrial activity during the latter half of last century, as well as of the intensity of Germany's capitalistic development." (W. Sombart, *Deutsche Volkswirtschaft*, 2d ed., p. 103).

47. See Hans Gideon Heymann, *Die gemischten Werke im deutschen Grosseisengewerbe*. Ein Beitrag zur Frage der Konzentration der Industrie, Stuttgart & Berlin, 1904, J. G. Cotta Nachf. (*Münchener Volksw. Studien*, edited by Brentano and Lotz, 65. Stück), p. 4: "It was the employment of mineral coal for smelting and as a source of power that paved the way for capitalism and large industry." (See also p. 62.)

48. See Max Wirth, *Geschichte der Handelskrisen*, 2d ed., p. 292.

49. Engel, *Die erwerbstätigen juristischen Personen, insbesondere die Aktiengesellschaften im Preussischen Staate*. (Berlin, Verlag des kgl. statist. Bureaus, 1876), pp. 10-11.

50. It can not be proved that the *Crédit Mobilier* participated financially in the founding of the Darmstädter Bank.

51. See *Geschäftsbericht der Darmstädter Bank* for 1853, page 9. Fortunately the idea was never carried into practice.

52. Anonymous article: "Die modernen Kreditbanken," published in 1856 in the *Deutsche Vierteljahrsschrift*, No. 3 (Stuttgart and Augsburg, J. G. Cotta), page 255 seq.

53. Conrad: *Grundriss zum Studium der politischen Oekonomie*. (4th ed., Jena, Gust. Fischer, 1902), part 1, section 72 (p. 229 seq.): "Die *Crédit-Mobilier-oder Emissions- und Industriebanken*."

54. In the main, the theme seems to have been furnished by the *Union générale* (Bontoux).

55. While following a hearse one should neither philosophise nor try to make laws. Had Ihering taken this to heart he certainly would not have marred his great work "Der Zweck im Recht" by the following generalisation written immediately after the crisis of 1873: "The devastations which they (the joint-stock companies) caused among private property are

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worse than if fire and famine, failure of crops, earthquake, war, hostile occupation had combined to ruin the national prosperity." (Vol. I, p. 223.)

It is both surprising and regrettable that Ruhland quotes my words in his "System der polit. Oekonomie" (Vol. III, p. 8) in quotation marks in the following manner: "Riesser's desire" * * * "not to philosophise, nor to try to make laws when following a hearse, and *not to select the effect of a stock exchange panic as the starting point of a reformatory action*(1)" etc. My words are simply a warning not to criticise, to draw philosophical conclusions, or to take legal action immediately after a crisis; that is to say, while one is "following the hearse." The italicized passage is not only not to be found in the paragraph quoted by Ruhland (footnote 3 on p. 38 of the second—German—edition of this book), but it does not even remotely represent what was written there—a fact which will be clear to every careful reader of my book. Keeping the above-mentioned facts in view, we can correctly estimate the scientific basis of Ruhland's deduction found in the following sentence: "The political economist whose duty as a 'physician' is to cure the diseased 'body-economic' would be guilty of the most criminal neglect if (in accordance with Professor Riesser's wishes) he would conceal or overlook its worst and most threatening symptoms!" He evidently forgets that it is one of the first elements of scientific polemics not to construct an argument on absolutely false citations and then proceed to combat it.

56. M. Aycard, "Histoire du Crédit Mobilier," 1852-1867, Bruxelles, 1867.

57. Joh. Plenge, Gründung und Geschichte des Crédit Mobilier. Zwei Kapitel aus Anlagebanken, eine Einleitung in die Theorie des Anlagebankgeschäftes (Tübingen, H. Laupp, 1903). This treatise, intended to be the precursor of a larger unpublished work treating the latter theme (theory of the investment bank business) in detail, differs far more than the title would lead one to infer, and is characterised by an abundance of interesting material and keen observation.

58. The increase took place when it was too late (1866); the capital was then doubled, being raised to 120,000,000 francs. The reserves amounted only to 4,000,000 francs.

59. As early as March 9, 1856, the Government felt obliged to prohibit any further issue of securities on the Paris Bourse. According to Plenge (loc. cit., p. 91), no less than 457 limited liability companies with a combined capital of 1,000,000,000 francs (not 100,000,000) were founded in France from July 1, 1854, to July 1, 1855. Among these companies there were 227 joint-stock companies *en commandite*, with a capital of 968,000,000 francs.

The fusion policy in the field of industry, announced in the 1854 report of the Crédit Mobilier in correct anticipation of the concentrative tendencies inseparable from large-scale industry, was only carried out to a limited extent by the company. On the other hand, several important railways were consolidated by its assistance. (See Plenge, loc. cit., p. 104.)

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60. See Plenge's list of bourse quotations, loc. cit., p. 111.

61. As early as 1859 the *Crédit Mobilier* had about 77,000,000 francs of securities of all descriptions in its possession, while its capital was 60,000,000 francs, and its reserves 2,000,000 francs. In 1862 the total of these holdings (among which "rentes" occupied but a modest place) had grown to 148,000,000 francs.

The advances to subsidiary companies amounted to 29,500,000 francs in 1858, and to nearly 73,000,000 francs in 1866.

62. Aycard, who has a keen instinct in such matters, believes that 11,000,000 francs represented the profits solely from speculation during 1856. This sum certainly did not include the profit on issues, such as Plenge mentions (loc. cit., p. 150).

63. 3,910 kilometres had been authorized up to 1851 and 14,227 kilometres up to 1857. (Plenge, loc. cit., p. 91)

64. See Plenge's list, p. 59 seq., and p. 62. For instance: In 1852-1854 French Southern Railway; 1854, Austrian State Railway, Paris-Mülhausen, Dôle-Salins; 1857, Hungarian Franz-Joseph Railway, Swiss Central Railway, and West Swiss Railway, Dauphiné Railways, Russian Railway, Cordova-Sevilla, Spanish Northern Railway, etc.

65. Ad. Wagner, *Bankbrüche u. Bankkontrollen*, in the *Deutsche Monatsschrift für das gesamte Leben der Gegenwart* (ed. Jul., Lohmeyer), 1st year, No. 1. (October, 1901), pp. 74-85, and No. 2. (November, 1901), pp. 248-258, especially p. 255. For the contrary view, see, amongst other material, the *Deutscher Oekonomist* of October 19, 1901, and February 1, 1902; also Richard Rosendorff, *Bankbrüche und Bankkontrollen*, in *Hirth's Annalen des Deutschen Reiches*, 1902, No. 3, pp. 182-197.

66. See Plenge, loc. cit., p. 14. As a matter of fact the French Government frequently adopted a rigorous attitude towards the *Crédit Mobilier*. It prevented the issue (announced first for the middle of September, and subsequently for October 5, 1855) of 240,000 bonds at 500 francs, nine days before subscription; on March 9, 1856, it prohibited the issue of any further securities on the Paris Bourse; in its charter the *Crédit Mobilier* was even forbidden to subscribe to foreign public loans without the consent of the Government.

67. Loc. cit., pp. 71-98, sec. 10: *Der Pariser Crédit Mobilier von 1852-1867*. In criticizing this description and criticism it seems to me that Plenge (VII, and 17) is rather too severe.

68. Loc. cit., pp. 249-267.

69. Max Wirth in his *Geschichte der Handels-Krisen* (published in 1857) shows by his strong prejudice against the German *Crédit Mobilier* Banks (which is conspicuous in some chapters on almost every page) that the book was written whilst the author was completely under the influence of the serious crisis of '57 and the speculative excesses preceding it.

70. Section 10 as well as sections 8, 11, 12, 16, 17, 18, 19, 21, 23, 30, 32, 36, and 40 were formulated somewhat differently by resolution of the general meeting of May 31, 1860.

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71. This is expressly referred to in the following passage of the program-like business report of the Darmstädter Bank for 1853 (reprinted above, p. 48): "and to lend its cooperation in order to lead enterprise and capital into the proper channels, corresponding with the requirements of the moment." It is obvious that the wording of this clause is too restrictive and, taken literally, is economically incorrect.

72. See especially article 5 of the statutes of the *Crédit Mobilier*.

73. In section 2 of the statutes of the *Berliner Handelsgesellschaft*, dated July 2, 1856, which in this respect were far more comprehensive, the object of the company was stated to be "the carrying on of banking, commercial, and industrial business of every description." Its activity, in particular, is to extend to "industrial and agricultural undertakings, mining, foundries, canal, road, and railway building, as well as to the formation, combination, and consolidation of joint-stock companies, and to the issue of shares and bonds of such companies."

74. In 1860 the entire wording of section 10 was partly changed and partly supplemented. In my text, following a well-founded criticism by Warschauer (in *Conrad's Jahrbücher*, 3d series, vol. xxxi, p. 705), I have made considerable abbreviations.

75. It must be remembered that up to the introduction of the "Allg. Deutsch. Handelsgesetzbuch" (1862), that is to say, during the first decade of the activity of the Darmstädter Bank, the management was not in the hands of the directorate, which was merely an executive organ, but solely in the hands of the "bank administration," consisting of 18 members.

76. Max Wirth, "Geschichte der Handelskrisen," 2d ed., pp. 244 and 295.

77. Max Wirth, *loc. cit.*, p. 296.

78. A few years later, in 1866, as already noted, similar conditions prevailed in England, which, after having passed through the crises of 1825, 1836, 1839, and 1847, underwent another serious crisis in 1866.

79. Business report for 1853 (program), pp. 7 and 10.

80. It is therefore incorrect to state that the bank was "compelled" to establish branches and limited liability companies "merely in order to invest its capital profitably" (Max Wirth, *loc. cit.*, p. 272). The "half bankrupt calico factory at Heidenheim," with the transformation of which into a joint-stock company Max Wirth reproaches the bank, remarking that "nothing has been heard of its profits as yet," is the present flourishing and highly respected Württemberg Calico Joint Stock Company (*Aktiengesellschaft Württembergische Kattunmanufaktur*) at Heidenheim (Württemberg).

81. See Felix Hecht, *Bankwesen und Bankpolitik in den süddeutschen Staaten*, etc., pp. 166-167.

82. Others were planned in St. Petersburg, London, Constantinople, Smyrna, and Prague.

83. Most of the other banks participated herein, or they acted independently, although the latter case occurred only to a small extent during this period. For details see p. 71 et seq.

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84. On one occasion, it is true (1859), the Darmstädter Bank was induced to make long-term advances amounting to 4,500,000 florins to industrial concerns and railways, sustaining great losses thereby. In this case, however, it obtained securities the value of which fell to an extent not anticipated, and it was unable to obtain supplementary security. (See Model, *Die grossen Berliner Effektenbanken*—ed. Ernst Loeb—Gust. Fischer, Jena, 1896, pp. 60–61.)

85. The real increase amounted merely to 46,000 florins, so that the capital from 1856 on was 25,046,000 florins=42,936,000 marks; the certificates (Berechtigungsscheine) which had been issued beyond that amount had to be gradually withdrawn. The issue of these certificates was accompanied by rather unpleasant occurrences. (See Model, *loc. cit.*, p. 58.)

86. It reduced its "lombard and covered credits" from 1,400,000 florins in 1859 to 90,000 florins in 1864; its loans and mortgages from 4,710,000 florins in 1859 to 400,000 florins in 1864, and its "illiquid claims" from 910,000 florins in 1859 to 114,000 florins in 1864.

87. See the interesting report: *Die Disconto-Gesellschaft, 1851–1901, Denkschrift zum fünfzigjährigen Jubiläum* (Berlin, 1901, J. Guttentag), p. 15 (quoted hereafter as "Jubiläumsbericht").

88. The dividends which the Darmstädter Bank and the Disconto-Gesellschaft distributed during 1856–1900 have been compiled in a table by Ad. Weber, *Depositenbanken und Spekulationsbanken*, Duncker & Humblot, Leipzig, 1902, pp. 209–210, those of the Disconto-Gesellschaft also in its Jubilee Report, p. 261.

89. During the first fifty years of its existence (1853–1903) 7 $\frac{5}{10}$ per cent.

90. For the period from April 1, 1856, to December 31, 1900, 9.51 per cent; from April 1, 1856, to 1904, 9.42 per cent.

91. Model, *loc. cit.*, p. 68, gives a table of the current business of the Darmstädter Bank during 1859–1864 and emphasizes that the management attached the greatest value to "fostering and extending the current account business, and to carrying out long engagements." This table, however, appears to me to prove the latter tendency rather than the former, although the former also existed. The current business of the Darmstädter Bank yielded, in 1856, 8 per cent of the total profit of 15 per cent.

92. Of the other banks Model only mentions the Berliner Handelsgesellschaft. I profit by the opportunity to express my best thanks to these banks for supplying me with their business reports for the earlier period, of which reports in most cases only few copies are in existence, and these in some instances only in manuscript form.

93. The item "debits" (Debitoren), which decreased in 1867 and still further in 1868 and 1869, rose to 30,526,471 marks in 1870 and to 62,771,967 marks in 1871.

94. The deposits, which rose to 7,466,212 marks in 1867 (as against 2,716,187 in 1866) fell in 1868 to 4,384,850 marks and in 1869 as low as the amount given above (2,274,228 marks). They increased again in 1870 to 3,676,343 marks, rose in 1871 suddenly to 14,779,269 marks, and in 1873

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as high as 64,788,366 marks without, however, being able to maintain that level during the following years.

95. At its very first meeting (30 October, 1848) the supervisory council, at the suggestion of the board of directors of the bank, had fixed 4,000,000 thalers as the limit for individual credit, 2,000,000 thalers for deposits to be accepted, 1,000,000 thalers for its own securities (eigene Effekten), and 1,000,000 thalers for its own bills (Geldanweisungen) (see Ernst Koenig's *Erinnerungsschrift zum 50-jährigen Bestehen des A. Schaaffhausen'schen Bankvereins vom Oktober 1898*, p. 26).

96. On this point the board of directors remarks in its business report for 1852, page 1: "We heartily welcome every new and large establishment in this town and country, being convinced that in the course of years the prosperity of the Bankverein will become inseparable from the growth and and rise of the Rhenish industry in all its branches." (See business report 1853, p. 3.)

97. "For the exploitation of the rich coal mines of the Essen field." (Business report for 1852, p. 3.)

98. From 1864 onward only the total sums are given, the number of accounts being omitted.

99. No details can be found for the earlier years. In 1852 the average debit on current account was 6,804 thalers and the average credit account, 5,255 thalers.

100. The business report of that year (the one preceding the crisis of 1857) mentions that at the end of September "the Prussian Bank for several days refused to discount anything."

101. As far as balancing the accounts is concerned, section 57 of the statutes deserves special attention. It provided that "the inventory to be compiled annually shall represent the capital of the society according to its true value; the capital, if anything, should be underestimated rather than overestimated."

102. This is shown in the business report of 1860, page 2.

103. One noteworthy fact disclosed by the business reports of the bank is that during the whole of the first period a 10 per cent share in the net profits was paid to its founders. Another circumstance worth recording is that at the ordinary general meeting held in 1860 a shareholder expressed the desire that (p. 3 of the minutes) "in the future the dividends of the bank should be determined by the board of management, and not by the general meeting."

104. For the other reductions and increases, see the Jubilee Business Report of the Mitteldeutsche Credit-Bank for 1905 (1856-1906), page 2.

105. Syndicates of private bankers existed earlier.

106. A syndicate under the leadership of the Disconto-Gesellschaft was formed among the Berlin bankers and banking firms during the same year (1859) in order to take over a part of the 30,000,000-thaler loan necessary for the mobilization of the Prussian army; this was the first step toward

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the formation of the so-called "Prussian Syndicate." (See Jubilee Report of the Disconto-Gesellschaft, p. 29.) (See above, p. 62.)

107. Nevertheless the business report of the Darmstädter Bank as early as 1862 (pp. 11-12), and the reports following, contained a list of the classes of securities and their amounts, the amounts of former years being added for comparison. The list comprised (1) American bonds, (2) government securities and lottery tickets, (3) preference bonds, (4) railway bonds, (5) note-issuing banks' stock, (6) credit and discount banks' shares, (7) stock in shipping companies, (8) municipal and mortgage bonds.

108. See, for example, the business report of the Darmstädter Bank for 1855, page 6: "We can not, however, promise rapid successes in this direction (industry) * * * and can not satisfy oversanguine views." Business report for 1857, page 2: "The excessive expectations which swindlers have based on these new developments (the 'Industrial Banks') will certainly not be fulfilled."

109. Felix Hecht, *Bankwesen und Bankpolitik in den süddeutschen Staaten, 1819-1875* (Jena, Gustav Fischer, 1880), page 172

110. Particularly through the revolution of 1848, the war with Denmark in 1849, the Russian-Turkish war of 1853, the Crimean war of 1854, the Austrian war against Italy of 1859, the American war of secession, 1861-1865, the French-Mexican war of 1861-1867, the Austrian-Prussian campaign against Denmark, 1864, and the Prussian war against Austria and her allies in 1866.

111. Especially through the crises of 1856, 1857, and 1866.

Part III.

1. Law relating to the coining of imperial gold coins, December 4, 1871; coinage law of July 9, 1873, with additions of July 9, 1873, January 6, 1876, and June 1, 1900; law relating to the issue of imperial treasury notes of April 30, 1874; supplementary law of June 5, 1906 (section relating to 10-mark and 5-mark notes); and decree concerning the introduction of the imperial gold standard of September 22, 1875.

2. Law relating to the constitution of law courts of January 27, 1877, and May 17, 1898; civil procedure law of January 30, 1877, and May 17, 1898; criminal procedure law of February 1, 1877; bankruptcy law of February 10, 1877, and May 17, 1898; law concerning matters of voluntary jurisdiction (*freiwillige Gerichtsbarkeit*) of May 17, 1898.

3. Military service law of November 9, 1867, with supplementary laws of February 11, 1888, February 8, 1890, and April 15, 1905; military law of May 2, 1874, amended by the laws of May 6, 1880, March 11, 1887, January 27, 1890, May 26, 1893, March 25, 1899, and partly through the code of civil law; the control law of February 15, 1875, law concerning voluntary jurisdiction (*freiwillige Gerichtsbarkeit*) in the army and navy of May 28, 1901, and decree of February 20, 1890; military penal code of June 20, 1872; military criminal procedure law of December 1, 1898.

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4. Bank law of March 14, 1875, with amendments of December 18, 1889, June 7, 1899, and June 1, 1909; statutes of the Reichsbank, May 21, 1875, with decree of September 3, 1900; law concerning the issuing of bank notes of December 21, 1874; law of February 20, 1906, regarding the issue of bank notes in denominations of 20 and 50 marks.

5. Section 125 et seq. of the constitution of law courts act, and act as to seat of the supreme court (Reichsgericht) dating 11th April, 1877.

6. The words which were here added in the second edition, "combined with the victorious advance of large-scale manufacture in almost all branches of industry," had to be struck out after the publication of the statistical material in the essay of A. Saucke: "Hat neuerdings der Grossbetrieb auf Kosten des Kleinbetriebs in der deutschen Industrie zugenommen?" (Has large-scale industry recently increased in Germany at the expense of small-scale industry?) (Conrad's Jahrbücher, III series, vol. 31, pp. 222-223); for although in certain branches large-scale production doubtless increased greatly at the cost of small-scale production even during the second period, yet these statistics prove that in German industry (subject to accident insurance) as a whole, an increase of large-scale production at the expense of small-scale production has not taken place, "at least not during the fifteen years from 1888-1903," that is to say, during a considerable part of the second period. In agriculture, it is true, the number and area of the great landed properties have greatly increased, especially in East Prussia; the small and middle sized farms, however, show the greatest increase.

7. See Ludwig Pohle, loc. cit., pp. 140-141, and the table printed there.

8. See Ernst von Halle, *Die Deutsche Volkswirtschaft an der Jahrhundertwende* (Berlin, Ernst Siegfr. Mittler & Sohn, 1902), p. 73. According to the statistical annual for the German Empire (twenty-ninth year, 1908), p. 26, Tab. 13 d., and p. 25, note 1, the oversea emigration of Germans via German and foreign ports in 1907 amounted to 31,696 persons, whereas the immigration via German ports into Germany amounted to 217,812 persons.

9. See table in Ludwig Pohle, loc. cit., p. 146, under II.

10. See *Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter* (supplementary Volume III of the German Finance Reform Bills of 1908), p. 50.

11. See W. Sombart, *Der moderne Kapitalismus*. II, p. 214.

12. In the Palatinate (Bavarian), according to Emil Herz, loc. cit., p. 44, the development proceeded on the same lines. Thus the number of inhabitants of Kaiserslautern was 48,306 in 1900, as compared to 8,250 in 1842; that of Pirmasens was 30,194 in 1900, as compared to 6,410 in 1842.

13. See report of Die Aeltesten der Kaufmannschaft in the *Berliner Jahrbuch für Handel und Industrie* for 1904, I, p. 26.

14. Ad. Wagner, *Zur Methodik der Statistik des Volkseinkommens und Volksvermögens* (in the *Zeitschrift des Kgl. Preuss. Statist. Bureaus*, forty-fourth year, 1904, p. 41-122), and in his expert report to the Imperial

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Treasury, published on the occasion of the German Finance Reform Bills of November, 1908 (No. 1043), in the "Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter," under II, pp. 122-132.

15. A calculation of this kind made solely on the basis of population is, open to objection, however, because different conditions prevail in different parts of Germany.

16. In the *Grenzboten*, No. 28, of July 9, 1908, pp. 55-57.

17. In the "Woche" of August 23, 1906, No. 34 (also in the *Konservative Monatsschrift* of October, 1908).

18. In the "Tägliche Rundschau" of 1908, No. 541 Individual incomes are computed in this case on the basis of insurance statistics.

19. "Zur Reichsfinanzreform," Berlin (October), 1908. Here, too, insurance statistics are made the starting point for the estimate of the value of various kinds of property; similarly in the essay, "350 Milliarden deutsches Volksvermögen" (Berlin, Otto Elsner, 1909)

20. Differences of many billions of marks are also found in examining the several items. Thus, the value of capital invested in foreign enterprises and in foreign securities during 1904-1905 is estimated at a minimum of 24,000,000,000 to 25,000,000,000 marks in the memorial of the admiralty of December, 1905, "Die Entwicklung der deutschen Seeinteressen im letzten Jahrzehnt," and by Ballod likewise at 25,000,000,000 marks, whereas Steinmann-Bucher estimates the amount at 40,000,000,000 marks. It must also be borne in mind here that in 1892-93 the Prussian Finance Minister von Miquel estimated the amount of Prussian capital alone invested in foreign securities at 15,000,000,000 marks (Abgeordneten-Haus. 17 Legisl. Session, 5th sess., appendix to the stenographic reports No. 6, pp. 535-536), an amount that was excessive. The "Deutscher Oekonomist" of June 27, 1908 places the amount of foreign securities in German hands at 10,000,000,000 to 15,000,000,000 marks, Sombart (*Deutsche Volkswirtschaft*, 2d ed., p. 416) at 12,500,000,000 to 13,000,000,000 marks. The value of German capital in foreign enterprises is estimated in the admiralty memorial mentioned above at 7,700,000,000 to 9,200,000,000 marks (1905), and the value of German capital invested in foreign securities at a minimum of 16,000,000,000 marks.

21. Thus it is evident, in particular, that in the income-tax laws of the various German Federal States possessing a general and direct income tax quite different principles exist for declaration, assessment, and control of incomes, as well as for the exemption of small incomes from taxation, and that in regard to the computation of the value of property not subject to income tax, other great divergences may arise. It need hardly be emphasised that in this case as well, a simple calculation of the German figures on the basis of the Prussian results, and according to the proportion of population, is open to objection. Steinmann-Bucher, in his latest work (*350 Milliarden deutsches Volksvermögen*, Berlin, 1909), places the German national income at not less than 35,000,000,000 marks (p. 107)

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22. Grundriss, 6th ed., vol. II, p. 184 (at the end).

23. This includes an amount of 150,000,000 marks for annual new deposits in coöperative banks ("Genossenschaftsbanken"), which, being mostly made by owners of capital under 6,000 marks, are generally exempt from the tax on capital. This gives for Prussia 1,850,000,000 marks, or (computed at three-fifths for the whole Empire) 3,080,000,000 marks for Germany. This amount is further increased by the annual new deposits in the savings banks (which as a rule are also exempt from the tax on capital) of 620,000,000 marks (conservatively estimated), which, without counting property not assessed for the tax on capital, gives the amount quoted above, of 3,700,000,000 marks. The author proves this calculation by pointing out that there is an annual issue of stock exchange securities to the value of 3,150,000,000 to 3,200,000,000 marks.

24. This applies especially to the estimate of the French national wealth made by Mulhall (1895) at 198,000,000,000, by de Foville (1902) at 161,600,000,000, by Yves Guyot at 190,400,000,000 marks, by Leroy-Beaulieu (1906) at 205,000,000,000 to 210,000,000,000 marks, and by Edmond Théry ("Les Progrès économiques de la France," 6th ed., Paris, 1908, p. 322 seq.) for the year 1906 at 201,000,000,000 francs, equaling 161,000,000,000 marks.

The French national income was estimated by Leroy-Beaulieu at 20,000,000,000 marks.

The same is true of the national wealth of Great Britain and Ireland, estimated by Sir Robt. Giffen (1885) at about 204,500,000,000 marks, by Mulhall (1895) at about 235,000,000,000 marks, and by L. G. Chiozza Money (in 1908 for 1902-3) at about 228,000,000,000 marks. In all probability the same is true of the official estimate (evidently very conservative) made in 1904 of the "true value" of the national wealth of the United States of America (with about 83,000,000 inhabitants), which is given by the Census Office of the Department of Commerce and Labor as \$107,000,000,000, or 430,000,000,000 marks, for 1904.

Under such circumstances, owing to the complete difference of bases, principles, and statistical methods, any comparison of these foreign estimates with German estimates of national wealth and income would be still more objectionable, although such comparisons (with the necessary reservations) are occasionally desirable and useful in many directions.

25. According to the above-mentioned Appendix III to the German finance reform bills of 1908: *Materialien zur Beurteilung der Wohlstands-entwicklung Deutschlands im letzten Menschenalter*, pp. 4-15; but with the reservations mentioned above, and on pp. 2 to 4 of the "*Materialien*."

26. See especially Appendix IV, of the *Reichstagsdrucksachen*, No. 1887: *Materialien zur Beurteilung der Zusammenhänge zwischen dem öffentlichen Schuldenwesen u. dem Kapitalmarkt*, pp. 247-249.

27. *Jahrbuch für Handel und Industrie*, 1907, vol. I, p. 213.

28. See page 248 of the "*Materialien*," cited in Note 26: "The exact amount of the very considerable capital that has migrated abroad for investment in securities can not be estimated even approximately."

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29. *Deutscher Oekonomist* of June 27, 1908 (twenty-sixth year), page 395, where objections are also raised against the employment of the table described in the text.

30. Appendix to the Reichstagsdrucksachen No. 1087 of 1908, pp. 247 and 248.

31. See appendix to the Bank Inquiry, 1908-9: *Zur Frage der Emissionsstatistik*, Berlin, 1909, pp. 6-7.

32. See inter alia: Ernst v. Halle: *Die deutsche Volkswirtschaft an der Jahrhundertwende*, Berlin, 1902, pp. 56-57, and Mor. Ströll, loc. cit., p. 194.

33. In the *Zeitschrift des Kgl. Preussischen Statistischen Büreaus*, forty-fourth year, 1904, page 92. In that passage Ad. Wagner avoids the expression which he repeatedly uses in his essay: "Die Reichsfinanznot," Berlin, 1908 (for instance, pp. 13-14 and 41), where he speaks of the elements or classes "enriching themselves" (instead of "the elements, or classes who have become richer"), words which convey the idea that the very fact of growing richer is a reproach, an utterance which, while corresponding to a strong popular impression, is not on that account any more correct. It is also stated (p. 23), "that the middle as well as the upper classes ought not only to be compelled to pay the same amount of taxes in proportion to their capacity, especially as measured by their income, as the lower classes, but that they should pay proportionately more." This statement should be compared with the proof given (for Prussia only, and not for the whole Empire) by the Prussian Minister of Finance Freiherr von Rheinbaben in the Prussian Lower House on January 20, 1909 ("*Reichsanzeiger*," January 21, 1909), which has been amply confirmed by the official verification of the results of the assessment for the Prussian income tax of 1908 (1st suppl. of the "*Reichsanzeiger*" of February 11, 1909, No 36). According to this statement there were, in 1908, 17,957,848 persons completely exempt from taxation (their incomes not exceeding 900 marks), or 42.22 per cent of the population, which in 1908 numbered 38,026,556 souls. Of the balance of the population, 16,176,674, or 42.54 per cent of the Prussian population, were assessed in the lowest group of income taxpayers (with incomes over 900 and less than 3,000 marks); this class paid a total of 83,752,973 marks, or 34.26 per cent of the whole assessed amount of income tax. Thus there remained only 2,000,000 (1,916,901), equal to 5.5 per cent of the population, who paid not less than 66 per cent of the entire income tax. Out of these 2,000,000, the persons having an income of over 9,500 marks constituted only 0.87 per cent of the population, while paying 43 per cent of the entire income tax. To this the municipal taxation must be added, so that, as far as Prussia is concerned (and similar conditions probably prevailed in other Federal States), there is no ground for Wagner's statement that it may be doubted, whether taxation according to capacity is realized in the legislation of the Empire, Federal States, and municipalities. Trade, commerce, and industry, which

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pay by far the greatest part of the taxes, are also burdened with the tremendous burden put on them by "social" legislation.

34. "Die Reichsfinanznot u. die Pflichten des Deutschen Volks wie seiner politischen Parteien. Ein Mahnwort eines alten Mannes" (Berlin, Puttkammer & Mühlbrecht, 1908), p. 14.

35. See *inter alia* the minutes of the meetings of the Bank Inquiry Commission, concerning points III-V of the list of questions; 1909, p. 86.

36. Thus in Prussia, according to the *Reichsanzeiger* of February 11, 1909, from 1907 to 1908 alone the income-tax-paying population increased in the proportion of 4,445 to 4,758.

37. According to the calculations of R. E. May (in Schmolter's *Jahrb. f. Gesetzgebung u. Verwaltung*, 1899, pp. 271-314) the following conditions prevailed in the German Empire at the end of the nineties: About one-half of the total national income, or 12,750,000,000 marks, belonged to that part of the earning population (18½ millions) possessing incomes below 900 marks; a little more than one-fourth of the total national income, or 6,500,000,000 marks, belonged to that part of the earning population (3¾ millions) possessing incomes from 900 to 3,000 marks; and not quite a quarter of the total national income, or 5,750,000,000 marks, belonged to that part of the earning population (one-third million) possessing incomes exceeding 3,000 marks.

38. *Grundriss*, II, pp. 460-461.

39. Volume III of the Appendix to the German finance reform bills of 1908: *Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter* (No. 1043 of the Parliamentary publications of 1908), pp. 14-15; according to the *Reichsanzeiger* of February 11, 1909, the assessed taxable income of this group amounted to 5,450,975,235 marks.

40. *Ibid.*

41. Walter Troeltsch, *Über die neuesten Veränderungen im deutschen Wirtschaftsleben*, p. 144. At the same time it remains true that, as already mentioned (footnote 33) in Prussia in 1908 there were still about 18,000,000 souls, or 47.22 per cent of the population of about 38,000,000, exempt from taxation, and that of the balance, 16,000,000, or 42.54 per cent, were assessed in the lowest income tax group (with incomes exceeding 900 marks and below 3,000 marks).

42. With the (rather unimportant) reservations made on p. 17 of the *Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter*, already cited several times.

43. Allowance has to be made, of course, for the fact that one person may have several savings bank books.

44. For the period between 1891-1897 see Walter Troeltsch, *Ueber die neuesten Veränderungen im Deutschen Wirtschaftsleben*, p. 197; for 1904 and 1906, *Statistisches Jahrbuch f. d. Preuss. Staat für 1908* (Berlin, 1909), p. 144; for 1907 the "Materialien" quoted in note 42.

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45. In 1908 there were 169 credit banks with a capital of at least 1,000,000 marks each.
46. See p. 21 of the "Materialien," quoted in note 42.
47. That is, from 1880 till the end of 1905.
48. Statist. Jahrbuch. f. d. Deutsche Reich (twenty-ninth year, 1908), pp. 46-47, and H. v. Scheel, *Die Deutsche Volkswirtschaft am Schlusse des 19. Jahrhunderts* (Berlin, 1900, Puttkammer & Mühlbrecht), p. 91.
49. *Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands*, pp. 46-47. According to Von Halle (*loc. cit.*, pp. 48-49) the total amount of power developed by engines in all the works in Germany in 1895 was only about 3,500,000 horsepower.
50. For 1843 see above, p. 33; for 1895 and 1907 see the Statist. Korrespondenz of February 3, 1909 (Year XXXV), p. 2.
51. For the census of occupations of 1895 see Paul Voigt, *Deutschland u. der Weltmarkt*, Preussische Jahrbücher, vol. 91 (January and April, 1898), p. 271.
52. Geh. Ober.-Reg.-Rat Dr. Traugott Müller, *Industriestaats oder Agrarstaats? Ein Beitrag zur wirtschaftlichen Wertschätzung der deutschen Landwirtschaft* (in Mentzel and von Lengerke's *Landwirtschaftlicher Hilfs- und Schreibkalender*, 55th year, 1902, Part II, pp. 55-85).
53. See *Statistisches Jahrbuch f. d. Deutsche Reich* (29th year), 1908, p. 27: 5,558,317 agricultural establishments in 1895 (last census published), as compared to 5,276,344 in 1882.
54. *Ibid.*, 43,243,742 hectares (1 ha = about 2½ acres) in 1895 as compared to 40,178,681 in 1882.
55. *Ibid.*, p. 39, tab. IV: Live stock in the Federal States according to the census of 1907. The figures show that the number of sheep decreased from 24,999,406 at the beginning of 1873, to 9,692,501 at the end of 1900, and 7,681,072 at the end of 1907, whereas the number of horses increased from 3,352,231 at the beginning of 1873 to 4,195,361 at the end of 1900, and to 4,337,263 at the end of 1907; cattle increased from 15,776,702 to 18,939,692 at the end of 1900, and 20,589,856 at the end of 1907; pigs from 7,124,088 to 16,807,014 at the end of 1900, and to 22,080,008 at the end of 1907, or more than threefold.
56. While the average prices of wheat rose about 60 per cent, of rye about 69 per cent, and of barley about 90 per cent in the old provinces of Prussia in the periods 1831-1840 to 1871-1880, they fell again (see Troeltsch, *loc. cit.*, pp. 32 and 36) despite high corn duties, which were introduced in 1879, raised in 1887, but reduced again by the commercial treaties of 1892 and 1894. Compared to the prices of 1876-1880 the prices of wheat in Prussia fell during 1881-1885 10 per cent, 1886-1890 20 per cent, 1896 36 per cent; the prices of rye, 1881-1885 4 per cent, 1886-1890 15 per cent, 1896 29 per cent; the prices of barley, 1881-1885 7 per cent, 1886-1890 17 per cent, 1896 21 per cent.
57. According to Troeltsch (*loc. cit.*, p. 44), in the agricultural communes of Prussia there was an increase of registered mortgages amounting

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to 190,000,000 marks per annum, or a total increase of 2,100,000,000 marks, between 1896 and 1907. The indebtedness of the farmers of 126 Württemberg rural communities increased 40 per cent between 1874 and 1894. In this connection Troeltsch establishes the fact, frequently corroborated elsewhere, that 80-90 per cent of the mortgage debts were due to the fact that persons acquiring an estate (by purchase or inheritance) were compelled, either by insufficiency of capital or by excessive demands of co-heirs to incur excessive obligations. This evil was augmented by overestimation of land values, due to an unhealthy development in the prices of land.

58. Much can and must yet be done to increase agricultural production; on the one hand, by the agricultural exploitation of the heaths that still exist in considerable size, especially in the northwest of Germany; and on the other hand, by the drainage and cultivation of the moors that cover some 500 German square miles, 400 of which could be reclaimed for purposes of agricultural cultivation. This work, however, can not be carried out without a considerable extension of the present railways and canals. Unfortunately, however, the building of the latter is often opposed by agriculturists themselves. (See Max Schinkel in the stenographic reports of the Bank Inquiry Commission, points III-V of the question sheet, p. 77.)

59. This, of course, ought not to be carried too far, as it may lead to endless sophistries in favour of agriculture, such as are presented by some authors (see Traugott Müller, loc. cit., p. 61), who include even railway, postal, and telegraph enterprises under agricultural undertakings, the employees consequently being classified under the heading of "those engaged in agriculture as a secondary occupation."

60. In direct contrast to trade, industry, etc., in which the number of independent persons decreased 12.6 per 1,000 during the same period, and the number of persons in a dependent position increased 30.5 per 1,000.

61. See Ludwig Pohle, loc. cit., p. 22; also his *Deutschland am Scheidewege* (Leipzig, B. G. Teubner, 1902), p. 43 seq.

62. The statement frequently made, that agriculture, and agriculture only, creates new values, is incorrect. "Values" that are completely new can not be produced by agriculture either, since at any rate such seed as is not produced by national agriculture forms the basis of that activity to the same degree that raw materials form the basis of industrial activity. Thus in agricultural as well as in industrial activity (different as they may be in detail), the process is always one of transformation or refinement, which in both cases merely increases the value of preexisting material. If, therefore, agriculture and industry are included in the "productive occupations," trade should be included therein by the same right, since its value-increasing activity consists in the transfer of goods from districts where the supply is great to districts where the demand is great, independent of whether the goods meanwhile undergo additional manufacture or not. (See, among other authors: Richard Ehrenberg, *Der*

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Handel, seine wirtschaftliche Bedeutung, seine nationalen Pflichten und sein Verhältnis zum Staate, Jena, Gustav Fischer, 1887.)

63. Ludw. Pohle, loc. cit., p. 23. Max Sering, Handels- und Machtpolitik, Stuttgart, 1900 (J. G. Cotta Nachflg., vol. II, p. 5), does not go nearly so far, when he points out that "as early as the beginning of the fifties, Germany imported more rye, and since the middle of the seventies more wheat, than she supplied to foreign countries." In 1860 the excess of rye imports amounted to some 259,000 tons.

64. Werner Sombart, Deutsche Volkswirtschaft, 2nd ed., p. 411.

65. Huber is right when he says (loc. cit., p. 109), regarding the German textile industry, that the whole export trade depends on the oversea supply of wool and cotton.

66. See Werner Sombart, Die Deutsche Volkswirtschaft, 2nd ed., p. 447: "The pièce de resistance of the German exports consists to-day of high-class manufactured goods, containing great labor value (Arbeitswert) and little land value (Bodenwert). Germany, consequently, pays in an increasing measure for foreign soil with home labour."

67. Statist. Jahrb. f. d. Deutsche Reich of 1909, Appendix, page 153. The special trade exports comprise, since March 1, 1906, the exports from the customs area (Wirtschaftsgebiet), including domestic produce (exported under the supervision of the customs authorities and subject to excise or stamp duties), such as beer, spirits, salt, sparkling wines, playing-cards tobacco, and sugar; as well as the exports from the customs area, after further manufacture for home account. The customs area in the sense of these new statistics comprises the German Empire (without Heligoland and some communes in Baden), the Grand Duchy of Luxemburg, and the Austrian communes of Jungholz and Mittelberg.

The imports for home consumption comprise, on the one hand, the imports into the free commerce of this customs area, directly or with cockets, including imports from free districts, bonded warehouses, etc., as well as the imports of goods for shipbuilding, etc., and the supplies of foreign goods for German ships outward bound; on the other hand, merchandise imported into the customs area for the purpose of being further manufactured for home account (ibid., p. 124).

68. If it were possible to compare the figures given by Rau with the present-day official import and export statistics (which in the absence of agreement of geographic areas, of bases and methods of calculation is impossible) it would appear that German export trade, as well as German import trade, had increased between 1842 and 1907 thirteenfold, while the population of Germany has not even doubled during the same period.

69. See Appendix, Volume III, to the Imperial finance reform bill of 1908: Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter (p. 52).

70. Only in the case of food and cattle was there a decrease in exports, namely, by 20.2 per cent, while the imports increased 131.7 per cent (ibid.).

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71. For details, see page 43 of the Appendix, Volume III, to the Imperial finance reform bill of 1908.

72. *Ibid.*, pages 37-38 and 53.

73. A permanent adverse balance of payment is altogether impossible—that is to say, it would mean bankruptcy.

74. In that case, and in that case only, will Ludwig Pohle's fears prove unfounded (*loc. cit.*, p. 26), that "the increase in the absorptive capacity of the home market denotes a constant growth of Germany's dependence on foreign countries, instead of an increase in her economic independence.

75. Engel, in *Zeitschrift des Statist. Bureaus*, Berlin, 1875, vol. 4, p. 356.

76. W. Sombart, *Der moderne Kapitalismus*, II, p. 16.

77. Engel, *loc. cit.*, p. 457 et seq.

78. *Deutscher Oekonomist*, 1885, 21st Feb., p. 72.

79. Van der Borgh's essay: "Aktiengesellschaften" in the *Handwörterbuch der Staatswissenschaften* (Jena, 1899, Gust. Fischer), Vol. I, pp. 192-193.

80. With reference to the distribution by the different branches, see particularly Ed. Wagon, "Die finanzielle Entwicklung deutscher Aktiengesellschaften von 1870-1900" (Jena, 1903, Gust. Fischer), especially pp. 41 et seq., 56 et seq., 62 et seq., 73 et seq., 107 et seq.

81. As late as 1883 there were only 104 machine building companies, with 193,240,000 marks capital.

82. From 1870-1874, fifty-nine brewery companies, with a capital of 72,000,000 marks, were founded (Ed. Wagon, *loc. cit.*, p. 107).

83. *Deutscher Oekonomist*, 1901, 26th January, p. 45.

84. See v. Halle, *loc. cit.*, p. 94.

85. See *Deutscher Oekonomist* for 7th Jan., 1905; 6th Jan., 1906; and 18th Jan., 1908.

86. According to information collected by the Imperial Statistical Office the figures were 217 companies, with a capital of 260,700,000 marks.

87. These figures are based on material collected by the Imperial Statistical Office.

88. Ed. Wagon, *loc. cit.*, pp. 166-167. (The rate of dividend, however, is reduced in case the stock was bought above par.)

89. For the interpretation of "net income," see Ed. Wagon, *loc. cit.*, p. 12; Dividend income, minus the losses given in the balance sheets, or those arising from liquidations and failures.

90. From 1872-1900, exclusive of machine factories and railway-supply factories.

91. See L. Glier, *Zur neuesten Entwicklung der amerikanischen Eisenindustrie*, in *Schmoller's Jahrbuch für Gesetzgebung*, etc., 27th year, No. 3, p. 229-230.

92. *Statist. Jahrb. f. d. deutsche Reich*, 29th year, 1908. - Appendix, p. 30*, table 19. In 1908 the German output of pig iron amounted to only 11,805,000 tons (*ibid.*, 30th year, 1909, Appendix, p. 28*, tab. 20).

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93. L. Glier, Zur gegenwärtigen Lage der amerikanischen Eisenindustrie, in Conrad's Jahrbücher, 3d series, vol. 31, p. 591 (Feb., 1908).

94. Henry Voelcker, Eisen u. Stahl, in the magazine "Die Weltwirtschaft," ed. by v. Halle, Year III, 1908, Part II, p. 78. According to the Imperial statistics the consumption amounted in 1904 to 166.1 kilograms, and in 1906 to 197.8 kilograms per capita. These statistics, in calculating the consumption, subtract the exports of pig iron, but not the exports of iron manufactures, and thus arrive at a larger consumption figure per capita.

95. See Ludwig Pohle, Die Entwicklung des deutschen Wirtschaftslebens im letzten Jahrhundert, Appendix p. 145; Statist. Jahrb. f. d. Deutsche Reich, 29th year, 1908, Appendix, p. 29*, tab. 18 (for the period 1887-1907); for value see E. Jüngst, "Bergbau," in the magazine "Die Weltwirtschaft," ed. v. Halle, Year III, 1908, Part II, p. 61. The German coal production in 1908 amounted to 148,537,000 tons (Statist. Jahrb. f. d. Deutsche Reich, 30th year, 1909; Appendix, p. 27*, tab. 19).

96. E. Jüngst, loc. cit., p. 60, and Statist. Jahrb. f. d. Deutsche Reich, 30th year, 1909, p. 97.

97. Rud. Eberstadt, Der Deutsche Kapitalmarkt, Leipzig, 1901, p. 64.

98. Thus in 1894 the Gesellschaft für elektr. Unternehmungen Berlin (affiliated with the Union-Elekt.-Ges., Loewe-Group); 1895, die Akt.-Ges. für elektr. Anlagen u. Bahnen, Dresden (Kummer); Kontinentale Gesellschaft für elektr. Unternehmungen (Schuckert); Bank für elektr. Unternehmungen, Zürich (Allgem. Elekt.-Ges.); 1896, Deutsche Ges. f. elektr. Unternehmungen, Frankfurt a. M. (Lahmeyer); Schweizerische Ges. für elektr. Industrie (Siemens & Halske); 1897, Elektrische Licht- und Kraftanlagen A.-G. (Siemens & Halske), Aktiengesellschaft für Elektrizitätsanlagen (Helios); 1898, Elektra, Dresden (Schuckert).

99. On this and the preceding subjects, see Friedr. Fasolt, Die sieben grössten deutschen Elektrizitätsgesellschaften, ihre Entwicklung und Unternehmertätigkeit Dresden, 1904; also Jos. Loewe, Die elektrotechnische Industrie in: Störungen im deutschen Wirtschaftsleben, Vol. III, pp. 77-155 (publications of the Verein für Sozialpolitik, Vol. CVII), 1903; Ed. Wagon, loc. cit., p. 73 et seq.; Max Jörgens, Finanzielle Trustgesellschaften (Stuttgart, 1902, J. G. Cotta Nachf.), p. 116 et seq.; H. Hasse, Die A. E. G. (Heidelberg, Winter, 1903).

100. 1896, "Siemens" Elektrische Betriebe G. m. b. H. (Siemens & Halske); 1897, Elektrizitätslieferungsgesellschaft (Allgem. Elektrizitätsgesellschaft); 1898, Bayerische Elektrizitätswerke A.-G. (Helios); Süddeutsche Elektrizitätswerke (Kummer); A.-G. Süddeutsche elektrische Lokalbahnen (Kummer); 1900, Elektrizitäts-Werke-Betriebs-Aktiengesellschaft (Kummer). All these companies (1896-1900) were organized in boom time, when the general public took considerable interest in the shares of such establishments.

101. These figures (taken from E. Budde, Elektrotechnik, in the serial Die Weltwirtschaft, ed. v. Halle, year III, Part II, 1908, p. 88). The details

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here given from the *Monatliche Nachrichten über den auswärtigen Handel Deutschlands* would seem to require considerable revision according to the *Statist. Jahrbuch f. d. Deutsche Reich*, 29th year, 1908, pp. 157-158 (thus, for instance, the value of the incandescent lamps exported during 1907 amounted to 10,478,000 marks and not to 8,382,000 marks, etc.).

102. See Ed. Wagon, *loc. cit.*, p. 62; *Geh. Ober-Reg.-Rat Gust. Müller, Die chemische Industrie*, Leipzig, 1909, B. G. Teubner. As far as the following statements have been taken from the reports on the administration of the chemical trade association we must not forget that this association, which was established on the basis of the accident insurance act of the 6th of July, 1884, requiring the employer to insure his workmen against accidents happening to them while in his employ, includes many minor trades which are not, strictly speaking, chemical. These are the illuminant, fat, soap, and oil trades; also the salt works, so far as they do not belong to miners' associations (*Knappschaftsverbände*) established under the laws of the several States. In addition to these are the roof felt and roofing-paper factories, manufacturers of rubber and gutta-percha goods, the preserving works, with the exception of those chiefly occupied in preserving wood; finally, the artificial mineral-water trade. (See Gustav Müller, *loc. cit.*, p. 27.)

103. *Statist. Jahrb. f. d. Deutsche Reich*, 29th year, 1908, p. 47.

104. See Richard Brauer, *Chemische Industrie*, in the annual *Die Weltwirtschaft*, ed. v. Halle, Year III, 1908, Part II, p. 91.

105. The totals given by Richard Brauer, *loc. cit.*, p. 91, are incorrect as they are stated in metric tons of 1,000 kilograms instead of metric quintals of 100 kilograms. Moreover, his import and export figures seem to include articles which are either used not exclusively or not at all in the German chemical industry.

106. *Ibid.*, p. 91.

107. See Rich. Brauer, *loc. cit.*, p. 92.

108. *Statist. Jahrb. f. d. Deutsche Reich*, 29th year, 1908, p. 47.

109. Ludwig Pohle, *Die Entwicklung des deutschen Wirtschaftslebens im letzten Jahrhundert*, p. 70 seq., especially pp. 72-73.

110. *Loc. cit.*, p. 77.

111. *Statist. Jahrb. f. d. Deutsche Reich*, 29th year, 1908, pp. 46 and 47.

112. This includes State railways, railways administered on account of the State, and purely private railways.

113. *Statist. Jahrb. für das Deutsche Reich*, 29th year, 1908, p. 113.

114. *Statist. Jahrb. für das Deutsche Reich*, 1906, p. 66. At the end of 1903 this network comprised 52,814.2 kilometres (*ibid.*, 1905, p. 62); 949,290,000 travellers and 390,741,000 tons of goods were conveyed on the standard gauge main and branch lines during 1903 (*ibid.*, 1905, p. 64, tab. 2^d).

115. *Statist. Jahrb. f. d. Deutsche Reich*, 30th year, 1909, p. 115, tab. 2^d.

116. W. Sombart, *Deutsche Volkswirtschaft*, 2nd ed., p. 267.

117. *Statist. Jahrb. f. d. Deutsche Reich*, 30th year, p. 118.

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118. *Ibid.*, p. 117, tab. 3.
119. *Ibid.*, p. 112, tab. 1^b.
120. *Ibid.*, p. 112, tab. 1^b, and p. 111, tab. 1^a.
121. *Ibid.*, p. 111.
122. According to the memorial presented to the Reichstag on the occasion of the naval bill of 1899, entitled "Die Steigerung der deutschen Seeinteressen von 1896 bis 1898," which contains the above estimate, the total value of the German merchant marine had increased from 1896 to the end of 1899 by 66 $\frac{2}{3}$ per cent. The sum required to replace the German merchant marine in case of its loss might therefore be estimated in 1899 at least at 750,000,000 marks (p. 147). A further increase of 14 per cent of steamships took place during the next year, sailing vessels decreasing by 3 per cent. The value of the German mercantile fleet at the end of 1900 might therefore be estimated at 640,000,000 to 650,000,000 marks. According to the memorial of the Imperial Admiralty quoted above, dated December, 1905, the value of the German merchant marine at the end of 1905 amounted to 810,000,000 marks, as stated in the text, while the cost of replacing it would considerably exceed 1,000,000,000 marks. According to the *Handbuch der deutschen Aktiengesellschaften*, ed. 1904 to 1905, I and II, the following number of German joint-stock shipping companies existed at the end of 1903: One hundred and five joint-stock companies with a share capital of 415,019,000 marks, and outstanding bonds of 127,824,000 marks. The amount of share and loan capital of the joint-stock companies in Hamburg and Bremen alone amounted, according to the memorial of the admiralty (December, 1905) quoted above, to 443,000,000 marks, against 273,000,000 marks at the end of 1899.
123. *Statist. Jahrb. f. d. Deutsche Reich*, 1908, p. 108.
124. See Emil Fitger, *Ein Jahrzehnt in Schiffsbau, Reederei und Seeschiffahrt*, Berlin, Leonh. Simion Nachfolger, p. 22.
125. See the memorial of the admiralty, December, 1905, already quoted, p. 94; Ernst von Halle, *Die Entwicklung und Bedeutung der deutschen Reederei (Handels- und Machtpolitik, Vol. II, pp. 129-174, Stuttgart, J. G. Cotta's Nachf., 1900)*; and *Reederei u. Schiffahrt*, in the annual *Die Weltwirtschaft*, ed. von Halle, year III, 1908, part I, *Internat. Uebersichten*, p. 83 seq.
126. See Emil Fitger, *loc. cit.*, pp. 49, 55, and 56-61.
127. *Statist. Jahrb. für d. Deutsche Reich*, 30th year, 1909, p. 140, tab. 13.
128. See Emil Fitger, *loc. cit.* pp. 61, 64-68.
129. See B. Huldermann, *Subventionen der ausländischen Handelsflotten* (Berlin, 1900, Ernst Siegf. Mittler & Sohn), p. 39.
130. It raised its capital in 1853, 1865, 1867, 1868, 1870, 1871, 1872, 1874, 1875 (in 1877 the capital was reduced), 1887, 1888, 1897, 1898, 1899, 1900, and 1905.
131. Regarding the development of other large German shipping companies see W. Sombart, *Die deutsche Volkswirtschaft*, 2nd ed., Appendix

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26, p. 544. Among the other German shipping companies are the following: Deutsche Dampfschiffahrtsgesellschaft Kosmos; Deutsche Levante-Linie; Deutsch-Ostafrika-Linie; Hamburg-Südamerikanische Dampfergesellschaft; Deutsch-Australische Dampfergesellschaft; Woermann Linie; Hamburg-Bremer Afrika-Linie; Dampfschiffsgesellschaft Argo; Dampfschiffsgesellschaft Hansa; Dampfschiffahrtsgesellschaft Neptun; Dampfschiffsreederei Union.

132. The following is taken from Karl Thiess, *Organisation und Verbandsbildung in der Handelsschiffahrt* (Berlin, 1903, Ernst Siegf. Mittler & Sohn).

133. The following details are taken in the main from Emil Fitger, loc. cit., p. 26.

134. W. Sombart, *Die deutsche Volkswirtschaft*, 2nd ed., p. 284, and Appendix 25 (Organisation of inland navigation in the main centres); p. 543.

135. *Statist. Jahrb. f. d. Deutsche Reich*, 30th year, 1909, p. 129.

136. Of the total length, 2,437.77 kilometres were navigable by vessels of 1.75 meter draft; 3,082.12 kilometres by vessels of 1.50 meter draft, 7,064.07 kilometres by vessels of 1 meter draft; 599.40 kilometers by vessels of 0.75 meter draft; 1,182.83 kilometers by vessels of less than 0.75 meter draft. See *Statist. Jahrb. f. d. Deutsche Reich*, 1904, p. 74. See *ibid.*, 1905, p. 71, for corrections as to vessels. These corrections have been introduced in the text. *Statist. Jahrb. f. d. Deutsche Reich*, 1906, p. 75 gives the same figures, while in the volume for 1908, p. 100, the total length of the navigable waters is given for the 31st of December, 1902, as 13,793.4 kilometers.

137. v. Halle, loc. cit., p. 78. On pages 128-129 of the same work are found details on the status of the imperial navy in 1900.

138. See the Jubilee memorial published by the directorate of the Reichs bank: "Die Reichsbank 1876-1900," Gustav Fischer, Jena (cited below as the jubilee memorial of the Reichsbank), as well as the statistical tables submitted to the Bank Inquiry Commission of 1908, and the *Statist. Jahrb. f. d. Deutsche Reich*, 29th year, 1908, pp. 229-234, and *Internationale Uebersichten*, pp. 70-75*; Karl von Lumm, *Die Stellung der Notenbanken in der heutigen Volkswirtschaft* (Berlin, 1909, J. Guttentag); Louis Katzenstein, *Die dreissigjährige Geschäftstätigkeit der Reichsbank*, Berlin, Leonhard Simion Nachf., 1906. Regarding the questions submitted to the Bank Inquiry Commission of 1908, see principally: *Die Verhandlungen der Bank-Enquete-Kommission*, items I-V of the question sheet, Berlin, 1909. For the rest, Friedr. Koch, *Der Londoner Goldverkehr*; (Stuttgart & Berlin, 1905); E. Schmalenbach, *Der Reichsbank-Ausweis* (*Zeitschr. für handelswissenschaftliche Forschung*, ed. Schmalenbach, year I, 1906, No. 3, pp. 77-92; Heiligenstadt, *Der deutsche Geldmarkt* (in *Schmoller's Jahrb.*, vol. 31, pp. 71 seq.); Arthur Feiler, *Die Probleme der Bankenquete* (Jena, Gustav Fischer, 1908), Ferdinand Bendixen, *Das Wesen des Geldes* (Leipzig,

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Duncker & Humblot, 1900); Magnus Biermer, *Die deutsche Geldverfassung* (Giessen, 1908); Hermann Schumacher, *Die deutsche Geldverfassung u. ihre Reform* (in *Schmoller's Jahrb.*, Vol. XXXII, p. 1 seq.; R. Koch, *Der Kredit bei der Reichsbank* (*Zeitschrift f. Handelswissenschaft und Praxis*, year I, No. 4, July, 1908, pp. 115-118); Heymann, *Reichsbank und Geldverkehr* (Berlin, 1908); A. Arnold, *Die Bedeutung der Giro-Guthaben für die Bankpolitik* (in *Bank-Archiv*, year VI, No. 5, p. 155 seq.); Edgar Jaffé, *Die Ursachen der letzten Geldteuerung und die Bankenquete* (*Deutsche Wirtschaftszeitung*, 4th year, No. 13, p. 582 seq. and No. 14, p. 626 seq.).

139. The bank notes, according to article 3 of the bank law, were issued up to 1906 in series of 1,000 marks and 100 marks, whereas under the Imperial law of February 20, 1906, series of 50 and 20 marks were allowed, the amount of which, however, according to the declaration made in the Reichstag, remains at present limited to 300,000,000 marks.

140. According to the text of the Supplementary Bank Law of the 1st July, 1909. (Formerly it read: "in exchange for German legal tender money.")

141. The 19,416 private giro accounts carried on March 31, 1908, included 6,366 accounts belonging to commerce, transport, and insurance; 7,763 accounts belonging to industries and trades; 369 accounts belonging agriculture and allied trades; 936 accounts of joint-stock banks; 2,311 accounts of bankers and financial businesses of all descriptions.

142. The total turnover in 1908 amounted to 269,946,259,800 marks.

143. Exclusive of the other clearing houses existing in 113 towns, the total turnover of which amounted in 1907 to 249,258,000,000 marks.

144. That is the turnover in receipts and expenditures in the giro, transfer, deposit, bill, and collateral loan business, in discounted and collected securities, and in other business of every description transacted with authorities and private persons.

145. As far as Germany is concerned it is incorrect to speak of unsecured bank notes, for bank notes without any security whatever do not exist there. (Article 17 of the bank law).

146. Cash in the sense of article 9 of the bank law consists of metal (*Metallvorrat*, see note 147), treasury notes of the Empire, and bank notes of the four note-issuing banks.

147. "Metal in hand" consists, according to articles 9 and 17 of the bank law, of current German money, gold in bars or in foreign coins, the pound fine (German) being calculated at 1,392 marks.

148. Concerning these reasons, see my remarks before the Bank Inquiry Commission of 1908, on points I-V of the question sheet (Berlin, 1909), p. 259.

149. As a rule a continued outflow of gold into foreign countries can only take place when the balance of payments is unfavorable to Germany and the quotations on foreign bills threaten to surpass the upper gold point or have surpassed it, so that the export of gold becomes remunerative. (Se

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my statements in the Proceedings of the Bank Inquiry Commission, Berlin, 1909, p. 71.)

150. See my statements in the Proceedings of the Bank Inquiry Commission, p. 70.

151. Highest amount (December 31, 1907), 364,297,700 marks; lowest amount (January 23, 1907), 54,090,000 marks. The figures for December 31, 1907, include a lombard loan of 67,630,200 marks to the Preussische Zentral-Genossenschaftskasse.

152. The quota has been exceeded in 1881-1885 five times by a total of 92,795,000 marks; 1886-1890 ten times by a total of 585,771,000 marks; 1891-1895 four times by a total of 253,598,000 marks; 1896-1900 seventy-one times by a total of 8,184,274,000 marks; 1901-1905 thirty-two times by a total of 4,229,393,000 marks; 1906 seventeen times by a total of 3,547,485,000 marks; and 1907 twenty-five times by a total of 5,376,670,000 marks. During 1907 the note circulation of the Reichsbank exceeded its quota by more than 58,000,000 marks on an annual average; on December 31, 1907 (a very abnormal year), the excess above the quota of notes exempt from taxation attained the record amount of 625,974,363 marks.

153. The literature of cartels is so extensive that it is almost impossible to survey it. In an appendix to the second edition (German) of this book a list of the most important cartel literature from 1883-1905 was given.

154. Menzel (Report at the general meeting of the Verein für Sozialpolitik, 1894, p. 31 seq., and "Die Kartelle und die Rechtsordnung," p. 12 seq.) shows that associations for the limiting of competition, and for the monopolizing of certain branches of trade, industry, and transportation existed as far back as mediæval and ancient times. He refers to the two constitutions, 473 A. D. and 483 A. D., in the times of the Roman Empire (Cod. lib. 4. Tit. 59) under the title "On monopolies, and illicit agreements of traders, also on prohibited and unlicensed agreements of tradesmen, employers, and bath-keepers." The constitution of Emperor Zeno, 483 A. D., deals with monopolies not only in food (especially corn) but also in articles of common use and labor.

In the legislation of the ancient German Empire, the Imperial decrees of 1512, 1524, 1530, and 1532, and the imperial police regulations of 1548 and 1577, provide severe penalties for "Monopolia und schädlichen Fürkauf," (monopolies and harmful sale). "However, they do not appear to have met with any notable degree of success." (Report, p. 34; separate edition, p. 14.)

The Gewerbeordnung does not contain any clause for cartels similar to article 152 regarding labor contracts.

155. As early as 1862 the cartel of Rhenish tin-plate factories, as well as the Cologne tin-plate combine, were in existence. To them was added, in 1863, the German rail combine. The beginning of the German salt works cartel dates from 1868, the potash syndicate from 1870 (Bücher in the Publications of the Verein für Sozialpolitik, LXI, pp. 141-142).

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156. Consequently (as opposed to Sombart, *Deutsche Volkswirtschaft*, 2nd ed., p. 344), the fact that many cartels were formed only after crises, and to some extent at the beginning of more prosperous times is only a seeming deviation from this rule. Brentano (*Proceedings of the Verein für Sozialpolitik*, LXI, p. 176) calls the cartels "a product of necessity." He says: "The necessity of cartels is rooted to-day in the constant growth of fixed, untransferrable capital in distinction to the predominant liquid capital of former times." He does not fail to point out, however, that this, of course, refers only to the cartels of producers and not to the cartels of traders.

157. See among others Stieda, *Schriften des Vereins für Sozialpolitik*, LXI, p. 5; Kleinwächter, *Die Kartelle* (1883), p. 126, and in the *Handwörterbuch der Staatswissenschaften*, 2nd ed., Jena, 1900, vol. V, p. 39; Jos. Grunzel, *Über Kartelle* (1902, pp. 8 and 12).

158. See especially P. F. Aschrott, *Die amerikanischen Trusts als Weiterbildung der Unternehmerverbände*, in *Braun's Archiv für soziale Gesetzgebung und Statistik* (1889), vol. II, p. 383-418, and Jeremiah W. Jenks, *Die Trusts in den Vereinigten Staaten von Amerika* (*Conrad's Jahrb. f. Nat.-Oek. und Stat.*, 3rd. series, vol. 1, p. 1 seq., 1891).

159. Tariff measures, however, in so far as they are intended to check an abusive business policy on the part of the cartels—that is, by reducing or moderating import duties on cartel products, or by introducing export duties on cartel products—are always a two-edged sword, since they react in other directions, and a doubtful as well as questionable weapon, because they strengthen foreign competition. Some of these objections (although not all) apply to the combating of an incorrect cartel policy by means of railway tariffs, i. e., through facilitating the importation of competing products through lower freight rates, and rendering the exportation of cartel-made articles more difficult through higher freight tariffs. Other restrictive means in the economic field would be the promoting of competitive concerns, the acquisition of such undertakings by the State, or the endeavor to obtain as decisive an influence as possible on the price policy of cartels through state participation in cartel undertakings. (This experiment was to have been made in the well-known "Hibernia" case.) A further means would be the promotion of cartels of consumers. A "smaller remedy" for relieving the finishing industry ("*weiterverarbeitende Industrie*") somewhat from the pressure of raw material cartels by means of duty-free importation of articles destined for re-exportation after they have undergone a finishing process exempt from customs duty ("*zollfreier Veredlungsverkehr*") is of service only to export industries, and then only to an inconsiderable extent.

160. See von Halle, *loc. cit.*, p. 47.

161. Some of these complaints can only be remedied by combinations of consumers, which in the face of the cartels of producers are becoming more and more an urgent economic necessity, as well as by the better organization of the distributing and commission agencies.

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162. Reichstag Publications, 11th legislative period, II session, 1905-6, No. 4.

163. *Ibid.*, 11th legislative period, II session, 1905-6, No. 351.

164. *Ibid.*, 12th legislative period, I session, 1907, No. 255.

165. *Ibid.*, 12th legislative period, I session, 1907-1909, No. 1019.

166. It is exceedingly interesting to note that these two charges have also been brought against the United States Steel Corporation founded in 1901. Glier demonstrates convincingly in his treatise "Zur gegenwärtigen Lage der amerikanischen Eisenindustrie," written in February, 1908 (Conrad's Jahrb., III series, vol. 35, p. 587 seq.), that the corporation displayed great moderation in the fixing of prices of manufactured products during the first boom (1901 to 1902-3), although the prices for foundry raw iron which the corporation neither produced, bought, nor sold, rose by about 34 per cent (pp. 599-601); it held, however, tenaciously to its high prices (a proceeding approved of by Glier) during the period of reaction (1903-4), for a reduction in price would not have caused a greater demand.

167. Although the United States Steel Corporation during the last crisis refrained in the main from selling to foreign countries and endeavored to bring about a recovery solely through enormous limitations of output, the chief reason for such procedure was that foreign markets at the time were not capable of absorbing goods even at the lowest prices. Subsequent events have proved, however, that this policy was not able to restore a healthy tone to the American market, so that in the event of another crisis a different policy may be pursued by the Americans.

168. See the remarks of Director Mannstaedt in the "Verbal deliberations" ("kontradiktorische Verhandlungen") concerning German cartels, Part 6, "Verhandlungen über den Halbzeugverband am 2. und 3. December 1903," p. 465. I consider these remarks to be as correct as they are important.

169. That the so-called "mixed" ("gemischt") works suffered less than the "pure" ("reine") works, and the reasons therefor, are well known.

170. The Rhenish-Westphalian and the Siegerland Pig Iron syndicates ceased to exist, for the time being at any rate, on January 1, 1909, certain difficulties preventing their prolongation; on the other hand, a plate-glass sale combine was formed among a number of Siegerland works. As regards the Upper Silesian Pig Iron Syndicate, see note 171. The manufacturers of pig iron in Rhineland and Westphalia are therefore in the same position they were before the nineties, namely in a state of free competition. Neither has a prolongation of the Lorraine-Luxemburg Pig Iron Syndicate hitherto proved feasible.

171. For what follows see Völcker, *L'Etat actuel de l'industrie sidérurgique allemande et son organisation* (Revue Economique Internationale, vol. III, No. 4, December 15-20, 1904, p. 727 seq.), and J. Kollmann, *Der Stahlwerksverband* (in the "Nation" 22d year, Nos. 18-22, February 4-25, 1905). Meantime hearings ("kontradiktorische Verhandlungen") have taken place in the Imperial Office of the Interior regarding the Stahl-

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werksverband-Akt.-Ges. at Düsseldorf, and the Oberschlesischer Stahlwerksverband (Limited) in Berlin. Most of the Upper Silesian Works, quitting the last-mentioned union in April, 1907, entered the Düsseldorfer Stahlwerksverband, and subsequently founded, on June 27, 1907, the Oberschlesische Stahlwerks-Gesellschaft (Limited) in Berlin for the common sale of the products B which had been released (freigegeben) by the Düsseldorfer Stahlwerksverband.

172. Further, the shortening of the time of payment for domestic buyers to fifteen days after delivery (foreign buyers have to pay immediately after presentation of bills of lading), and the limitation of discount for domestic buyers (no discount is allowed to foreign customers) will exercise a favorable influence if really carried out, not only on the Stahlwerksverband itself but far beyond its domain. On the other hand, a great and serious defect in the organization of the Stahlwerksverband consists in its placing on the market (at present) only 3 groups of its products, whereas the balance (products B), principally coarse and fine sheet iron, wire, bar iron, and pipes, are sold by the works themselves at their own prices; the products, however, are allotted among the different works according to a fixed quota. Products B cause keen competition among the various works, with the exception of rolled wire, for which there is a special syndicate, whereas for the drawn wire manufactured from the rolled wire, a price convention has been established since the beginning of January, 1909.

173. "Die Unzulänglichkeit der heutigen Schutzzollgesetzgebung für die Eisenindustrie."

174. In the rail cartel, the English share was fixed at 53.50 per cent, the German share at 28.83 per cent, and the Belgian at 17.67 per cent. The accession of the French works (later on) caused the total to be raised to 104.8 per cent for the first year, to 105.8 per cent for the second year, and to 106.4 per cent for the third year, in which the French participated to the extent of 4.8, 5.8, and 6.4 per cent respectively during the three years. Germany's share, after the accession of the American works, amounted to 21 per cent. In the girder cartel (from which the English kept aloof) 73.45 per cent was allotted to the Germans, 15.05 per cent to the Belgians, and 11.50 per cent to the French; the latter, however, were to receive a larger quota were the French exports to exceed those of 1903.

175. See L. Glier: Zur neuesten Entwicklung der amerikanischen Eisenindustrie, in Schmoller's Jahrbuch f. Gesetzgebung u. Verwaltung, 28th year, No. 1, p. 150 seq.; earlier articles see *ibid.*, 27th year, No. 3, p. 229 seq., and No. 4, p. 43 seq.

176. Sombart (*Deutsche Volkswirtschaft*, 2nd ed., p. 203) also says: "Doubtless a good share of the growth of German economic activity may be ascribed to this interest taken by banks and bankers in productive economic activity, hampering as it may have been for the development of the banking business proper (?). Banks have been directly the promoters of the spirit of enterprise in Germany; they have been pacemakers for industry and trade."

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177. The statement made by Paul Wallich (*loc. cit.*, pp. 6, 25) that in the beginning of 1870 the Discontogesellschaft had the largest capital and the Darmstädter Bank the next largest is thus seen to be erroneous.

178. The capital of the Mitteldeutsche Kreditbank originally (in 1856) amounted to 8,000,000 thalers, of which 3,000,000 remained in the hands of the institution, while in 1859 1,000,000 thalers' worth of the bank's own stock was redeemed. In 1869, that is to say, near the end of the first period, the paid-up capital of 4,000,000 thalers was increased by 1,000,000 to a total of 5,000,000 thalers, equal to 15,000,000 marks.

179. This was the last *Konzession* granted to a domestic bank, since the concession system was abolished soon after.

180. Compare Max Wirth, *Handbuch des Bankwesens*, 3d ed. Cologne, 1883, p. 377. It may be noted in this connection, that this book, though frequently quoted as an authority, is in many points superficial and unreliable. In particular, the author's judgments and conclusions are largely biased by his strong prejudice against the credit banks and should therefore be accepted with caution. For that matter, the author's own text under the heading "German private banks" comprises, all told, about 5 pages (pp. 376-379 and 398-399); the rest is statistical material.

181. Compare, for example, Georg Schanz, article "Banken" in *Elster's Wörterbuch der Volkswirtschaft*, Vol. I, p. 310.

182. Compare Waldemar Müller, *Die Organisation des Kredit- und Zahlungsverkehrs in Deutschland*, in *Bankarchiv*, Vol. VIII (1909), Nos. 7, 8 and 9.

183. *Ibid.*

184. In English banking literature the term "banker" is applied to a person who obtains outsiders' funds for the purpose of circulating them for profit; in case a person loans his own capital, he is regarded as a capitalist or a merchant, but not a banker.

185. On this point see among others Ad. Wagner in Schönberg's *Handbuch*, I, p. 437; Adolph Neumann-Hofer, *Depositengeschäfte und Depositenbanken* (Leipzig, C. F. Winter, 1894), p. 39 et seq.; M. Schraut, *Die Organisation des Kredits* (Leipzig, Duncker & Humblot, 1883), p. 32.

186. Since May 31, 1879, deposits at the Reichsbank, in conformity with the well-grounded practice of most other central banks of issue, no longer bear interest. As a result deposits repayable after notice have become quite insignificant. At the end of 1900 they amounted to only 319,881 marks, as shown in Table 43, p. 337, of the jubilee memoir of the Reichsbank (1876-1900). On the contrary, the other deposits (on giro account, exclusive of giro balances of the imperial and state treasuries) at the end of 1908 amounted to 285,303,000 marks.

187. Compare Waldemar Müller, *loc. cit.* (*Bankarchiv*, 8th year, No. 8, p. 116.)

188. It is true that, according to a statement by an expert before the bank inquiry commission, a certain percentage of the funds deposited at the savings banks (reported to be as much as one-third of the total) likewise

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bear the same character of temporary deposits. But, if this be so, it means that these very depositors, who are said to belong to the middle and higher classes, by taking these funds to the savings institutions and not to the banks, deliberately intend to give to these funds the character of saving deposits and not of bank deposits.

189. Compare Waldemar Müller. (Bankarchiv, 8th year, No. 8, p. 117.)

190. Compare *Deutscher Ökonomist*, July 28, 1900, p. 466, and December 2, 1905 (23d year, No. 1197, article *Das Depositengeschäft der deutschen Banken*); also Robert Franz, "Die deutschen Banken im Jahre 1907" (reprint from the *Deutscher Ökonomist*, Berlin, 1908), p. 14; and Waldemar Müller, in *Proceedings of the Third General Convention of German Bankers at Hamburg*, Sept. 5 and 6, 1907, p. 107.

191. *Proceedings of the Third General Convention of German Bankers*, pp. 107, 115; *Deutscher Ökonomist*, July 28, 1900, and Dec. 2, 1905; Rob. Franz, *Die deutschen Banken im Jahre 1906*, p. 11; also Caesar Straus, *Unser Depositengeldersystem und seine Gefahren*, Frankfurt, 1892, p. 5, who states that "up to the present time it was in the main large industry and the wholesale trades which were the depositors of the German bankers," i. e. the same classes that take part in the giro business of the Reichsbank.

192. They also include the so-called hoards (see Ad. Wagner, loc. cit., p. 61, et seq.), that is to say, quantities of precious metals which have not yet found employment, and the amounts held ready for the purpose of liquidating international payments, or for the arbitrage business.

193. The report of the A. Schaaffhausen'scher Bankverein for the fiscal year 1907 gives the total amount of deposits as 72,335,365 marks and adds that "of these deposits invariably by far the larger part consists of interest-bearing funds turned over to us for long terms, varying for the most part from six months to one year."

194. Otto Warschauer in *Conrad's Jahrbücher*, 3d series, Vol. XXVII, p. 480 (1904). See however the correct reasoning by the same author on p. 35 of his book: *Physiologie der deutschen Banken*, which appeared only one year before.

195. The total amount to the credit of clients in the check departments of the German post office was 70,955,349.88 marks on Dec. 1, 1909.

196. This explains, among other things, Lansburgh's discovery (*Das deutsche Bankwesen*, p. 8) that in the case of the smallest joint-stock banks, with a capital up to 100,000 marks per bank, the amount of outsiders' moneys, i. e., deposits and credit accounts, exceeds their own capital about thirty-one times, while in the case of the large banks, with a capital of over 10,000,000 marks each (except the large Berlin banks) the ratio is only 2 to 1. Hence he infers that it is not the larger capital, but publicity, that attracts deposits to the joint-stock banks, inasmuch as an increase of capital is accompanied by a percentual decrease of outsiders' moneys.

197. According to the "Materials bearing on the development of prosperity in Germany during the last generation" (Appendix III to report

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on the imperial finance reform bill of 1908, No. 1043 of Reichstag documents) pp. 18 and 19.

198. Statistisches Jahrbuch für das Deutsche Reich, 1903, p. 187.

199. Ad. Weber, *Depositenbanken und Spekulationsbanken*. Leipzig, Duncker und Humblot, 1902, p. 82.

200. Edgar Jaffé, *Das englische Bankwesen*, 1905, p. 135.

201. *Verhandlungen des III Allgemeinen Deutschen Bankiertages*, p. 96.

202. On not less than 11,117,700 accounts.

203. For 1905 data see Paul Marcuse's *Beobachtungen über das Notenbankwesen in den Vereinigten Staaten von Amerika*, Berlin, 1907, p. 123.

204. Frequent references are made by German writers to these enactments (especially regarding the cash reserve) in advocacy of laws and regulations to govern the German bank deposit business. These references are entirely unwarranted, for the American regulations mentioned in the text (p. 204) were intended to regulate not the deposit business of the National banks, but solely their note operations. (See Neumann-Hofer, *loc. cit.*, p. 35.)

205. I have no means of verifying the data of *Le Figaro* of May 20, 1906, according to which at the end of 1905 the 25 largest credit banks held 5,000,000,000 francs of deposits (the meaning of the term is not quite clear), an increase of more than 3,500,000,000 francs over the corresponding amount in 1885, when 1,159,005,000 francs were reported. In Austria, on the other hand, no systematic fostering of the deposit business appears yet to have commenced. According to an address by Karl Morawitz, president of the Anglo-Austrian Bank, before the Austrian Economic Society (*Bank Archiv*, Year VI, no. 5, p. 64) the deposits in all Austrian credit banks amounted in 1895 to only 250,000,000 kronen (\$50,750,000), while the deposits in the savings banks totalled about 5,000,000,000 kronen (\$1,015,000,000).

206. Joh. Fr. Schär., *Die Bank im Dienste des Kaufmanns* (Leipzig, 1909, G. A. Gloeckner), pp. 122-126.

207. Deposits in the Darmstädter Bank since 1894 comprise all daily-due liabilities.

208. Data taken from *Deutscher Oekonomist*, which up to 1908 included among the Berlin banks the following institutions: Deutsche Bank, Disconto-Gesellschaft, Darmstädter Bank, Dresdner Bank, A. Schaaffhausen'scher Bankverein, Berliner Handelsgesellschaft, Commerz-und Disconto-Bank, Nationalbank für Deutschland besides five institutions of totally different character viz: Bank des Berliner Kassenvereins, Berliner Maklerverein, Amerika Bank (now liquidated), Deutsche Ueberseeische Bank and Deutsche Treuhandgesellschaft (German Trust Company). Since 1908 the five banks last named no longer figure among the "Berlin banks" in the compilations of the *Deutscher Oekonomist*.

209. Data taken from Robert Franz, *Die deutschen Banken im Jahre, 1906*, p. 11, und im Jahre, 1907, p. 14.

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210. Compare, among others, Ad. Wagner, *Beiträge zur Lehre von den Banken* (Leipzig, 1857, Leopold Voss), p. 70: "The banks by means of credit on the basis of deposits may raise the purchasing power of a country."

211. Compare Rud. Eberstadt, *Der deutsche Kapitalmarkt* (Leipzig, 1901, Duncker & Humblot), p. 117 et seq.

212. Compare Felix Hecht, *Die Mannheimer Banken 1870-1900* (Leipzig, 1902, Duncker & Humblot), pp. 39, 40.

213. See Felix Hecht, *loc. cit.*, p. 40.

214. Ad. Weber, *Die Rheinisch-Westfälischen Provinzialbanken und die Krisis*, *loc. cit.*, p. 342.

215. K. v. Lumm, *Die Entwicklung des Bankwesens in Elsass-Lothringen*, 1901, p. 165.

216. Joh. Fr. Schär, *Die Bank im Dienste des Kaufmanns*, p. 136.

217. Edgar Jaffé, *Das englische Bankwesen*, p. 143.

218. Alfred Lansburgh, *Die Verwaltung des Volksvermögens durch die Banken*. Reprint from "Die Bank" (Berlin-Charlottenburg, 1908), p. 13 et seq.

219. The money circulation through the German post office, which is still carried on to a large extent by means of cash-shippments, amounted in 1907 to 13,500,000,000 marks, i. e. to about 37,000,000 marks daily. The money required by the mortgage business, which until recently was also on a cash basis likewise reaches enormous amounts. Thus in Prussia alone the yearly amount of mortgages recorded averages about 4.5 billion marks, while the amount of mortgages cancelled each year is about 2.3 billion marks.

220. Recently many savings banks have made efforts to extend their activity along commercial banking lines by introducing the check system (in accordance with article 2, sec. 1 of the check act). In particular the tenth assembly of the Union of Baden Savings Banks, which met at Müllheim, Baden, on November 10, 1908, adopted resolutions, recommending the use of checks in the case of saving deposits, and proposing even the establishment of regular current accounts including the granting of credit. See the order of the Prussian minister of finance, dated April 20, 1909.

221. See especially Siegfried Buff, *Der gegenwärtige Stand und die Zukunft des Scheckverkehrs in Deutschland* (Munich, 1907, E. Reinhardt).

222. In addition, 14,497 checks were redeemed which were not booked on check account, making a total of 61,816.

223. Gamp, *Der landwirtschaftliche Kredit und seine Befriedigung* (The needs of agricultural credit and how to meet them). Berlin, 1883.

224. *Verhandlungen des Kgl. (Preuss.) Landes-Ökonomie-Kollegiums*, 1906, p. 17.

225. The most important institutions for agricultural credit are the following: The Imperial Federation of Agricultural Cooperative Societies of Germany (Reichsverband der deutschen landwirtschaftlichen Genossenschaften in Deutschland) and its cooperative agricultural bank at Darmstadt, with about 11,896 cooperative credit societies, savings and loan

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banks, belonging in 1906 to the federation and its sub-federations; the General federation of cooperative rural societies for Germany (Generalverband ländlicher Genossenschaften für Deutschland [E. V.]) at Neuwied with 4,159 cooperative credit societies, savings and loan banks belonging in 1906 to the federation and its sub-federations; the Bavarian state Federation of agricultural loan associations and other agricultural cooperative societies (Bayrischer Landesverband landwirtschaftlicher Darlehenskassenvereine und sonstiger landwirtschaftlicher Genossenschaften) with unlimited liability at Munich, with 2,259 cooperative societies, savings and loan banks in 1906; the Federation of agricultural cooperative societies of the Grand Duchy of Baden at Karlsruhe (Verband landwirtschaftlicher Kreditgenossenschaften im Grossherzogtum Baden), with 384 cooperative societies, savings and loan banks in 1907; the Federation of Württemberg cooperative societies (Verband württembergischer Kreditgenossenschaften) at Ulm, with 90 cooperative societies in 1907; the Federation of cooperative societies of the Provinces of Posen and West Prussia (Verband der Erwerbs- und Wirtschaftsgenossenschaften in den Provinzen Posen und Westpreussen) at Posen, with 225 cooperative societies in 1907; and in part of course also the (Schulze-Delitzsch) General federation of German cooperative societies (Ltd.) founded on self help (Allgemeiner Verband der auf Selbsthilfe beruhenden deutschen Erwerbs- und Wirtschaftsgenossenschaften), with 917 cooperative societies in 1907, the members of which constitute about one-third of the total membership in all (about 16,000) cooperative credit societies. For details on the above see "Materialien zur Beurteilung der Wohlstandsentwicklung Deutschlands im letzten Menschenalter" (Data bearing on the progress of prosperity in Germany during the last generation), vol. III of the Appendices to the Imperial Finance Reform Bill, of 1908, pp. 21-27.

226. See Lansburgh, loc. cit., pp. 31-32.

227. Waldemar Müller, Die Organisation des Kredit- und Zahlungsverkehrs in Deutschland (The organization of the system of credit and payment in Germany) in Bank-Archiv, Vol. VIII, 1909, No. 7, p. 99.

228. Waldemar Müller, *ibid.* As regards the Reichsbank, according to the returns made to the bank inquiry commission, there were in the entire German Empire 70,480 firms and individuals entitled to credit in its bill business. Of these (a) merchants and trading companies constituted 41 per cent, or in all 29,020 firms and individuals for the entire German empire; (b) manufacturers and industrial companies constituted 31 per cent or 21,887 firms and individuals in the Empire; (c) land owners and establishments engaged in agriculture and the manufacture of agricultural products 14 per cent, 9,589 firms and individuals in the Empire; (d) cooperative societies of all kinds 1 per cent or 883 firms and individuals in the Empire; (e) capitalists (Rentner), artisans, and similar tradesmen 13 per cent, or 9,101 firms and individuals in the Empire. According to the same official returns, the loans on collateral security made by the bank and outstanding on Dec. 31, 1907 (on 5,666 collateral certificates) amounted

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to a total of 364,297,700 marks. Of this total, 1,972,200 marks were loaned to agriculture and allied rural industries (on 249 collateral certificates).

229. Thus among others Lansburgh in an article in "Die Bank" published separately under the title "Die Verwaltung des Volksvermögens durch die Banken" (The administration of the national wealth by the banks), p. 26, which I shall have occasion to notice later.

230. Materialien zur Beurteilung der Zusammenhänge zwischen dem öffentlichen Schuldenwesen und dem Kapitalmarkt (material to elucidate the connection between the public debt system and the capital market). Appendices to Imperial finance reform bill of 1908, Part IV, No. 1087 of Reichstag Documents, p. 249.

231. "According to competent estimates," foreign countries had absorbed by the middle of 1908 no more than 400,000,000 marks of imperial bonds and only between 80,000,000 and 105,000,000 marks of Prussian consols. (Ibid, p. 247, II.)

232. See Felix Hecht, *Die Mannheimer Banken, 1870-1900*, Leipzig, Duncker & Humblot, 1902, p. 23: "Each credit bank . . . wants to be studied by itself."

233. Thus Felix Hecht, *Lehren der Krisis (Lessons of the Crisis)* (Sept. 15, 1903), loc. cit., p. 140. The same author asserts however in his paper before the general meeting of the Mitteleuropäischer Wirtschaftsverein, Sept. 15, 1908 (Publications of the Verein, No. 6, p. 75) that the German tendency to engage in extensive oversea commercial and industrial enterprises has "undoubtedly" taken much German capital from domestic industrial enterprises and from legitimate domestic credit."

234. Adolph Weber justly says: "No country has had so rich or so bitter an experience in the results of unsound credit-granting as England." (*Depositbanken und Spekulationsbanken*, p. 109.)

235. Alfred Lansburgh, *Die Verwaltung des Volksvermögens durch die Banken* (reprint from "Die Bank," Berlin-Charlottenburg, 1908). The merit of this book is that it has facilitated the study and appreciation of the smaller banks, with a capital of less than 1,000,000 marks down to 100,000 marks, and even of the smallest banks with a capital of less than 100,000 marks, by supplying careful statistics (Tables IV and V and explanatory notes, which in the main are to the point). It should be said, however, that in this field *Der Deutsche Oekonomist* (mentioned by the author on p. 24) had already done valuable preliminary work, though limited to the capital stock and the deposits (*fremde Gelder*) exclusive of reserves. Adolph Weber, in *Die Rheinisch-Westfälischen Provinzialbanken und die Krisis* (the Rhenish-Westphalian Provincial Banks and the Crisis), 1903, p. 362-371, which Lansburgh does not mention, was, so far as I know, the first to study the activities of the small banks of this district in detail and with valuable results. By supplying the omissions of the *Ökonomist* and by analyzing the small banks of all Germany, on the basis of their balance sheets and their activity, Lansburgh has performed a valuable service, particularly from the social standpoint. We must not forget however, that

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the deposits (fremde Gelder) in all these small banks amount to no more than 4 per cent of the deposits of all credit banks.

In his later work, containing about the same material, the title "The German Banking System" is inappropriate and misleading, for the entire text covers only 63 pages, of which 12 are devoted to the small banks (pp. 22-23). Since the author admits this in his preface, he ought to have adopted a more appropriate title. In passing I wish to note that I do not share the author's opinion (p. 7) that there are in Germany 6,000 private bankers. According to my estimate the (purely) private bankers number about 4,000.

236. Especially on page 55 of the reprint from the periodical "Die Bank" (Berlin-Charlottenburg), mentioned in note 235.

237. The first point is not regarded by Lansburgh as a very serious reproach, as is evident from his remarks on p. 8: "The old controversy as to whether Germany is to be an agricultural or an industrial state, has long ago been answered by the general development of things. No political upheaval can reverse this development. That would be a misfortune." His wish is solely that the process should go on without shock by way of evolution and not of revolution, and that the available funds of the nation should not be thrust into industry by sheer force. In this he is entirely right.

238. Die Bank, No. 6, June 1908, p. 543.

239. Riesser, Scheckverkehr und Scheckgesetz (Check Circulation and Check Legislation), No. 4 of the "Veröffentlichungen des Mitteleuropäischen Wirtschaftsvereins in Deutschland," Berlin, Puttkammer und Mühlbrecht, 1907.

240. The causes which compel the German credit banks to extend current account credit preferably to trade and industry, and only to a slight extent to craftsmen, small traders and agriculturists, have been mentioned briefly before (p. 223 and following).

241. The number of such persons would thus be counter-balanced in a remarkable way by the number of persons who according to the complaints heard in savings banks circles, have been won away from them by the credit banks, one third of whose total deposits are claimed to be made up of "saving deposits."

242. "Die Bank," June, 1908, p. 544.

243. See Herman Mauer, Das landschaftliche Kreditwesen Preussens (The Prussian System of Cooperative Land Credit), (Strassburg, Karl J. Trübner, 1907); Felix Hecht, Die Landschaften und landschaftsähnlichen Kreditinstitute in Deutschland (the Agricultural Credit federations, and similar organizations in Germany), Vol. I, Statistics (Leipzig, Duncker & Humblot, 1908).

244. Die Organisation des langfristigen gewerblichen Kredits (in the Publications of the Mitteleuropäischer Wirtschaftsverein, No. 6, pp. 59-86.)

245. Die Mannheimer Banken, 1870-1900, Leipzig, Duncker und Humblot, 1902. Lehren der Krisis. Paper read at the general meeting of the

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Verein für Sozialpolitik, 15 September 1903 (Vol. CXIII of the publications of the Verein für Sozialpolitik), and monograph on "Die Organisation des gewerblichen langfristigen Kredits (The Organization of long-time industrial credit), 1908.

246. A larger degree of publicity, as for instance the more frequent publication of summary balance sheets (Rohbilanzen), while practicable per se, is not likely to throw much more light on the condition of the institution

247. Berlin, Puttkammer & Mühlbrecht, 1909, p. 340-361.

248. In "Die Lehren der Krisis," p. 141, and in the monograph on "Die Mannheimer Banken," p. 45

249. Ad. Weber, Die rheinisch-westfälischen Provinzialbanken, in the Publications of the Verein für Sozialpolitik, Vol. CX, p. 344. In this monograph—long before Lansburgh,—the activity of the small banks in the Rhine country and Westphalia has been treated in great detail and duly appreciated, pp. 362-371.

250. So far as we can foresee, this policy of the mortgage banks (except in a few instances where loans are made on warehouses) is not likely to be changed, even if it be true that the mortgage bank act (art. 12) does not stand in the way of loans on factories, as Ernst Sontag tried to prove (Die Gründung einer Industrie-Hypothekenbank—[The Establishment of a mortgage bank for Industry]. Kattowitz, Gebr. Böhm, 1909). The mortgage banks are not likely to regard factories as easily marketable risks nor must they underestimate the risk that the buildings may remain idle and yield no return.

251. Waldemar Müller (Bank-Archiv No. 7, Jan. 1, 1909, p. 98).

252. See Otto Jeidels, Das Verhältnis der deutschen Grossbanken zur Industrie (The relation of the great German banks to industry) Leipzig, Duncker und Humblot 1905, p. 34. In just such cases however, the central institution proposed by Hecht would not be authorized to intervene (Veröffentlichungen des Mitteleuropäischen Wirtschaftsvereins, Berlin, 1908, vol. 6, No. 5, p. 79).

253. We may readily suppose, for instance, that the repayment in annuity form of long-time industrial loans granted by the credit banks may be made a normal part of the contract in the same way as is proposed in connection with the central bank.

254. The question of the profitableness of the enterprise (Veröffentlichungen, p. 85) which Hecht prefers to leave untouched would of course be largely affected by the greater or smaller amount of capital stock; but on this point, too, Hecht has nothing to say.

255. This is also the opinion of Karl Diehl, Der Bau einer neuen Organisation des langfristigen industriellen Kredits (Plan for a new organization of long-time industrial credit), in the Bank-Archiv of March 15, 1909, Vol. VIII, No. 12, p. 190. The article contains a number of other pertinent criticisms of the proposed central institution. See also Frankfurter Zeitung (Abendblatt) of Sept. 25, 1908, and the criticisms of Bank Director

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Freiherr von Pechmann, in the Veröffentlichungen des Mitteleuropäischen Wirtschaftsvereins, No. 6, pp. 86-95; also A. M. Ernst Sontag, *op. cit.*

256. Eugen Lopuszanski, Einige Streiflichter auf das österreichische Bankwesen (Some side-lights on the Austrian bank system) in Volkswirtschaftliche Wochenschrift of Al. Dorn, Vol. I, No. 1305, Dec. 31, 1908, p. 437.

257. See Veröffentlichungen des Mitteleuropäischen Wirtschaftsvereins, No. 6, p. 75.

258. It is to be noted, however, that in the transactions of the Mitteleuropäische Wirtschaftskonferenz in Berlin, May 17 and 18, 1909, Hecht himself to all appearances assumed the necessity of legislative regulation of the matter, which he evidently had not contemplated before.

259. Security in the shape of a guarantee or a life insurance policy pledged is of little practical consequence in connection with the bonds discussed above, so that we may safely ignore such cases here. Loewy (Rawitsch) is of a different opinion (Bank-Archiv, Vol. VIII, p. 241, et seq.); on principle he is in favor of the idea of a central institution.

260. The law (art. 1) becomes applicable the moment it is found that the object of the activity of the enterprise is actually directed to this end. It makes no difference whether this object of the undertaking is specifically indicated in the charter or by-laws or not; otherwise it would be very easy to make article 1 of the mortgage bank act inoperative, by simply omitting to mention in the charter or by-laws this object of the undertaking.

261. Ernst Sontag, *op. cit.*

262. Veröffentlichungen des Mitteleuropäischen Wirtschaftsvereins, No. 6, p. 66.

263. See Felix Hecht, Denkschrift über die Organisation des gewerblichen langfristigen Kredits, p. 10.

264. See Siegfried Buff, Das Kontokorrentgeschäft im deutschen Bankgewerbe (current-account transactions in German banking). J. G. Cotta'sche Buchhandlung Nachf., Stuttgart & Berlin 1904 (issued as No. 60 of the Volkswirtschaftliche Studien, edited by Brentano & Lotz).

265. See Joh. Friedr. Schaer, Die Bank im Dienste des Kaufmanns (the bank and its service to the merchant), Leipzig, G. A. Gloeckner, 1909, p. 19.

266. In its very first annual report (1853) the Darmstädter Bank stated that in accordance with the instructions of the government of the Grand Duchy of Hesse, the authorities of the customs department granted credit on customs duties to all merchants on their bills provided with the guarantee (Aval) of the bank.

267. We do not agree with Joh. Fr. Schaer's view (*loc. cit.*, pp. 23-24) that under the provisions of the law governing bank deposits, "the bank having the care of securities, is entitled to represent the shares at the general meeting, unless the depositor has signified his wish to the contrary" (see Riesser, Kommentar zum Bankdepotgesetz, 2d ed., Berlin, 1906, Otto Liebmann, p. 42, sec. 3, d, β). On the contrary the bank must not assume

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to represent the shares unless specifically authorized by the depositor, for such representation involves a "disposition" of the shares, limited though it be, to which the bank taking care of the securities is not entitled. The authorization need not however be made out in this case in the form prescribed in article 2 of the bank deposit law.

268. Bank-Archiv, Jan. 15, 1909, Vol. VIII, No. 8, pp. 114-15.

269. Substantially the same description is given by Joh. Friedrich Schaer, loc. cit., p. 46, B, a.

270. For the Deutsche Bank see circular (No. 4) reprinted by Joh. Friedr. Schaer, loc. cit., p. 130.

271. The terms for current accounts of the Disconto-Gesellschaft, the Dresdner Bank, and the Berliner Handelsgesellschaft, in the form in which they were in force immediately before 1904, are reprinted in Siegr. Buff, loc. cit., pp. 110-125.

272. See Waldemar Müller, Bankarchiv, Vol. VIII, No. 8, p. 115, and Joh. Fr. Schaer, p. 74, No. 1.

273. Bank-Archiv, Vol. VIII, No. 8 (Jan. 15, 1909), p. 115.

274. See Ad. Weber, Die rheinisch-westfälischen Provinzialbanken und die Krisis, loc. cit., p. 342.

275. See Felix Hecht, Die Katastrophe der Leipziger Bank (The collapse of the Leipziger Bank) in "Störungen im deutschen Wirtschaftsleben während der Jahre 1900 ff." (Disturbances in German economic life during 1900 and the following years), Vol. VI, Geldmarkt-Kreditbanken, p. 384).

276. In balancing a current account the interest is figured thus: The interest-bearing amounts (the result of multiplying the capital by the number of days and dividing by 100) are first determined, (in Berlin the month is considered as thirty days) and entered on the credit or debit side according as the customer is to be credited with interest or to be debited therewith. The current account is usually kept by double entry and balanced daily as far as practicable.

277. See Otto Jeidels, loc. cit., p. 33.

278. See Otto Jeidels, loc. cit., p. 169-171, for an account of the distribution by localities and industries of the industrial corporations with which the large banks are connected, either through the appointment of representatives on the supervisory boards of the corporations or by serving as their fiscal offices for the payment of interest and dividends or the redemption of bonds when mature. In spite of his declaration to the contrary, Jeidels overestimates the importance of such fiscal agencies.

279. Robert Franz, Die deutschen Banken im Jahre 1908, (German banks in 1908), p. 22.

280. Even such an arrangement could but seldom be made with the German retailer. Contrary to the custom prevailing in France, he will, as a rule, not allow himself to be drawn upon nor does he give bills. Nevertheless he demands long terms of credit and settlement without being

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willing to obligate himself, as in the case of bill credit, to make payment at the end of the period.

281. In England, too, bills of this kind drawn on foreign countries are not discounted by the banks. (See Edgar Jaffé, *Das englische Bankwesen* [the English banking system] p. 142.) They are at once sold to foreign bill brokers. For other particulars see Jaffé, pp. 123 and 124.

282. According to the Jubilee Report of the Reichsbank (p. 78), this practice explains why the average value of the bills reaching the Reichsbank rose from a minimum of 1,421 marks in 1878 to a maximum of 1,936 marks in 1900. The amounts drawn on banks and bankers are nearly always for very large sums. However in proportion as the large banks are making their way into the provinces by means of their branches, discounting there also the bills of small borrowers, the average amount of the bills discounted declines.

283. Edgar Jaffé, *loc. cit.*, p. 124.

284. Walther Lotz, *Die Technik des Emissionsgeschäfts*, Leipzig. Duncker & Humblot, 1890, p. 58.

285. Heiligenstadt, in the Proceedings of the Bank Inquiry Commission of 1908 on points 1-4 of the question sheet (Berlin, 1909, Imperial Printing Office), p. 25.

286. Under the old stock exchange law, in case of speculation on a cash basis the following method was often resorted to among provincial banks and private bankers. The customer engaged in speculation would make part payment on the securities bought for him and left on deposit with his bank or banker. The balance of the purchase price, which was to be paid at once, would be obtained by having the bank or banking establishment draw on another banking institution, or else, in order to cover up the true character of the bill as a finance bill, the person on whose account the securities were bought would draw on a provincial bank or private banker, that is on his own banker, who would thereupon discount his own acceptance. See W. Prion, *Das deutsche Wechseldiskontgeschäft*. (Bill discounting in Germany), Leipzig, Duncker & Humblot, 1907, p. 42.

287. See among others *Der Deutsche Oekonomist* of Aug. 4, 1900, p. 476, July 29, 1905, p. 414, and Rob. Franz, *Die deutschen Banken im Jahre, 1907*, p. 15 & 16. For the Berlin banks, during 1894-1899 the amount fluctuated between one-half and two-fifths. (See Ernst Loeb, *loc. cit.*, p. 267.)

288. Ad. Weber, *Depositenbanken, etc.*, p. 117.

289. Schmoller, *Grundriss*, II, p. 493.

290. The separation of the acceptances from the avals was not practicable because of difficulties in the technique of accounting, the two items appearing combined in the balance sheets of many banks.

291. See W. Prion, *loc. cit.*, p. 53.

292. Special literature: W. Prion, *Das deutsche Wechseldiskontgeschäft*. Mit besonderer Berücksichtigung des Berliner Geldmarktes (The German bill discounting business. With special reference to the Berlin money

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market). (Leipzig, Duncker und Humblot, 1907.) No. 127 of *Staats- und Sozialwissenschaftliche Forschungen*, edited by von Schmoller and Sering. An excellent work.

293. This fact, repeatedly established at the hearings of experts before the bank inquiry commission, is also affirmed by W. Prion (*loc. cit.*, p. 32).

294. See W. Prion, *loc. cit.*, p. 61, where he mentions that Hamburg has a quotation for the private discount of prime bills and a special quotation for commercial bills, the margin between them amounting to one-fourth to one-eighth of 1 per cent; and the same is true of London, where there is a difference of one-half of 1 per cent between the quotation of bank bills and of trade bills.

295. This device, hardly perceptible to outsiders, of raising the rate of private discount in individual cases, even though the amount be trifling, may thus be used by the Bourse as a warning signal. In the case of an excessive straining of credit on the part of some bank, it may perform within banking circles the same functions and exert the same influence as the ruder and ostentatious means of a general raise of the official rate of bank discount, in case of a general overstraining of credit.

296. See W. Prion, *loc. cit.*, p. 33.

297. Waldemar Müller, *loc. cit.* (*Bank-Archiv.*, Vol. 8), No. 8, p. 117.

298. *Loc. cit.*, p. 51.

299. W. Prion, *loc. cit.*, p. 53.

300. The number of note banks was as follows: 1883-1886, 18; 1887, 17; 1888, 16; 1889, 14; 1890, 13; 1891-1893, 9; 1894-1900, 8; 1901, 7; 1902-1904, 6; 1905-1908, 5 (Reichsbank, Bayerische Notenbank, Sächsische Bank, Württembergische Notenbank, and Badische Bank).

301. The number of mortgage banks varied between 24 in 1883, 39 in 1900-1902, and 40 in 1903-1908.

302. See Rob. Franz, *Die deutschen Banken im Jahre, 1907*, p. 12, and Rob. Franz, *Die deutschen Banken im Jahre, 1908*, p. 14. That enumeration, however, includes only credit banks having a capital each of at least 1,000,000 marks, while in the case of mortgage banks no such restriction is made.

303. The amounts of bills held by the six great banks of Berlin vary somewhat from those given by W. Prion, *loc. cit.*, p. 208 (514, 559, 671, 697, 742, 740, 914, 1017 million marks).

304. In regard to the figures given above, it is to be noted that in consequence of the circulation of bills between central banks and branch banks, certain items have doubtless been counted several times.

305. Edgar Jaffé, *Das englische Bankwesen*, p. 124 and pp. 141-144.

306. Edgar Jaffé, *loc. cit.*, p. 125.

307. Edgar Jaffé, *loc. cit.*, p. 145.

308. The acceptance commission at the foreign banks is one-half per cent.

309. Edgar Jaffé, *loc. cit.*, pp. 148-151.

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310. It is to be noted that the official discount in London represents a minimum rate of discount, whereas the official rate of discount of the German Reichsbank has rather the meaning of a maximum rate of discount, so that the two are not strictly comparable. Furthermore, the Bank of England, unlike the German Reichsbank, reserves the absolute right to decline to discount even "legitimate" bills when not convenient, so that, especially in times of overstrained credit, and when the Bank is planning a raise of discount, it does not discount all the bills presented. Finally, the Bank of England, unlike the German Reichsbank, discounts only the bills of regular customers. Nevertheless the variations in the rates of discount in Germany and England run entirely parallel. However, the rate of discount in England has invariably been higher than in Germany during the last fifty-six years, the proportion during that time being as 100:122. (On an average the difference is 0.63 per cent.) See the exceedingly instructive work by Joh. Fr. Schaer, *Zahlungsbilanz und Discout* (Berlin, 1908, S. Simon), pp. 110 and 111. On pp. 101 and 102, on the basis of statements by Karl Waidmeyer, general secretary of the Austro-Hungarian Bank, are given the average rates of official discount in England, France, Germany and Austria-Hungary from 1852 to 1907, that is to say, for fifty-six years, the years of crisis being noted, while on p. 107 are given the averages of the official discount of the last five decades for the same countries. The differences in the figures of the rates of discount in Germany as compared with those of England, France and Austria-Hungary, are due, in the foremost place, to the difference of the economic situation and of the balance of payment, as well as to the differences in the organization of the money markets and banks.

311. See W. Prion, loc. cit., pp. 74, 75.

312. Loc. cit., p. 75.

313. See my statements before the bank inquiry commission (Transactions of the full commission, under Numbers I-V of the question sheet, Berlin, Ernst Siegf. Mittler & Sohn, 1904), pp. 70, 71.

314. Loc. cit., p. 55.

315. See W. Prion, loc. cit., pp. 77-95.

316. My own views, coinciding with the above, were set forth in the proceedings of the bank inquiry commission, under Numbers I-V of the question sheet (Berlin, 1909), p. 259. By a misprint, the word *nicht* (not) was omitted in the phrase "je nach den Verhältnissen des Geld- oder Warenmarktes überhaupt nicht zu einer Realisierung führt" ("is not realized on, in accordance with the conditions prevailing in the money market or the commodity market").

317. See W. Prion, loc. cit., p. 93.

318. Loc. cit., p. 78.

319. Friedr. Leitner, *Das Bankgeschäft und seine Technik*, Frankfurt-am-Main, 1903, J. D. Sauerländer, publisher, pp. 259-260.

320. Lombard loans to banks and others (bankers and other financial concerns) are greatly influenced by the demands of commerce, industry

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and other lines of activity, which demands are largely concentrated in the banks, and are particularly heavy at the close of the year and at other customary dates of settlement (*schwere Termine*). As an illustration of this influence it may be mentioned that on December 31, 1907, the total amount of lombard loans of the Reichsbank (in 5,666 pledge receipts) was 364,297,700 marks, distributed as follows: To joint-stock banks (on 497 pledge receipts) 163,100,300 marks, to other money and credit institutions (on 916 pledge receipts) 125,399,000 marks. It is also interesting to note the proportion of lombard loans granted to joint-stock banks and those to private banks, etc., at the two dates of comparison (March 31, 1908, and December 31, 1907).

Before the meeting of the bank inquiry commission and to some extent during its proceedings, there was some talk of compelling the Reichsbank to establish a certain limit which must not be exceeded in the discounting of bills and the granting of lombard loans on dates of settlement (*schwere Termine*), especially at the close of each quarter, the aim being to improve the condition of the bank. In the course of the proceedings this demand was dropped. In fact, the close of the quarter is precisely the time at which the most legitimate demands of commerce arise, which must be met almost entirely by the granting of short-term credit, a task which the Reichsbank can not shirk, since the very purpose of its existence is "to facilitate payments," while another, though not equally essential part of its functions is "to promote the utilization of available funds" (art. 12, sec. 1 of the bank act).

On this point Waldemar Müller justly remarks: "To grant credit and issue notes in times of business calm, no central bank of issue with the privileges of the Reichsbank is needed; even so defective a note bank system as that of the United States suffices for that purpose. It is in times of heavy demand and in times of crisis that the bank has to prove itself equal to the task assigned to it by the bank act" (Bank-Archiv, Vol. 8, No. 9, Feb. 1, 1909, p. 130).

321. Felix Hecht, *Die Mannheimer Banken*, p. 40.

322. A. Weber, *Depositbanken und Spekulationsbanken*, p. 97.

323. Waldemar Müller, *Die Organisation des Kredit- und Zahlungsverkehrs in Deutschland* (Bank-Archiv, 15 January, 1909, Vol. 8, No. 8, p. 116).

324. The portion of the rules and regulations of the Deutsche Bank coming under this head is reproduced in Joh. Fr. Schaer, *Die Bank im Dienste des Kaufmanns*, pp. 128 and 129.

325. This is the reverse, quite compatible with the principles of jurisprudence, of the provision of art. 405, sec. 2 of the Commercial Code, which, it is to be noted, is merely declaratory in its nature. It declares that, when the broker announces the execution of an order without expressly stating that he himself is liable for it, this is equivalent to the statement that he has closed the transaction with a third party on account of his client.

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326. This is self-evident from art. 403 of the Commercial Code.

327. Until the new Bourse Law went into effect, it was customary to add the following: "Transactions relating to securities with fixed date of delivery are subject to special provisions."

328. This is an extension of arts. 397 and 369 of the Commercial Code.

329. That is to say, not merely "on account of all demands on current account in the brokerage business" (art. 397, Commercial Code).

330. This addition corresponds to art. 8 of the bank deposit law of July 5, 1896, which requires that the broker (local banker) who transmits for safe-keeping securities, the property of a customer, to a central banker, or transmits to such banker an order, received from a customer, to purchase securities, shall declare to the central banker that the securities belong to a third party or that the purchase is to be made on account of a third party. The consequence of this is that the central banker can exercise the right of pledge and retention only in virtue of claims that have arisen in connection with these securities (in particular as regards any remnant of the purchase price), but not in virtue of all claims which the central banker has against the provincial banker in connection with any other business. The latter was the case before the enactment of the Bank Deposit Law, when the provincial banker deemed himself authorized to leave the central banker in ignorance of the fact that the transmitted papers belonged to a third party or that the ordered purchase was to be made on account of a third party. If thereupon the provincial banker became bankrupt, the central banker enforced his right of pledge or retention in virtue of all his claims on the provincial banker, with the consequence that the client of the provincial banker as a rule found that his right of exemption became illusory.

331. This addition, referring to art. 2 of the imperial stamp law of June 3, 1906, is intended to exclude the joint liability of the bank for the stamping of the securities in accordance with the law. In virtue of this provision, while the pledging of foreign securities comes under the definition of a "business" (between living persons) liable to stamp dues, the same is not true of the deposit of such securities made without any right of pledge. That is the reason why the conditions provide that in the case of unstamped foreign securities the right of pledge and retention, which otherwise would be created, is excluded.

332. Arts. 1221 and 1235 of the Banking Code read as follows: Art. 1221: If the pledge has a bourse or market price, the holder of it may sell it at free sale at the current price through a broker legally authorized to make such sales, or through a person authorized to make public auction sales. Art. 1235: The sale of the pledge is to be made by way of public auction. If the pledge has a bourse or market value, the provision of art. 1221 applies.

333. Art. 1246 of the Banking Code says: If, according to equity, the interests of the parties concerned would be better served by a method of sale of the pledges different from that provided in arts. 1235 to 1240, either of these parties may demand that the sale shall take place according to this

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other method. If an agreement is not reached, the decision shall be made by the court.

334. Concerning the meaning of the word "ausdrücklich" (expressly), see Riesser, *Das Bankdepotgesetz*, 2d edition (Berlin, Otto Liebmann, 1906), p. 49, note 1, and pp. 26 and 27. Bruno Buchwald, on p. 172 of his exceedingly valuable book "Die Technik des Bankbetriebs" (5th ed., Berlin, Julius Springer, 1909, p. 172), reproduces a printed blank containing the words: "and I confer on you the rights provided in section 1, article 2 of the deposit law of July 5, 1869." It is to be noted that this blank is *not* conformable to the law. The law requires an *express* authorization, that is to say, the authorization itself must make it clear that the giver thereof was well aware of its contents and meaning.

335. However, to guard against an incorrect practice, such as seems to obtain in many places, it must be pointed out once more that, even where such authorization has been given to the banker, he is required to safeguard the customer's securities in accordance with the provisions of art. 2 of the bank deposit law so long as he has not made use of the authorization (see Riesser, *loc. cit.*, p. 33 under b).

336. See Bruno Buchwald, *loc. cit.*, pp. 131, 149.

337. See Bruno Buchwald, *loc. cit.*, pp. 149, 352.

338. See Rob. Franz, *Die deutschen Banken im Jahre 1908*, pp. 24-25.

339. See Ad. Weber, *Depositenbanken und Spekulationsbanken*, p. 102

340. See Rob. Liefmann, *Beteiligungs- und Finanzierungsgesellschaften* (Jena, 1909, Gust. Fischer), who justly insists that this financing business is to be sharply distinguished from the issue business (p. 84 et seq.). The former consists in procuring the funds, belonging to the bank or to the public, required for the operations of transformation or original founding, and—I may add—in assuming the functions of intermediary in these operations.

341. The ratio of transformations to original foundings (which are combined in the table of companies founded, see p. 119), was stated by van der Borcht for the period 1895-1907 at about 50 per cent (*Jahrbücher für National-Oekonomie und Statistik*, 3d series, Vol. XV).

342. See p. 115 and following of the present work for an account of the increase in the capital of stock companies founded in the four-and-a-half-year period 1870-1874, as compared with the capital of stock companies founded in the period 1851-1870.

343. Heinrich Sattler, *Die Effektenbanken* (Leipzig, 1890), p. 21: "The operations of transformation may be briefly designated as industrial jobbery (*industrielle Ausschachtungsgeschäfte*)."

344. Engel, in *Zeitschrift des Statistischen Büreaus* (Berlin, 1875), Heft 4, p. 356.

345. See Ad. Wagner's preface to Heinrich Sattler's scientifically rather unimportant work, *Die Effektenbanken* (Leipzig, C. F. Winter'sche Verlagshandlung, 1890). In that preface, Wagner displays with startling distinctness his attitude toward the credit banks, which afterward prompted his

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various extreme proposals. "The fat dividends," he says in the preface, p. VIII, "may in some cases have been earned by these banks honestly, but on the whole they owe their high figure principally to the exploitation of the heedlessness, inexperience and greed of that portion of the population which engages in gambling at the bourse." (Compare with this statement the sources of bank dividends, as stated in the present work!) Again: "Social legislation concerns . . . all those economic relations where there is danger of exploitation, and where profits, incomes, fortunes, often of gigantic dimensions, are developed without corresponding 'labor,' at the expense of the persons exploited, though the latter may in many cases share in the blame."

346. Walther Lotz, *Die Technik des deutschen Emissionsgeschäfts* (Leipzig, Duncker & Humblot, 1890). A fundamental work.

347. Art. 41, sec. 1 of the Bourse law reads as follows: "The stock of an enterprise transformed into a stock company or into a stock company en commandite shall not be admitted to trade at the Bourse before the expiration of one year from the date of the entry of the name of the company in the trade register and before the publication of the first annual balance sheet, with statement of profit and loss. In special cases this period may be abridged or dispensed with by the government of the State (art. 1)."

348. According to the table of *Der Deutsche Oekonomist*, reproduced on p. 268 of Ernst Loeb's work, *Die Berliner Grossbanken in den Jahren 1895 bis 1902 etc.*, the premium on newly issued stock in the years 1896-1900, inclusive, was as follows: Bank stock, 35.3, 53.5, 36.7, 30.6, and 26.5 per cent, industrial stock, 36.1, 66.7, 67.7, 66.9, and 55.2 per cent.

349. A "bonus" (Bonifikation) is the remuneration paid to a bank before or at the time of issue by the party issuing securities solely for services in promoting the sale of the securities, that is to say, a function which has absolutely nothing to do with the quality of the bank as broker for its clients. This "bonus" therefore represents a special remuneration for a special kind of banking activity, consisting in this that the banker undertakes, to the best of his ability and on the ground of his special knowledge of customers, to see that the securities issued are placed in good hands, that is to say, permanently. This function should not be, and in fact can not be, performed by any one but a banker. Hence it is absurd to say that he is bound to pay this bonus to his clients, that is to say, the buyers of the securities, and still less, that he acts "fraudulently" (*dolos*) in failing to state the fact that he received a bonus and to share it with others, as was decided by the Imperial Court (I Civil Senate) in a judgment rendered Dec. 10, 1904.

350. How ill-advised it is to draw rash conclusions in regard to the manner of issue from a temporary decline in quotations, is illustrated by the table printed by Ad. Weber (*loc. cit.*, p. 155), in which the list of "Stock companies of inferior quality" includes the Jura-Simplon railway, which has since then been nationalized.

351. See Walther Lotz, *loc. cit.*, p. 71.

352. The two tables are reprinted on pp. 278 and 279 of the proceedings of the bank inquiry commission of 1908 (*Proceedings of the full commis-*

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sion, Numbers I-V of the question sheet, Berlin, Ernst Siegr. Mittler & Sohn, 1904), as appendix to pp. 65 et seq.

353. The Frankfurter Zeitung enumerates the bonds thus: "German and foreign mortgage bank bonds (estimated)" and "Other bonds;" the Deutscher Oekonomist, on the contrary, discriminates between mortgage, railway and industrial bonds, both in the case of the German and of the foreign bonds. The Frankfurter Zeitung gives railway stock and tramway stock in a single item, while the Deutscher Oekonomist separates them. The table of the Frankfurter Zeitung lacks the item "Insurance stock," which receives special notice in the Deutscher Oekonomist at least in the case of German securities. The table of the Frankfurter Zeitung contains separate statements regarding foreign securities only in the case of government loans, while the table of the Deutscher Oekonomist gives these separate statements throughout. Finally, there are great differences in the amounts. Thus for example the nominal amount of the foreign government loan issues during 1905 given in the table of the Frankfurter Zeitung differs from that given in the Deutscher Oekonomist by not less than 142,000,000 marks (Frankfurter Zeitung, nominal amount 724,000,000, Deutscher Oekonomist 866,000,000 marks) in a single group of securities. In 1907 the market value of all issues, according to the Frankfurter Zeitung, was in round figures 1,842,000,000 marks, while according to the Deutscher Oekonomist it was 2,135,000,000 marks, again a difference of nearly 300,000,000 marks.

354. Based largely on Otto Jeidels, *Das Verhältnis der deutschen Grossbanken zur Industrie*, Leipzig, Duncker & Humblot, 1905.

355. Regarding positions in the supervisory councils as a "consequence of concentration in the banking and particularly in the issuing business," see Franz Eulenburg, *Die Aufsichtsräte in den deutschen Aktiengesellschaften* (Conrad's Jahrbücher, series 3, Vol. XXXII, Lieferung 1, pp. 109 et seq.).

356. Otto Jeidels, loc. cit., p. 111.

357. Otto Jeidels, loc. cit., p. 44.

358. Ibid, p. 51.

359. For example, in the case of the fusion of the Huldshinsky Smelting Works with the Upper Silesian Railway Supply Co., 1904.

360. Loc. cit., p. 127.

361. Loc. cit., p. 55.

362. Otto Jeidels, loc. cit., p. 139.

363. Loc. cit., p. 169, Tables I and II.

364. Loc. cit., pp. 170, 171, Tables III and IV.

365. See Riesser, *Zur Aufsichtsratsfrage* (Berlin, Otto Liebmann, 1903, reprint from the Jubilee publication of the Juristische Gesellschaft zu Berlin in honor of Richard Koch), pp. 296 et seq.

366. Rud. Eberstadt, *Der deutsche Kapitalmarkt* (Leipzig, Duncker & Humblot, 1901).

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367. See Ad. Weber, loc. cit., p. 171. Ruhland, indeed, continues to deem it appropriate, without any regard to the objections raised, to say (Vol. III of the "System der Politischen Oekonomie", Berlin 1908, p. 146): "According to an investigation by Eberstadt, the market value of German industrial securities was enhanced by speculation during the period from January 1, 1895, to April 1, 1900, by 75 to 100 per cent above their issue price."

368. Ernst Loeb, (loc., cit. p. 271) assumes that one-half to three-fourths of the credits booked under loans (Debitoren) were granted in behalf of commerce and industry, a statement which it would be difficult to verify.

369. In refutation of Eberstadt see also Franz Eulenburg, Die gegenwärtige Wirtschaftskrise, Symptome und Ursachen, in Conrad's Jahrb., III series, Vol. XXIV, p. 381; Heinemann in Conrad's Jahrb. (1902), III series, Vol. XX, p. 128; and Ernst Loeb, in the Schriften des Vereins für Sozialpolitik, Vol. CX (Die Störungen im deutschen Wirtschaftsleben, 1903, Vol. VI), p. 270.

370. See for instance the report of the Darmstädter Bank for 1853.

371. Page 29.

372. Jubilee report of the Disconto-Gesellschaft, p. 29.

373. Concerning other mistakes made in connection with the issue of that first war loan, see Riesser, Finanzielle Kriegsbereitschaft und Kriegsführung (Jena, Gustav Fischer, 1909) p. 102 et seq. Nevertheless the blame for this poor result has until very recently been laid not on the financial administration, which established those conditions against the express warning of the representatives of the banking business, but on the whole body of German banks and bankers.

374. Loc. cit., Bank-Archiv, Vol. 8, No. 8 (of Jan. 15, 1909), p. 118.

375. The compensation is effected for the most part by exports.

376. I greatly prefer the term "balance of claims" (Forderungsbilanz), proposed by Sartorius Freiherr von Waltershausen in lieu of the term "balance of payments" (Zahlungsbilanz), on pp. 73 et seq. of his book "Das volkswirtschaftliche System der Kapitalanlage im Auslande," which will be discussed on a subsequent page.

377. Jubilee report of the Disconto-Gesellschaft, p. 127.

378. Bourse inquiry commission, list of proposals rejected or withdrawn, p. 21.

379. Sartorius Freiherr von Waltershausen; Das volkswirtschaftliche System der Kapitalanlage im Auslande. Berlin, 1907, Georg Reimer.

380. Bank-Archiv of Sept. 1, 1908, Vol. 7, No. 23, p. 357.

381. The issues in question were in the main Argentine, Greek, Portuguese, Chilean, and Servian Government loans, a Buenos-Aires municipal loan, Brazilian, Dutch-South-African, and Mexican railway loans, in the issue of which, in one case or another, all the great banks without exception, together with a number of other banks and banking firms, took part to a greater or less extent. Certain of these securities declined rapidly almost as soon as issued, which led to sharp criticisms of the issuing firms. See the

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table of the *Deutscher Oekonomist*, reproduced by Ad. Weber, loc. cit., p. 132. This table, however, should be used with caution.

382. Even Siemens' calculations (see *Deutscher Oekonomist*, Sept. 14, 1901, p. 529), correct as they are, can not be regarded as pertinent from the point of view here represented. A more important circumstance is the fact pointed out by Rob. Liefmann (*Conrad's Jahrbücher*, series 3, Vol. XXVII, p. 172), as well as in the present work, that a large part of the issues of foreign loans is often sold not in German but in foreign markets.

383. Ad. Weber, loc. cit., p. 134, note 3.

384. *The History, Principles and Practice of Banking*, London, 1901, I, p. 64 (see *ibid.*, p. 181).

385. Only one 5 per cent Prussian loan of £5,000,000, included in the table, dated back as far as 1818.

386. Ad. Weber, *Depositenbanken und Spekulationsbanken*, p. 132. In contrast with these numerical data, taken from the *Deutscher Oekonomist*, there is a statement, also found in the *Deutscher Oekonomist* (July 22, 1899, p. 527), which puts the figure as low as 1,973,000,000, a good deal less than the 2,417,000,000 mentioned in the text.

387. Ad. Weber, loc. cit., pp. 128-129. The figure given for 1900 does not quite agree with the corresponding figure given by Ernst Loeb, *Die Berliner Grossbanken in den Jahren 1895 bis 1902*, p. 121, which gives also the real estate participations (*Terrainbeteiligungen*). These are stated as follows, from 1897 to 1901: 3, 3, 8, 8, 11.

388. Ernst Loeb, loc. cit., p. 161.

389. For the time being the *Berliner Handelsgesellschaft* does not publish any summary balances.

390. See for example the data from the balance sheets of the *Darmstädter Bank* for the end of 1899 and 1900, reproduced by Ad. Weber, loc. cit., p. 163.

391. See Ernst Loeb, loc. cit., p. 171, and for the preceding table, p. 161.

392. No figures are available for the *Berliner Handelsgesellschaft*, since this bank does not yet publish any summary reports.

393. See Jubilee report of the *Disconto-Gesellschaft*, pp. 29, 33, and following.

394. See Jubilee report of the *Disconto-Gesellschaft*, pp. 84 and 85.

395. For particulars regarding the creation and development of the firm *Ludwig Loewe & Co.*, and of the Loewe group, see Otto Jaidels, p. 243 and following.

396. See Richard Rosendorff, *Die deutschen Banken im überseeischen Verkehr* (in *Schmoller's Jahrb.*, 1904, Vol. XXVIII, No. 4, pp. 93-134).

Same author, *Le développement des Banques Allemandes à L'Étranger* (*Revue Économique Internationale*, T. I. Sept. and Oct., 1906). Same author, *Die Deutschen Übersee-Banken und ihre Geschäfte* (in *Blätter für vergleichende Rechtswissenschaft und Volkswirtschaftslehre*, Vol. III, 1908, Nos. 7, 8). J. Hellauer, *Die Zahlungsvermittlung der englischen Banken im Überseehandel*. Vienna, 1904. Emil Herz, *Deutschlands ausländische*

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Banken (Annalen des Deutschen Reichs, Vol. 39, 1906, No. 1, p. 48 and following). R. Hauser, Die deutschen Übersee-Banken (Jena, 1906). Anton Paul Brüning, Die Entwicklung des ausländischen, speciell des überseeischen deutschen Bankwesens (Berlin, 1907, Puttkammer & Mühlbrecht). André E. Sayous, Les Banques Allemandes et le Commerce d'outremer, in Bulletin Mensuel de la Fédération des Industriels et des Commerçants Français, 5th year, No. 52 (January, 1908, Part I). Same author, *ibid.*, No. 70, July, 1909, p. 404 and following): Pourquoi et comment il faut former en France des Banques d'exportation. L'exemple des banques allemandes d'outremer. Georges Diouritch, L'expansion des Banques Allemandes à L'Étranger, Ses Rapports avec le Développement Économique de l'Allemagne (Paris, 1909, Arthur Rousseau).

397. An appreciation has been attempted in my obituary on the occasion of the untimely death of Dr. George v. Siemens, the gifted and lamented president of the Deutsche Bank (Bank-Archiv., 1st year, No. 2, Nov., 1901).

398. For a discussion of the manner in which banks had to intervene and did intervene on behalf both of importers and exporters, see, among others, Richard Rosendorff, Die deutschen Banken im überseeischen Verkehr (Schmoller's Jahrbuch für Gesetzgebung, etc., Vol. XXVIII, No. 14, pp. 93-134), also p. 426 and following of this volume.

399. See Report of the Deutsche Bank for 1871, p. 3.

400. See Report of the Deutsche Bank for 1871, p. 4.

401. The following citations are taken from Model, *loc. cit.*, pp. 107, 109, and 117. The above remarks are not intended as a reproach to the newspaper in question; but the sentiments prevailing at that time in banking and bourse quarters, and which are merely found reflected in that paper, are of more than purely historical interest.

402. Emil Herz, *loc. cit.*, No. 1, p. 48 et seq.

403. The German oversea banks engaged in this line of business (the so-called "Inkassogeschäft," i. e. the collection of bills, bills of lading, etc.) have special so-called "Inkasso tariffs" See, for instance, the Inkasso tariff of the Deutsche Orient bank reproduced by Rich. Rosendorff, Die deutschen Ueberseebanken und ihre Geschäfte, reprint, pt. 24-46.

404. See Waldemar Müller, Die Organisation des Kredit- und Zahlungsverkehrs in Deutschland, Bank-Archiv, vol. 8, p. 115 et seq.

405. In case of the so-called "option shipments," by the terms of which the article may be offered for sale at different places during transportation, "option bills of lading" are given.

406. Waldemar Müller, *loc. cit.*, p. 116.

407. Thus, for instance, the banks, for the purpose of securing their advances, cause both the sender and consignee to sign declarations, according to which the goods and their proceeds remain hypothecated with the bank, not only so long as the documents are in the hands of the bank, but also subsequently, so that the consignee obligates himself to hold at the disposal of the bank the documents or the goods themselves (if deliv-

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ered to him), to keep separate accounts regarding the goods and their proceeds, not to merge the proceeds with other receipts and assets, and to deliver these proceeds to the bank at the earliest possible opportunity, (letter of hypothecation). The person who receives the goods, when informed of these stipulations through the bank by the grantee of the advance must make a corresponding declaration (letter of lien), and it is only after such a declaration and the giving of the acceptance that he receives the documents

408. Waldemar Müller, *Bank-Archiv*, vol. 8, No. 8 (Jan 15, 1909), p. 115.

409. For particulars regarding the charter of the Deutsche Ueberseeische Bank, commercial and railroad conditions in Argentina, the achievements of the various branches of the bank, the turnover and the results attained by these branches see Ant. Paul Brüning, p. 45-80, and Georges Diouritch, *loc. cit.*, pp. 497-549.

410. We frequently come across the erroneous view, adopted to some extent in the literature of the subject, (see for instance Georges Diouritch, *loc. cit.*, p. 501), that, under the Argentine laws of that time, the increase of capital of the old bank (the Deutsche Ueberseebank), which was intended in 1891 because of the large growth of the business of the bank, could be affected only after its liquidation and the organization of a new bank, which was take over the assets and liabilities of its predecessor. As a matter of fact, the old bank, too, was a German corporation, so that an increase of capital would have had to be effected in accordance with German and not with Argentine laws. The true cause, evidently, was that for various reasons it was desired to endow the bank with a large capital. According to German law this could only be done by fully paying up the capital of the old bank, which the managers were not willing to do, preferring to found a new institution with a larger capital, of which for the time being only a part had to be paid up.

411. Ad (b) and (c) see Anton Paul Brüning, pp. 14, 15.

412. Report of the Deutsche Bank for 1892, p. 4.

413. Report of the Deutsche Bank for 1890, p. 4.

414. Report of the Deutsche Bank for 1872, p. 4.

415. Report for 1883, p. 11.

416. Report for 1883, pp. 3, 11.

417. For particulars see Rich. Rosendorff, *Treuhandgesellschaften und ihre Funktionen*, in *Conrad's Jahrbücher*, 1906, No. 5, pp. 608 et seq.; also Walter Nachod, *Treuhänder und Treuhandgesellschaften* (Tübingen 1908, H. Laub'sche Buchhandlung) pp. 88 et seq.

418. Report of the Deutsche Bank for 1892, p. 4.

419. Report of the Deutsche Bank for 1901, p. 5.

420. Report of the Deutsche Bank for 1903, p. 7.

421. Report of the Deutsche Bank for 1908, p. 8.

422. Report of the Deutsche Bank for 1873, p. 10.

423. Report of the Deutsche Bank for 1883, p. 11.

424. Report of the Deutsche Bank for 1895, p. 4.

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425. Report of the Disconto-Gesellschaft for 1887, p. 5. For particulars regarding balance sheets of the Brasilianische Bank für Deutschland for the years 1889 to 1905 see Rich. Rosendorff, *Le développement etc.* p. 42 and -43, also Georges Diouritch, *loc. cit.*, pp. 550-598.
426. Report for 1889, p. 9.
427. Report for 1890, p. 8, and 1900, p. 13.
428. For particulars regarding the balance sheets of the Bank für Chile und Deutschland for the years 1896-1904 see Rich. Rosendorff, *Le développement etc.* (Oct., 1906) pp. 44, 45 and Georges Diouritch, pp. 599-621.
429. Rosendorff's statement, *loc. cit.*, p. 33, that the bank was founded in 1892, is a misprint.
430. For particulars regarding the activity of the bank, see, among others Georges Diouritch, *loc. cit.*, p. 684-690.
431. Report of the Disconto-Gesellschaft for 1900, p. 10, and 1905, pp. 13-15.
432. Report of the Disconto-Gesellschaft for 1888, p. 8.
433. Report of the Dresdner Bank for 1905, p. 6.
434. Report of the Dresdner Bank for 1905, p. 6.
435. Report for 1905, p. 6. The Dresdner Bank on that occasion noted that it would during the coming years regard it as one of its principal tasks "to enlarge and properly develop the foreign business relations, especially in oversea lands with which Germany has active trade connections."
436. Report of the Darmstädter Bank for 1885, p. 16.
437. Report of the Darmstädter Bank for 1871, p. 2.
438. Report for 1873, p. 16.
439. See Anton Paul Brüning, pp. 32, 33.
440. Report of the Berliner Handelsgesellschaft for 1887, p. 8.
441. Report for 1889, p. 11.
442. Report for 1903, p. 10.
443. For particulars see, among others, Georges Diouritch, p. 624.
444. The absolute amounts in the balance sheets of the Deutsch-Asiatische Bank from 1891 to 1904 are given by Rich. Rosendorff, *Le Développement des Banques Allemandes a l'Etranger*, pp. 38, 39. For further particulars see Georges Diouritch, pp. 669-690.
445. For particulars see Georges Diouritch, pp. 669-677.
446. For particulars see Georges Diouritch, pp. 738-753.
447. See Rich. Rosendorff, *Neuordnung des Deutsch-Ostafrikanischen Münzwesens*, in *Finanz-Archiv* of Schanz, Vol. XXII, No. 1, and Schmolzer's *Jahrbuch*, Vol. XXX, No. 2, p. 170.
448. See art. 8 of the charter (Appendix 1 to the *Deutscher Reichs-und Königlich Preussischer Staatsanzeiger*, Mar. 3, 1905, No. 54). Furthermore the bank is obliged, according to article 13 of the charter, to publish a statement of its assets and liabilities on the last of every month, at its own cost, in a periodical designated by the governor of the German East African protectorate.
449. For particulars see Georges Diouritch, *loc. cit.*, pp. 754-760.

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450. Nevertheless, according to art. 42 of its charter, published in Appendix 1 of the *Deutscher Reichs- und Königlich Preussischer Staatsanzeiger*, February 1, 1905, No. 28, it is obliged to publish a statement of its assets and liabilities on the last of every month, at its own cost, in the *Reichsanzeiger*, according to a schedule prescribed in art. 42, sec. 2.

451. Memorial of the imperial Admiralty on "Die Entwicklung der deutschen See-Interessen im letzten Jahrzehnt," Dec. 1905, p. 175. In regard to France, see Rich. Rosendorff, *Die französischen Kolonialbanken* (Bank-Archiv, 1904, Vol. 3, No. 10, pp. 172-174). In regard to the several British colonial and foreign banks, as well as the several French and Dutch colonial banks, with their branches, capital and dividends, see Rich. Rosendorff, *Le Développement etc.*, pp. 49-51, and Diouritch, loc. cit., appendix to p. 283.

452. See *Deutscher Oekonomist*, No. 1127, 436; No. 1179, p. 415; and Rob. Franz, *Die deutschen Banken im Jahre 1908*, p. 18.

453. See Robert Franz, *Die deutschen Banken im Jahre, 1906* (p. 14), im Jahre 1907 (p. 21), and im Jahre 1908 (p. 26).

454. E. Wagon, *Die finanzielle Entwicklung deutscher Aktiengesellschaften von 1870-1900* (Jena, 1903, Gustav Fischer), p. 46.

455. See *Vierteljahrshefte zur Statistik des Deutschen Reichs*, *Ergänzungsheft zu 1909, II: Die Geschäftsergebnisse der deutschen Aktiengesellschaften im Jahre, 1907, 1908*, pp. 15, 16. Concerning the methods of calculation, see E. Moll, *Die Rentabilität der Aktiengesellschaften* (Jena, 1908, Gustav Fischer).

456. Including, in addition to the 6 great banks, the following: Nationalbank für Deutschland, Commerz- und Disconto-Bank, Mitteldeutsche Kreditbank, Bank des Berliner Kassenvereins, Berliner Maklerverein, Amerika-Bank, Deutsch-Ueberseeische Bank, and Deutsche Treuhand-Gesellschaft. Beginning with 1909, the *Deutscher Oekonomist* no longer enumerates the five last-mentioned institutions among the "Berlin Banks" (*Deutscher Oekonomist*, Aug. 28, 1909, Vol. XXVII, No. 1391, p. 529), a commendable change, since these institutions are managed on a totally different basis.

457. Rud. Steinbach, *Die Verwaltungskosten der Berliner Grossbanken* (*Schmoller's Jahrbuch*, Vol. 29, No. 2, p. 85).

458. In conformity with the new and correct practice of the *Deutscher Oekonomist*, only the nine credit banks properly so called are here included.

459. Of April 3, 1904, reprinted by Otto Jeidels, loc. cit., p. 129.

460. In 1908 the gross profits from interest, bills and commissions have been combined.

461. On this point see Rud. Steinbach, *Die Verwaltungskosten der Berliner Grossbanken* (*Schmoller's Jahrbuch*, Vol. 29, No. 2, pp. 71-110, and No. 3, pp. 141-179): Ad. Weber, loc. cit., p. 213; Heinemann, *Die Berliner Grossbanken an der Wende des Jahrhunderts* (Conrad's Jahrbücher, series III, Vol. XX, p. 86 et seq.); *Frankfurter Zeitung*, No. 91, April 1, 1903, and No. 93, April 3, 1903 ("Betriebskosten der Banken");

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Deutscher Oekonomist, Aug. 2, 1902; Rob. Franz, Die deutschen Banken im Jahre 1907, p. 18, and im Jahre 1908, p. 25. If all the banks were included, the proportion of operating expenses to gross profits would be still more unfavorable, since the above figures of the Deutscher Oekonomist do not include the directors' fees (Tantiemen), which though constituting part of the cost of operation are enumerated separately.

462. In 1907 and 1908, reserves and amounts written off are combined.

463. Ed. Wagon, loc. cit., p. 146.

464. These words are found in my opening address as chairman of the First General Congress of German Bankers, in Frankfort-on-the-Main (See transactions of the Congress of Sept. 19 and 20, 1902, published by the Centralverband des Deutschen Bank- und Bankiergewerbes, Berlin, 1902, p. 2).

465. Compare Otto Jeidels, loc. cit., p. 105.

466. It is to be noted that the surplus is here calculated not as per December 31 of the year given but as per Jan. 2 of the year following.

467. Jubiläumsbericht der Disconto-Gesellschaft, p. 172.

468. Compare Ernst Loeb, Supplement to Model, loc. cit., p. 152.

469. See Otto Jeidels, loc. cit., pp. 114-117.

470. See Model, loc. cit., p. 58.

471. Jubiläumsdenkschrift der Disconto-Gesellschaft, pp. 204-205.

472. "The bank is authorized to conduct all kinds of banking business, and therefore to conduct business of such nature that it can withdraw its money from that business at any time it may be needful."

473. For some unaccountable reason, Model, in his work "Die grossen Berliner Effektenbanken" (1896) failed to mention the A. Schaaffhausen'scher Bankverein, although it ranked even then among the great *Effektenbanken*, and, having established its Berlin branch in 1891, might properly be numbered among the Berlin great banks.

474. Compare Otto Jeidels, loc. cit., p. 113.

475. See Otto Jeidels, loc. cit., pp. 112, 123.

476. *Ibid.*, p. 210.

477. See Otto Jeidels, loc. cit., p. 137.

478. For the following discussion See Model, loc. cit., p. 91 et seq.

479. Report of the Berliner Handelgesellschaft for 1878, p. 2.

480. See A. Sartorius Freiherr von Waltershausen, Das volkswirtschaftliche System der Kapitalanlagen im Auslande, Berlin, Georg Reimer, 1907.

481. During the first period the Darmstädter Bank, as we learned above (p. 49), included in its program the creation of agencies both at home and abroad, whose purpose was to be to foster exportation and the innumerable relations between German industry and the money market. But for this the time was not yet ripe (partly because of the scarcity of German capital at that period), and thus the Darmstädter Bank had soon to abandon its ambitious plans (see p. 60 above and note 82 on p. 798) just as the Deutsche Bank had for a while to give up its East Asiatic agencies opened soon after its foundation.

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482. Otto Jeidels must have overlooked the close connection between this phase of banking and the so-called "export industrialism" or, at least, he did not attach sufficient importance to it, when in his excellent book on the "Relation between the great banks of Germany to industry" (p. 270), he deplors the "lack on the part of the banks, of a general industrial policy serving the economic interests of the nation as a whole," and contends (p. 197) that with the further evolution of capitalism the banks are driven "to exert their activity abroad," by the growing necessity to find opportunities for profitable investment in foreign countries for unemployed German capital. This argument, while possessing a certain weight, is not decisive.

483. The exports by sea constitute a large share of the total exports, amounting in the same year, according to the special report of the Admiralty (introduction p. v), to 64 per cent of the total exports.

484. According to the report of the imperial Admiralty of Dec. 1905 on the "Development of the German marine interests in the last decade" (introduction, p. v), of the total imports in 1904 almost 73.9 per cent arrived by sea.

485. See Paul Voigt, loc. cit., p. 273.

486. In the middle of the last century, as stated above (p. 44), industry was called upon to provide sustenance and employment for the rapidly increasing population which could no longer be supported by agriculture alone.

487. The expression "feeding countries" (*Nahrungsstaaten*) is too narrow, because we are dependent upon foreign countries for other things besides food-stuffs.

488. Thus von Halle's description (loc. cit., p. 70), "Earnings of German capitalists from foreign securities and loans, bought and sold in Germany" is too narrow.

489. Paul Dehn, *Weltwirtschaftliche Neubildungen* (Berlin, Allgem. Verein für deutsche Literatur, 1904, p. 41).

490. See *Journal officiel de la République Française*, XXIV^e année, Sept. 25, 1902, and the oft-mentioned *Denkschrift des Reichsmarineamts* of December 1905, pp. 188-222.

491. Loc. cit., p. 247.

492. *Das Geld im russisch-japanischen Kriege* (Berlin, Ernst Siegf. Mittler & Sohn, 1906), p. 217.

493. See the very instructive report of Léon Say to the French National Assembly, made on Aug. 5, 1874, translated in the publication of the Centralverband des Deutschen Bank- und Bankiergewerbes: "The payment of the French war indemnity of 1870-71 in Strassburg, Alsace" (Berlin, J. Guttentag, 1906, p. 83).

494. See report of the Reichsmarineamt of Dec. 1905, introduction, p. XI.

495. For particulars regarding the foreign business of German private insurance companies, see the report just mentioned, pp. 179-187.

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496. Report of the Reichsmarineamt of December 1905, p. 171, note 1.
497. 2d ed., pt. II, No. 3, sec. 13: Daten zur Handelsbilanz (Vienna, 1904), p. 780, note 2.

498. The total amount of Austro-Hungarian gold claims against foreign countries was estimated by the Neue Freie Presse of Mar. 29, 1903, at 400,000,000 crowns.

499. The estimates of income from these freight receipts differ greatly. According to estimates of von Halle (loc. cit., p. 201), based upon Wörmann's calculations, it amounted in 1897 to 200,000,000 marks annually, and would therefore amount at present to about 300,000,000 marks. Rud. Arnold (Die Handelsbilanz Deutschlands, Berlin, 1905, Franz Siemenroth, p. 185) estimates it at a much lower figure. W. Lotz (Einiges über den Ausgleich von Soll und Haben in Weltverkehr, Bank-Archiv, Vol. 1, No. 6, p. 93) on the other hand also estimates the German freight receipts from oversea shipping at 200,000,000 to 300,000,000 marks. The freight receipts of the British merchant marine from its oversea trade alone are estimated at 1,800,000,000 marks annually. (Grunzel, System der Handelspolitik, 1901, p. 584.)

500. Ad. Soetbeer, Bemerkungen über die Handelsbilanz Deutschlands (in Hirth's Annalen, Vol. 75, p. 731 et seq.). This is probably the work in which the expression *Zahlungsbilanz* (balance of payments) was first used (No. 8, p. 735) in contradistinction to *Handelsbilanz* (balance of trade).

501. Compare with the above the report by Ignatz Gruber, (Vienna) on statistics of the international balance of payments, presented to the International Statistical Institute (10th session, London, July 31 to Aug. 15, 1905).

502. See Riesser, Finanzielle Kriegsbereitschaft und Kriegsführung, p. 2 et seq.

503. Die deutsche Volkswirtschaft im 19 Jahrhundert, 2d ed., p. 184. The amount of Russian State securities (including railway securities guaranteed by the state) disposed of in France is estimated at 10,000,000,000 to 13,000,000,000 francs.

504. The table compiled by Rud. Arnold on pages 169-171 of his book "Die Handelsbilanz Deutschlands von 1889-1900" (Berlin, Franz Siemenroth, 1905) is entirely incomplete, as he himself admits. Large additions may be made to it from the data contained in the book of Axel Preyer "Überseische Aktiengesellschaften und Grossbetriebe" (Leipzig, Th. Grieben's Verlag, 1905), which, however, does not relate solely to German undertakings and excludes small enterprises.

505. 2d ed., part 2, No. 3, sec. 13: "Data on the balance of payment," (Tables 224-458). Vienna, K. K. Hof- und Staatsdruckerei, 1904.

506. This chapter is a summary of the views which I advocated as a member of the bank bill commission of 1908 and at the examination of experts.

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506a. See Otto Warschauer, "Das Depositenbankwesen in Deutschland, mit besonderer Berücksichtigung der Spareinlagen" (Conrads "Jahrb." Third series, Vol. XXVII, p. 433-487).

507. Caesar Straus, "Unser Depositengeldersystem und seine Gefahren," (Frankfort-on-the-Main, Carl Jügel, 1892).

508. *Loc. cit.*, p. 17.

509. *Loc. cit.*, p. 26.

510. *Loc. cit.*, pp. 38-39.

511. Otto Warschauer, "Das Depositenbankwesen in Deutschland," in Conrads' Jahrbücher," third series, Vol. 27 (1904), p. 473 et seq., 477, 481.

512. *Loc. cit.*, pp. 480-481.

513. *Loc. cit.*, p. 482.

514. Otto Warschauer, pp. 483-484.

515. With unlimited liability. According to Warschauer, credit corporations with limited liability should be forbidden to accept deposits (*loc. cit.*, p. 484).

516. See resolution of Count von Arnim in the Bourse act commission of Mar. 10, 1896, the text of which has been reproduced by Ad. Weber *loc. cit.*, p. 259-60 and by others. According to that resolution, regulations are to be issued by which banks and business people engaged solely in the deposit business are to be prohibited from engaging in contango, speculative, founding and issuing business (except trust-fund issues) as well as from participating in such business and in any issues not expressly permitted. They are moreover to be compelled to publish monthly summary statements, the form of which—set forth in the resolution—is to be legally prescribed.

517. See, among others, Otto Warschauer, *loc. cit.*, p. 486 (Bilf. No. 3).

518. C. Heiligenstadt, "Der Deutsche Geldmarkt," in Schmoller's Jahrb. Vol. 31, No. 4, p. 98.

519. *Loc. cit.*, p. 98, X.

520. *Loc. cit.*, p. 99.

521. Reprinted in "Handel und Gewerbe," Mar. 24, 1906, 12th year, No. 24, p. 470, and elsewhere.

522. Edgar Jaffé, in Transactions of the Third General Congress of German Bankers (Allgemeiner Deutscher Bankiertag), p. 99.

523. In such cases the bank usually assists only the stock brokers, not the joint stock banks themselves.

524. Ed. Jaffé, "Das Englische Bankwesen," p. 204, note 1.

525. Ed. Jaffé, in Transactions of the Third General Congress of German Bankers (Allgemeiner Deutscher Bankiertag), p. 99.

526. Caesar Straus, *loc. cit.*, p. 31.

527. *Loc. cit.*, p. 99.

528. According to J. W. Gilbert, "The History, Principles and Practice of Banking," ed. 1901, London, I, p. 310, 311, et seq.; II, p. 342, 361, et seq.

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529. See second (German) edition of this book, pp. 12-14 (foot-note). Thus for instance during the crisis of 1857 the first banks to fail were the Borough Bank of Liverpool with liabilities of £1,200,000, the Western Bank of Scotland, which only a year before had paid a 9 per cent dividend and which had 101 branch offices. The last-named bank had advanced £1,603,000 to four firms which became insolvent, although its total capital only amounted to £1,500,000; furthermore, an item of £260,000 figured in its published balance sheets as good assets, which the managers themselves (according to notes discovered) had marked as irrecoverable. The Derwent Iron Co. alone owed the bank no less than £750,000 and had deposited as "security" (in addition to a land mortgage) £250,000 of its own debentures, which were nothing more than notes of the directors forming the company. None of these facts, of course, could be ascertained from the published statements. In 1858 occurred, among others, the failure of the Northumberland and Durham District Bank of Newcastle with £1,256,000 deposits just after it declared a 7 per cent dividend at the semiannual meeting of its shareholders; the directors pleading that, since so many of the shareholders lived on their dividends, they had not the heart "to face the shareholders without paying a dividend!"

In 1864 no less than 27 joint stock banks failed, and another large number followed in 1866, including the Joint Stock Discount Co., the Barneds Bank of Liverpool with liabilities amounting to £3,500,000, the Bank of London, the Consolidated Bank, the Agrar and Mattermans Bank, the English Joint Stock Bank, the Imperial Mercantile Credit Co., the European Bank, etc., etc.

In the crisis of 1878 the City of Glasgow Bank was the first of the deposit banks to fail; it had lent £4,000,000 to 4 firms, and had published false balance sheets in 1877.

A series of other banks followed. Compare O. Glauert, "Depositenbildung in England u. in Deutschland" (Conrad's Jahrb. 3rd series, Vol. VII, p. 808): "From 1814 to 1816, 240 agricultural banks suspended payment, and 70 within the first six weeks of 1826." See also Edgar Jaffé, loc. cit., pp. 196-197.

According to Karl Mamroth, "Die schottischen Banken," (Conrad's Jahrb., 3rd series, Vol. XXIV, No. 1, p. 43, note 139) 11 banks of issue failed in Scotland between 1804 and 1842.

530. Edgar Jaffé, "Das englische Bankwesen," pp. 204-205, and p. 202.
531. Loc. cit., pp. 204, 205.

532. In England this "doctoring" of the balance sheets is called "window dressing." Edgar Jaffé, loc. cit., p. 205.

533. Edgar Jaffé in Transactions of the Third General Congress of German Bankers (Allgemeiner Deutscher Bankiertag), p. 96. Ad. Weber, loc. cit., p. 231. The reserve funds alone of all the 82 English deposit banks amounted to about £31,000,000=68 per cent of the paid-up capital, but only about 4½ per cent of their liabilities.

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534. The published balance sheets of the 13,912 cooperative societies connected with the Prussian Central Cooperative Society (*Preussische Central Genossenschaftskasse*) showed that at the end of 1905 their own resources amounted to 54,625,382 marks, the deposits to 758,514,000 marks. The proportion consequently was 93:7, i. e., the deposits were about thirteen times as much as their own means. For 1,002 cooperative societies with limited liability the proportion of deposits to own resources at that period, was 88:5.

535. Ed. Wagon, "Die finanzielle Entwicklung der deutschen Aktiengesellschaften," (Jena, Gustav Fischer, 1903), p. 146; see p. 470.

536. See Edgar Jaffé, p. 198.

537. See Ad. Wagner, "Beiträge zur Lehre von den Banken," Leipzig, 1857, pp. 166-170, and p. 61.

538. On the other hand, however, it must be remembered that if in time of crisis a demand is made on a bank for immediate payment of money which according to existing agreement is only due within a short time, it can not afford to refuse except in case of necessity, and even then for the most part not without risk. A different opinion, at least apparently, is expressed in *Der Deutsche Oekonomist* of Nov. 11, 1905; 23d year, No. 1194, p. 566).

539. Lansburgh, loc. cit., pp. 36-38, refers to other sources of error, namely, that both the capital and cash accounts, and the other balance sheet items are considerably influenced by the reciprocal relations of the banks, so that frequently the same amounts are necessarily counted twice, even three times. Consequently, the immediately available assets are frequently lower than they appear in the balance sheet, for instance, when according to the example given (p. 36) a provincial bank passes on its ready cash to a central bank. In this case the amount passed on figures in the balance sheet of the provincial bank as a bank credit, and in the balance sheet of the central bank as cash, and in case the central bank, as is often done, books its giro account at the Reichsbank as cash, the sum in question will figure for the third time as the central bank's cash balance at the Reichsbank. This inconvenience may in part be done away with by placing in the balance sheet of the Central Bank the amount passed on to it by the provincial bank not only among the cash holdings, that is to say among the assets, but also among the debit items, that is to say, among the liabilities.

540. As long ago as Sept. 5, 1907, in my report at the Third General Congress of German Bankers at Hamburg (*Transactions* p. 22; and reprint published by Leonh. Simion Nachfolger, Berlin, 1907, p. 32), I especially emphasised the fact that a permanent falling off in the liquidity of bank balances would constitute "one of the most serious drawbacks" of the concentration in the banking business.

541. The degree of liquidity of individual credit banks may of course be more or less favorable than the average for all banks, even decidedly so.

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542. In regard to the liquidity of the Austrian joint stock banks, Dr. Eugen Lopuszanski, secretary to the Ministry, Vienna, in a treatise entitled: "Einige Streiflichter auf das Oesterreichische Bankwesen," in the *Volkswirtschaftliche Wochenschrift*, von H. Dorn, vol. L. No. 1305, Dec. 31, 1908, p. 442, writes as follows: "The liquidity, in as far as it is exhibited by the ratio of the so-called liquid assets (cash, discounts, loans on collateral, and contango) to the total of creditors, deposits and acceptances, amounted at the end of 1883 to about 65 per cent, and at the end of 1907 to about 45 per cent."

This comparison shows a considerable decrease in the liquidity of the Austrian joint stock banks. But even the present percentage of 45 per cent is comparatively favorable.

543. I wish to emphasize once more that, in reference to the liquidity of the assets, the greatest difference may exist among different banks, without being noticeable in any balance sheet or summary statement.

544. *Conrads Jahrb.* III series. Vol. 34, No. 5, Nov. 1907, p. 588; cf. loc. cit., Vol. XX, pp. 86-97.

545. See his article in *Conrads Jahrb.* III series, Vol. XX, p. 90, in which he calculates that on Dec. 31, 1899, in 11 Berlin Banks the immediately available assets constituted only 57 per cent of the liabilities. However, he includes neither the loans on collateral, which for those banks amounted to about 463,000,000 marks on the date mentioned, nor the securities which in 1898 amounted for the same banks to 714,500,000 marks, but solely cash, specie, bank credits, bills and contango. This is not consistent, for the same objections that may be made against the immediate availability of the loans on collateral (which by the way at that time included also the Bourse contango) can be made against the contango, (which was regarded by Heinemann as immediately realisable), nay even against the bills, which likewise cannot always be realised at a moment's notice.

546. See Robert Franz, "Die Deutschen Banken im Jahre 1908," p. 549.

547. Some banks, it is true, hold no doubt large amounts of bills due to industrial long-time investments.

548. See Rob. Franz, *Die Deutschen Banken im Jahre 1908* (Reprint from the *Deutscher Oekonomist*, Berlin, 1908), p. 549.

549. Loc. cit., p. 468-470.

550. *Transactions*, p. 118.

551. The compilation given in the "Tag" of Apr. 17, 1908, entitled "Die hauptsächlichsten Bank- und Bankierinsolvenzen 1906-1907," is utterly unreliable. Even the title is misleading, inasmuch as the table deals only with a single credit bank, the Marienburger Privatbank, a joint stock company with limited liability, with losses to depositors amounting to 6,600,000 marks, as already noted in the above-mentioned table by Dr. Salomonsohn. The firm of Messrs. Haller, Söhle & Co., despite its title "Hamburger Bank," was no Bank, but merely a private banking establishment. On the other hand, while the list purports to be essen-

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tially a statement of losses of deposits, it quite unwarrantably includes brokers' firms, as well as a whole series of banking establishments which either had no deposits, or whose depositors sustained no losses. One firm had simply gone into liquidation because it was taken over by a bank (without even a shadow of danger to depositors); another firm, alleged to have lost 672,000 marks, could not be traced even with the assistance of the chambers of commerce.

552. See *Deutscher Oekonomist*, Jan. 18, 1908, 26th year, No. 1308.

553. At the beginning of the Bank Inquiry of 1908, the Imperial chancellor expressly stated through Herr Wermuth, the Under Secretary of State, that no division between pure deposit banks and banks transacting miscellaneous business was contemplated.

554. See Edgar Jaffé, "Das Englische Bankwesen," pp. 170-178.

555. Caesar Straus, loc. cit., pp. 38-39; Otto Warschauer, loc. cit., p. 474.

556. This effectually disposes of the assertion by the former bank official Lansburgh (loc. cit., p. 55) to the effect that the German bank managers are opposed to deposit banks solely on the ground that they are not likely to yield to them (the managers) sufficient profit. This direct attack on the probity of all German bank managers does not become any more excusable by the fact that Lansburgh (*ibid.*) starts with the idea "that a deposit bank is far more profitable than a bank dealing in securities," an idea which, in view of the present absolutely and relatively small German national wealth, is utterly erroneous. This is not and never was the attitude of the managers of German credit banks. They are ready to establish deposit banks immediately they become convinced of the propriety of such a step, or as soon as legal enactments or the measures taken by State institutions or deposit banks shall force them to do so.

557. See O. Glauert, loc. cit., p. 815; Reichsbank President Koch in *Bank-Archiv*, 4th year, No. 5, March, 1905. The statement that the tasks of the Reichsbank have of late been rendered more difficult by the "concentration of the credit banks influencing the open market" would apply in a still greater degree to the proposed Reichsdepositenbank, and to any private, or non-Federal state banks, except that the effect of the latter would be not merely to hamper but even to thwart the discount policy of the Reichsbank.

558. See Edgar Jaffé "Das Englische Bankwesen," pp. 170-178. See also an essay entitled "La haute Banque allemande," in "La chronique industrielle, maritime et coloniale," Jan. 6, 1905, p. 3: "Thanks to the support and aid lent to it by high finance, German industry has in a short time undergone a gigantic development. There can be no doubt that without this alliance, without this union of its industrial and financial forces, the Empire would not have achieved the wonders which we have witnessed."

See also Ad. Weber, loc. cit., p. 257, citing various opinions including those of Anatole Leroy-Beaulieu and of an English expert, who speaks of German banks as follows: "They are virtually the pioneers of the home

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and foreign trade of the German Empire" (see Frederick J. Fuller and H. D. Rowan, "Foreign competition in its relation to banking" in the *Journal of the Institute of Bankers*, Vol. XXI, Part II, p. 55). Even André E. Sayous, who as a rule has little to say in favor of the management of the German banks, and who in his book, *Les Banques de Dépôt, les Banques de Crédit et les Sociétés financières* (Paris, 1901, L. Larose), pp. 292, 293, goes so far as to assert that a serious panic, even one of no great severity, "would force nearly all the German banks to suspend payment," nevertheless concludes the 3d chapter of that book with the words: "Be this as it may, while the French banks have accentuated the economic stagnation of our country, the German banks have had a considerable share in the brilliant industrial and commercial expansion of Germany."

559 I pointed out there, among other things, that, so far as human foresight goes, there was no reason to expect that the Reichsdepositenbank would receive deposits to the extent of at least 1,000,000,000 marks, the amount on which Warschauer bases his calculation of the chances of profit—unless the funds collected by the postal cheque offices were assigned to it. Even assuming this, the business expenses must be deducted from the gross profits, which at first could hardly exceed 1 per cent. As the expenses of the German credit banks absorb 31 per cent of their gross profits (see Rob. Franz, "Die Deutschen Banken in 1907," p. 78), and in the case of Berlin banks even 33 per cent, the net profits would scarcely amount to more than one-fourth to one-half of 1 per cent on the interest-bearing deposits, and the dividends would amount to about 5 to 6 per cent, according to the amount of the share capital. Even this would only be reached gradually. Further, I pointed out that the analogy with the English deposit banks, whose dividends had led Warschauer to make his estimate, did not hold. In the first place, in England the paid-up share capital, on which dividends are to be paid is, in contrast to the reserves, absolutely and relatively trifling in amount (in 1904 for 87 deposit banks an average of 15,000,000 marks per bank), while the turnover and deposits are extremely large, 6,250,000,000 marks (see p. 202). Moreover, deposits accepted in London with or without the condition of two weeks' notice bear interest only at $1\frac{1}{2}$ per cent below bank discount, and this applies to only such deposits that have been at the bank's disposal for at least one month, the minimum amount of deposit at any time being £10. I have misgivings concerning the use to be made of "first-class" industrial securities and bank shares for loans on collateral up to 30 per cent of their market value, a device admitted by Warschauer manifestly to increase the lucrativeness of the proposed institution. At his demand I will explain that these misgivings are based on the fact that dividend-paying securities are subject to great fluctuations in quotation and, in critical times, can either not be sold at all or only at a great sacrifice, while on those very occasions the margin is with difficulty kept up and the repayment of advances can not be readily expected. Further, the

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practice which Warschauer is disposed to admit would lead to the very evil for which the English deposit banks are blamed, namely, the use of deposits for Bourse speculation. Finally, as regards the "acquisition of first mortgages" by deposit banks pure and simple, which Warschauer even deems "advisable" (geboden), I do not regard it as a desirable investment, at least to a considerable extent, since these banks have to be ready at any time to repay call deposits or short-term deposits, and it may be difficult to realize even on first mortgages.

560. Nor can the advocates of this idea appeal to the fact that according to Roman law the creditors of noninterest-bearing deposits possessed a prior right in the case of bankruptcy of a banker (argentarius), which Papinian expressly states was introduced for the benefit of the whole community (Utilitate publica receptum—see l. 17, secs. 2, 3, 8 D, 16, 3), for modern business methods allow of no comparison with those of the argentarius.

561. Among the arguments raised against it, see *Deutscher Oekonomist*, 22d year, No. 1127, p. 432 (July, 1904), "Suggestions have been made relating to the proportion between deposits and share capital. This, however, is pure word-play without any value; for on the one hand the reserves are property of the bank, just as apt to be called upon to cover liabilities as the share capital, and on the other hand the assets are security for all liabilities, and not merely for the deposits. To establish a definite proportion between share capital and deposits would have a purpose only in case there were no other liabilities than the deposits. That is the condition of the Savings Banks, which of course is totally different from that of ordinary banks."

562. See *Deutscher Oekonomist*, July 13, 1904 (22d year, No. 1127), p. 432.

563. This remark, though often repeated, is a gross exaggeration, to say the least, intended, or at least apt, to scare the timid. The national wealth certainly does not consist merely of deposits, bills and current account balances, which for all those banks that had at least 1,000,000 marks capital each amounted at the end of 1908 to about 7,250,000,000 marks. Of these banks only the largest are managed by 10 to 12 managers, just as State and private industrial and agricultural concerns. On the contrary the national wealth, estimated at present to be between 216,000,000,000 to 360,000,000,000 marks, consists of a great number of enormous items, such as the savings deposited in savings banks and cooperative societies to the amount of about 14,000,000,000 marks, of the vast amounts, totaling about 40,000,000,000 marks, invested in mortgages and mortgage bonds, etc.

Nevertheless, I do not underrate the great power and responsibility of the heads of our great banks, as this book will show.

564. In *Schmoller's Jahrbuch*, vol. 31, No. 4, *Der Deutsche Geldmarkt*, pp. 72-95.

565. Heiligenstadt very properly omits debits on current account from the list of immediately available assets. In giving his reasons for this

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omission, he makes, however, the surprising statement (p. 82) that "With a view to aiding the enlargement of commercial and industrial enterprises and enabling them to complete their works, the banks grant credit to these enterprises, in the form of current account credit, quite regularly, and to an increasing degree as the money market becomes less favorable (!). This is done in the hope and with the purpose of restoring the liquidity of such loans by the issue of shares and debentures, when the money market becomes more favorable." It is hard to imagine how the banks could have pursued such a business policy. What really occurred occasionally was that certain credits which were, originally working credits were, through the debtor's inability to pay, gradually transformed into investment credit (*Anlage-Kredit*) very much against the will of the creditors; or, that credit which was really intended to be used for investment was applied for as working credit (*Betriebskredit*), or finally, that during good times (or such as were considered good) the long-term credit, that is to say, investment credit, necessary for finishing works already begun, or for extending existing works, so as to make them profitable even in critical times, was granted in the hope and expectation that the debtor would soon be able to get clear of it in the form of debentures, or shares. Lansburgh probably goes too far when he says that the credit granted to industrial companies is "distinguished" from all other credit in that it can be cast off at almost any period desired. ("Die Verwaltung des Volkvermögens durch die Banken," [separate reprint] pp. 9-10).

During many years of practical experience in banking I have not met with a case where a bank or bank director in his sound senses granted credit regularly during bad times and even "to an increasing degree as the market becomes more unfavorable," with the idea of restoring its liquidity by issuing shares and debentures at a more favorable season, and I do not believe that such banks or bank directors could remain in business very long.

It may not be amiss to point out that credit banks have, on the other hand, been frequently reproached with the opposite policy of having constrained manufacturers to adopt the generally unsuitable and far too expensive short-term personal credit with quick and frequent renewals, although in the case of improvements, rebuilding, and the erection of new works, long term credit, irredeemable for many years, or at least credit repayable in instalments, is more suitable.

566. See: Commission report, p. 26 "* * * that it would be outright unbusinesslike, especially in the case of industrial companies, to oblige them to withdraw money for the reserve funds from their business and invest it independently, whereas they may perhaps be compelled to borrow the necessary capital at a higher rate of interest. * * *"

567. See "Deutscher Oekonomist," Dec. 28, 1901, (Vol. XIX, No. 993).

568. George Bernhard in "Plutus," Apr. 24, 1909, p. 306.

569. Reprinted among others by Ad. Weber, loc. cit., pp. 259, 260.

570. See Felix Hecht, "Die Katastrophe der Leipziger Bank," (Störungen im Deutschen Wirtschaftsleben während der Jahre 1900 ff, published by

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the Verein für Socialpolitik, Vol. 6, Geldmarkt, Kreditbanken, p. 373, et seq.): "At the end of 1900 the Leipziger Bank, according to its balance sheet, held bills amounting to 37,798,570.67 marks. But this balance sheet does not show that about 12,000,000 marks of these bills were pledged to the "lottery loan fund" (p. 384).

571. As an additional argument against the demand for a statement of the "total of moneys employed for contango transactions and loans on collateral," the following may be urged: Nothing is gained, least of all the object aimed at, by showing the extent to which the bank has favored speculation, as the contango and loans on collateral may comprise quite different engagements and advances on goods. Neither can the kind, number and above all the quality of the securities deposited at the bank as guarantees be ascertained from the statement demanded, although these are the most essential points; and matters would not be greatly altered if the "total amount"—nothing else is possible—of the guarantees were also published.

572. Doctor Salomonsohn in Transactions of the III General Congress of German Bankers, p. 116.

573. In regard to this see the very appropriate remark by Eugen Lopuzanski in his treatise "Einige Streiflichter auf das Oesterreichische Bankwesen (In the "Volksw. Wochenschrift" of Alex. Dorn, Vienna, Dec. 31, 1908, Vol. LX, No. 1305, p. 433): "While banking, outwardly, forms only a limited part of the national economy, yet by reason of its organic arrangement and purpose it is best fitted, through its condition at any given moment, to exhibit the interaction of the forces and the results of the movement of the national economy, in a cross section, as it were, of the economic organism."

574. See the essay: "Spargelder" in the "Neue Politische Correspondenz" of May 21, 1909.

575. Such a case is mentioned by the "Neue Politische Correspondenz" of May 21, 1909.

576. See "Aelteste der Berliner Kaufmannschaft" in the Berl. Börsen-Zeitung, No. 264, June 9, 1909; Alfred Loewenberg in the "Tag," No. 198, Aug. 25, 1909, and especially Koch in the "Zeitschrift für Handelswissenschaft und Handelspraxis," Vol. II, p. 38 et seq., who justly points out, that the proposal to increase the personnel seems rather strange at a time when everybody is studying how to reduce the number of employees.

577. In his book "Beiträge zur Lehre von den Banken," Leipzig, 1857 p. 159.

578. Ad. Wagner, "Bankbrüche u. Bankkontrollen," in the Deutsche Monatsschrift für das gesamte Leben der Gegenwart (ibid. Lohmeyer) Year I, No. 1 (Oct., 1901), pp. 74-85, and No. 2 (Nov., 1901), pp. 248-258, especially p. 255. See on the other hand the Deutscher Oekonomist of Oct. 19, 1901, and Nov. 1, 1902, and R. Rosendorff, "Bankbrüche u. Bankkontrollen," in Hirths "Annalen des Deutschen Reichs," 1902, No. 3, pp. 182-197.

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579. Paul Marcuse, loc. cit., p. 136.

580. The fact, noted by Obst, that, according to the report of the Comptroller of the Currency of Sept. 23, 1908, the majority of the presidents of the national banks have declared themselves satisfied with the supervision hitherto exercised by the "national bank examiners," does not necessarily mean that this method has served its purpose; it may mean something totally different.

Part IV.

1. See Hermann Schumacher, *Die Ursachen und Wirkungen der Konzentration in deutschen Bankwesen* (Causes and Effects of Concentration in German Banking) in *Schmoller's Jahrbuch*, Jan. 27, 1906, Vol. XXX, No. 3, pp. 884, et seq. Paul Wallich, *Konzentration in deutschen Bankwesen* (Concentration in German Banking), Stuttgart and Berlin, Cotta, 1905. Julius Steinberg, *Die Konzentration in Bankgewerbe* (Concentration in Banking), Berlin, Franz Siemenroth, 1906. Adolf Weber, *Die Konzentration in deutschen Bankwesen* (Concentration in German Banking), *Krit. Blätter, f. d. ges. Sozialwissenschaften*, Vol. II, No. 7, pp. 299-303. Edgard Depitre, *Le mouvement de concentration dans les Banques Allemandes* (The concentration movement among German Banks), Paris, Arthur Rousseau 1905. Otto Warschauer, *Die Konzentration im deutschen Bankwesen* (Concentration in German Banking), *Conrad's Jahrbücher*, 3d series, Vol. XXXII, pp. 145-162. André Sayous, *La concentration de trafic de banque en Allemagne*, *Journal des Économistes* Jan. 15, 1899.

2. W. Sombart, *Der moderne Kapitalismus*, Vol. I, p. 407.

3. For a description of the movement of concentration in banking abroad see the very excellent accounts in the *Vossische Zeitung* of Jan. 26, 27, 28, and 31, 1905. (They cover Austria-Hungary, Great Britain, France, Belgium, and the United States.) Use has been made of these articles in various parts of the following discussion.

4. On this point the best references are the different sections (lectures) of the classic work of Karl Bücher, *Die Entstehung der Volkswirtschaft* (The Evolution of Economic Society), Tübingen, Laupp'sche Buchhandlung, 1901, and particularly the following sections: IV, *Die gewerblichen Betriebssysteme in ihrer geschichtlichen Entwicklung*, (The Industrial Systems in their Historical Evolution), pp. 175 et seq.; V, *Der Niedergang des Handwerks* (Decline of the Handicraft System), pp. 215 et seq.; VII, *Arbeitsvereinigung und Arbeitsgemeinschaft* (The Combination and Concentration of Labor); IX, *Arbeitsgliederung und soziale Klassenbildung*, p. 283 et seq.; (The Division of Labor and the Development of Social Classes) pp. 367 et seq.

5. In order to avoid duplication we must refer to the abundant material given on this point in what is now Part III, Chap. III, secs. 1 and 2 (See above pp. 191 to 407). See also the valuable work of Otto Jeidels, *Das Verhältnis der deutschen Grossbanken zur Industrie, mit besonderer Berücksichti-*

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gung der Eisenindustrie" (The Relation of the German Great Banks to Industry, with special reference to the iron industry), Leipzig, Duncker & Humblot, 1905.

6. But this does not necessarily mean the doubling of profits.

7. See Hermann Schumacher, *op. cit.*, pp. 5-6. The requirements of sound principle is that customers receiving large amounts of credit from a bank should be obliged to confine their entire banking business to the bank advancing its credit, in order that the bank may be in a position to keep posted on the business of the borrower. This requirement can not be readily enforced owing to competition, but so far as it is practicable, it is in a large measure lived up to by the banks. Unfortunately as the Terlinden case has proved, the observance of this obligation by the customer can not be readily controlled. So long as there is no central credit agency, such a clause in the contract must remain a *lex imperfecta*. Owing to practical difficulties, such an agency has not yet been established, although a few attempts have been made.

8. This too is a function of the bank floating securities, or of the banks interested in selling the stocks or bonds in connection with an issue of securities. For this activity exclusively, as distinguished from the banker's work as broker, he receives a "bonus." The bonus represents thus a special compensation for a special service performed by the banker. The service consists in the obligation assumed by the banker to make every effort, and to utilize his special knowledge of his clientele with a view to placing the securities issued in good hands, that is to say, where they will be held permanently. This is a duty that should be done by no one else but the banker and can not be done by any one else. It is therefore unreasonable to require him to divide the bonus with his principal, the purchaser of the securities. Neither can it be said, as the court (Reichsgericht, I Zivilsenat) has held in a decision of Dec. 10, 1904, that he is acting with fraudulent intent, in case he fails to inform the purchaser of the bonus received by him, or in turn fails to let the purchaser share the benefit of this bonus.

9. See K. Fleischhammer, *Zentralisation im Bankwesen in Deutschland*, Schmoller's Jahrbuch f. Gesetzgebung, Verwaltung und Volkswirtschaft, vol. 25, No. 2, pp. 241 et seq.

10. See No. 12 of the Bestimmungen für den Giroverkehr der Reichsbank. (Rules relating to Giro Business of the Reichsbank.) According to No. 10 of these rules money deposited for giro transactions does not bear interest.

11. Helfferich, *Der deutsche Geldmarkt 1895-1902*, p. 44.

12. It seems that similar occurrences have taken place also in England, (See Edgar Jaffé, *Das Englische Bankwesen*, p. 190), also in Austria. In 1899 the Anglobank established a branch in Aussig, and in the same year a branch was established by the Wiener Bankverein. In 1901 the Niederösterreichische Escomptegesellschaft acquired the branch of the Böhmisches Escomptebank in Trautenu, and in the same year a branch of the

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Anglobank was opened in that town. There are many other such examples which may be found in the Prager Tageblatt for Oct. 12, 1905, No. 281, in the article entitled "Die Konkurrenz im Oesterreichischen Bankwesen."

13. The Rhenisch-Westphalian Pig Iron Syndicate came to an end on Jan. 1, 1909, as has been noted above (see note 170, p. 818) and likewise The Lorraine-Luxembourg and the Siegerland pig iron syndicates. For details consult the above discussion.

14. Among them are the general directors of the following mining and iron companies: Harpener Bergbau-Aktiengesellschaft, Oberschlesische Eisenindustrie-Aktiengesellschaft, Bergwerkgesellschaft Hibernia, Konsolidation, Bergwerks-Aktiengesellschaft zu Schalke, Prager Eisenindustrie in Wien, Hohenlohe Werke.

15. Among them are the general director of the Gelsenkirchener Bergwerks-Aktiengesellschaft, and as representatives of shipping circles the general directors of the Hamburg-American Line, and of the North German Lloyd.

16. Among them are a former director of the firm of Friedrich Krupp, and a general director of each of the following mining and smelting companies: Laura Hütte, Bismarkhütte, Schlesische Aktiengesellschaft für Bergbau und Zinkhüttenbetrieb in Lipine, and the Kattowitzer Aktiengesellschaft für Bergbau und Eisenhüttenbetrieb.

17. See Frankfurter Zeitung of May 26, 1884, No. 147.

18. The new tax provision was particularly oppressive for the buyer since the tax was paid in every case on multiples of 1,000 marks.

19. See Centralverbands-Denkschrift of December, 1903, pp. 32-34 and the Verhandlungen des II Allgem. Deutschen Bankiertages (Proceedings of the Second General Convention of German Bankers) at Berlin, May 16 and 17, 1904, p. 58 (Mommsen), pp. 73-74 (Arons), pp. 83-84 (Frank), and the Frankfurter Zeitung of May 31, 1901.

20. See Centralverbands-Denkschrift, pp. 42 et seq. and the Proceedings of the First General Convention of German Bankers at Frankfort-on-the-Main, Sept. 19 and 20, 1902, pp. 58-59 (von Pflaum), and Dr. Alfred Meyer, Die deutschen Börsensteuern 1881-1900 (German Stock Exchange Taxes), Stuttgart and Berlin, J. G. Cotta'sche Buchhandlung Nachf. 1902, pp. 55 et seq.

21. See Riesser, Das Bankdepotgesetz vom 5. Juli 1896. Aus der Praxis und für die Praxis, insbes. des Handelsstandes, erläutert (The Bank Deposit Law of July, 1896, based on its practical application, and explained for practical use, for special use of the commercial classes). Berlin, Otto Liebmann, 2d ed. 1906, pp. 67 et seq.

22. For a discussion of the economic injury resulting from the stock exchange law, see among others, Riesser, Die Notwendigkeit einer Revision des Börsengesetzes vom 22 Juni 1896/Jan. 1, 1897 (The Need for a Revision of the Stock Exchange Law of June 22, 1896, effective January 1, 1897), Berlin, 1902, Leonhard Simion Nachf.; and Stand und Aussichten der Börsengesetzreform (Position and Prospects of the Stock Exchange Reform

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Legislation, Berlin, 1907, Leonhard Simion Nachf.) and works mentioned in note indicated by one asterisk (*) in the aforementioned Centralverbands-Denkschrift, p. 17. Reference may be made to the following economic literature of more general character:

Franz Eulenburg, Die gegenwärtige Wirtschaftskrisis, Symptome und Ursachen, Conrad's Jahrbücher, 3d series, Vol. XXIV, p. 382; Helfferich, Der deutsche Geldmarkt 1895-1902, op. cit., p. 27; Ad. Weber, Depositenbanken und Spekulationsbanken, p. 7; Rud. Eberstadt, Die gegenwärtige Krisis, ihre Ursachen und die Aufgaben der Gesetzgebung, Berlin, 1902, K. Hoffmann, p. 33; v. Halle, Amerika, seine Bedeutung für die Weltwirtschaft und seine wirtschaftlichen Beziehungen zu Deutschland, insbesondere zu Hamburg (America, Its Significance in the Economic Life of the World, Its Economic Relations to Germany and Particularly to Hamburg), published by the Hamburger Börsenhalle, 1905, particularly p. 31: "Under the ill-advised stock exchange laws of the last ten years, there has been no proportionate progress even in participation in the financial operations of the various States." See also Otto Warschauer, Die Reform des Börsengesetzes in Deutschland in Conrad's Jahrb. f. Nationalökonomie und Statistik, 3d series, Vol. XXX, No. 4, Oct. 1905, pp. 433-469.

23. These limitations became applicable to both "legitimate" as well as "illegitimate" dealings in futures.

24. Helfferich, op. cit., p. 27.

25. See among others the annual report of the Deutsche Bank for 1895 and that of the Dresdner Bank for 1896.

26. See the article in the Frankfurter Zeitung of Nov. 15, 1904, No. 318 entitled Börsengesetz und Bankenanschwellung (Stock Exchange Legislation and the Growth of the Banks). This article shows in two tables the growth that has taken place in the case of 10 Great Berlin banks and 20 provincial banks contrasting their situation in 1896 and again in 1903 with their position in 1884.

27. As early as the beginning of the seventies the "provincial" banks established were based almost entirely on private banks which had been transformed or absorbed, as for instance the Provinzial-Disconto-Gesellschaft, the Provinzial-Gewerbebank in Berlin, the Süddeutsche Provinzialbank in Stuttgart, the Prov. Wechslerbank in Breslau, the Prov. Maklerbank in Berlin and the Allgemeine Deutsche Filialen-Kreditanstalt in Leipzig. The idea of these provincial or union central banks was ahead of its time, and for that reason failed in most instances.

As regards England, see Edgar Jaffé, Das Englische Bankwesen, p. 192; 1844-1875; Gradual Consolidation of Joint Stock Banks in London and the Provinces as a result of the absorption and supplanting of private banking firms; 1878-1890, consolidation of the provincial banks and the formation of large institutions; some of the latter gaining a foothold in London; 1890-1896, almost total supplanting of private banking firms in London as well. The great provincial banks have become consolidated in London. J. W. Gilbert, op. cit. (ibid., 1901), p. 423 mentions the fact

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that as early as 1836 no fewer than 138 private banking establishments had merged with deposit banks. The number of private bankers in England and Wales declined from 448 in 1837 to 261 in 1858, to 226 in 1878, to 144 in 1891 and to 100 in 1896.

With reference to Austria, the *Neues Wiener Tageblatt* said as far back as September 13, 1903, that the private banker "has disappeared even more rapidly than in Germany, we have well nigh reached the final stage in that process."

According to the *Berliner Tageblatt* (of May 27, 1904, No. 265), not a single private banker remained in Crefeld out of 20 that had once been in business there. For the disadvantages resulting from the decline of the profession of the private banker see *Frankfurter Zeitung* of Jan. 11, 1905, "Aktienbanken und Privatbankiers" and the *Centralverbands-Denkschrift* of 1903, pp. 39 et seq.

In the United States, private bankers until quite lately were still numerous (numbering in 1902, 4,188), in spite of the exceptional growth in number of joint-stock banks, which increased from 9,338 in 1892 to 13,684 at the close of 1903 (*Vossische Zeitung*, Jan. 31, 1905), and in spite of the fact that here too bank consolidations have played a great part. (In 1901, 27 national banks were absorbed by other national banks, in 1902, 46).

The special report of the U. S. Monetary Commission gives under date of Apr. 28, 1909, the total number of private banks as 1,497, as compared with 6,888 national banks and 11,292 state banks on the same date. This number is exclusive of 642 mutual savings banks, 1,061 stock savings banks, and 1,079 loan and trust companies. The total number of corporate and private banks, including those which had failed to report to the Commission, is estimated at about 25,000.

28. See below for a discussion of the question, whether the resultant severe depression and the lack of vitality occasioned by it, was justified to the extent observed. (Part VI, p. 751).

29. As an example we may cite the increase in small landholdings (less than two hectares) shown by the census of 1895. These form 58 per cent of all agricultural holdings. In 1895 they amounted to 3,236,367, as against 3,061,831 in 1882. (*Statist. Jahrb. f. d. Deutsche Reich für 1904*, p. 24.)

30. In consequence of mergers, the number of London banks (exclusive of colonial and so called foreign banks) decreased from 115 in 1885 to 77 in 1901. (See *Schmoller, Grundriss II*, p. 232.)

31. *Op. cit.*, pp. 198-247. See, however, his study, *Die Wirkungen des Börsengesetzes auf das Bank- und Börsengeschäft* (Effect of the Stock Exchange Law on the Business of the Banks and Stock Exchanges) in *Conrad's Jahrb. 1897*, 3d series, Vol. XIII pp. 725 et seq.

32. *Centralverbands-Denkschrift* for December, 1903, p. 37, and Table XV, p. 68.

33. These were the terms used by Eschenbach at the general convention of the *Verein für Sozialpolitik* in 1904 (*Verhandlungen*, p. 286) in con-

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troverting those who held that there had been a "relative decline," as well as an absolute diminution in the number of private bankers. Eschenbach himself seems to admit that there had been a relative decrease, but does not attribute it to the stock-exchange law. In my opinion there is not much difference between these two views; according to the above data both views would seem sufficiently founded.

34. *Op. cit.*, p. 248.

35. *Op. cit.*, p. 263.

36. Paul Wallich (*op. cit.*, p. 13) calls attention to another circumstance which tended to drive private firms out of the banking business to an increasing extent—the establishment of branches of the Reichsbank in the Provinces. This caused severe competition to the private bankers along the most legitimate lines, even in such places where joint stock banks had not yet made their influence felt. This competition of the Reichsbank, it is claimed, was particularly severe in the eastern part of the Kingdom of Prussia, for the reason that the Reichsbank rates for discount and Lombard loans, uniform for the entire Empire, were much lower than the rates charged before the advent of the Reichsbank, and thus caused an enormous lowering of interest rates in the respective sections of the country.

37. *Op. cit.*, p. 248. The Centralverband was unable to obtain absolutely accurate figures on this point, as the *Denkschrift* reports. More important, however, is the testimony of the author, who is a private banker in Berlin. A large proportion of the private firms still in existence have continued their business, in order not to deprive of a livelihood employees who had served them for many years. The business of many of these firms, however, no longer represents any considerable amounts. Julius Steinberg (*op. cit.*, p. 9) did not assert, as the *Deutscher Oekonomist* of December 23, 1905, wrongly assumed, that "generally speaking the number of private bankers had not declined, but on the contrary had increased somewhat." This assertion he made only for some German large cities; on the other hand, for the stock exchange centers of Berlin and Frankfort-on-the-Main he showed a decrease.

38. See Julius Steinberg, *op. cit.*, p. 9. The figures reprinted here, taken from the giro-accounts of the Reichsbank and continued to 1904, do not give a clear picture, for the reason that no distinction is made between the provincial banks which had remained independent and the private banking firms.

39. I call attention here again to the fact that the decline of private banking like the concentration in banking, was, in my opinion, only hastened by the stock-exchange law and not caused by it. Even without the stock-exchange law, the movement toward concentration so clearly seen in entirely different fields, and in foreign countries as well as in Germany, would have set in, though perhaps not with such intensity and rapidity. We have here only one phase in a great and universal process of economic evolution. Concerning England, Edgar Jaffé tells us (*Inaugural-Dissert.*, p. 33) that of the old private banking firms that belonged to the clearing house (40 in

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1810) only 13 retained their membership in 1873 and 3 in 1900. However, English conditions can not be used for comparison, for the reason that, as Jaffé reports, (*Das Englische Bankwesen*, p. 93) in the closing decades of the nineteenth century, no new members were admitted to the clearing house, not even banks.

40. According to Ad. Weber, *Die rheinisch-westfälischen Provinzbanken und die Krisis* (Schriften des Vereins f. Sozialpolitik CX, and *Störungen im deutschen Wirtschaftsleben* etc. Vol. VI, pp. 326, 327). The inference made there that the capital stock of these banks increased during this period relatively more rapidly than that of the large Berlin banks cannot be accepted as correct without further evidence. In the first place comparison is made with only 6 of the 10 great Berlin banks then in existence. As a matter of fact these banks increased their capital stock during these seven years "only" from 428,000,000 million marks to 705,000,000 marks or "only" about 64 per cent whereas the increase for the other banks is 226 per cent. In the second place, all these large banks had previously made large additions to their capital beginning with 1885.

41. For other calculations see the article in the *Frankfurter Zeitung* for May 6 and 7, 1903, Nos. 125 and 126, *Konzentration im Bankgeschäft*, and for Nov. 15, 1904, No. 318, *Börsengesetz und Bankanschwellung*. If the period for 1890-1901 is taken, a different picture is obtained. See W. Christians, *Die Entwicklung der deutschen Aktienbanken von 1890-1901* in *Bank-Archiv.*, vol. 2, No. 4 Jan. 1903, pp. 53 et seq., and particularly p. 56. (Appeared also as reprint).

42. The Oberbergische Bank with the cooperation of the Rheinisch-Westfälische Disconto-Gesellschaft was consolidated November 11, 1907, with the Gummersbacher Volsbank into a new corporation, the Oberbergische Kreditanstalt in Ohl (capital 2,000,000 marks, with branches in Halver and Gummersbach).

43. See Paul Wallich, *op. cit.*, pp. 16-24. The chief example is the Provinzial-Discontogesellschaft, organized by the Disconto-Gesellschaft in 1871 with a nominal capital of 30,000,000 marks but liquidated as early as 1878.

44. *Die Konzentration im deutschen Bankwesen*, pp. 34-38.

45. Quoted from Paul Wallich, *op. cit.*, p. 131.

46. *Die Düsseldorfer Stahlwerksverband* was concluded until June 30, 1912. As to the *Oberschlesischer Stahlwerksverband* see note 171, pp. 818-819.

47. In alphabetic order. The share capital and reserves, unless otherwise stated, are given as reported on Dec. 31, 1908.

48. Next to it, even now, among the Berlin banks, in point of centralization, is the Nationalbank für Deutschland, which has no branches nor communities of interest, but 17 deposit offices and one commandite (The Mitteldeutsche Kreditbank has no communities of interest, but has 5 branches, 3 commandites, 22 deposit offices and 2 agencies).

49. See Appendix VII, p. 982.

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50. As regards the calculation of the full share capital, and of the surplus, see note p. 58 below.

51. See Supplement VII, p. 994 et seq. The Deutsch-Bulgarische Bank in Sofia is not included, because it is a foreign bank, nor the Revisions- und Vermögensverwaltungs-Aktiengesellschaft, because it is not a bank proper.

52. See Supplement VII, p. 999 et seq.

53. See Supplement VII, p. 1005 et seq. The Ostbank für Handel und Gewerbe in 1905 absorbed the Ostdeutsche Bank Aktiengesellschaft vormalis J. Simon Wittwe & Söhne in Königsberg, formerly one of the "concern" banks of the A. Schaaffhausen'scher Bankverein, and thus belongs now to the Schaaffhausen group. It formerly maintained community of interest relations with the Bank für Handel und Industrie (Darmstädter Bank), as set forth in Supplement VII, p. 984 under 2, and hence can not be here enumerated again.

54. See Supplement VII, p. 982 et seq.

55. The Bromberger Bank für Handel und Gewerbe, formerly mentioned here as having a community of interest with the Ostbank, has meantime been absorbed by the latter.

56. See, however, note 7, p 1013.

57. It might also be proper to include the Württembergische Vereinsbank (share capital 30,000,000 marks), since there is a community of interest between it and the Württembergische Bankanstalt. (See Supplement VII).

58. I have here purposely left unnoticed the fact that the linking together of banks is in many cases effected by means of an exchange of shares, rendered possible through an increase of the capital of the annexing bank. Thus where the share capital both of the annexing and the annexed bank is taken at full value, there is often, though not always, an excessive, but by no means necessarily a double, reckoning of share capital, as a mere matter of arithmetic.

There may also be cases in which the same capital is counted twice or even three times, to wit, when the annexation is effected not through exchange but through acquisition of stock (without increase of capital). It may be that all or part of the capital of the provincial bank which is annexed by a central bank by the latter method is counted once more among the "permanent participations" of the central bank. On the other hand, among the "permanent participations" of the provincial bank there may be found once more the share capital, or part of it, of other banks, which the provincial bank in its turn has annexed by means of acquisition of shares, if it has allowed these banks to continue as separate stock companies.

This attitude, which I deliberately took in the first edition, I have decided to maintain after renewed reflection, especially since every other method of calculation would lead to errors at least equal and generally much larger in amount, which can only be avoided by omitting the summing up of the items into a total.

In case of an exchange of stock, it is generally impracticable, owing to lack of data in the reports, to ascertain how many shareholders of the

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annexed bank have availed themselves of the offer to exchange their stock for stock of the annexing bank. This is strikingly proved by the laborious and detailed calculation which Ernst Loeb, in his oft-cited work "Die Berliner Grossbanken in den Jahren 1895-1902" had to make (pp. 101-103), in order to ascertain, with only partial success, how many shareholders of the Bergisch-Märkische Bank and the Schlesischer Bankverein availed themselves of the offer of exchange made in 1897 by the Deutsche Bank.

Still less is it possible, in most cases, to ascertain how many of the shares received in exchange remained permanently in possession of the annexing bank, and how many were sold. Thus any estimates that may be made in this matter are almost entirely baseless.

Similarly, in the case of mere acquisition of shares, the balance sheets furnish no definite data for exact figures, since the "permanent participations" are mostly stated merely in the aggregate.

Thus, aside from a few exceptions, it is impossible by this method to ascertain the exact sum which would have to be deducted from the share capital of the annexed banks, in order to obtain an accurate result. The same objection, however, applies to the method proposed by some, which consists in ascertaining the book values of exchanged shares from the balance sheets or reports of the annexing banks, the reason being that these book values in most cases can not be ascertained from the sources in question, and it would of course be unscientific to adopt this method where it is possible, and another method in other instances.

Moreover annexations have occurred within one and the same group either through exchange of shares or through other methods of acquisition of shares, that is to say, without any increase of capital on the part of the annexing bank. This leads to differences within the various groups, which, if taken into account in the calculation, would result in a totally false picture of the relative power of the several groups.

Finally—and this is perhaps the most important point—the aim is not to ascertain the *capital* of the several groups but their capital *power*, and this can hardly be represented in any other way than by a statement of the share capital and reserves, unless we are prepared, with Otto Jeidels, (loc. cit., pp. 91-93) to take a further step and include in the calculation the entire earning capital, that is to say, current account credits and deposits.

If the object is simply to represent the capital power, which in fact is the only point of interest, the statement of the full share capital and reserves is justified by the consideration that, from the outsider's point of view, the sphere of influence of a bank, its credit and business power, are embodied in this share capital and reserves. Indeed, as rightly pointed out by W. Christians (in the *Deutscher Oekonomist*, Dec. 2, 1905, 23d year, No. 1197, p. 597), the fact that, for example, the entire capital of the Norddeutsche Bank is held by the Disconto-Gesellschaft, which in turn has passed over to the shareholders of the Norddeutsche Bank 50,000,000 marks of its total capital of 170,000,000 marks, does not justify the statement that the total capital of the Disconto-Gesellschaft now amounts only to 120,000,000

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marks, and the united capital of the two banks only to 170,000,000, not 220,000,000 marks. This would be so if we admitted the principle that the shares of the annexing bank turned over for the purpose of exchange should not be counted together with the shares of the annexed bank.

Even after the operation of exchange, the capital *power* of the two banks is equal to the sum of the share capital and reserves of both, as has been admitted by the *Deutscher Oekonomist*, not only in the above-cited article of Dec. 2, 1905, on the capital power of the bank groups (loc. cit., p. 597) but even earlier (in No. 1178, July 22, 1905) as well as by Julius Steinberger (op. cit. p. 7) and Otto Jeidels (op. cit., pp. 91-92).

However, the whole question becomes rather immaterial when we consider the sums involved. The aggregate capital and reserves of the five groups of banks, as set forth above, is in round numbers 2,000,000,000 marks. The significance of this total will not be greatly changed by adding or deducting a few million marks. For shares recurring as securities or permanent participations in the balance sheets of other institutions, Wallich (op. cit., pp. 138-139, Table XIV) deducts 64,000,000 in the case of the Deutsche Bank group, 75,000,000 in the case of the Disconto-Gesellschaft group, 15,000,000 in the case of the Dresdner Bank group, and 22,000,000 in the case of the Darmstädter Bank group, making a total of 176,000,000. As a matter of fact, these figures represent in part arbitrary assumptions, as do those of Lansburgh (op. cit., p. 35) who assumes a like total of 500,000,000 marks for all the banks.

59. In this point I differ from Otto Jeidels, op. cit., p. 91-93.

60. One of the factors promoting the concentration of capital, as we have seen, is the formation of syndicates or groups. However, this factor does not belong here, since its professed aim is not concentration but quite different objects, to wit, the distribution of risk on the one hand and the facilitating of the issuing function on the other.

61. In the *Kritische Blätter für die gesamten sozialen Wissenschaften*, Vol. II, No. 7, p. 300.

62. See tables given by Jeidels, op. cit., pp. 172-173.

63. According to the table given by Jeidels (p. 603 et seq.), the following banks were represented during 1905 in the supervisory boards of companies belonging to the chemical and textile industries:

	Number of boards on which represented.	
	In the chemical industry.	In the textile industry.
Deutsche Bank	9	21
Darmstädter Bank	7	5
Disconto-Gesellschaft	5	5
A. Schaaffhausen'scher Bankverein	6	2
Dresdner Bank	3	6

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64. Depositenbankwesen und Scheckverkehr in England, p. 259.
65. In addition to the economic factors, there are psychologic factors that play a part in this movement, the significance and strength of which, particularly in the field of concentration, we have repeatedly pointed out in the text. Such factors are "the craving for individual freedom" (W. Sombart, *Der moderne Kapitalismus* II, p. 237), ampler room for individual exertion, wider aims, etc., and, later on, the attraction of a human conglomeration, of a vast traffic, of the facilities for learning the latest in economic and political matters, etc.
66. Apart from those banks which were satisfied with being represented in Berlin by the inadequate method of silent partnership connections (*commandites*) with Berlin banking houses (see Paul Wallich, *op. cit.*, p. 56, Table VIII.)
67. The Breslauer Discontobank of Breslau had likewise founded a branch in Berlin in 1896, which was however taken over in 1902 by the Bank für Handel und Industrie.
68. This is the same process that may be observed in France in the case of the Paris branch of the *Crédit Lyonnais*.
69. This is the view of Rudolf Eberstadt, *Depositenbanken und Scheckverkehr in England*, pp. 251 and 259, note 2.
70. For France see André Sayous, *Die Konzentration des Bankverkehrs in Frankreich* in the *Bank-Archiv*, vol. III, No. 8, of May 3, 1904, Table I, p. 129.
71. Edgar Jaffé, *Das englische Bankwesen*, p. 30.
72. Edgar Jaffé, *loc. cit.*, p. 192.
73. Thus the capital of the Joint Stock Banks in Great Britain during the years 1900-1905, rose from £76,000,000 to £79,500,000, in round figures, while their number fell from 83 to 62.
74. See above, p. 605.
75. See p. 607 and following of the text and notes thereto.
76. The several capital increases of the Darmstädter Bank during the second epoch were as follows: Up to 1880 to 60,000,000 marks, up to 1889 to 80,000,000 marks, up to 1898 to 105,000,000 marks, up to 1902 to 132,000,000 marks, up to 1904 to 154,000,000 marks. (The last-named figure has been maintained to date.)
77. The several capital increases of the Berliner Handelsgesellschaft during the second epoch were as follows: Up to 1880 to 30,000,000 marks (in 1882 reduced to 20,000,000 marks), up to 1886 to 30,000,000 marks, up to 1887 to 40,000,000 marks, up to 1889 to 50,000,000 marks, up to 1891 to 65,000,000 marks, up to 1896 to 80,000,000 marks, up to 1899 to 90,000,000 marks, up to 1903 to 100,000,000 marks, up to 1908 to 110,000,000 marks. (The last-named figure has been maintained to date.)
78. The several capital increases of the Disconto-Gesellschaft during the second epoch were as follows: Up to 1880 to 60,000,000 marks, up to 1889 to 75,000,000 marks, up to 1898 to 115,000,000 marks, up to 1899 to 130,000,000 marks, up to 1902 to 150,000,000 marks, up to 1904 to 170,000,000 marks. (The last-named figure has been maintained to date.)

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79. The several capital increases of the A. Schaaffhausen'scher Bankverein during the second epoch were as follows: Up to 1880 to 36,000,000 marks, up to 1891 to 48,000,000 marks, up to 1895 to 60,000,000 marks, up to 1897 to 75,000,000 marks, up to 1899 to 100,000,000 marks, up to 1904 to 130,000,000 marks, up to 1908 to 145,000,000 marks. (The last-named figure has been maintained to date.)

80. The several capital increases of the Mitteldeutsche Kreditbank during the second epoch were as follows: Up to 1880 to 30,000,000 marks, up to 1897 to 36,000,000 marks, up to 1899 to 45,000,000 marks, up to 1905 to 54,000,000 marks.

Assuming an original capital of 5,000,000 thalers (=15,000,000 marks) instead of 8,000,000 thalers (since 3,000,000 thalers remained in the portfolio of the bank), a nearly fourfold increase within the period may be figured out.

81. In Austria the earning capital (share capital plus surplus, acceptances, deposits and credits on current account (Kreditoren) of all Austrian joint-stock and provincial banks (*Landesbanken*) at the end of 1902 was in round figures 7,500,000,000 crowns, of which, it is true, the Austro-Hungarian Bank was credited with about 2,432,000,000 crowns, and the Kreditanstalt with 494,000,000 crowns. Out of 60 banks, 6 possessed in the aggregate more than 60 per cent of the total capital. At the end of 1908, the following Austrian banks, which since 1905 have also greatly increased the number of their branches, showed the following share capitals:

	Capital at end of 1908.	Capital in year of foundation.	Year of foundation.
	<i>Million crowns.</i>		
1. K. K. Priv. Kreditanstalt für Handel und Gewerbe.	120	^a 100,000,000 florins	
2. K. K. Priv. Österreichische Bodenkreditanstalt.	45	7,200,000 crowns	1864
3. K. K. Privilegierte Österreichische Länderbank.	130	100,000,000 francs	1880
4. Wiener Bankverein	130	6,400,000 crowns	1869
5. Anglo-Österreichische Bank	60	12,000,000 crowns	1853
6. Niederösterreichische Escomte-gesellschaft.	60	10,461,000 crowns	1853
7. Unionbank	70	2,000,000 crowns	1870

^a Beginning with 1864 only 60,000,000 florins.

The great Hungarian banks, too, have recently increased their share capitals very considerably (in part also the number of their branches), in particular the following: 1, Ungarische Allgemeine Kreditbank, capital increased to 60,000,000 crowns; 2 Österreichisch-Ungarische Commercialbank, capital increased to 42,000,000 crowns; 3, Ungarische Escomte- und Wechslerbank, capital increased to 40,000,000 crowns.

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In France, the following increases of share capital took place between 1870 and the end of 1908: *Crédit Lyonnais* (with 43 agencies in Paris, 9 in the suburbs of Paris, 174 in French provincial towns and in Algeria), from 20,000,000 to 250,000,000 francs; *Comptoir national d'Escompte de Paris* (with 35 bureaux de quartiers in Paris, 14 agencies in the suburbs and 150 agencies in the provinces), from 50,000,000 to 150,000,000 francs; *Crédit industriel et commercial* (with 30 succursales in Paris, 3 in the suburbs and 1 agency in London), from 15,000,000 to 100,000,000 francs; *Société générale pour favoriser etc.* (with 88 succursales, agencies and bureaux in Paris and suburbs, 637 agencies in the provinces, and one agency each in London and Saint Sebastian, Spain), from 60,000,000 to 300,000,000 francs.

82. The several increases of the *Deutsche Bank* were: Period ending 1880 to 45,000,000, 1881 to 60,000,000, 1888 to 75,000,000, 1895 to 100,000,000, 1897 to 150,000,000, 1902 to 160,000,000, 1904 to 180,000,000, 1905 to 200,000,000 marks; amount unchanged since then.

83. The several increases of the *Dresdner Bank* were: Period ending 1880 to 15,000,000, 1881 to 24,000,000, 1883 to 36,000,000, 1887 to 48,000,000, 1889 to 60,000,000, 1892 to 70,000,000, 1895 to 85,000,000, 1897 to 110,000,000, 1899 to 130,000,000, 1904 to 160,000,000, 1907 to 180,000,000 marks, 1910 to 200,000,000 marks.

84. The several increases of the *Commerz- und Disconto-Bank* were: Period ending 1883 to 40,000,000, 1897 to 50,000,000, 1904 to 85,000,000 marks; amount unchanged since then.

85. The several increases of the *National bank für Deutschland* were: Period ending 1883 up to 24,000,000, 1899 (after reduction to 21,000,000 and to 18,000,000) to 27,000,000, 1890 to 36,000,000, 1895 to 45,000,000, 1898 to 60,000,000, 1905 to 80,000,000 marks; amount unchanged since then.

86. See also p. 629 and following for list of banks and private banking firms absorbed by provincial banks which remained independent. For example, the *Rheinisch-Westfälische Disconto-Gesellschaft in Aachen* (Aix-la-Chapelle) alone absorbed a total of 7 banks and 2 private banking concerns (4 banks and 1 private banking concern being absorbed in a single year, 1905); see p. 633 et seq.

87. In 1909 the *Disconto-Gesellschaft* set up a branch in Mainz, to take the place of the banking firm of *Bamberger & Co.* in Mainz, which it had absorbed.

88. In 1909 the *Deutsche Bank*, without absorbing any banking establishment, set up a branch in Constantinople, in order to foster and develop the manifold relations to Turkey.

89. Paul Wallich (loc. cit., p. 59 et seq.) says that fusion was "the characteristic form of concentration" in German banking in the period 1880-1895. I am unable to share that view, even as regards the period named. Concerning a bank which ceased to exist not long after its establishment, it soon became a common saying at the Bourse that the shares were bought and sold "per disappearance."

90. Such is the case of the *Berliner Bank*, which had been unable fully to attain its purpose, namely to attract the credit business of the class of small traders.

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91. Such is, for example, the case of the Hessische Notenbank under the firm name of Bank für Süddeutschland, which, by reason of the new banking law, was no longer able to attain its aims as fully as had been intended and was in fact requisite. Paul Wallich (*loc. cit.*, p. 78) reports the absorption of six other former note banks by credit banks. Here must also be mentioned the absorption, in 1905, of the Braunschweigische Kreditanstalt (share capital, 6,750,000 marks) by the Braunschweigische Bank (share capital, 10,500,000 marks), the latter absorbing in 1906 also the banking firms of Hermann Schoof in Helmstedt and Hugo Rennau in Schöningen.

92. See article: "Zwangsfusionen" in the *Berliner Tageblatt* (*Handelszeitung*) Jan. 15, 1906.

93. Thus in the case of the absorption of the Anglo-Deutsche Bank by the Dresdner Bank in 1892.

94. Rudolf Eberstadt, *Depositenbankwesen und Scheckverkehr in England*, *op. cit.*, p. 249. Edgar Jaffé (*loc. cit.*, pp. 190-191) thinks on the contrary that "the movement has been slackening since the beginning of the new century."

95. Edgar Jaffé, *loc. cit.*, p. 191.

96. Karl Mamroth, *Die schottischen Banken*, p. 10, note 38.

97. *Vossische Zeitung*, Jan. 31, 1905; see Charles J. Bullock, *Concentration of Banking Interests*, in *Atlantic Monthly*, Aug. 1903.

98. See C. Stegemann, *Die Entwicklung des französischen Grossbankbetriebes* (Münster in Westfalen, Theissing, 1908), pp. 22-23, 26, 39.

99. See p. 869, note 57.

100. This refers solely to the share capital, not to reserves nor to deposits of all kinds.

101. The Rheinisch-Westfälische Disconto-Gesellschaft (share capital 80,000,000 marks, 17 branches, see p. 633), which was enumerated in this connection in earlier editions, and which is particularly active in the mining region of the Rhineland and Westphalia, I no longer include in the group of the Disconto-Gesellschaft for reasons stated on p. 673.

102. The Westdeutsche Bank vormalis Jonas Cahn in Bonn, having in 1904 been absorbed by the A. Schaaffhausen'scher Bankverein, can of course not be separately mentioned. For the same reason the Niederrheinische Kreditanstalt vormalis Peter & Co. in Krefeld (fused in 1904) has to be omitted.

103. Georg Tischert, *Filialsystem und Zentralisation im Bankwesen* (*Bank-Archiv* May 1903, No. 8, pp. 119-120).

104. Paul Wallich, *Die Konzentration im deutschen Bankwesen*, 1905, pp. 17-24 and Table II, p. 19.

105. *Jubiläumsbericht der Disconto-Gesellschaft* (Jubilee report of the Disconto-Gesellschaft), p. 208. The practice of setting up independent provincial banks at the locality of the parent bank was probably prompted by considerations similar to those which as early as 1864 had led the Darmstädter Bank to transform its branch in Mainz into a commandite, "in order to limit the number of institutions that might directly commit the bank."

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106. See above (Part 3, chap. 2, par. 4, under II).

107. In the first period (1848-1870) and at the beginning of the second period the Darmstädter Bank took the lead in establishing subsidiary companies (Tochtergesellschaften).

108. See Supplement VII.

109. In the case of the domestic subsidiary companies (Tochtergesellschaften), which, as appears from the above remarks, have of late been established in somewhat larger number, several institutions have occasionally established them by joint action, in order to lessen some of the disadvantages here described.

110. The formation of trust companies was also greatly promoted by paragraph 39 (now 41) of the stock exchange act.

111. For details the reader is referred to Max Jörgens, *Finanzielle Trustgesellschaften* (Stuttgart and Berlin, J. G. Cotta Nachfolger, 1902); Robert Liefmann, *Beteiligungs- und Finanzierungsgesellschaften*, (Jena, Gustav Fischer, 1909) p. 369 et seq.

112. Even in these cases, however, the "closer connection" means for the most part that the bank whose shares are acquired becomes more or less subject to the will and guidance of the bank acquiring them. Such connections might be more properly called "communities of protection" (Schutzgemeinschaften) than "communities of interest" (Interessengemeinschaften).

A very peculiar kind of community of interest is represented by the connection established in 1905 between the Imperial Bank of Agricultural Credit Societies (*Landwirtschaftliche Reichsgenossenschaftsbank*) in Darmstadt and the Prussian Central Bank of Credit Societies (*Preussische Zentralgenossenschaftskasse*). The former, which was by far the weaker, was permitted to acquire shares of the latter to the amount of 1,000,000 marks, in exchange for which it surrendered to the latter the business with the Prussian Credit Societies (union deposit offices), this surrender being deemed an equivalent for the acquisition of the shares.

113. See *Frankfurter Zeitung* No. 216 (Aug. 6, 1905), where the view is expressed that the estimate of 2,000,000 marks as the amount of shares of the *Rheinisch-Westfälische Disconto-Gesellschaft* held by the *Disconto-Gesellschaft* is rather high.

For details concerning the *Rheinisch-Westfälische Disconto-Gesellschaft* see above, p. 633.

114. A similar condition exists in the case of the *Schlesische Handelsbank Aktiengesellschaft* in Breslau (formerly *Perls & Co.*), whose share capital at its foundation or rather transformation in 1905 was acquired in part by the *Berliner Handelsgesellschaft* and in part by the *Disconto-Gesellschaft*.

115. See Otto Jeidels, p. 261.

116. In the first edition of the present work I had pointed out that differences regarding the business management and the common policy would be apt to arise. The *Berliner Jahrbuch für Handel und Industrie* (1908, Vol. I, p. 261) states, I do not know on what grounds, that such

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differences did manifest themselves in the classic instance of the Dresden Bank-Schaaffhausen alliance, one case occurring as early as 1904 in regard to the Hibernia nationalization plan, another in 1908 in regard to the occurrences connected with the International Exploration Company Erkelenz, whose shares were owned for the most part by the A. Schaaffhausen'scher Bankverein. It is to be noted that industrial communities of interests, too, have sometimes been terminated, mostly through the fusion of the contracting parties. Such was the case with the community of interest entered into in 1904 for five years between the Bismarckhütte and the Oberschlesische Eisenindustrie Aktiengesellschaft in Gleiwitz; the oft-mentioned community of interest entered into in 1904 for thirty-one years between the Schalker Gruben- & Hütten-Verein, the Gelsenkirchener Bergwerks-Aktien-Gesellschaft and the Eisenhüttenwerk Rote Erde Aktiengesellschaft Aachen, which were fused in 1907; the community of interest entered into in 1905 for thirty-five years between the firm Arthur Koppel and the Aktiengesellschaft für Feld- und Kleinbahnbedarf vormals Orenstein & Koppel in Berlin. In this case, too, the alliance terminated in fusion, the former firm being merged in the latter, and the combined enterprise assuming the firm name of Orenstein & Koppel, Arthur Koppel Aktiengesellschaft.

117. This view has been substantiated since the first edition of this book in 1905, while in industry numerous communities of interest have meantime been entered into, such as the great communities of interest in the chemical industry described on pp. 721 et seq. See Henry Völcker, Vereinigungsformen und Interessenbeteiligungen in der deutschen Grossindustrie, in Schmoller's Jahrb. für Gesetzgebung, Band XXXIII, Heft 4, p. 11 et seq.

118. Report of the Bergisch-Märkische Bank for 1897, p. 3.

119. Paul Wallich (loc. cit., p. 102) rightly refers also to the difficulties from the standpoint of taxation, citing a passage from Jörgens, Finanzielle Trustgesellschaften, p. 75: "Double taxation, which is likely to occur in the case of a stock company, inasmuch as the tax is laid on the income or profits first of the company and second of the shareholder, is apt to become triple taxation when one stock company owns the other." Again Wallich justly remarks (loc. cit., p. 110) that "in banking, the permanent participation represents, in principle, the same degree of improvement on the stock company as the stock company does on individual enterprise." However, I am unable to agree with the argument he advances in support of the last-mentioned thesis, because, to my mind, the modern stock company is characterized by the fact that (contrary to the opinion expressed by Wallich, loc. cit., p. 111) the stockholder (aside from exceptional cases), while possessing an "interest in the undertaking," does not possess an "undertaker's interest," especially since it is not the individual stockholder but the aggregate of the stockholders that has to be regarded as the undertaker. Now this aggregate, though perhaps not possessing the capacity to undertake, which even the physical undertaker may lack,

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certainly has the will to undertake, as appears from the very fact that it does not dissolve the enterprise but carries it on, or rather causes it to be carried on. Hence the assertion recently made (for example by Ad. Gottschewsky in his interesting and stimulating work "Ueber die Aktienform der Unternehmung," in Schmoller's *Jahrb.* 31 Jahrg. 1 Heft, p. 199 et seq.), that in the case of a stock company there is no undertaker at all, must be regarded as erroneous.

120. Toward the end of 1904 the number of commandites had decreased by two (see 1st ed., p. 211).

121. See Jubilee Report of the Disconto-Gesellschaft, pp. 204-205.

122. See Report of Darmstädter Bank, 1871, pp. 12-13.

123. See Model, pp. 75-76.

124. See Loeb, cited by Model, p. 168.

125. However, on looking into the details, we find that the conditions are entirely different. Among the great banks, the Dresdner Bank has the largest number of branches (14).

126. To this must be added 4 branches of the Westfälisch-Lippische Vereinsbank, a subsidiary company of the A. Schaaffhausen'scher Bankverein, mentioned in Supplement VII, and 3 branches of the Bayerische Disconto- und Wechselbank, also 2 branches of the Revisions- und Vermögens-Aktien-Gesellschaft, as well as 8 branches of the Bank für Thüringen vormals B. M. Strupp, Aktien-Gesellschaft, making a total of 17 branches. This does not change the general statement nor the average number of branches per allied bank (Konzernbank).

127. In the United States the obstacles are mainly of a legal nature.

In Austria, too, with the exception of the Oesterreichisch-Ungarische Bank, which is a note bank, the great banks have hitherto had a relatively small number of branches. The Oesterreichische Kreditanstalt at the end of 1904 had only 7 branches, the Wiener Bankverein 4, the Oesterreichische Länderbank 2. The three last named, however, had a number of exchange offices (Wechselstuben). In 1905 the branches began to multiply. According to the *Prager Tageblatt*, December 27, 1905, there were in Bohemia alone, at the end of 1905, not less than 31 branches and agencies of Bohemian banks and 27 branches and agencies of Vienna banks, besides 54 branches and sub-offices (Nebenstellen) of the note bank (Oesterreichisch-Ungarische Bank). In 1905-6 the Wiener Bankverein alone established branches in Marienbad, Karlsbad and Pilsen, which were to be followed by others in Bozen and Meeran and in Constantinople, and this movement continued in subsequent years.

128. *Depositenbanken und Spekulationsbanken* (1902), p. 62 et seq.

129. Rudolf Eberstadt, *Depositenbankwesen und Scheckverkehr in England*, p. 248.

130. In the case of England, however, it is advisable to use the term banking offices (Bankstellen) rather than the term branches, since the London "branches" at any rate in many cases resemble our deposit offices rather than our branches.

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131. Edgar Jaffé, *Das englische Bankwesen*, p. 189. See preceding note.

132. For the period up to 1903 see André A. Sayous, *Die Konzentration des Bankverkehrs in Frankreich*, *Bank-Archiv*, 3 Jahrgang, No. 8, May 1904, pp. 129-132, especially Table I: Number of agencies and branches of French credit institutions in Paris and vicinity (p. 129); and Table II: Number of agencies and branches of the French credit institutions in the province (p. 130); also *Vossische Zeitung* of Jan. 28, 1905.

133. See Karl Mamroth, *Die schottischen Banken*, loc. cit., p. 20 et seq.

134. See, however, note 130 on p. 872.

135. The words "in large part" were added in deference to an objection raised by C. Hegemann in his paper *Die Entwicklung des französischen Grossbankbetriebes (Münster in Westfalen, 1908, Theissing)*, p. 27. The objection must be regarded as well-grounded. However, he himself states (p. 94) that the French branches of the credit institutions are merely instruments to carry out the orders of the central bank.

136. This is probably the reason why André A. Sayous, in the paper mentioned in the above note 132, combines agencies and branches.

137. Our Reichsbank, too, had at the end of 1908 487 banking offices (Stellen) (in 1903 379). See *Verwaltungsbericht der Reichsbank für das Jahr 1909*, page 16. In Scotland the number of branches rose very decidedly in 1854, because the stamp tax on bank notes was reduced from 5 pence to 1 penny (Karl Mamroth, loc. cit., pp. 19-20).

138. Quoted from Somers, *The Scotch banks and system of issue*, Edinburgh 1873. (See Karl Mamroth, loc. cit., p. 27).

139. *Die Berliner Grossbanken in den Jahren 1895-1902 etc.*, p. 114.

140. For details see Edgar Jaffé, *Das englische Bankwesen*, pp. 184-85.

141. Ad. Weber, *Depositbanken und Spekulationsbanken*, p. 41.

142. The income tax depends on the legislation of the various states. The legislation of Prussia, for example, provides that stock companies having their main office in Prussia and branches in another German state are taxed in Prussia on that part of their total income which is derived from the business operations of the establishments located in Prussia.

Similarly, stock companies having their main office outside of Prussia but possessing branches in Prussia are subject to the Prussian income tax on that part of their total income which is derived from establishments located in Prussia.

143. Loc. cit., p. 112.

144. On this account, agencies, as contrasted with branches, would doubtless play a very prominent part in Germany also, but for the peculiar reasons mentioned in the text. From a business point of view it would be good policy to begin with the easier form, the agency, and develop it gradually, as business increases, into the more substantial and important juridical form, the branch. With this view some banks, for example the Pfälzische Bank, have established branches which they called "agencies"

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or "deposit offices" or "deposit and exchange offices" (*Wechselstuben*), but which had to be recorded as branches.

145. Of the remaining "agencies," the majority are agencies only in name, being entered in the trade register as branches. See preceding note.

146. Most of the sums in question are in fact deposits, because in Mecklenburg, Oldenburg, Schleswig-Holstein and Alsace-Lorraine, more than elsewhere in Germany, especially so far as the rural population is concerned, it is customary to keep available funds in the banks as deposits instead of investing them. These sums are sometimes quite large and are often kept in the bank for a long time.

147. See for example Ad. Wagner, *Beiträge zur Lehre von den Banken*, Leipzig, Leopold Voss, 1857, p. 164 et seq., and above, pages 189 and following, also notes thereto.

148. *Grundriss zum Studium der politischen Oekonomie* 4th ed., Jena, 1902, Gustav Fischer, p. 149.

149. Concerning an earlier period see Ad. Wagner, loc. cit., pp. 70-71 and others.

150. Edgar Jaffé, *Das englische Bankwesen*, p. 189.

151. Hans Gideon Heymann, loc. cit., p. 132.

Part V.

1. For details see W. Sombart, *Der moderne Kapitalismus*, I, pp. 553-569; Hans Gideon Heymann, *Die gemischten Gewerke im deutschen Gross-Eisengewerbe* (Stuttgart and Berlin, 1904, J. G. Cotta'sche Buchhandlung Nachf.), pp. 211 et seq. and 280 et seq.

2. *Kontradiktorische Verhandlungen über deutsche Kartelle*, Heft 5, Supplement I, pp. 102 et seq.

3. Hans Gideon Heymann, loc. cit., p. 211.

4. From an earlier period the following example may be cited:

The A. Borsig machine works, which as early as 1847 had built a puddling and rolling mill as an adjunct to the machine works, thereupon leased coal and ore mines and in the sixties erected in Upper Silesia other puddling and rolling mills, "thus developing from a "machine factory" into a great mixed steel plant, through the systematic annexation of establishments supplying the raw material and half-finished manufactures." (Hans Gideon Heymann, loc. cit., pp. 186-187). A multitude of other examples from recent times are found in the volume of Henry Voelcker cited on p. 871, note 117.

5. For details concerning these highly interesting developments, which however are beyond the scope of the present book, the reader is referred to the following works:

Robert Liefmann, *Die kontradiktorischen Verhandlungen über deutsche Kartelle* (Conrad's Jahrbücher, 3 Folge, Band XXV, p. 638 et seq.), 1903.

Idem, *Die Verhandlungen über die Roheisensyndikate und den Halbzeugverband in der deutschen Kartellenquête* (Conrad's Jahrbücher, 3 Folge, Band XXVII, p. 525 et seq.), 1904.

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Idem, Kartelle und Trusts (Stuttgart, Ernst Heinrich Moritz), 1905; see especially p. 99 et seq.: Die Weiterbildung der Kartelle.

Idem, Krisen und Kartelle (Schmoller's Jahrb. Jahrg. 1902, p. 661 et seq. and Schriften des Vereins für Sozialpolitik, Bd. CXIII, p. 261 et seq.

Idem, Die Weiterbildung der Unternehmungsformen unter dem Einfluss der Kartelle (Deutsche Wirtschaftszeitung, 1 Jahrgang, Nr. 2, 3 and 4, January and February 1905).

von Landmann, Die amtlichen Erhebungen über das deutsche Kartellwesen (Annalen des Deutschen Reichs, 1904, Ns. 1, 2 and 4).

Hans Gideon Heymann, loc. cit.

See also Kontradiktorische Verhandlungen über deutsche Kartelle, Heft 1-8, Berlin 1903 and 1904 (Franz Siemenroth), especially the reports of Regierungsrat Voelcker on the Rhenish-Westphalian Coal Syndicate, H. I (session of 26-27 Feb. 1902) pp. 25-47 and p. 275 et seq. note (List of syndicate coal mines acquired by other coal mines or smelting works), and Heft 5: Report on the cartel movement in the German iron industry (also published separately), and Supplement I: Betriebsvereinigungen in der deutschen Eisenindustrie, page 102 et seq.

6. See Robert Liefmann, Die kontradiktorischen Verhandlungen etc., p. 544.

7. Ibidem, pp. 642-645.

8. It is well known, of course, that some individual electrical firms, for example the A. E. G. (Allgemeine Elektrizitäts-Gesellschaft) have for many years kept large balances in their banks.

9. Completely absorbed by the Elektrizitäts-Aktien-Gesellschaft vormalis W. Lahmeyer & Co., the absorption taking effect on September 1, 1902. In May 1905 the manufacturing section of the Aktiengesellschaft vormalis W. Lahmeyer & Co. was united with the firm Felten & Guillaume Carlswerk Aktien-Gesellschaft in Mühlheim am Rhein, which for that purpose increased its share capital from 36,000,000 to 55,000,000 marks. The united companies bear the name "Felten & Guillaume-Lahmeyer Werke Aktien-Gesellschaft."

10. In 1898 the Schaaffhausen'scher Bankverein left the Schuckert group and joined the Loewe group (Union-Elektrizitätsgesellschaft).

11. Particular mention may be made here of the remarkable progress recently achieved in the production of dyes, perfumes, artificial silk, the extraction of nitrogen from the air, the manufacture of new explosives, of materials needed in aerial navigation, the discovery of prophylactic, anaesthetic and soporific remedies, and last but not least the transmutation of metals, and even of elements, or substances formerly regarded as elements.

12. The discussion here follows in the main L. Mueffelman, Les ententes dans l'industrie chimique Allemande (Revue économique internationale, Vol. III No. 4 December 15 to 20, 1904, pp. 882-890); a few errors are here corrected.

13. Besides those enumerated in the text mention should be made of the *Farbwerk Mühlheim* formerly A. Leonhardt & Co. in Mühlheim; Kalle &

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Co. in Biebrich (now part of the combined H6chster Farbwerke-Cassella); K. Oehler in Offenbach on-the-Main (now absorbed by the *Chemische Fabrik Griesheim-Elektron*).

14. See Otto Jeidels, op. cit. pp. 123-125, where illustrations are also given. See also p. 125.

15. Op. cit., p. 122.

16. Hans Gideon Heymann, op. cit., p. 43.

17. Ibid., p. 4, 62.

18. Ibid., p. 72.

19. Ibid., pp. 85-94.

20. Ibid., pp. 107-8

21. Ibid., p. 119.

22. Ibid., p. 199.

23. Ibid., p. 204

24. See Ludwig Eschwege, *Revolutionierende Tendenzen im deutschen Eisengewerbe* (Revolutionizing Tendencies in the German Iron Industry) in *die Bank*, Apr., 1909, pp. 313-318 and "Ladon" in *die Zukunft*, Apr. 3, 1909, p. 26.

25. Thyssen keeps aloof from the great banks that have hitherto been dominant in the Lorraine-Luxemburg district, neither has he developed closer relations to the Darmstadter Bank, which founded the above mentioned works or to the A. Schaaffhausen'scher Bankverein which reorganized, financed and improved the technical outfit of the Lorraine furnace company Aumetz-Friede (This company was merged in 1903 with the Fentscher Huttenaktienverein and the Gewerkschaft Crone.)

Stinnes too at first had only a few minor bank connections in this district, chiefly through his directorship in the Mittelrheinische Bank and his relations to Spaeter & Co. This may have been the reason why he gladly availed himself of the opportunity in 1901 to secure a strong position in this district by entering the directorate of the Deutsch-Luxemburgische Bergwerks- und Hutten-Aktiengesellschaft.

Part VI

1. For certain reservations to be made here see above, p. 527 et seq. and particularly pp. 535 and 536.

2. For the future there is a possibility of combinations, which would at least lead to a saving of taxes.

3. Conditions in England are evidently similar. For these see John Cockburn Macdonald, *The Economic Effects, National and International, of the Concentration of Capital in Few Controlling Hands*. (The Institute of Bankers, Oct., 1900, Vol. XXI, pt. VII, pp. 371-3.)

4. *Finanzielle Trustgesellschaften*, p. 75.

5. With reference to his activity as a curb broker (*coulisse*) and in the arbitrage field see above pp. 620-621.

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6. Thus Karl Bücher says (*Die Entstehung der Volkswirtschaft*, 3d ed., 1901, p. 229): Concentrated demand cannot be met by scattered production. Progress of concentration in demand must be accompanied by progress of concentration in industrial production, the latter causing the disappearance of the craftsman.

7. Karl Bücher, *op. cit.*, p. 235.

8. Otto Jeidels is mistaken in his opinion with reference to these and the majority of listed bonds, that "industrial bonds yield only a small return." (*Op. cit.*, p. 55). The opposite is usually the case.

9. This has happened in England, too, but only in a few cases. (See Barclay etc.)

In France there has been formed from among the private bankers the "Syndicat des Banquiers de la province française," and the Banque de l'Union Parisienne (Mallet frères, Vèrnes et Cie., de Neufelize et Cie, etc).

The former publishes an organ of its own, "La France économique et financière." In Germany similar combinations have been proposed, among others by Julius Kohen (Aschersleben), in the *Plutus* for July 1, 1904, "A Bankers' Association for Cooperative Buying," and by Ludwig Eschwege in *Die Hilfe* of July 3, 1904, No. 27.

10. See W. Sombart, *Die deutsche Volkswirtschaft*, 2d ed., p. 191.

11. According to the excellent and exhaustive report (published also as reprint) made by the manager of the Centralverband des Deutschen Bank- und Bankiergewerbes, Wittner, Counsellor-at-law in Berlin, to the Third General Convention of German Bankers at Hamburg in September 1907, a schedule was prepared for the purpose of gathering statistics of salaries paid to German bank employees, also regarding the living conditions of these employees and their families, and 38,000 copies of this schedule were sent to about 4,000 banking institutions and firms. The data of these schedule were worked up by the Central Verband. Of the total number sent out, 24,146 or about 65 per cent were returned filled out by 1,247 establishments having 24,146 employees, distributed as follows—264 joint stock banks with 16,391 employees, 708 private banks with 5,938 employees and 275 cooperative banking institutions with 1,817 employees.

12. Memorial on the investigation into the economic condition of salaried employees in private establishments instituted during Oct., 1903, by the organizations of salaried employees and transmitted to the Reichstag March 14, 1907.

13. According to an article on Banking and Exchanges by Henry Crosby Emery, professor of political economy at Yale University there was recently established in the United States the International Banking Corporation with a capital of \$7,000,000, with the intention of having a bank with American managers and employees, and American customers. It was, however, impossible to find Americans trained for the positions, and "today all the branch managers are Englishmen," (in Ernst v. Halle, *Amerika, seine Bedeutung für die Weltwirtschaft und seine wirtschaftlichen Beziehungen zu Deutschland*, insbes. zu Hamburg, Verlag der Hamb. Börsen-

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halle 1905, p. 344) In these matters it is not always true that where there is a will, there is a way.

14. As an illustration of most recent occurrence I refer to the day of the outbreak of the Russo-Japanese war.

15. This and the following quotations are from Riesser "Die Notwendigkeit einer Revision des Börsengesetzes," Berlin, 1901, Leonhard Simion, pp. 42, 43.

16. See Ernst Loeb in the *Nationalzeitung* of Apr. 18, 1904, No. 244.

17. Thus for example Eschenbach in the *Proceedings of the Verein für Sozialpolitik* of September 16, 1903, *Schriften*, CXIII.

18. See above p. 97 et seq. The proportion of the population assessed for the income tax was in 1904 37.1 per cent of the total population; in 1903, 35.9 per cent, and in 1896 only 29.3 per cent.

19. Thus Ludwig Pohle, *Deutschland am Scheidewege* (Germany at the Parting of the Roads) Leipzig, B. G. Teubner, 1902, p. 199. Cf. also his polemic (*ibid.*, pp. 197-198) against Dietzel's theory that wages and the prices of grain have a tendency to vary in opposite directions, a view which I am neither able to share.

20. In his very interesting rectoral address of Jan. 26, 1910, on "The Development of the Iron Industry in Germany," (p. 10) Muthesius cites the official reports of the Krupp consumers' institution. According to these reports "there has been no increase worth mentioning during the last twenty years in the prices of the leading commodities entering into the cost of living." However this very gratifying statement must be used with caution, for conditions there are undoubtedly out of the ordinary.

21. Walter Troeltsch "Über die neuesten Veränderungen im deutschen Wirtschaftsleben" (On some recent changes in German Economic Life) Stuttgart, 1899, p. 145.

22. *Ibid.*, p. 147-148.

23. The well-known Hibernia case has been considered as one of such excesses, for the reason that the decline of the government offer was brought about by a coalition of banks, which bought up the stock. This is however a one-sided and incorrect interpretation. We must not forget that among those who favored the government's offer there were two great banks, viz. the Dresdner Bank, and the A. Schaaffhausen'scher Bankverein. Furthermore, even in the absence of the concentration movement a coalition of banks might be formed for a specific purpose. Moreover, any one of the allied great banks was sufficiently powerful by itself to buy up enough shares to bring about the refusal of the government's offer.

24. Max Sering says, "The question of supplanting our imports by domestic production, must be answered absolutely in the negative. If this is so, we must export on a scale, that will enable us to pay for those articles ("Handels- und Machtpolitik, Vol. II, pp. 38-39 Stuttgart, J. G. Cotta's Nachfolger, 1900). Sering goes somewhat too far, at least as regards tropical products, for these we may hope to draw in increasing quantities from

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our colonies. It may also prove possible to reduce considerably our imports of agricultural products.

25. Thus the cartels may be required to submit their by-laws and certain kinds of resolutions (as for example those relating to export premiums) also to answer inquiries and to publish certain information. Schmoller's proposal, that they be required to submit all of their more important resolutions, would prove impracticable owing to the indefiniteness of his formula, if for no other reason. See paragraph 7 of the report made to the general meeting of the Verein für Sozialpolitik in Mannheim, Sept. 27, 1905, reprinted in Schmoller's *Jahrbuch für Gesetzgebung* etc. vol. 29, No. 4, pp. 326 et seq., and particularly p. 362).

26. On this point cfr. the very instructive section in Paul Wallich, *Liquidation of Banks* ("Entgründungen"), op. cit., pp. 34-48.

27. *Schriften des Vereins für Sozialpolitik*, LXI, pp. 183-184.

28. Heinrich Waentig, *Industriekartelle und Trusts und das Problem ihrer rechtlichen Regelung* (*Industrial Cartels and Trusts—The Problem of their legal regulation*) Schmoller's *Jahrb. f. Gesetzgebung* etc., vol. 25 1901, No. 4, p. 19.

The Board of Governors

The Board of Governors of the Federal Reserve System is composed of seven members appointed by the President of the United States, with the advice and consent of the Senate. The Board is authorized to issue regulations and orders not inconsistent with the Act to provide for the effective administration of the System. The Board is also authorized to suspend or revoke any such regulations or orders if it finds that they are not in the public interest. The Board is also authorized to suspend or revoke any such regulations or orders if it finds that they are not in the public interest.

APPENDICES.

APPENDIX

APPENDIX I.

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APPENDIX II.

Credit banks founded during the years 1848-1856.

[To page 45.]

Location.	Designation.	Year of founding.	Paid-up share capital at end of 1857.
			<i>Marks.</i>
Berlin	Disconto-Gesellschaft	1851	39,131,000
Do	Berliner Handels-Gesellschaft	1856	11,220,000
Breslau	Schlesischer Bankverein	1856	7,500,000
Coburg	Coburg-Gothaer Credit-Gesellschaft.	1856	1,700,000
Darmstadt (Berlin)	Bank für Handel und Industrie	1853	42,936,000
Dessau	Creditanstalt für Industrie und Handel.	1856	1,800,000
Eisleben	Eislebener Disconto-Gesellschaft	1856	600,000
Hamburg	Norddeutsche Bank	1856	30,000,000
Do	Vereinsbank	1856	6,000,000
Cologne	A. Schaaffhausen'scher Bankverein	1848	15,561,000
Leipzig	Allgemeine Deutsche Creditanstalt	1856	22,292,000
Mühlhausen (Alsace)	Comptoir d'Escompte de Mulhouse	1854	800,000
Oldenburg	Oldenburgische Spar- und Leih-Bank	1845	1,200,000
Strassburg (Alsace)	Strassburger Bank (Stähling)	1852	2,400,000
Total 14 banks			183,140,000

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APPENDIX III.

German credit banks in 1872.^a

[To page 188.]

Location.	Designation.	Year of foundation.	Paid-up share capital at end of 1872.
			<i>1,000 marks.</i>
Aix-la-Chapelle	Aachener Bank für Handel u. Industrie . .	1872	2,400
Do	Aachener Discontogesellschaft (Rheinsche).	1872	2,400
Aschaffenburg	Bankverein Aschaffenburg	1872	1,500
Augsburg	Augsburger Bank	1871	2,400
Barmen	Barmer Bankverein, Hinsberg, Fischer & Co.	1867	12,000
Berlin	Allgem. Bau- u. Handelsbank	1873	1,200
Do	Allgem. Deutsche Handelsgesellschaft . .	1871	3,000
Do	Berliner Bank	1871	8,400
Do	Börsenbank für Maklergeschäfte	1871	1,800
Do	Berliner Bankverein	1871	18,000
Do	Börsen-Handels-Verein	1872	3,600
Do	Centralbank für Industrie u. Handel . . .	1871	22,500
Do	Commissions- u. Maklerbank	1872	3,000
Do	Berliner Commerz- u. Wechselbank	1871	4,500
Do	Deutsche Bank	1870	45,000
Do	Deutsche Handelsbank	1869	900
Do	Deutsche Unionbank	1871	36,000
Do	Disconto-Gesellschaft	1851	60,000
Do	Deutsche Genossenschaftsbank, Sörgel, Parrisius & Co.	1865	7,500
Do	Gewerbebank, H. Schuster & Co.	1863	18,000
Do	Generalbank für Maklergeschäfte	1872	3,000
Do	Hamburg-Berliner Bank	1872	9,000
Do	Berliner Handelsgesellschaft	1856	31,500
Do	Internationale Handelsgesellschaft	1871	5,250
Do	Berliner Lombardbank	1871	1,500
Do	Berliner Maklerbank	1871	2,400
Do	Maklerversbank	1871	2,400
Do	Preussische Creditanstalt	1872	15,000
Do	Provinzial-Disconto-Gesellschaft	1871	18,000
Do	Provinzial-Gewerbebank	1872	6,000
Do	Vereinsbank, Quistorp & Co.	1870	7,500
Do	Wechselstuben A.-G.	1872	4,500
Do	Berliner Wechselbank	1871	15,000

^aSee *Deutscher Oekonomist* of January 27, 1906 (Vol. XXIV, No. 1205), which includes, however, note banks, mortgage banks, the so-called *Baubanken*, *Handelsbanken*, and *Produktenbanken*, which are omitted from the above list. The latter includes, on the other hand, the so-called *Maklerbanken* (brokers' banks). This made necessary a number of changes in the table of the *Deutscher Oekonomist*.

The dates printed in heavy type indicate that the respective banks were founded during the fifties of the nineteenth century.

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German credit banks in 1872—Continued.

Location.	Designation.	Year of founda- tion.	Paid-up share capital at end of 1872.
			<i>I,000 marks.</i>
Beuthen (Upper Sile- sia.)	Oberschlesische Bank für Handel u. In- dustrie.	1872	3,000
Bielefeld	Westfälische Bank	1868	6,000
Braunschweig	Braunschweiger Creditanstalt	1871	9,000
Bremen	Bremer Bankverein	1871	3,000
Do	Deutsche Nationalbank	1871	13,500
Breslau	Breslauer Discontobank	1870	30,000
Do	Breslauer Maklerbank	1871	1,800
Do	Provinzial-Maklerbank	1872	2,400
Do	Maklerversbank	1872	1,800
Do	Breslauer Wechslerbank	1871	9,000
Do	Provinzial-Wechslerbank	1872	3,000
Do	Schlesischer Bankverein	1856	22,500
Do	Schlesische Vereinsbank	1872	7,200
Bromberg	Ostdeutsche Wechslervereinsbank	1872	3,000
Cassel	Hessische Bank	1871	3,000
Chemnitz	Chemnitzer Bankverein	1871	3,000
Coburg	Coburg-Gothaer Credit-Gesellschaft	1856	9,000
Cologne	Bank für Rheinland u. Westfalen	1871	15,000
Do	Rheinische Effektenbank	1872	12,000
Do	Rheinisch-Westfälische Genossenschafts- bank.	1872	1,500
Cologne (Berlin)	A. Schaaffhausen'scher Bankverein	1848	48,000
Cologne	Kölner Wechsler- u. Comm.-Bank	1871	3,000
Cottbus	Niederlausitzer Bank	1871	3,000
Crefeld	Bankverein von Gebr. Peter & Co.	1862	1,500
Danzig	Danziger Bankverein	1871	3,000
Darmstadt (Berlin)	Bank für Handel u. Industrie	1853	34,000
Dessau	Creditanstalt für Industrie u. Handel	1856	1,800
Dresden (Berlin)	Dresdner Bank	1872	9,600
Dresden	Dresdner Handelsbank	1872	3,000
Do	Dresdner Wechslerbank	1872	6,000
Do	Sächsischer Bankverein	1872	5,250
Do	Sächsische Creditbank	1871	9,000
Do	Sächsische Discont (Lomb.)-Bank	1868	1,500
Eisleben	Eisleber Disconto-Gesellschaft	1856	900
Elberfeld	Bergisch-Märkische Bank	1871	8,100
Do	Elberfelder Disconto- u. Wechslerbank	1872	6,000
Do	Elberfelder Handels-Gesellschaft	1872	1,200
Emden	Emder (Genossenschafts) Bank	1867	167
Erfurt	Thüringer Bankverein	1871	4,500
Essen	Essener Creditanstalt	1872	9,000

The German Great Banks

German credit banks in 1872—Continued.

Location.	Designation.	Year of foundation.	Paid-up share capital at end of 1872.
			<i>1,000 marks.</i>
Frankfurt a. M.	Frankfurter Bankverein	1870	18,000
Do	Deutsche Creditbank	1872	3,000
Do	Deutsche Effekten- u. Wechselbank	1872	12,000
Do	Deutsche Handels-Gesellschaft	1872	9,000
Do	Deutsche Vereinsbank	1871	30,000
Do	Österreichisch-Deutsche Bank	1871	23,800
Do	Frankfurter Wechslerbank	1871	7,200
Freiberg i. S.	Vorschussbank	1870	240
Geestemünde	Geestemünder Bank	1872	750
Gera	Geraer Handels-Creditbank	1872	6,000
Görlitz	Görlitzer Vereinsbank	1872	2,400
Grünberg in Silesia	Niederschlesischer Kassenverein	1868	3,000
Halle	Hallescher Bankverein	1866	4,500
Do	Hallesche Creditanstalt	1872	2,100
Hamburg	Waaren-Creditanstalt	1871	3,600
Do	Anglo-Deutsche Bank	1871	24,000
Do	Bankverein in Hamburg	1872	9,000
Hamburg (Berlin)	Commerz- u. Disconto-Bank	1870	21,000
Hamburg	Internationale Bank	1870	18,000
Do	Norddeutsche Bank	1856	45,000
Do	Vereinsbank	1856	9,000
Do	Maklerbank	1871	1,200
Do	Wechslerbank	1872	1,500
Hanover	Hannoversche Disconto- u. Wechslerbank	1872	4,800
Kiel	Kieler Bank	1872	2,400
Königsberg (Prussia)	Königsberger Vereinsbank	1871	4,200
Leer	Ostfriesische Bank	1872	900
Leipzig	Allgemeine Deutsche Creditanstalt	1856	30,000
Do	Communalbank des Königreichs Sachsen	1871	600
Do	F. Schönheimerscher Bankverein	1872	3,000
Do	Leipziger Disconto-Gesellschaft	1872	9,600
Do	Leipziger Vereinsbank	1871	8,400
Do	Leipziger Wechslerbank	1872	3,150
Do	Leipziger Wechsler- u. Depositenbank	1872	2,400
Lübeck	Lübecker Bank	1871	1,500
Do	Vorschuss- u. Sparverein	1864	72
Magdeburg	Magdeburger Bankverein	1867	3,000
Do	Magdeburger Wechsler- u. Discontobank	1872	2,400
Mannheim	Pfälzer Bankverein	1871	4,800
Do	Rheinische Creditbank	1870	12,000
Mühlhausen i. Thuringia	Vereinsbank	1872	1,200

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German credit banks in 1872—Continued.

Location.	Designation.	Year of foundation.	Paid-up share capital at end of 1872.
			<i>1,000 marks.</i>
Mühlhausen i. Alsace..	Banque de Mulhouse.....	1871	4,800
Do.....	Comptoir d'Escompte de Mulhouse.....	1854	800
Munich.....	Bayerische Handelsbank.....	1869	5,100
Do.....	Bayerische Vereinsbank.....	1869	9,000
Do.....	Bayerische Wechslerbank.....	1872	3,600
Nuremberg.....	Vereinsbank.....	1871	3,600
Oldenburg.....	Oldenburger Spar- u. Leihbank.....	1845	1,200
Posen.....	Bank für Landwirtschaft u. Industrie....	1870	2,269
Do.....	Ostdeutsche Bank.....	1871	6,000
Do.....	Provinzial Wechsler- u. Discontobank....	1871	3,000
Ratibor.....	Oberschlesischer Creditverein.....	1871	1,800
Rostock.....	Rostocker Vereinsbank.....	1871	3,000
Do.....	Rostocker Gewerbebank.....	1872	240
Stettin.....	Stettiner Vereinsbank.....	1871	4,500
Do.....	Stettiner Maklerbank.....	1872	1,200
Strassburg i. Alsace..	Strassburger Bank (Stähling).....	1852	2,400
Do.....	Bank für Elsass und Lothringen.....	1871	4,800
Stuttgart.....	Stuttgarter Bank.....	1871	7,200
Do.....	Süddeutsche Provinzialbank.....	1872	3,600
Do.....	Württembergischer Commissionsbank.....	1872	600
Do.....	Württembergischer Vereinsbank.....	1869	6,800
Wernigerode.....	Wernigeroder Comm.-Gesellschaft A.-G..	1865	150
Wismar.....	Vereinsbank.....	1868	375
Zittau.....	Oberlausitzer Bank.....	1871	4,800
Zwickau.....	Zwickauer Bank.....	1872	1,200

A total of 139 banks with a combined capital of 1,122,113,000 marks, of which, however, a considerable portion disappeared a short time after.

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APPENDIX IV.

Representation of the great banks on the supervisory boards of stock companies.

[To page 367.]

BANK FÜR HANDEL UND INDUSTRIE.

Seats on the supervisory board.	Class of industry.
MINING, SMELTING, AND SALT WORKS.	
Two (vice-chairman)	Deutsch-Luxemburgische Bergwerks- u. Hütten-Gesellschaft in Bochum.
One	Heldburg, A.-G. für Bergbau, bergbauliche und andere industrielle Erzeugnisse, Hildesheim.
One	Harpener Bergbau A.-G., Dortmund.
One (chairman)	Holzverkohlungs-Industrie, Konstanz.
One	Internationale Kohlenbergwerks-A.-G., Cologne.
One	"Phönix," A.-G. für Bergbau und Hüttenbetrieb, Hörde.
One	Rheinische A.-G. für Braunkohlenbergbau u. Brikettfabrikation, Cologne.
One	A. Riebeck'sche Montanwerke, A.-G., Halle.
One	Saar- u. Mosel-Bergwerks-Gesellschaft, Karlingen.
STONES AND EARTHS.	
One (vice-chairman)	A.-G. für Glasindustrie vorm. Friedr. Siemens, Dresden.
One (vice-chairman)	Annawerke, Chamotte- u. Tonwaren, Oeslau.
One (chairman)	Glashütte Schreiber A.-G., Fürstenberg a. O.
One	Stralauer Glashütte A.-G., Berlin.
METAL WORKING.	
One	Berliner Metallwarenfabrik H. A. Jüst & Co. A.-G. Berlin.
One (vice-chairman)	Deutsche Gold- u. Silber-Scheideanstalt, Frankfort-on-the-Main.
MACHINE AND INSTRUMENT MAKING.	
One (chairman)	Adlerwerke vorm. Heinrich Kleyel A.-G., Frankfort-on-the-Main.
One	A.-G. Mix & Genest, Telefon- und Telegraphen-Werke, Berlin.
One	A.-G., Maschinenbau-Anstalt vorm. Venuleth & Edenberger, Darmstadt.
One	Allgemeine Elektrizitäts-Gesellschaft, Berlin.
One	Deutsche Niles, Werkzeugmaschinen-Fabrik, Oberschönweide.
One	Deutsch-Überseeische Elektrizitäts-Gesellschaft, Berlin.
One	Deutsch-Südamerikanische Telegraphen-Gesellschaft, Cologne.
Two (vice-chairman)	Elektrizitätswerke Homburg v. d. H.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

BANK FÜR HANDEL UND INDUSTRIE—Continued.

Seats on the supervisory board.	Class of industry.
	MACHINE AND INSTRUMENT MAKING—continued.
One	"Fenstra," Fabrik für Eisenkonstruktionen und Brückenbau, Düsseldorf.
One	A.-G. Körtings Elektrizitätswerke, Berlin.
One (vice-chairman)	Lech-Elektrizitätswerke, Augsburg.
One	Ludw. Loewe & Co., Berlin.
One	Maschinenbau-Gesellschaft, Heilbronn.
One (chairman)	"Phönix," A.-G. für Stuhl-, Herd- u. Ofenindustrie in Oberhausen.
One	Veithwerke, A.-G., Sandbach, Automobil- und Fahrradfabrik.
	CHEMICALS.
One	Bayerische Stickstoffwerke in Munich.
One (vice-chairman)	Chemische Werke, vorm. H. und E. Albert, Biebrich.
One (chairman)	Chemische Fabrik Griesheim, Elektron, Frankfurt-on-the-Main.
	ILLUMINANTS, SOAPS, FATS, OILS, VARNISHES.
One	Deutsche Petroleum A.-G., Berlin.
One (vice-chairman)	Frankfurter Gasgesellschaft.
	TEXTILES AND LEATHER.
One	I. P. Bemberg, Oehde (Buntfärberei).
One (vice-chairman)	Gruschwitz, Textilwerke, Neusalz.
One	Eduard Lingel, Schuhfabrik A.-G., Erfurt.
One (vice-chairman)	Vereinigte Kunstseidefabriken, Frankfurt-on-the-Main.
One (chairman)	Württembergische Kattunmanufaktur, Heidenheim.
	PAPER.
One (vice-chairman)	Albrecht & Meister, A.-G., Berlin.
One	A.-G. für Buntpapierfabrikation, Aschaffenburg.
	WOOD AND CARVING INDUSTRY
One	Holzindustrie Herm. Schütt, Czersk.
	FOODS AND DRINKS.
One (chairman)	Aktien-Zuckerfabrik, Gr.-Gerau.
One	Aktien-Zuckerfabrik Wetterau, Friedberg
One (chairman)	Altmünster Brauerei, Mainz.
One	Continental Wasserwerks-Gesellschaft, Berlin.
One	Deutsche Bierbrauerei, Berlin.
One (vice-chairman)	Gebr. Stollwerck, A.-G., Cologne-on-the-Rhine.
One	Konservenfabrik Joh. Braun, Worms.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

BANK FÜR HANDEL UND INDUSTRIE—Continued.

Seats on the supervisory board.	Class of industry.
COMMERCIAL ENTERPRISES.	
One	Bank des Berliner Kassenvereins, Berlin.
One	Bank für Brauindustrie, Berlin.
One	Berliner Hypothekenbank.
One	Berg- u. Metallbank in Frankfurt-on-the-Main.
One (chairman)	Boden-A.-G. am Amtsgericht Pankow.
Three (chairman)	Boden-A.-G. Berlin-Nord.
One	Borsigwalder Terrain-Ges. Berlin.
Two (chairman)	Breslauer Disconto-Bank in Breslau.
One	Deutsch-Asiatische Bank in Berlin.
One	Deutsche Treuhand-Gesellschaft, Berlin.
One	Gesellschaft für elektrische Unternehmungen, Berlin.
Two	Immobilien-Verkehrsbank, Berlin.
One	Kölnische Hausrenten-A.-G.
One	Neue Boden-A.-G., Berlin.
Two (vice-chairman)	Ostbank für Handel u. Gewerbe, Posen.
One	Preussische Pfandbriefbank, Berlin.
One (chairman)	Reiniger, Gebbert & Schall A.-G., Erlangen.
One	Süddeutsche Bodenkreditbank, Munich.
Two (chairman)	Süddeutsche Immobilien-Gesellschaft, Mainz.
One (vice-chairman)	Terrain-A.-G. Berlin-Mariendorf, Berlin.
One (chairman)	Terrain-Gesellschaft, Berlin u. Vororte, A.-G.
One	Vereinsbank, Wismar.
One	Westliche Boden-A.-G., Berlin.
One (chairman)	Wittenauer Boden-Gesellschaft, Berlin.
INSURANCE.	
One	"Allianz," Versicherungs-Gesellschaft, Berlin.
One (chairman)	Deutsche Lebensversicherungsbank, Berlin.
One	"Industrie," Versicherungs-A.-G., Berlin.
TRANSPORTATION.	
One (chairman)	Dessauer Strassenbahn-Gesellschaft.
Two (chairman)	Frankfurter Lokalbahn-Akt.-Ges.
One	Grosse Berliner Strassenbahn.
One	Kameruner Eisenbahn-Gesellschaft, Berlin.
One	Luftschiffahrt A.-G., Frankfurt on the Main.
One (vice-chairman)	"Midgard," Deutsche Seeverkehrs-A.-G., Nordenham.
One (vice-chairman)	Santa Catharina-Eisenbahn-Gesellschaft, Berlin.
One (chairman)	Süddeutsche Eisenbahn-Gesellschaft, Darmstadt.
One	Westdeutsche Eisenbahn-Gesellschaft, Cologne.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

BANK FÜR HANDEL UND INDUSTRIE—Continued.

Seats on the supervisory board.	Class of industry
FOREIGN COMPANIES.	
One.....	Amsterdamsche Bank.
One.....	Banca Marmorosch Blanck & Co., Bucharest.
One.....	Consolidated Mines Selection Company, London.
One.....	Gesellschaft für elektrische Beleuchtung vom Jahre 1886, St. Petersburg.
One.....	Société Générale Belge d'Entreprises Electriques, Brussels.
One.....	K. priv. Wechselstuben-A.-G., "Mercur," Vienna.

BERLINER HANDELSGESELLSCHAFT.

MINING, SMELTING, AND SALT WORKS.	
One.....	Bergwerks-Gesellschaft, "Hibernia," Herne.
One.....	"Bismarckhütte" in Bismarckhütte.
One (vice-chairman).....	Eisenhütte Silesia, Paruschowitz in Oberschl.
One.....	Frankfurt, Finckenheer, Braunkohlen, A.-G. Charlottenburg.
One (vice-chairman).....	Gewerkschaft, "Viktoria" Lünen, Dortmund.
One (director).....	Gewerkschaft Günthershall, Göllingen.
One.....	Harpener Bergbau-Gesellschaft, Dortmund.
One (chairman).....	Hohenlohe-Werke in Hohenlohehütte, Upper Silesia.
One.....	Kaliwerke Sarstedt.
One.....	Kaliwerke Friedrichshall in Schude.
One (chairman).....	Kraft, Bergbau, A.-G., Leipzig.
One (vice-chairman).....	Oberschlesische Kokswerke, Berlin.
One.....	Planiawerke, A.-G. für Kohlenfabrikation in Plania b. Ratibor.
One.....	A. Riebeck'sche Montanwerke in Halle a. S.
One.....	Rombacher Hüttenwerke, Rombach.
One.....	Schantung Bergbau-Gesellschaft, Berlin.
One.....	Schlesische Kohlen- u. Kokswerke in Gottesberg i. Schl.
One (chairman).....	Vereinigte Lausitzer Glaswerke, A.-G. Weisswasser.
STONES AND EARTHS.	
One.....	Breitenburger Portland-Cementwerke, Hamburg.
METAL WORKING.	
One (vice-chairman).....	Aluminiumindustrie Neuhausen.
One.....	Eisen- und Stahlwerk, Bethlen-Falva.
One (vice-chairman).....	Oberschlesische Eisenindustrie in Gleiwitz.
One.....	Rhenania, Emailierwerke, A.-G., Düsseldorf.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

BERLINER HANDELSGESELLSCHAFT—Continued.

Seats on the supervisory board.	Class of industry.
	METAL WORKING—continued.
One.....	Rheinische Stahlwerke, Meiderich.
One.....	Russische Eisenindustrie, Gleiwitz.
One.....	Vereinigte Deutsche Nickelwerke, Schwerte.
One.....	Westfälische Drahtindustrie, Hamm in Westphalia.
	MACHINE CONSTRUCTION AND INSTRUMENT MAKING.
One (chairman).....	Akkumulatorenfabrik, Berlin.
One (vice-chairman).....	Allgemeine Elektrizitäts-Gesellschaft, Berlin.
One.....	Benrather Maschinenfabrik, Berlin.
One.....	Berlin-Anhaltische Maschinenbau, Berlin.
One (vice-chairman).....	Berliner Elektrizitätswerke, Berlin.
One.....	Deutsche Nileswerke, Oberschöneeweide.
One (chairman).....	Elektrotechnische Werke, Berlin.
One (chairman).....	Kraftübertragungs-Werke, Rheinfelden.
One (vice-chairman).....	Julius Pintsch, Berlin, Elektrizitätswerk.
One.....	Stettiner Maschinenbau, "Vulcan," Stettin.
	CHEMICALS.
One.....	Bayerische Stickstoffwerke, München.
Two (vice-chairman).....	Chemische Fabrik, Lindenhof, C. Weyl, A.-G., Mannheim.
Two (vice-chairman).....	Dellarocca, Chemische Fabrik, A.-G., Berlin.
Two (vice-chairman).....	Rütgerswerke, Charlottenburg.
	ILLUMINANTS, SOAPS, FATS, OILS, VARNISHES.
One.....	Deutsche Continental-Gasgesellschaft, Dessau.
	FOODS AND DRINKS.
One.....	Leipziger Bierbrauerei, Reudnitz.
One (vice-chairman).....	W. A. Scholten, Stärke- und Syrupfabrik, A.-G., Brandenburg.
One (vice-chairman).....	Zuckerraffinerie Tangermünde.
	BUILDING TRADES.
Two (vice-chairman).....	Wilhelm Bruch, Kanalbau-A.-G., Berlin.
	COMMERCIAL ENTERPRISES.
One.....	A.-G. für Erwerb- u. Verwertungsindustrie, Neuhof.
One.....	Bahnhof Jungfernheide, Boden-Gesellschaft, Berlin.
One (chairman).....	Bank für deutsche Eisenbahnwerte, Berlin.
One (vice-chairman).....	Bank für elektrische Unternehmungen, Zürich.
One.....	Berliner Maklerverein, Berlin.
One.....	Deutsch-Asiatische Bank, Berlin.
One.....	Deutscher Eisenhandel, A.-G., Berlin.
One.....	Deutsche Hypothekenbank, Berlin.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

BERLINER HANDELSGESELLSCHAFT—Continued.

Seats on the supervisory board.	Class of industry.
COMMERCIAL ENTERPRISES—continued.	
One	Diamanten-Pacht-Ges., Berlin.
Three (director)	Handelsgesellschaft für Grundbesitz, Berlin.
One (chairman)	Industriegelände Schöneberg, A.-G., Berlin.
One	Liquidationsverein für Zeitgeschäfte, Berlin.
One	Ostbank für Handel u. Gewerbe, Posen.
Two (chairman)	Papierfabrik Koeslin, A.-G., Koeslin.
One	Preussische Hypotheken-Aktienbank, Berlin.
One	Reichsbank, Berlin.
TRANSPORTATION ENTERPRISES.	
One (chairman)	A.-G. für Verkehrswesen, Berlin.
One	Braunschweig-Schöninger Eisenbahn, Braunschweig.
One	Bröhlthal Eisenbahn-Gesellschaft, Cologne.
One	Capito & Klein, A.-G., Benrath.
One	Deutsche Kolonial-Eisenbahn- u. Betriebs-Gesellschaft, Berlin.
Two (director and chairman)	Kamerun-Eisenbahn-Gesellschaft, Berlin.
One (vice-chairman)	Leipziger elektrische Strassenbahn, Leipzig.
Two (vice-chairman)	Ostdeutsche Eisenbahn-Gesellschaft, Königsberg.
One	Westdeutsche Eisenbahn-Gesellschaft, Cologne.
FOREIGN COMPANIES.	
One	A.-G. Hadeland, Bergwerk zu Grua (Norway).
One	A.-G. "Elektrizität," Warsaw.
Two	Banca Marmorosch, Blank & Co., Bucharest.
One	Banque Andréwitch & Co., A.-G., Belgrade.
One	Banque Internationale de Bruxelles.
One	Böhmische Montanges., vorm. fürstlich-Fürstenbergische Montanwerke, Vienna.
Two	Gesellschaft der Metallfabriken, vorm. B. Hantke, Warsaw.
One	A. Görz & Co., London.
One	Kraftwerk Laufenburg in Laufenburg, Switzerland.
One	Labouchère, Oyens & Co., Bank, Amsterdam.
One	Norge Erz-Bergbau, Ges. zu Hakedal (Norway).
One	Oesterreich. Alpine-Montan-Gesellschaft, Vienna.
Two	Prager Eisenindustrie, Vienna.
One	Schantung-Eisenbahn-Gesellschaft, Tsingtau, China.
One	Schweizerische Metallbank in Basle.
One	Süddeutsche Donau-Dampfschiffahrts-Gesellschaft, Vienna.
One	Züricher Eisenbahn-Bank, Zürich.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

COMMERZ- UND DISCONTO-BANK.

Seats on the supervisory board.	Class of industry.
	MINING, SMELTING, AND SALT WORKS.
One	Mecklenburgische Kali-Salzwerke, Jessenitz.
	STONES AND EARTHS.
One	Portland-Cementfabrik "Germania," A.-G. in Lehrte.
One (vice-chairman)	"Teutonia," Misburger Portland-Cementfabrik, Hanover.
	METAL WORKING.
One	Stanz- u. Emaillierwerke vorm. Carl Thiel & Söhne, A.-G. in Lübeck.
One	Berliner Gusstahl- u. Eisengiesserei, A.-G., Berlin.
	MACHINE AND INSTRUMENT MAKING.
One	A.-G. Görlitzer Maschinenbauanstalt u. Eisengiesserei.
One	Continentale Gesellschaft für elektrische Unternehmungen, Nuremberg.
One	Düsseldorfer Maschinenbau-A.-G. vorm. J. Lohenhäusen.
One	Elektrizitäts-A.-G. vorm. Schuckert & Co., Nuremberg.
One (vice-chairman)	Leipziger Werkzeugmaschinenfabrik vorm. W. v. Pittler.
Two (chairman)	Maschinenbauanstalt u. Eisengiesserei vorm. Th. Flöther, Gassen.
One	Maschinenfabrik für Mühlenbau vorm. C. G. W. Kapler Berlin.
	CHEMICALS.
One	Chemische Fabriken Harburg-Stassfurt, vorm. Thörl & Heidtmann, A.-G., Harburg.
	TEXTILES.
One	Norddeutsche Jutespinnerei u. Weberei, Hamburg-Harburg.
	FOODS AND DRINKS.
One	Barmbecker Brauerei-A.-G., Hamburg-Barmbeck.
One	Brauerei "Germania," A.-G., Berlin.
One	Norddeutsche Zuckerraffinerie, Frelstedt.
	BUILDING TRADES.
One	A.-G. Berliner Neustadt in Liquid. in Berlin.
	COMMERCIAL ENTERPRISES.
Two (chairman)	Credit- u. Sparbank in Leipzig.
Two (chairman)	Grundstücks-A.-G. in Berlin.
One	Lichtenberger Terrain-A.-G.
One	Revisions- u. Vermögensverwaltung, A.-G., Berlin.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

COMMERZ- UND DISCONTO-BANK—Continued.

Seats on the supervisory board.	Class of industry.
	COMMERCIAL ENTERPRISES—Continued.
One	Terrain-Gesellschaft am Teltowkana! Rudow-Johannis- thal.
One (vice-chairman)	Terrain-Gesellschaft München, Friedenheim.
One	Waren-Commissionsbank in Hamburg.
	INSURANCE ENTERPRISES.
One	"Industrie"-Versicherungs-A.-G., Berlin.
One	"Nordstern," Unfall- u. Altersversicherungs-A.-G., El- berfeld.
	TRANSPORTATION ENTERPRISES.
One	Bergische Kleinbahn-A.-G. in Elberfeld.
One (chairman)	Reinickendorf-Liebenwalde-Schönebecker Eisenbahn- A.-G.
One	Vereinigte Elbschiffahrts-Gesellschaften, A.-G. in Dresden.
	HOSTELRY AND TAVERN ENTERPRISES.
One	Kaiserkeller, A.-G., Berlin.
	FOREIGN COMPANIES.
One	Santa Catharina-Eisenbahn-Gesellschaft, Berlin.

DEUTSCHE BANK.

	MINING, SMELTING, AND SALT WORKS.
One (chairman)	Bleichert'sche Braunkohlenwerke, Neukirchen.
One (vice-chairman)	Bochumer Verein für Bergbau u. Gussstahlfabrikation.
One	Continental Wasserwerks-Gesellschaft, Berlin.
One	Deutsche Mineralöl-Industrie, A.-G., Berlin.
One	Essener Bergwerksverein "König Wilhelm."
One (vice-chairman)	Essener Steinkohlenbergwerke.
One	Gelsenkirchener Bergwerks-A.-G.
One	Gewerkschaft Wilhelmsschacht, Gnaudorf-Borna.
One	Harpener Bergbau-A.-G., Dortmund.
One (vice-chairman)	Königsborn, A.-G., für Bergbau, Salinen- u. Solbadbe- trieb.
One	"Phönix," A.-G. für Bergbau und Hüttenbetrieb, Hörde.
One	Rombacher Hüttenwerke.
One	Otavi, Minen- u. Eisenbahn-Gesellschaft, Berlin.
	STONES AND EARTHS.
One (vice-chairman)	Steingutfabrik Sörnewitz, Meissen.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

DEUTSCHE BANK—Continued.

Seats on the supervisory board.	Class of industry.
	METAL WORKING.
One	Aluminium-Industrie, A.-G., Neuhausen.
One (vice-chairman)	Hirsch, Kupfer- und Messingwerke, Halberstadt.
One (chairman)	Reichelt, Metallschrauben-A.-G., Fürstenwalde.
	MACHINE CONSTRUCTION AND INSTRUMENT MAKING.
One (vice-chairman)	Akkumulatorenfabrik Berlin-Hagen.
One (chairman)	Bayerische Elektrizitätswerke, München.
One	Benrather Maschinenfabrik, Berlin.
One	Bergmann, Elektrizitätswerke, Berlin.
One	Berlin-Anhaltische Maschinenbau-Gesellschaft.
One	Berliner Elektrizitäts-Werke.
One	Chemnitzer Werkzeugmaschinenfabrik.
Two (1 chairman, 1 director).	Deutsche Ueberseeische Elektrizitäts-Gesellschaft, Berlin.
Two (chairman)	Elektrische Licht- u. Kraftanlagen, Berlin.
One	Fabrik für photographische Apparate, Dresden.
One	J. Frerichs & Co., Osterholz, Maschinenfabrik u. Schiffs- werft.
One	Carl Hamel, Schönau, Maschinenfabrik.
One (vice-chairman)	Kraftübertragungswerke, Rheinfelden.
One (chairman)	Mannesmannröhren-Werke.
One	Märkische Maschinenbau-Anstalt, Wetter.
One	Maschinenfabrik Augsburg-Nürnberg.
One	Oberschlesische Eisenbahnbedarfs-A.-G., Friedenshütte.
One (vice-chairman)	Orenstein & Koppel, Berlin, A.-G. für Feld- und Klein- bahnbedarf.
One	Jul. Pintsch A.-G., Berlin, Maschinenfabrik u. Beleuch- tungs-Gesellschaft.
One	Rheinisch-Westfälisches Elektrizitätswerk, Essen.
One	F. Küppersbusch & Söhne, A.-G.
Two	Siemens & Halske, Berlin.
One	Ernst Schiess, Werkzeugmaschinenfabrik, Düsseldorf.
One (chairman)	Voigt & Haeffner, A.-G., Frankfort on the Main.
	CHEMICALS.
One	J. D. Riedel, Berlin, Chemische Fabrik.
	ILLUMINANTS, SOAPS, FATS, OILS, AND VARNISHES.
One	Deutsche Continental-Gas-Gesellschaft, Dessau.
Two (chairman)	Deutsche Petroleum-A.-G., Berlin.
One (chairman)	Europäische Petroleum-Union, Bremen.
One	F. Thörls, Vereinigte Harburger Ölfabriken.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

DEUTSCHE BANK—Continued.

Seats on the supervisory board.	Class of industry.
TEXTILES.	
One	Allgäuer Baumwollspinnerei u. Weberei.
One	Baumwollspinnerei "Germania," Epe.
One (vice-chairman)	Bremer Wollkämmerei.
One	Bremer Tauwerkfabrik A.-G., vorm. C. H. Michelsen, Grohn.
One	Schlesische Textilwaren, Methner & Frahne, Landeshut.
One (vice-chairman)	Vereinigte Glanzstoffabriken, Elberfeld.
PAPER.	
One	Paul Süß, Luxuspapierfabrik, Dresden.
RUBBER.	
One (chairman)	Vereinigte Berlin-Frankfurter Gummiwaren.
FOODS AND DRINKS.	
One	Aktien-Mühlenwerke Stockau-Reichertshofen-Mauching.
One	Zuckerfabrik Fröbeln.
One	Wasserwerk für das nördliche westfälische Kohlenrevier, Gelsenkirchen.
BUILDING TRADES.	
One (chairman)	Gesellschaft für den Bau von Untergrundbahnen, Berlin.
One	Internationale Baugesellschaft, Frankfurt on-the-Main.
ART INDUSTRY.	
One (chairman)	Kunstdruck- u. Verlagsanstalt, Wetzel & Naumann, Leipzig.
One (vice-chairman)	Moritz Prescher Nachf., A.-G., Leutzsch, Kunstdruckerei.
COMMERCIAL ENTERPRISES.	
Two (chairman)	Bergisch-Märkische Bank, Elberfeld.
One	Berliner Maklerverein.
One (chairman)	Bodengesellschaft am Hochbahnhof Schönhauser Allee, Berlin.
One	Börsenhandelsverein, Berlin.
One (chairman)	Deutsche Treuhand-Gesellschaft, Berlin (Revisions-Gesellschaft).
One	Deutsche Handels- u. Plantagen-Gesellschaft, Hamburg.
One (president)	Deutsche Kolonial-Gesellschaft für Südwestafrika.
One	Deutsche Hypothekenbank, Meiningen.
Six (director)	Deutsche Ueberseeische Bank, Berlin.
One	Deutsche Vereinsbank, Frankfurt on-the-Main.
One (vice-chairman)	Essener Bankverein.
One	Essener Kreditanstalt.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

DEUTSCHE BANK—Continued.

Seats on the supervisory board.	Class of industry.
COMMERCIAL ENTERPRISES—continued.	
One	Hannoversche Bank.
One (chairman)	Mecklenburgische Hypotheken- und Wechselbank Schwerin.
One	Mecklenburgische Sparbank, Schwerin.
One	Neu-Bellevue, A.-G. für Grundstücksverwertung, Berlin.
One (chairman)	Neu-Westend, A.-G. für Grundstücksverwertung, Berlin.
One	Norddeutsche Kreditanstalt, Königsberg.
One (chairman)	Preussische Bodenkredit-Aktienbank, Berlin.
One	Privatbank, Gotha.
One (delegate and member of the central committee)	Reichsbank, Berlin.
One	Rheinische Kreditbank, Mannheim.
One	Sächsische Bank, Dresden.
One (chairman)	Schlesischer Bankverein, Breslau.
One	Süddeutsche Bank, Mannheim.
One	Schöneberg-West, A.-G. für Grundstücksverwertung, Berlin.
One	Terrain-Gesellschaft am Teltowkanal, Rudow-Johannisthal, A.-G.
One	Wilmersdorfer Terrain-Gesellschaft "Rheingau," Berlin.
INSURANCE ENTERPRISES.	
One	Allgemeine Versicherungs-Gesellschaft für See-, Fluss- u. Landtransport, Dresden.
One (vice-chairman)	"Allianz," Versicherungs-A.-G., Berlin.
One	"Atlas," Deutsche Lebensversicherungs-Gesellschaft, Ludwigshafen.
One	Kontinentale Versicherungs-Gesellschaft, Mannheim.
One	Mannheimer Versicherungs-Gesellschaft.
One	Sächsische Rückversicherungs-Gesellschaft in Dresden.
One (vice-chairman)	Transatlantische Güterversicherungs-Gesellschaft in Berlin.
One	"Union," Allgemeine Versicherungs-Gesellschaft, Berlin.
TRANSPORTATION ENTERPRISES.	
One	A.-G. "Weser," Schiffswerft, Bremen.
One (vice-chairman)	Deutsch-Australische Dampfschiffs-Gesellschaft, Hamburg.
One (vice-chairman)	Gesellschaft für elektrische Hoch- und Untergrundbahnen, Berlin.
One	Elektrische Strassenbahn, Barmen-Elberfeld.
One	Norddeutscher Lloyd, Bremen.
One	Ostafrikanische Eisenbahn-Gesellschaft, Berlin.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

DEUTSCHE BANK—Continued.

Seats on the supervisory board.	Class of industry.
FOREIGN COMPANIES.	
Two (chairman)	Anatolische Eisenbahn-Gesellschaft, Constantinople.
Two (chairman)	Bagdad Eisenbahn-Gesellschaft.
Two (vice-chairman)	Bank für elektrische Unternehmungen, Zürich.
One (vice-chairman)	Bank für orientalische Eisenbahnen, Zürich.
One (vice-chairman)	Betriebsgesellschaft der orientalischen Eisenbahnen, Vienna.
One	Compañía Barcelonesa de Electricidad.
Two (chairman)	Eisenbahn-Gesellschaft Mersina-Adana.
One	A. Goerz & Co., Ltd., London.
One (chairman)	Gesellschaft für elektrische Beleuchtung, St. Petersburg.
One	National Bank of South Africa, London.
Two (vice-chairman)	Société du Chemin de Fer Ottoman Salonique-Monastir.
Three (vice-chairman)	Société du Port de Haidar-Pascha, Constantinople.
Two (chairman)	Steaua Romana, A.-G. für Petroleumindustrie, Bucharest.

DIRECTION DER DISCONTO-GESELLSCHAFT.

MINING, SMELTING, AND SALT WORKS.	
One (chairman)	Bochumer Bergwerks-A.-G., Bochum.
One	Continental Tiefbohrgesellschaft, Halle.
One	Deutsch-Luxemburger Bergwerks- u. Hütten-A.-G., Bochum.
One	Diamanten Regie-Gesellschaft.
One	Eschweiler Bergwerksverein.
Two (chairman)	Gelsenkirchener Bergwerks-A.-G., Gelsenkirchen.
Three	Gewerkschaft Braunkohlengrube, Borna.
Three	Gewerkschaft Christoph Friedrich.
One	Hüstenen Gewerkschaft.
Two	Otavi Minen- und Eisenbahn-Gesellschaft, Berlin.
Two	"Phönix," A.-G. für Bergbau u. Hüttenbetrieb, Laar.
One (chairman)	"Union," A.-G. für Bergbau, Eisen- u. Stahlindustrie, Dortmund.
Two	Zinkhütten- und Bergwerks-A.-G. vorm. Dr. A. Lowitsch & Co., Kattowitz.
STONES AND EARTHS.	
One	A.-G. für Betonbau Diss & Co., Düsseldorf.
One	Porzellanfabrik Kahla.
METAL WORKING.	
One	Neuwalzwerk, A.-G., Bösperde.
One	Rheinische Stahlwerke, Meiderich.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

DIRECTION DER DISCONTO-GESELLSCHAFT—Continued.

Seats on the supervisory board.	Class of industry.
	MACHINE CONSTRUCTION AND INSTRUMENT MAKING.
One.....	Allgemeine Elektrizitäts-Gesellschaft, Berlin.
One.....	Bergmann, Elektrizitätswerke, Berlin.
One (vice-chairman).....	Berliner Maschinenbau-A.-G., Berlin.
One (vice-chairman).....	Deutsche Ueberseeische Elektrizitäts-Gesellschaft, Berlin.
Three.....	Maschinenfabrik u. Mühlbau-Anstalt H. Luther, Braunschweig.
One.....	Rheinisch-Westfälische Elektrizitätswerke, Essen.
One.....	Sächsische Maschinenfabrik, Chemnitz.
One.....	Turbinia, Deutsche Parsons Marine A.-G.
	CHEMICAL INDUSTRY.
One (vice-chairman).....	Anglo-Continent. vorm. Ollendorffsche Guano-Werke, Hamburg.
One.....	Berliner Benzinwerke, Lichtenberg.
One (chairman).....	Dynamit-A.-G., Hamburg.
Two.....	Internationale Wasserstoff-Gesellschaft.
Two.....	Kaliwerke, Aschersleben.
	ILLUMINANTS, SOAPS, FATS, OILS, VARNISHES.
One (chairman).....	Allgemeine Elektrizitäts-Gesellschaft, Berlin.
Three.....	Allgemeine Petroleumindustrie, Berlin.
	FOODS AND DRINKS.
One.....	Freiherrlich v. Tucher'sche Brauerei, Nuremberg.
	COMMERCIAL ENTERPRISES.
Two.....	Allgemeine Deutsche Kreditanstalt, Leipzig.
One.....	Bank des Berliner Kassenvereins, Berlin.
Two (vice-chairman).....	Bank für Thüringen vorm. B. M. Strupp, Meiningen.
Two.....	Bank für Chile und Deutschland, Hamburg.
One.....	Barmer Bankverein, Hinsberg, Fischer & Co., Barmen.
One.....	Bayerische Disconto- und Wechselbank, Nuremberg.
One.....	Bayerische Revisions- und Vermögens-A. G., Munich.
One.....	Berliner Maklerverein.
Four (1 vice-chairman, 1 chairman).....	Brasilianische Bank für Deutschland, Hamburg.
Two (vice-chairman).....	Busse & Co., Berlin, Bankgeschäft.
One.....	Deutsche Afrika-Bank, Hamburg.
Four (1 chairman and 1 director).....	Deutsche Asiatische Bank, Shanghai u. Berlin.
One.....	Deutscher Eisenhandel, A.-G.
One.....	Deutsche Grundkreditbank, Gotha.
One.....	Deutsche Hypothekenbank, Meiningen.
One.....	Deutsch-Ostafrikanische Bank, Berlin.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

DIRECTION DER DISCONTO-GESELLSCHAFT—Continued.

Seats on the supervisory board.	Class of industry.
COMMERCIAL ENTERPRISES—continued.	
One.....	Königsberger Terrain-A.-G.
One (chairman).....	Landbank, Berlin.
One.....	Magdeburger Bankverein.
Two (unlimited partners)...	Norddeutsche Bank, Hamburg.
One.....	Oberlausitzer Bank, Zittau.
One.....	Preussische Zentral-Bodenkredit-A.-G., Berlin.
One.....	Preussische Hypotheken-Aktienbank, Berlin.
One (member of the central committee).	Reichsbank, Berlin.
Three.....	Revision, Treuhand-A.-G., Berlin.
One.....	Heinrich Aug. Schulte, A.-G., Dortmund.
Two (vice-chairman).....	Stahl & Federer, A.-G., Stuttgart.
Two (vice-chairman).....	Süddeutsche Disconto-Gesellschaft, Mannheim.
One.....	Terrain-Gesellschaft Berlin-Südwesten.
PLANTATION COMPANIES.	
One.....	Deutsche Kolonisationsgesellschaft für Südwestafrika.
One.....	Neu-Guinea-Compagnie.
ENTERTAINMENT ENTERPRISES.	
One.....	Berliner Eispalast-Gesellschaft, Berlin.
INSURANCE ENTERPRISES.	
One.....	"Nordstern," Lebensversicherung in Berlin.
One.....	"Nordstern," Unfall- und Altersversicherung in Berlin.
TRANSPORTATION ENTERPRISES.	
One.....	Bröthaler Eisenbahngesellschaft, Hennef.
Two.....	Deutsch-Chinesische Eisenbahn-Gesellschaft.
One.....	Deutsche Ostafrika-Linie, Hamburg, Dampfschiffahrts-Gesellschaft.
One.....	Grosse Leipziger Strassenbahn.
FOREIGN COMPANIES.	
One.....	Banca Commerciale Italiana, Milan.
One.....	Banque de Crédit, Sofia.
One (chairman).....	Banca Generala Romana.
Two.....	Banque Générale Roumaine, Bucharest.
One (chairman).....	Compagnie Générale des Tramways de Behire, Brussels.
One.....	Compagnie du Chemin de Fer du Congo.
One.....	Compagnie industrielle des Pétroles, Paris.
One.....	Compagnie internationale d'Orient, Brussels.
Two.....	Concordia, Rumänische Petroleumindustrie, Bucharest.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

DIRECTION DER DISCONTO-GESELLSCHAFT—Continued.

Seats on the supervisory board.	Class of industry.
FOREIGN COMPANIES—continued.	
One (chairman)	"Credit Petrolifer," Gesellschaft zur Förderung der Entwicklung der rumänischen Petroleumindustrie.
One	Deutsche Niederlassungs-Gesellschaft, Tientsin.
One	Elektrische Strassenbahn, Valparaiso.
One	General Mining and Finance Corporation, Johannesburg.
One	Grosse Venezuela-Eisenbahn.
One	Ostafrikanische Eisenbahn-Gesellschaft.
One	Osteuropäische Telegraphen-Gesellschaft.
Two (1 chairman, 1 director)	Schantung-Eisenbahn-Gesellschaft, Tsingtau.
One	Société Financière de Transport et d'Entreprises Industrielles, Brussels.
One	Société Générale Belge d'Entreprises électriques.
Two	"Vega," Rumänische Petroleum-Raffinerie.
One	Warschau-Wiener Eisenbahn-Gesellschaft.

DRESDNER BANK.

MINING, SMELTING, AND SALT WORKS.	
One	"Bismarckhütte" in Bismarckhütte.
One	Deutsch-Luxemburger Bergwerks- und Hütten-Gesellschaft in Bochum.
Two (vice-chairman)	Deutsch-Oesterreichische Bergwerks-Gesellschaft, Dresden.
One	Gelsenkirchener Bergwerks-A.-G. in Gelsenkirchen.
One	Internationale Kohlenbergwerks-Gesellschaft, Cologne.
One	Mülheimer Bergwerksverein in Mülheim a. R.
One	"Phönix," A.-G. für Bergbau u. Hüttenbetrieb, Hörde.
Three (chairman)	Saar- u. Mosel-Bergwerks-Gesellschaft zu Karlingen.
One	Schlesische Zinkhütten-A.-G. in Lipine.
One	Vereinigte Königs- u. Laurahütte, A.-G. f. Bergbau u. Hüttenbetrieb, Berlin.
STONES AND EARTHS.	
One	Porzellanfabrik Ph. Rosenthal & Co., A.-G. in Selb.
One	Sächsisch-Böhmische Portland-Zementfabrik, A.-G., Dresden.
METAL WORKING.	
One	Gebr. Böhler & Co., A.-G., Berlin.
One (vice-chairman)	A.-G. Lauchhammer in Lauchhammer, Eisenwerk.
One	Sächsische Gussstahlfabrik in Döhlen bei Dresden.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

DRESDNER BANK—Continued.

Seats on the supervisory board.	Class of industry.
	MACHINE CONSTRUCTION AND INSTRUMENT MAKING.
One	Allgemeine Elektrizitäts-Gesellschaft zu Berlin.
One	Ascherslebner Maschinenbau-A.-G. in Aschersleben.
One	Balcke, Telling & Co., A.-G. in Benrath.
One	Deutsche Waffen- und Munitionsfabriken in Berlin.
One	Deutsch-Überseeische Elektrizitäts-Gesellschaft in Berlin.
One	Felten & Guillaume-Lahmeyerwerke, A.-G., Mülheim.
One	Kraftübertragungswerke in Rheinfelden.
One	Kohl, M., A.-G. in Chemnitz.
One (vice-chairman)	Ludw. Loewe & Co., A.-G., Berlin.
One (chairman)	Maschinenbau-A.-G. Markt-Redwitz vorm. H. Rockstroh.
One	Norddeutsche Seekabelwerke in Köln-Nordenham.
One (chairman)	Orenstein & Koppel, A.-G. für Kleinbahnen etc.
One	Rheinisch-Westfälische Elektrizitäts-A.-G. in Essen.
One (vice-chairman)	Wanderer, Fahrradwerke vorm. Winkelhöfer & Jänicke in Schönau.
	CHEMICALS.
One (chairman)	Gehl & Co., A.-G. in Dresden.
	TEXTILES.
One (vice-chairman)	Erdmannsdorfer A.-G. für Flachsgarn-Maschinenspinnerei u. Weberei.
One	Vereinigte Strohstoffabriken, Dresden.
	PAPER.
One	A.-G. Kartonnagenindustrie in Loschwitz bei Dresden.
	FOODS AND DRINKS.
One	Aktien-Bierbrauerei zu Reisewitz bei Dresden-Löbtau.
One	Sächsische Malzfabrik in Dresden-Plauen.
	COMMERCIAL ENTERPRISES.
One	Allgemeine Boden-A.-G. zu Berlin.
One	Banque de Mulhouse in Mülhausen i. Els.
One	Baubank für die Residenzstadt Dresden.
One (chairman)	Berlinische Boden-Gesellschaft, Berlin.
One (chairman)	Berlinische Boden-Credit-A.-G. Berlin.
One	Berliner Maklerverein, Berlin.
Two (vice-chairman and chairman)	Bodengesellschaft Kurfürstendamm, Berlin.
Two (chairman)	Centralbank für Eisenbahnwerte, Berlin.
Two (chairman)	Deutsche Orientbank, A.-G., Berlin.
Two (director)	Deutsche Südamerikanische Bank, Berlin.
One	Eisenbahnbank, Frankfort on-the-Main.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

DRESDNER BANK—Continued.

Seats on the supervisory board.	Class of industry.
COMMERCIAL ENTERPRISES—continued.	
One	Eisenbahn-Rentenbank, Frankfort on-the-Main.
One (vice-chairman)	Gesellschaft für elektrische Unternehmungen, Berlin.
One	Märkische Bank, Bochum.
Two (vice-chairman)	Mecklenburgische Bank, Schwerin i. M.
One (chairman)	Norddeutsche Lagerhaus-A.-G., Berlin.
Two (chairman)	Preussische Pfandbriefbank, Berlin.
One	Rheinische Bank in Essen.
One	Rheinisch-Westfälische Boden-Credit-Bank, Cologne.
One	Sächsische Boden-Creditanstalt in Dresden.
Two	A. Schaaffhausen'scher Bankverein, Cologne.
Two (vice-chairman and chairman)	Schmargendorfer Boden-A.-G.
Two	Schwarzburg, Hypothekenbank in Sondershausen.
Two (vice-chairman)	Schwarzburg, Landesbank in Sondershausen.
One	Terrain-Gesellschaft Berlin-Südwesten.
Two (chairman)	Terrain-Gesellschaft am Centralviehof, A.-G.
One	Terrain-Gesellschaft Dresden-Süd.
One	Terrain-Gesellschaft Park Witzleben, Berlin.
One	Württemberg. Landesbank, Stuttgart.
INSURANCE ENTERPRISES.	
One	"Allianz," Versicherungs-A.-G., Berlin.
One	"Deutscher Anker," Pensions- und Lebensversicherungs-A.-G., Berlin.
One	Magdeburger Feuerversicherungs-Gesellschaft.
TRANSPORTATION ENTERPRISES.	
One (chairman)	Berlin-Charlottenburger Strassenbahn, Berlin.
Two (chairman)	Continental Eisenbahn-Bau- und Betriebs-Gesellschaft, Berlin.
One (vice-chairman)	Deutsch-Atlantische Telegraphen-Gesellschaft, Cologne.
One (chairman)	Deutsch-Niederländische Telegraphen-Gesellschaft, Cologne.
One (vice-chairman)	Dux-Bodenbacher Eisenbahn, Vienna.
One	Gross Berliner Strassenbahn, Berlin.
One (chairman)	Lausitzer Eisenbahn-Gesellschaft, Sommerfeld.
One (chairman)	Osteuropäische Telegraphen-Gesellschaft, Berlin.
One (chairman)	Sächsisch-Böhmische Dampfschiffahrts-Gesellschaft, Dresden.
One (vice-chairman)	Strasseneisenbahn-Gesellschaft in Hamburg.
One	Westliche Berliner Vorortbahn, Berlin.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

DRESDNER BANK—Continued.

Seats on the supervisory board.	Class of industry.
	HOSTELRY AND TAVERN ENTERPRISES.
One (vice-chairman)	Deutsche Eisenbahn-Speisewagen-Gesellschaft, Berlin.
One	A.-G. vorm. Speyr & Co., Basle.
One	Bank für Orientalische Eisenbahnen in Zürich.
One	Betriebs-Gesellschaft für Orientalische Eisenbahnen Vienna.
One	Belgische Eisenbahnbank, Brussels.
One	Deutsch-Asiatische Bank, Shanghai.
One	Gen. Mining and Finance-Comp., Ltd., Johannesburg, London.
One (chairman)	Gewerkschaft "Brucher Kohlenwerke" in Teplitz.
One	Schweizerische Gesellschaft für nordamerikanische Werte in Basel.

NATIONALBANK FÜR DEUTSCHLAND.

	MINING, SMELTING, AND SALT WORKS.
One	Alkaliwerke, Ronnenberg, Hanover.
One	Bergbau-Gesellschaft "Teutonia," Hanover.
One	"Bismarckhütte" in Bismarckhütte.
One	Deutsch-Luxemb. Bergwerks- u. Hütten-A.-G. in Bochum.
One	Kamerun-Bergwerks-A.-G., Berlin.
One	Lothringer Hüttenverein Aumetz-Friede.
One	Oberschlesische Eisenindustrie, A.-G. f. Bergbau u. Hüttenbetrieb in Gleiwitz.
One (chairman)	Oberschlesische Zinkhütten, A.-G. in Kattowitz.
One	"Phönix," A.-G. für Bergbau u. Hüttenbetrieb, Duis- burg.
One	Rheinische A.-G. für Braunkohlen- u. Brikettindustrie in Harrem und Köln.
One	Schantung Bergbau-Gesellschaft in Berlin.
One	Styrumer Eisenindustrie A.-G. in Liqu., Oberhausen.
One	Zechau-Kribitzsche Kohlenwerke "Glückauf," A.-G., Zechau i. S.
	STONES AND EARTHS.
One	A.-G. für Asphaltierung u. Dachbedeckung vorm. J. Jeserich, Charlottenburg.
One	"Adler," deutsche Portland-Cementfabrik, A.-G., Berlin.
One	Oberschlesische Schamottefabrik früher "Didier" A.-G. Gleiwitz.
One (vice-chairman)	Schomburg, H., & Söhne, A.-G., Berlin.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

NATIONALBANK FÜR DEUTSCHLAND—Continued.

Seats on the supervisory board.	Class of industry.
	METAL WORKING.
One	Eisengiesserei A.-G. vorm. Keyling & Thomas in Berlin.
One	K. Kästner, A.-G. in Leipzig.
One	Schwelmer Eisenwerk Müller & Co., A.-G., Schwelm.
	MACHINE CONSTRUCTION AND INSTRUMENT MAKING.
One	A.-G. H. F. Eckert in Berlin-Friedrichsberg.
One	Allgemeine Elektrizitäts-Gesellschaft in Berlin.
One	Berliner Elektrizitätswerke.
One	Brandenburgische Carbid- u. Elektrizitätswerke, Berlin.
One	Breslauer A.-G. für Eisenbahnwagenbau in Breslau.
One	Deutsch-Niederländische Telegraphen-Gesellschaft, Cologne.
One	Deutsche "Niles"-Werkzeugmaschinenfabrik, Berlin.
One	Deutsche Ueberseeische Elektrizitäts-Gesellschaft, Berlin.
One	Deutsche Waffen- u. Munitionsfabriken, Berlin.
One	F. Dippe, Maschinenfabrik, A.-G. in Schladen a. Harz.
One	J. Frerichs & Co., A.-G. in Osterholz.
One	Kraftübertragungswerke Rheinfelden.
One	Ludw. Loewe & Co., A.-G., Berlin.
One	Oberschlesische Eisenbahnbedarfs-A.-G. Friedenshütte, Upper Silesia.
One	G. Sauerbrey, Maschinenfabrik, A.-G., Stassfurt.
One	Schlesische Elektrizitäts-Gesellschaft, Breslau.
One	Telefonfabrik, A.-G., vorm. Jul. Berliner zu Hannover.
One	Waggonfabrik, A.-G., Rastatt.
	CHEMICAL.
One	Chemische Fabrik Hönningen, vorm. Walther Fulda & Co.
Two (chairman)	Chemische Werke vorm. Dr. Heinrich Byk, Berlin.
	ILLUMINANTS, SOAPS, FATS, OILS, AND VARNISHES.
One	Celle-Wietze, A.-G. für Erdölgewinnung in Hannover.
One	Deutsche Mineralölindustrie, A.-G., Berlin.
One	Deutsche Petroleum-A.-G., Berlin.
	LEATHER.
One	Leipziger Gummiwarenfabrik vorm. Jul. Marx, Heine & Co.
	FOODS AND DRINKS.
One	Aktien-Brauerei Friedrichshain, Berlin.
One (vice-chairman)	Berliner Bockbrauerei, Berlin.
One	Bierbrauerei, A.-G., vorm. Gebr. Hugger in Posen.
One	Bierbrauerei A. Schifferer, A.-G. in Kiel.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

NATIONALBANK FÜR DEUTSCHLAND—Continued.

Seats on the supervisory board	Class of industry.
FOODS AND DRINKS—continued.	
One	Breslauer Aktien-Malzfabrik, Breslau.
One	Deutsche Bierbrauerei, A.-G. in Berlin.
One	Rositzer Zuckerraffinerie, Rositz (S.-A.).
BUILDING TRADES.	
One	Tiefbau- u. Kälteindustrie, A.-G., vorm. Gebhardt & Koenig, Nordhausen.
Two	"Union," Baugesellschaft auf Aktien in Berlin.
ART INDUSTRY.	
One	A.-G. H. Gladenbeck & Sohn, Bildgiesserei, Berlin.
One	R. W. Dinnendal, A.-G., Kunstwerkerhütte bei Steele.
One	Kunstanstalt B. Gross, A.-G. in Leipzig.
One	H. Schött, A.-G. in Rheydt.
COMMERCIAL ENTERPRISES.	
One	A.-G. für Montanindustrie, Berlin.
One	Bank für Brauindustrie, Berlin.
One	Berliner Maklerverein, Berlin.
One	Boden-A.-G. Berlin-Nord, Berlin.
One	Boden-Gesellschaft an der Kreisbahn Berlin-Nordost, Berlin.
One	Deutsch-Asiatische Bank, Berlin.
Two (vice-chairman).....	Deutsche Orientbank, A.-G., Berlin.
Two (director)	Deutsch-Südamerikanische Bank, Berlin.
One	Deutsche Treuhand-Gesellschaft, Berlin.
One	Gesellschaft für elektrische Unternehmungen, Berlin.
Two	Handelsstätte "Bellealliance," A.-G., Berlin.
One	Industriegelände Schöneberg, Berlin.
One	Neue Boden-A.-G., Berlin.
One	Norddeutsche Creditanstalt, Königsberg i. Pr.
Two (chairman).....	Norddeutsche Immobilien-A.-G., Berlin.
One	Preussische Pfandbriefbank, Berlin.
One	Rheinisch-Westfälische Boden-Creditbank, Cologne.
One	Stansdorfer Terrain-A.-G. am Teltowkanal, Berlin.
One	Teltower Boden-A.G. zu Berlin.
One	Terrain-A.-G. München Nord-Ost, Munich.
One	Terrain-Gesellschaft am neuen Botanischen Garten Berlin.
INSURANCE ENTERPRISES.	
One	"Deutscher Anker," Pensions- u. Lebensversicherung Berlin.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

NATIONALBANK FÜR DEUTSCHLAND—Continued.

Seats on the supervisory board.	Class of industry.
	TRANSPORTATION ENTERPRISES.
One	Deutsch-Südamerikanische Telegraphen-Gesellschaft, Cologne.
One	S. Eichelbaum, Transport-A.-G., Breslau.
One	Grosse Berliner Strassenbahn.
One	Kamerun-Eisenbahn-Gesellschaft zu Berlin.
One	"Midgard," Deutsche Seeverkehrs-A.-G. in Bremen.
One (vice-director)	Niederlausitzer Eisenbahn-Gesellschaft, Berlin.
One	Osteuropäische Telegraphen-Gesellschaft, Cologne.
One	Santa Katharina-Eisenbahn-Gesellschaft, Berlin.
One	Schantung-Eisenbahn-Gesellschaft, Tsingtau.
	PLANTATION COMPANIES.
One	Guatemala-Plantagen-Gesellschaft, Hamburg.
One	Ośma-Rochela-Plantagen-Gesellschaft, Hamburg.
	FOREIGN COMPANIES.
One	Bank für elektrische Unternehmungen in Zürich.
One	Credito Italiano, Genoa.
One	Compagnie Métallurgique Franco-Belge de Martagnea, Brussels.
One	Orientbank, A.-G., Athens.
One	Rumänische A.-G. für Industrie "Königreich Rumänien," Campina.
One	Ungarische Lokaleisenbahnen-A.-G. in Budapest.

A. SCHAAFFHAUSEN'SCHER BANKVEREIN.

	MINING, SMELTING, AND SALT WORKS.
Two (chairman)	Bergwerks-Gesellschaft "Aller Nordstern" m. b. H., Gr.-Häuslingen.
One	Bergwerks-Gesellschaft "Glückaufsegen" in Hörde.
One (chairman)	Bergwerks-Gesellschaft "Trier" m. b. H. in Hamm.
One	Deutsch-Luxemburg. Bergwerks- u. Hütten-A.-G. in Bochum.
One	Eschweiler Bergwerksverein in Eschweiler-Pumpe.
One	Gelsenkirchener Bergwerks-A.-G.
One (chairman)	Gewerkschaft der Zeche Blankenburg in Hammerthal a d. Ruhr.
One	Gewerkschaft "Zukunft", Cologne.
One	Harpener Bergbau-A.-G. in Dortmund.
Six (chairman)	Internationale Bohrgesellschaft Erkelenz.
Two (chairman)	Internationale Kohlenbergwerks-A.-G., St. Avold.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

A. SCHAAFFHAUSEN'SCHER BANKVEREIN—Continued.

Seats on the supervisory board.	Class of industry.
MINING, SMELTING, AND SALT WORKS—continued.	
One (chairman)	Lothringer Hüttenverein Aumetz-Friede in Kneuttingen i. L.
One	"Phönix," A.-G. für Bergbau u. Hüttenbetrieb, Duisburg-Ruhrort.
One	Rheinische Wasserwerks-Gesellschaft, Cologne.
One	Rombacher Hüttenwerke, Cologne.
One	Sieg-Rhein. Hütten-A.-G. zu Friedrich Wilhelmshütte.
One	Vereinigte Stahlwerke v. d. Zypen & Wissen Eisenhütte, Cologne-Deutz.
One	Zechau-Kriebitzsche Kohlenwerke "Glückauf," A.-G., Zechau (S.-A.).
STONES AND EARTHS.	
One (vice-chairman)	A.-G. für Rhein.-Westfäl. Cementindustrie in Beckum.
One	Weseler Portland-Cement- u. Tonwerke in Wesel.
METAL WORKING.	
One (vice-chairman)	Eschweiler-Köln. Eisenwerke, A.-G. in Eschweiler.
One (vice-chairman)	Façoneisen-Walzwerk L. Mannstaedt & Cie., Kalk, near Cologne.
One (chairman)	Schwelmer Eisenwerk Müller & Co., Schwelm (Westphalia).
One	Stahlwerk "Krieger," A.-G. in Düsseldorf.
MACHINE CONSTRUCTION AND INSTRUMENT MAKING.	
One	Allgemeine Elektrizitätsgesellschaft in Berlin.
One	Anker-Werke, A.-G., vorm. Hengstenberg & Co., Bielefeld.
One	Bergmanns Elektrizitätswerke, A.-G., Berlin.
One	Deutsche Waffen- und Munitionsfabriken, Berlin.
Two (chairman)	de Fries & Co., A.-G., Düsseldorf.
One (chairman)	Gasmotorenfabrik "Deutz."
One	Gesellschaft für elektrische Unternehmungen.
One	Kottbuser Maschinenbauanstalt u. Eisengiesserei, A.-G.
One (vice-chairman)	Maschinenbauanstalt Humboldt, Kalk, near Cologne.
One (chairman)	A.-G. Maschinenfabrik "Deutschland" in Dortmund.
One	Waggonfabrik A.-G., vorm. P. Herbrandt & Co., Cologne-Ehrenfeld.
One	Waggonfabrik, A.-G., Uerdingen.
One	Walther & Co., Commandit-Gesellschaft auf Aktien, Delbrück, near Cologne.
One	Werkzeugmaschinenfabrik Gildemeister & Co., A.-G., Bielefeld.
One	Weyersberg, Kirschbaum & Co., A.-G. für Waffen u. Fahrradteile in Solingen.

The German Great Banks

Representation of the great banks on the supervisory boards of stock companies—Continued.

A. SCHAAFFHAUSEN'SCHER BANKVEREIN—Continued.

Seats on the supervisory board.	Class of industry.
	CHEMICAL.
One (vice-chairman)	A.-G. für chemische Industrie in Gelsenkirchen-Schalke.
One	Chemische Fabrik Hönningen, vorm. Walther Feld & Co., A.-G.
	ILLUMINANTS, SOAPS, FATS, OILS, AND VARNISHES.
Two (chairman)	Deutsche Mineralöl-Industrie, A.-G., Cologne.
	TEXTILES.
One (vice-chairman)	Dülkener Baumwollspinnerei, A.-G. in Dülken.
One	Krefelder Teppichfabrik, A.-G., Krefeld.
Two (chairman)	Rhein. Kunstseidefabrik, A.-G., Cologne.
One (chairman)	Schöllersche und Eitorfer Kammgarnspinnerei, A.-G. Breslau.
	FOODS AND DRINKS.
One	Rositzer Zuckerraffinerie in Rositz.
	BUILDING TRADES.
Two (chairman)	A.-G. für Brückenbau, Tiefbohrung u. Eisenkonstruktionen in Neuwied.
One	Rhein. Baugesellschaft, Cologne.
One (chairman)	Tiefbau u. Kälteindustrie, vorm. Gebhardt & König, Nordhausen.
	ART INDUSTRY.
One (chairman)	W. Hagelberg, A.-G., Berlin (Art prints).
	COMMERCIAL ENTERPRISES.
One (vice-chairman)	A.-G. für Rhein.-Westfäl. Industrie, Cologne.
One (chairman)	Alexanderwerk, A. v. d. Nahmer, A.-G. in Remscheid.
One (vice-chairman)	Allgemeine Boden-A.-G. in Berlin.
One	Bank für deutsche Eisenbahnwerte in Berlin.
Three	Deutsche Orientbank, A.-G., Berlin.
Two (vice-chairman)	Deutsch-Südamerikanische Bank, A.-G., Berlin.
Two	Dresdner Bank in Dresden.
One	Düsseldorfer Baubank in Düsseldorf.
One (chairman)	Kölner Verlagsanstalt u. Druckerei, A.-G., Cologne.
Two	Mittelrhein. Bank, Koblenz.
One (chairman)	Neue Boden-A.-G., Berlin.
One	Oldenburg. Landesbank.
One	Ostbank für Handel u. Gewerbe, Posen.
One	Preussische Pfandbriefbank, Berlin.
Two (vice-chairman)	Rheinische Bank, Essen on-the-Ruhr.
One	Rhein.-Westf. Boden-Creditbank, Cologne.
One (vice-chairman)	Schwarzburg. Hypothekenbank in Sondershausen.

National Monetary Commission

Representation of the great banks on the supervisory boards of stock companies—Continued.

A. SCHAAFFHAUSEN'SCHER BANKVEREIN—Continued.

Seats on the supervisory board.	Class of industry.
COMMERCIAL ENTERPRISES—continued.	
One	Schwarzburg. Landesbank, Sondershausen.
One	Treuhand-Vereinigung, A.-G., Berlin.
Two (chairman)	Westfälisch-Lippische Vereinsbank in Bielefeld.
INSURANCE ENTERPRISES.	
One	"Rhenania," Versicherungs-A.-G. in Cologne.
TRANSPORTATION ENTERPRISES.	
One	A.-G. für Verkehrswesen in Berlin.
One	Badische Lokaleisenbahnen-A.-G. in Karlsruhe.
One	Berlin-Charlottenburger Strassenbahn, Berlin.
One	Braunschweig. Landeseisenbahn-Gesellschaft.
One (chairman)	Braunschweig-Schöninger Eisenbahn-Gesellschaft in Braunschweig.
One (vice-chairman)	Brohltal-Eisenbahn-Gesellschaft, Cologne.
One	Grosse Berliner Strassenbahn, Berlin.
One	Kamerun-Eisenbahn-Gesellschaft zu Berlin.
One (chairman)	Moselbahn-A.-G. in Trier.
One (chairman)	Mödrath-Liblar-Brühler Eisenbahn-A.-G., Cologne.
One (vice-chairman)	Rinteln-Stadthagener Eisenbahn-Gesellschaft in Rinteln.
One (vice-chairman)	Schlesische Dampfer-Compagnie in Breslau.
One (vice-chairman)	Schlesische Kleinbahn A.-G. in Kattowitz.
One (chairman)	Vereinigte Westdeutsche Kleinbahn-A.-G., Cologne.
One (chairman)	Westdeutsche Eisenbahn-Gesellschaft, Cologne.
One (chairman)	Württembergische Nebenbahnen-A.-G., Stuttgart.
FOREIGN COMPANIES.	
One	Banque Internationale de Bruxelles in Brussels.
One	Foraky Soc. au Belge de l'Entreprise de Forage et de Fonçage, Brussels.
One (vice-chairman)	Rumänische A.-G. für Industrie, Königreich Rumänien.
One	Schantung-Eisenbahn-Gesellschaft in Tsingtau.
One	Società Italiana Langen & Wolf, Milan.
One	Société Française de Forage et de Recherches Minières (Brevet Raky), Paris.

The German Great Banks

APPENDIX V.

TOTAL VALUE OF SECURITIES ISSUED AT THE BERLIN STOCK EXCHANGE BY THE GREAT BANKS DURING THE YEARS 1882-1908.

BANK FÜR HANDEL UND INDUSTRIE.

Total value of securities issued at the Berlin stock exchange during the years 1882-1908.

[To page 395.]

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1882.....	10,500,000	6,500,000		
1883.....	11,600,000	20,000,000		
1884.....	12,850,000			39,437,200
1885.....		209,512,800		75,380,800
1886.....	71,757,200		10,000,000	
1887.....	10,000,000			22,440,000
1888.....	87,852,800	21,500,000	3,000,000	314,620,000
1889.....	68,440,000	28,000,000	16,000,000	1,123,509,740
1890.....	8,000,000		77,600,000	495,195,694
1891.....		38,250,400		531,925,020
1892.....		9,600,000		398,800,000
1893.....	3,000,000	3,000,000	2,330,000	194,902,700
1894.....	14,358,400	3,000,000		110,000,000
1895.....	19,873,500	39,000,000	40,234,525	110,000,000
1896.....	25,756,000	41,183,500	8,000,000	109,100,000
1897.....	232,394,000	5,700,000		74,750,000
1898.....	112,386,000	21,750,000	14,703,000	125,000,000
1899.....	75,400,000	36,500,000	6,939,500	118,700,000
1900.....	2,300,000	8,200,000	83,139,500	247,400,000
1901.....	68,500,000	14,500,000	1,079,000	363,691,250
1902.....	140,265,700	23,000,000	7,500,000	1,261,099,500
1903.....	284,050,000	30,000,000	1,250,000	3,434,609,074
1904.....	24,625,000	44,000,000	35,000,000	197,723,570
1905.....	70,000,000	80,250,000	21,400,000	820,611,000
1906.....	110,000,000	184,000,000	82,497,200	274,798,000
1907.....	13,400,000	118,000,000	9,750,000	6,584,065,232
1908.....	9,310,000	136,200,000	3,300,000	565,600,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin stock exchange during the years 1882-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1882.....	4,500,000			
1884.....	10,000,000			
1886.....			10,000,000	
1887.....	10,000,000			
1888.....			3,000,000	40,000,000
1889.....	4,040,000			
1890.....				235,000,000
1891.....				450,000,000
1892.....				340,000,000
1893.....	2,000,000	3,000,000	2,330,000	25,000,000
1894.....	13,000,000			10,000,000
1895.....	16,280,700		39,034,525	
1896.....	17,750,000	2,321,000	8,000,000	2,800,000
1897.....	98,250,000			20,000,000
1898.....			14,703,000	6,000,000
1899.....	21,500,000	7,500,000	4,939,500	27,700,000
1900.....	2,300,000	3,000,000	3,639,500	57,500,000
1901.....	1,500,000	14,500,000	1,079,000	5,000,000
1902.....		6,000,000	6,000,000	17,000,000
1903.....				26,960,100
1904.....		16,000,000	35,000,000	17,000,000
1905.....	9,000,000	12,000,000		24,000,000
1906.....		50,000,000	9,017,200	26,000,000
1907.....	5,000,000	42,500,000	2,250,000	24,500,000
1908.....	2,000,000	67,000,000		190,000,000

FOREIGN PUBLIC SECURITIES

1886.....	51,757,200			
1887.....				22,440,000
1888.....	40,252,800			274,620,000
1889.....	16,400,000			247,020,000
1890.....			28,000,000	148,906,944
1891.....		34,650,400		50,750,000
1893.....				138,902,700
1895.....		26,000,000		
1896.....		14,062,500		
1898.....				51,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin stock exchange during the years 1882-1908—Continued.

FOREIGN PUBLIC SECURITIES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1900.....				102,000,000
1901.....				226,191,250
1902.....				1,166,599,500
1903.....	280,000,000			3,383,148,974
1904.....				90,426,570
1905.....				678,300,000
1906.....	80,000,000		48,480,000	28,350,000
1907.....				6,481,565,232
1908.....				127,500,000

GERMAN MORTGAGE BONDS.

1888.....	30,000,000			
1889.....	10,000,000			
1896.....		20,000,000		
1897.....	115,000,000			
1898.....	55,300,000			
1900.....			75,000,000	
1902.....	26,040,700	10,000,000		
1903.....		20,000,000		
1904.....		25,000,000		
1905.....		65,000,000	20,000,000	
1906.....			25,000,000	

FOREIGN MORTGAGE BONDS.

1896.....				51,000,000
1897.....				51,000,000
1904.....				34,000,000

GERMAN RAILWAY SHARES.

1896.....				1,800,000
1897.....				1,250,000
1898.....	13,150,000			
1900.....				1,200,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin stock exchange during the years 1882-1908—Continued.

GERMAN RAILWAY SHARES—Continued.

Year, ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1902.....	11,450,000			2,000,000
1904.....				14,297,000
1906.....				4,024,000
1908.....				11,000,000

FOREIGN RAILWAY SHARES.

1888.....	17,600,000			
1890.....			49,600,000	
1892.....		5,600,000		

GERMAN RAILWAY BONDS.

1888.....		2,500,000		
1890.....	8,000,000			
1897.....		5,700,000		2,500,000
1900.....				3,000,000
1901.....				5,500,000
1902.....				4,000,000
1905.....	3,000,000			5,000,000
1906.....	7,000,000			4,500,000

FOREIGN RAILWAY BONDS.

1882.....		6,500,000		
1883.....		20,000,000		
1884.....				39,437,...
1885.....		209,512,800		75,380,800
1886.....	20,000,000			
1889.....		16,000,000	16,000,000	876,489,740
1890.....				111,288,750
1891.....				31,175,020
1892.....				52,800,000
1893.....				16,000,000
1894.....				100,000,000
1895.....				100,000,000
1899.....	48,000,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin stock exchange during the years 1882-1908—Continued.

FOREIGN RAILWAY BONDS—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1901.....				87,000,000
1906.....				1,687,500
1907.....		42,000,000		

GERMAN STREET RAILWAY BONDS.

1896.....				7,500,000
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BANK SHARES.

1882.....	6,000,000			
1889.....	20,000,000			
1896.....	3,000,000			16,000,000
1897.....	16,200,000			
1898.....	28,000,000			8,000,000
1899.....				17,000,000
1901.....				24,000,000
1902.....	52,000,000			
1903.....		4,000,000		
1904.....				12,500,000
1905.....	22,000,000	3,000,000		16,000,000
1906.....	19,000,000	18,000,000		33,250,000
1907.....	3,400,000			20,000,000
1908.....	3,000,000			8,000,000

INDUSTRIAL SHARES.

1888.....		19,000,000		
1889.....	7,000,000	12,000,000		
1891.....		3,600,000		
1892.....		4,000,000		
1893.....	1,000,000			
1894.....	1,358,400	3,000,000		
1895.....	3,592,800	13,000,000		
1896.....	5,006,000	4,800,000		30,000,000
1897.....	2,944,000			
1898.....	2,436,000	9,750,000		20,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin stock exchange during the years 1882-1908—Continued.

INDUSTRIAL SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks</i>	<i>Marks.</i>	<i>Marks.</i>
1899.....	5,900,000	29,000,000	2,000,000	74,000,000
1900.....		5,200,000	2,500,000	48,700,000
1901.....	41,000,000			
1902.....	25,675,000	1,000,000	1,500,000	28,000,000
1903.....	4,050,000	5,000,000	1,250,000	12,500,000
1904.....	10,625,000	3,000,000		25,000,000
1905.....	26,000,000	250,000	1,400,000	80,311,000
1906.....	4,000,000	96,000,000		145,589,000
1907.....	5,000,000	30,000,000	7,500,000	43,000,000
1908.....	4,310,000	24,200,000	3,300,000	54,530,000

INDUSTRIAL BONDS.

1883.....	11,600,000			
1884.....	2,850,000			
1889.....	11,000,000			
1892.....				6,000,000
1893.....				15,000,000
1895.....			1,200,000	10,000,000
1898.....	13,500,000	12,000,000		40,000,000
1900.....			2,000,000	35,000,000
1901.....	26,000,000			23,000,000
1902.....	25,100,000	6,000,000		43,500,000
1903.....		1,000,000		12,000,000
1904.....	14,000,000			4,500,000
1905.....	10,000,000			17,000,000
1906.....		20,000,000		31,397,500
1907.....		3,500,000		15,000,000
1908.....		45,000,000		174,570,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

BERLINER HANDELS-GESELLSCHAFT.

Total value of securities issued at the Berlin Stock Exchange during the years
1882-1908.

Year, ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1883.....	35,730,000	.....	12,000,000	.....
1884.....	35,486,380	14,225,000	196,043,820	.....
1885.....	60,975,000	.....	14,000,000	.....
1886.....	57,975,000	16,000,000	519,249,720	48,645,000
1887.....	173,015,000	.....	21,000,000	96,726,500
1888.....	17,900,000	19,000,000	444,620,000	344,620,000
1889.....	62,198,600	204,000,000	9,999,500	215,520,000
1890.....	.....	.....	16,800,000	419,906,944
1891.....	3,716,000	3,600,000	7,000,000	473,770,000
1892.....	15,000,000	14,600,000	40,400,000	522,250,000
1893.....	1,050,000	6,000,000	14,350,800	117,000,000
1894.....	8,313,000	7,000,000	108,320,000	149,118,000
1895.....	13,025,000	42,000,000	62,233,000	196,219,000
1896.....	339,936,520	4,800,000	55,056,600	172,236,000
1897.....	25,848,000	29,350,000	65,685,500	288,760,000
1898.....	13,980,000	69,700,500	40,700,000	313,598,500
1899.....	19,600,000	85,000,000	85,198,000	155,100,000
1900.....	10,500,000	15,200,000	28,500,000	104,300,000
1901.....	4,000,000	54,200,000	.....	235,000,000
1902.....	171,508,800	73,300,000	22,350,000	478,800,000
1903.....	10,225,000	63,000,000	16,100,000	3,396,623,974
1904.....	19,000,000	35,500,000	38,250,000	65,100,000
1905.....	28,350,000	112,150,000	5,000,000	604,000,000
1906.....	21,173,750	69,100,000	.....	254,309,000
1907.....	8,000,000	73,296,000	24,920,000	6,591,435,232
1908.....	18,000,000	69,910,000	62,000,000	438,920,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1883.....	2,000,000			
1888.....				40,000,000
1889.....	3,500,000			
1890.....				235,000,000
1891.....				450,000,000
1892.....				340,000,000
1893.....		3,000,000		50,000,000
1894.....				10,000,000
1895.....		3,500,000	10,500,000	2,000,000
1897.....		2,750,000		
1899.....			6,000,000	15,700,000
1900.....			14,000,000	
1901.....				3,000,000
1902.....			12,000,000	
1903.....		3,000,000		
1904.....			27,000,000	
1905.....	8,000,000			24,000,000
1906.....				26,000,000
1907.....		9,796,000	12,000,000	20,000,000
1908.....		3,000,000	60,000,000	85,000,000

FOREIGN PUBLIC SECURITIES.

1884.....			32,860,320	
1886.....			492,129,720	
1887.....			5,000,000	22,440,000
1888.....			300,620,000	304,620,000
1889.....				170,520,000
1890.....				148,906,944
1892.....				11,250,000
1895.....		26,000,000	38,250,000	
1896.....	287,786,520			
1898.....		46,406,500		
1902.....		66,300,000		393,000,000
1903.....				3,399,323,974
1905.....				500,000,000
1906.....				28,350,000
1907.....				6,481,565,232
1908.....				127,500,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN MORTGAGE BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1892.....			20,000,000	30,000,000
1894.....				74,118,000
1895.....				20,000,000
1896.....	20,000,000		30,000,000	25,000,000
1898.....			20,000,000	
1899.....		70,000,000	20,000,000	
1901.....		20,000,000		
1903.....		40,000,000		
1904.....		15,000,000		
1905.....		75,000,000		
1907.....			10,000,000	
1908.....		20,000,000		

FOREIGN MORTGAGE BONDS.

1883.....	7,425,000			
1886.....	9,375,000			
1887.....	13,975,000			
1893.....			10,600,800	
1902.....			6,750,000	
1904.....			11,250,000	
1906.....		22,500,000		

GERMAN RAILWAY SHARES.

1883.....	1,905,000		12,000,000	
1884.....	2,000,000			
1889.....	3,150,000			
1891.....	2,316,000			
1895.....				3,000,000
1896.....	2,000,000		3,650,000	
1897.....				3,500,000
1898.....	1,400,000			6,500,000
1899.....	2,100,000			11,050,000
1900.....			8,500,000	8,600,000
1902.....	1,350,000		600,000	
1903.....	3,725,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN RAILWAY SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1904.....	1,500,000			5,300,000
1906.....				4,024,000
1908.....		4,210,000		11,000,000

FOREIGN RAILWAY SHARES.

1883.....	16,000,000			
1884.....	25,486,380			
1885.....	51,975,000			
1888.....			144,000,000	
1889.....				24,000,000
1892.....		5,600,000		
1894.....			11,000,000	

GERMAN RAILWAY BONDS.

1885.....	3,000,000			
1886.....			4,500,000	
1893.....	1,050,000			2,000,000
1894.....	2,638,000			
1895.....	4,275,000			
1896.....			960,600	15,000,000
1897.....				2,300,000
1898.....	1,830,000			10,000,000
1899.....				12,500,000
1900.....				14,000,000
1901.....	4,000,000			4,000,000
1902.....				19,650,000
1903.....	1,500,000			
1904.....	2,000,000			4,300,000
1906.....				11,700,000
1907.....		2,000,000		10,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN RAILWAY BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1883.....	8,400,000			
1884.....			161,683,500	
1885.....			14,000,000	
1886.....	21,000,000	16,000,000	21,420,000	48,645,000
1887.....	149,040,000		11,000,000	67,286,500
1889.....	6,753,600	185,000,000	6,800,000	16,000,000
1890.....			10,200,000	36,000,000
1891.....				9,770,000
1892.....			20,400,000	132,000,000
1893.....				16,000,000
1894.....			75,820,000	60,000,000
1895.....				158,219,000
1896.....			7,446,000	56,736,000
1897.....			36,955,500	243,210,000
1898.....				228,300,500
1899.....			44,800,000	
1900.....				27,000,000
1901.....				160,000,000
1902.....	170,158,800			
1906.....				1,687,500
1907.....		42,000,000		

GERMAN STREET RAILWAY SHARES.

1896.....				1,200,000
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BANK SHARES.

1886.....	17,000,000			
1889.....	11,043,000			
1891.....	1,400,000			1,500,000
1892.....	15,000,000			3,000,000
1894.....	1,000,000	4,000,000		
1895.....	5,000,000	9,500,000		3,000,000
1896.....	15,000,000		10,000,000	40,000,000
1897.....	3,498,000			25,500,000
1898.....	7,500,000			8,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

BANK SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1899.....	10,000,000		5,000,000	
1901.....				8,000,000
1903.....		4,000,000		
1904.....	10,000,000	5,000,000		12,500,000
1905.....				16,000,000
1906.....	10,923,750	24,000,000		10,000,000
1907.....				20,000,000
1908.....	18,000,000			8,000,000

INDUSTRIAL SHARES.

1884.....	6,000,000		1,500,000	
1885.....	6,000,000			
1886.....	10,600,000		1,200,000	
1887.....	4,000,000			7,000,000
1888.....	17,900,000	19,000,000		
1889.....	37,752,000	19,000,000	3,199,500	4,000,000
1890.....			6,600,000	
1891.....		3,600,000	1,000,000	
1892.....		4,000,000		
1893.....			3,750,000	
1894.....	675,000	3,000,000	21,500,000	
1895.....	3,750,000	3,000,000	2,000,000	
1896.....	12,150,000	4,800,000	3,000,000	
1897.....	12,350,000			14,250,000
1898.....	3,250,000	6,294,000	10,000,800	40,798,000
1899.....	7,500,000	8,000,000	9,398,000	91,850,000
1900.....	3,000,000	15,200,000	6,000,000	25,700,000
1901.....		18,200,000		5,000,000
1902.....		1,000,000		29,050,000
1903.....	5,000,000	10,000,000	11,600,000	
1904.....	1,000,000	11,000,000		35,000,000
1905.....	13,850,000	1,750,000	5,000,000	56,500,000
1906.....	10,250,000	17,800,000		152,200,000
1907.....	4,000,000	9,000,000		55,870,000
1908.....		21,200,000	1,000,000	46,100,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

INDUSTRIAL BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks</i>	<i>Marks.</i>	<i>Marks.</i>
1884.....	2,000,000	14,225,000		
1887.....	6,000,000		5,000,000	
1891.....			6,000,000	12,500,000
1892.....		5,000,000		6,000,000
1893.....		3,000,000		49,000,000
1894.....	4,000,000			5,000,000
1895.....			11,483,000	10,000,000
1896.....	3,000,000			34,300,000
1897.....	10,000,000	26,600,000	28,730,000	
1898.....		17,000,000	10,700,000	20,000,000
1899.....		7,000,000		24,000,000
1900.....	7,500,000			29,000,000
1901.....		16,000,000		55,000,000
1902.....		6,000,000	3,000,000	37,100,000
1903.....		6,000,000	4,500,000	17,300,000
1904.....	4,500,000			8,000,000
1905.....	6,500,000	35,400,000		7,500,000
1906.....		4,800,000		20,347,500
1907.....	4,000,000	10,500,000	2,920,000	4,000,000
1908.....		21,500,000	1,000,000	161,320,000

DEUTSCHE BANK.

Total value of securities issued at the Berlin Stock Exchange during the years 1882-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1882.....		1,500,000		35,782,560
1883.....	14,400,000	2,600,000	15,000,000	
1884.....	323,405,080	6,980,000	17,400,000	
1885.....	23,875,700	220,612,800		
1886.....	124,375,000		1,678,966,538	
1887.....	69,460,000	210,000,000	16,000,000	7,000,000
1888.....	78,354,600	100,000,000	5,000,000	85,734,200

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Total value of securities issued at the Berlin Stock Exchange during the years
1882-1908—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1889.....	71,000,000	547,132,048	59,446,397	321,080,000
1890.....	135,116,800			401,306,944
1891.....	34,320,000	34,910,400	3,000,000	572,400,000
1892.....	136,100,000	10,600,000		366,750,000
1893.....	67,100,000			64,750,000
1894.....	54,140,000	8,500,000		158,000,000
1895.....	180,243,600	35,450,000	18,500,000	33,000,000
1896.....	1,433,080,000	10,000,000	27,600,000	178,550,000
1897.....	67,655,000	11,700,000	6,500,000	65,800,000
1898.....	171,379,480	68,406,500	21,998,400	116,198,400
1899.....	329,430,000	77,500,000	10,000,000	606,430,000
1900.....	455,747,000	74,591,200	41,228,000	133,350,000
1901.....	81,378,800	241,700,000	119,320,000	183,000,000
1902.....	144,530,000	118,300,000	65,772,000	388,050,000
1903.....	603,334,040	59,500,000	110,650,800	3,209,204,490
1904.....	710,269,800	80,887,000	691,038,408	130,100,000
1905.....	635,947,900	235,687,000	109,092,000	829,900,000
1906.....	737,543,800	259,100,000	250,125,000	234,950,000
1907.....	227,963,600	370,270,000	97,265,000	6,603,235,232
1908.....	206,395,000	220,064,900	72,900,000	6,308,030,000

Value of securities issued and listed at the Berlin Stock Exchange during the
years 1882-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1882.....		1,500,000		
1886.....	12,000,000			
1887.....	41,200,000			
1888.....	9,854,200			40,000,000
1889.....			7,000,000	
1890.....	38,500,000			235,000,000
1891.....				508,000,000
1892.....	1,000,000			342,500,000
1893.....	1,100,000			25,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN PUBLIC SECURITIES—Continued.

Year. ^a	Issued exclusively by the Bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1894.....	21,500,000			
1895.....	6,000,000	3,000,000		10,000,000
1896.....	47,000,000			57,800,000
1897.....	8,950,000			24,000,000
1898.....	6,500,000	4,000,000	3,000,000	
1899.....	208,200,000	7,500,000		10,000,000
1900.....	48,200,000	5,000,000	3,228,000	59,000,000
1901.....	13,310,000	172,500,000	88,570,000	19,000,000
1902.....	12,300,000	42,000,000	1,272,000	74,000,000
1903.....	11,873,200	3,500,000	1,000,000	69,865,000
1904.....	16,500,000	20,937,000		60,000,000
1905.....	28,000,000	58,937,000	3,952,000	60,000,000
1906.....	42,400,000	75,500,000	20,000,000	44,000,000
1907.....	59,464,000	125,000,000	2,165,000	7,500,000
1908.....	52,575,000	123,654,900	29,000,000	73,000,000

FOREIGN PUBLIC SECURITIES.

1883.....	14,400,000			
1884.....	14,055,600			
1885.....	16,000,000			
1886.....	16,000,000		1,626,966,538	
1887.....	14,400,000			
1888.....	19,200,000			45,734,320
1889.....	21,600,000	294,132,048	51,546,397	
1890.....				148,906,944
1891.....		34,610,400		
1892.....				11,250,000
1895.....		26,000,000		
1896.....			20,400,000	
1898.....	116,767,080	46,406,500		51,000,000
1899.....				463,080,000
1902.....		66,300,000		242,250,000
1903.....				3,121,539,490
1904.....			651,219,408	
1905.....	216,960,000			678,300,000
1906.....	75,850,000		173,400,000	
1907.....		142,800,000		6,481,565,232

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN MORTGAGE BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1886.....	5,000,000			
1888.....	1,500,000			
1892.....				10,000,000
1894.....				70,000,000
1895.....	3,453,600	4,450,000		
1896.....		10,000,000		25,000,000
1899.....	5,000,000	70,000,000	10,000,000	
1900.....	45,000,000		10,000,000	
1901.....	30,000,000	35,000,000	30,000,000	
1902.....	46,000,000	10,000,000	60,000,000	
1903.....	76,000,000	45,000,000	100,000,000	
1904.....	25,000,000	29,000,000		
1905.....	32,420,000	100,000,000	80,000,000	
1906.....	30,000,000	15,000,000	50,000,000	
1907.....	50,000,000	10,000,000	60,000,000	
1908.....		30,000,000	40,000,000	

FOREIGN MORTGAGE BONDS.

1885.....	5,100,000			
1886.....	6,375,000		52,000,000	
1887.....		20,000,000	16,000,000	
1895.....	17,000,000		17,000,000	
1896.....	110,500,000			
1898.....	8,100,000			
1899.....	11,250,000			
1900.....		13,931,200		
1902.....	33,750,000			
1903.....	45,000,000			
1904.....	67,500,000			
1905.....	56,250,000			

GERMAN RAILWAY SHARES

1889.....	2,200,000			
1891.....	1,200,000			
1895.....				3,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN RAILWAY SHARES—Continued.

Year, ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....				3,500,000
1899.....				5,000,000
1900.....				600,000
1902.....				2,000,000
1904.....				26,300,000
1906.....	1,700,000	40,000,000		
1908.....		4,210,000		

GERMAN RAILWAY BONDS.

1884.....	6,000,000			
1885.....	2,775,700			
1888.....	500,000			
1891.....	1,000,000			
1893.....				2,000,000
1895.....	1,000,000			
1896.....				15,000,000
1897.....		5,700,000		2,300,000
1899.....				12,500,000
1900.....				10,000,000
1902.....				23,650,000
1903.....	2,000,000			
1904.....				4,300,000
1906.....	2,500,000			7,200,000
1907.....		2,000,000		10,000,000

FOREIGN RAILWAY SHARES.

1884.....			10,800,000	
1889.....				24,000,000
1892.....		5,600,000		
1899.....	52,500,000			
1900.....	331,162,000	48,960,000		
1901.....				80,000,000
1902.....	23,100,000			
1903.....	404,835,840			
1904.....	525,000,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN RAILWAY SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1905.....	136,743,600			
1906.....	481,042,800			
1907.....	73,500,000			

FOREIGN RAILWAY BONDS.

1882.....				35,782,560
1884.....	303,409,480			
1885.....		209,512,800		
1886.....	84,000,000			
1887.....	13,860,000	190,000,000		
1888.....	27,300,000	100,000,000		
1889.....	46,200,000	169,000,000		293,080,000
1890.....	92,100,000			
1891.....	26,120,000			
1892.....	132,000,000			
1893.....	64,000,000			
1894.....	32,640,000			
1895.....	132,640,000			
1896.....	1,176,730,800			

GERMAN STREET RAILWAY SHARES.

1896.....				1,200,000
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GERMAN STREET RAILWAY BONDS.

1894.....				16,000,000
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BANK SHARES.

1888.....	20,000,400			
1889.....		68,000,000		
1891.....	3,000,000	300,000		1,500,000
1892.....				3,000,000
1894.....		5,500,000		36,500,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

BANK SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1895.....	5,000,000	2,000,000		3,000,000
1896.....	93,249,200			42,250,000
1897.....	50,000,000	6,000,000		25,500,000
1898.....	24,201,600	9,000,000		8,000,000
1899.....	17,880,000			
1900.....	18,000,000			
1901.....				24,000,000
1902.....	9,252,000			
1903.....	18,400,000			
1904.....	44,750,800			12,500,000
1905.....	108,500,800	4,500,000	11,400,000	16,000,000
1906.....	71,316,000	34,000,000	13,500,000	6,250,000
1907.....	23,999,600			20,000,000
1908.....	29,220,000			

BANK DEBENTURES.

1891.....				50,400,000
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INDUSTRIAL SHARES.

1883.....		2,600,000		
1884.....		1,980,000		
1885.....		11,100,000		
1887.....				7,000,000
1888.....			900,000	
1889.....		16,000,000	900,000	4,000,000
1890.....	3,316,800			17,400,000
1891.....	3,000,000			
1892.....	1,600,000			
1893.....	2,000,000			3,750,000
1894.....				15,500,000
1895.....	12,150,000		1,500,000	2,000,000
1896.....	4,600,000		4,700,000	3,000,000
1897.....	8,705,000			10,500,000
1898.....	7,810,800	4,000,000	18,998,400	37,198,400
1899.....	34,600,000			91,850,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

INDUSTRIAL SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1900.....	7,385,000	6,700,000	5,000,000	34,750,000
1901.....	38,068,800	18,200,000	750,000	5,000,000
1902.....	7,600,000	.....	4,500,000	29,050,000
1903.....	10,100,000	10,000,000	1,000,000	5,000,000
1904.....	27,519,000	2,450,000	30,219,000	19,000,000
1905.....	18,423,500	59,250,000	5,000,000	68,100,000
1906.....	21,235,000	36,800,000	13,225,000	162,300,000
1907.....	10,000,000	44,000,000	15,100,000	42,670,000
1908.....	74,400,000	34,700,000	3,900,000	66,780,000

INDUSTRIAL BONDS.

1883.....			15,000,000	
1884.....		5,000,000	6,600,000	
1886.....	1,000,000			
1888.....			4,100,000	
1889.....	1,000,000			
1890.....	1,200,000			
1891.....			3,000,000	12,500,000
1892.....	1,500,000	5,000,000		
1893.....				34,000,000
1894.....		3,000,000		20,000,000
1895.....	3,000,000			15,000,000
1896.....	1,000,000		2,500,000	34,300,000
1897.....			6,500,000	
1898.....	8,000,000	5,000,000		20,000,000
1899.....				24,000,000
1900.....	6,000,000		23,000,000	29,000,000
1901.....		16,000,000		55,000,000
1902.....	12,528,000			17,100,000
1903.....	35,125,000	1,000,000	8,650,800	12,800,000
1904.....	4,000,000	28,500,000	9,600,000	8,000,000
1905.....	38,650,000	13,000,000	8,740,000	7,500,000
1906.....	11,500,000	57,800,000		15,200,000
1907.....	11,000,000	46,470,000	20,000,000	41,500,000
1908.....	40,200,000	27,500,000		168,250,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

DISCONTO-GESELLSCHAFT.

Total value of securities issued at the Berlin Stock Exchange during the years
1882-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks, ^b	Issued jointly with other banks and great banks, ^b
	Marks.	Marks.	Marks.	Marks.
1882.....	136,360,000	8,000,000	.....	85,782,560
1883.....	42,550,000	20,000,000	.....	.....
1884.....	13,000,000	9,225,000	12,800,000	39,437,200
1885.....	197,565,260	.....	4,000,000	75,380,800
1886.....	46,328,000	16,000,000	65,250,000	48,645,000
1887.....	30,509,250	210,000,000	253,377,090	67,286,500
1888.....	30,615,300	94,500,000	169,838,345	34,418,825
1889.....	65,205,400	148,392,048	1,315,738,680	924,869,360
1890.....	3,600,000	.....	1,495,903,264	349,738,750
1891.....	53,400,000	.....	224,800,000	482,374,000
1892.....	9,500,000	8,100,000	66,987,500	415,300,000
1893.....	42,000,000	.....	294,231,632	237,252,700
1894.....	33,138,000	.....	2,940,992,200	215,618,000
1895.....	104,807,000	7,500,000	182,730,000	198,219,000
1896.....	73,550,000	24,000,000	1,883,595,700	241,986,000
1897.....	711,692,000	30,350,000	331,900,000	315,960,000
1898.....	67,680,900	27,251,600	632,690,784	417,813,280
1899.....	185,724,000	41,100,000	357,200,000	67,500,000
1900.....	122,610,000	23,031,200	204,200,000	240,450,000
1901.....	49,464,600	179,000,000	89,400,000	516,492,000
1902.....	171,000,000	52,000,000	561,600,000	1,505,349,500
1903.....	213,615,188	32,213,000	159,850,000	3,214,824,590
1904.....	169,000,800	64,937,000	21,500,000	585,540,570
1905.....	2,193,222,000	231,337,000	487,771,330	1,141,250,000
1906.....	23,322,340	172,500,000	8,000,000	218,559,000
1907.....	53,499,600	333,796,000	92,550,000	6,575,015,232
1908.....	97,600,000	165,000,000	61,700,000	531,820,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1882.....	6,050,000	1,500,000		
1883.....	15,000,000			
1884.....	2,000,000			
1885.....			4,000,000	
1886.....	5,000,000			
1888.....	13,740,000			
1890.....			11,500,000	235,000,000
1891.....			3,000,000	458,000,000
1892.....	7,500,000			342,500,000
1893.....	12,000,000			50,000,000
1894.....			32,000,000	10,000,000
1895.....	36,357,000	3,500,000	6,230,000	10,000,000
1896.....			115,395,700	3,000,000
1897.....	18,552,500	2,750,000	40,000,000	
1898.....		4,000,000		6,000,000
1899.....		7,500,000		12,000,000
1900.....			8,000,000	7,500,000
1901.....	6,275,800	169,000,000	67,000,000	10,000,000
1902.....		42,000,000		138,000,000
1903.....	4,092,500	9,500,000		64,960,100
1904.....	54,000,000	11,937,000		408,317,000
1905.....	15,488,000	23,937,000		474,000,000
1906.....	1,000,000	56,000,000		26,000,000
1907.....		127,296,000	25,000,000	20,000,000
1908.....	36,200,000	106,000,000	5,000,000	190,000,000

FOREIGN PUBLIC SECURITIES.

1882.....	118,560,000			
1883.....	4,050,000			
1884.....			12,800,000	
1886.....	7,128,000		54,000,000	
1887.....	18,009,250		238,500,000	
1888.....			161,064,455	34,418,825
1889.....		148,392,048	1,081,561,680	76,500,000
1890.....			1,425,887,664	
1891.....			206,400,000	
1892.....			36,187,500	

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN PUBLIC SECURITIES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1893.....			40,000,000	133,502,700
1894.....			2,883,035,200	
1895.....			108,000,000	
1896.....			1,757,700,000	
1897.....			286,900,000	
1898.....			448,200,000	51,000,000
1899.....			357,200,000	
1900.....			151,200,000	102,000,000
1901.....				212,500,000
1902.....			561,600,000	1,317,349,500
1903.....			149,850,000	3,125,364,490
1904.....				90,426,570
1905.....			424,936,530	500,000,000
1907.....		142,800,000		6,481,565,232
1908.....			56,700,000	127,500,000

GERMAN MORTGAGE BONDS.

1887.....			3,500,000	
1891.....			4,000,000	3,000,000
1892.....			20,000,000	20,000,000
1893.....			10,000,000	
1894.....	30,000,000			4,118,000
1895.....	20,000,000		60,000,000	20,000,000
1896.....		20,000,000		50,000,000
1897.....	678,139,500			
1898.....	31,000,000			
1900.....	10,000,000		30,000,000	
1901.....			22,400,000	
1902.....	70,000,000	10,000,000		
1903.....	150,000,000	10,000,000		
1904.....	16,000,000	29,000,000	12,500,000	
1905.....	32,000,000	115,000,000	40,634,800	
1907.....			23,950,000	
1908.....	23,000,000	20,000,000		

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN MORTGAGE BONDS.

Year, ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1886.....			11,250,000	
1887.....		20,000,000	11,377,090	
1888.....	7,800,300			
1889.....			26,775,000	
1891.....			3,400,000	
1892.....			850,000	
1893.....			244,231,632	
1896.....				51,000,000
1897.....				51,000,000
1898.....			184,490,784	
1900.....		13,931,200		
1904.....				34,000,000
1907.....	22,500,000			

GERMAN RAILWAY SHARES.

1883.....	1,500,000			
1890.....	1,500,000			
1891.....	2,400,000			
1894.....	1,938,000			
1896.....				1,800,000
1897.....				1,250,000
1898.....				5,000,000
1899.....				5,000,000
1900.....	6,000,000			9,200,000
1901.....	1,560,000			
1904.....				35,297,000
1906.....	3,199,200			4,024,000
1908.....				11,000,000

GERMAN RAILWAY BONDS.

1888.....		2,500,000		
1894.....	1,200,000			
1896.....	6,000,000			
1897.....				2,500,000
1898.....				10,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN RAILWAY BONDS—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1899.....	25,000,000			
1900.....	42,000,000			7,000,000
1901.....	1,560,000			9,500,000
1905.....				5,000,000
1906.....				4,500,000
1907.....	500,000			

FOREIGN RAILWAY SHARES.

1885.....	37,120,000			
1888.....	4,800,000		6,913,890	
1891.....	36,000,000		8,000,000	
1892.....		5,600,000		
1897.....				243,210,000
1898.....				273,013,280
1899.....	126,000,000			
1900.....				27,000,000
1901.....				214,992,000
1903.....	56,522,688			
1904.....	42,000,000			
1905.....	2,100,000,000			105,000,000

FOREIGN RAILWAY BONDS.

1882.....		6,500,000		85,782,560
1883.....	16,000,000	20,000,000		
1884.....				39,437,200
1885.....	160,445,260			75,380,800
1886.....	15,200,000	16,000,000		48,645,000
1887.....		190,000,000		67,286,500
1888.....		92,000,000		
1889.....	22,450,000		207,402,000	848,369,360
1890.....			46,515,600	111,288,750
1891.....				21,374,000
1892.....				52,800,000
1893.....				16,000,000
1894.....			25,957,000	160,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN RAILWAY BONDS—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1895.....				158,219,000
1896.....				56,736,000
1906.....				1,687,500

GERMAN STREET RAILWAY BONDS.

1894.....				16,000,000
1896.....				7,500,000

BANK SHARES.

1887.....	2,500,000			
1889.....	16,500,000			
1891.....	15,000,000			
1892.....			9,950,000	
1894.....				4,500,000
1895.....	41,500,000			
1896.....	14,500,000		10,500,000	28,250,000
1897.....		6,000,000		18,000,000
1898.....	24,500,000	9,000,000		8,000,000
1899.....	4,000,000			17,000,000
1900.....	27,510,000			
1901.....	7,800,000			24,000,000
1902.....	36,500,000			
1903.....		7,713,000	10,000,000	
1904.....	30,000,800		9,000,000	12,500,000
1905.....	30,834,000		16,000,000	16,000,000
1906.....	1,008,000	6,000,000	8,000,000	23,250,000
1907.....	21,999,600		33,600,000	20,000,000
1908.....	4,500,000			

INDUSTRIAL SHARES.

1882.....	6,750,000			
1888.....			1,860,000	
1889.....	22,440,400			
1890.....	2,100,000		12,000,000	3,450,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

INDUSTRIAL SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1893.....				3,750,000
1894.....				6,000,000
1895.....	4,950,000	1,750,000	5,000,000	
1896.....	47,050,000	4,000,000		36,200,000
1897.....	15,000,000		5,000,000	
1898.....	12,180,900	11,751,600		24,800,000
1899.....	30,724,000	28,600,000		33,500,000
1900.....	31,100,000	9,100,000	5,000,000	52,750,000
1901.....	4,768,800			
1902.....	62,000,000			20,000,000
1903.....	3,000,000	5,000,000		12,500,000
1904.....	27,000,000			5,000,000
1905.....	14,900,000	50,000,000	6,200,000	41,250,000
1906.....	16,315,140	57,500,000		131,700,000
1907.....	4,500,000	54,000,000		38,450,000
1908.....	12,900,000	21,000,000		22,000,000

INDUSTRIAL BONDS.

1882.....	5,000,000			
1883.....	6,000,000			
1884.....	11,000,000	9,225,000		
1886.....	19,000,000			
1887.....	10,000,000			
1888.....	4,275,000			
1889.....	3,815,000			
1892.....	2,000,000	2,500,000		
1893.....	30,000,000			34,000,000
1894.....				15,000,000
1895.....	2,000,000	2,500,000	3,500,000	10,000,000
1896.....	6,000,000			7,500,000
1897.....		21,600,000		
1898.....		2,500,000		40,000,000
1899.....		5,000,000		
1900.....	6,000,000		10,000,000	35,000,000
1901.....	27,500,000	10,000,000		45,500,000
1902.....	2,500,000			30,000,000
1903.....				12,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

INDUSTRIAL BONDS—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1904.....		24,000,000		
1905.....		42,400,000		
1906.....	1,800,000	53,000,000		27,397,500
1907.....	4,000,000	9,700,000	10,000,000	15,000,000
1908.....	21,000,000	18,000,000		181,320,000

DRESDNER BANK.

Total value of securities issued at the Berlin Stock Exchange during the years 1882-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1882.....	12,920,000			
1883.....	25,000,200			
1884.....	26,413,200			
1885.....	7,000,000			
1886.....	320,000		31,966,800	
1887.....	14,000,000			
1888.....	36,650,000			158,340,000
1889.....	82,138,200	213,740,000	4,000,000	170,520,000
1890.....	6,100,000		15,500,000	256,150,000
1891.....		3,900,000	29,499,900	628,470,000
1892.....	10,140,000	6,000,000	41,000,000	372,000,000
1893.....		34,000,000	66,500,000	92,750,000
1894.....	13,825,000	3,000,000	6,000,000	100,758,000
1895.....	155,323,000	16,250,000	106,000,000	52,640,000
1896.....	100,648,000	30,362,500	38,900,000	119,500,000
1897.....	84,350,000		131,000,000	23,750,000
1898.....	31,450,000	14,001,600	132,000,000	69,200,000
1899.....	90,650,000		605,080,000	44,700,000
1900.....	37,734,400	62,200,000	30,000,000	142,900,000
1901.....	20,839,000	143,000,000	24,491,250	172,000,000
1902.....	50,000,000	13,000,000	242,250,000	480,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Total value of securities issued at the Berlin Stock Exchange during the years 1882-1908—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1903.....	43,293,100	32,713,000	36,260,000	85,404,900
1904.....	100,393,000	225,229,000	10,000,000	498,114,000
1905.....	128,247,400	457,070,000	684,000,000	158,700,000
1906.....	25,200,000	320,415,200	5,000,000	121,835,750
1907.....	47,550,000	357,990,000	.....	6,620,315,232
1908.....	209,734,400	278,154,900	.....	268,120,000

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1883.....	3,000,000	.....	.....	.....
1890.....	.....	.....	12,000,000	235,000,000
1891.....	.....	.....	.....	508,000,000
1892.....	.....	.....	12,000,000	340,000,000
1893.....	.....	.....	66,500,000	25,000,000
1894.....	1,000,000	.....	.....	10,000,000
1895.....	11,100,000	.....	106,000,000	.....
1896.....	.....	.....	4,000,000	48,000,000
1897.....	1,750,000	.....	20,000,000	29,000,000
1898.....	17,000,000	.....	75,000,000	.....
1899.....	4,000,000	.....	112,000,000	15,700,000
1900.....	13,000,000	5,000,000	.....	50,000,000
1901.....	15,000,000	118,000,000	9,800,000	17,000,000
1902.....	12,500,000	.....	.....	416,000,000
1903.....	29,142,100	.....	35,000,000	54,904,900
1904.....	6,000,000	48,779,000	.....	460,317,000
1905.....	5,652,400	67,000,000	3,200,000	60,000,000
1906.....	10,000,000	81,500,000	.....	.....
1907.....	24,000,000	63,720,000	.....	.....
1908.....	7,000,000	118,154,900	.....	65,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1888.....	10,400,000			158,340,000
1889.....	26,520,000	145,740,000		170,520,000
1891.....				50,750,000
1892.....			14,000,000	
1894.....	6,750,000			
1895.....	117,748,000			
1896.....		14,062,500		
1898.....			51,000,000	
1899.....			463,080,000	
1901.....			13,691,250	
1902.....			242,250,000	
1905.....		77,520,000	678,300,000	
1907.....		142,800,000		6,481,565,232
1908.....	199,834,400			

GERMAN MORTGAGE BONDS.

1885.....	7,000,000			
1889.....	15,718,200			
1891.....				3,000,000
1892.....				20,000,000
1894.....				4,118,000
1895.....				20,000,000
1896.....	30,000,000			
1897.....			60,000,000	
1899.....			30,000,000	
1900.....			30,000,000	
1901.....		15,000,000		
1902.....		10,000,000		
1903.....		25,000,000		
1904.....	30,000,000	120,000,000		
1905.....		220,000,000		15,000,000
1906.....		15,000,000		
1907.....		55,000,000		50,000,000
1908.....		90,000,000		

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN MORTGAGE BONDS.

Year, ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks, ^b	Issued jointly with other banks and great banks, ^b
	Marks.	Marks.	Marks.	Marks.
1895.....	6,075,000			
1896.....	9,000,000		17,000,000	
1905.....	67,500,000			

GERMAN RAILWAY SHARES.

1894.....	1,200,000			
1896.....				1,800,000
1906.....		40,000,000		

GERMAN RAILWAY BONDS.

1899.....	25,000,000			
1900.....	4,000,000			
1901.....	1,839,000			
1905.....				11,900,000
1906.....				4,500,000
1908.....		4,000,000		

FOREIGN RAILWAY SHARES.

1882.....	12,920,000			
1890.....	2,740,060			
1900.....		48,000,000		
1901.....				80,000,000
1904.....		25,500,000		
1905.....	25,000,000	15,300,000		

FOREIGN RAILWAY BONDS.

1883.....	10,000,200			
1884.....	26,413,200			
1890.....				20,400,000
1891.....			29,499,900	16,320,000
1892.....			15,000,000	12,000,000
1893.....				64,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN RAILWAY BONDS—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks, ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1894.....				32,640,000
1895.....				32,640,000
1896.....	48,948,000			
1906.....				1,687,500

GERMAN STREET-RAILWAY SHARES.

1894.....	4,275,000			
1895.....	3,000,000			
1896.....	8,650,000			
1897.....	1,350,000			1,250,000
1898.....			6,000,000	
1899.....	26,000,000			
1900.....				1,200,000
1902.....	23,000,000			
1904.....				14,297,000
1906.....				500,000

GERMAN STREET-RAILWAY BONDS.

1894.....				16,000,000
1896.....				7,500,000
1897.....				2,500,000
1900.....				3,000,000
1901.....				5,500,000

BANK SHARES.

1883.....	12,000,000			
1887.....	12,000,000			
1889.....	16,800,000	68,000,000		
1891.....		300,000		50,400,000
1892.....	10,000,000			
1894.....				32,050,000
1895.....	15,000,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

BANK SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1896.....			2,900,000	26,000,000
1897.....	78,000,000			
1898.....	9,600,000			8,000,000
1899.....	29,600,000			
1901.....				24,000,000
1903.....		7,713,000		
1904.....	41,000,000			12,500,000
1905.....	300,000	6,500,000		16,000,000
1906.....	10,500,000	22,100,000		6,250,000
1907.....	20,600,000	25,500,000		20,000,000

INDUSTRIAL SHARES.

1886.....	320,000		31,966,800	
1887.....	2,000,000			
1888.....	15,000,000			
1889.....	10,500,000		4,000,000	
1890.....	3,360,000		3,500,000	750,000
1891.....		3,600,000		
1892.....	140,000			
1893.....				3,750,000
1894.....	600,000	3,000,000	6,000,000	6,000,000
1895.....	2,400,000	4,750,000		
1896.....	2,800,000	8,800,000	15,000,000	36,200,000
1897.....	750,000			
1898.....	4,850,000	2,001,600		21,200,000
1899.....	6,050,000	40,100,000		29,000,000
1900.....	20,734,400	9,200,000		53,700,000
1902.....	1,000,000			28,000,000
1903.....	5,700,000		1,260,000	18,500,000
1904.....	20,193,000	10,950,000		11,000,000
1905.....	28,195,000	60,750,000		49,800,000
1906.....	4,700,000	79,315,200	5,000,000	91,750,750
1907.....	2,950,000	37,000,000		41,250,000
1908.....	2,900,000	23,000,000		31,800,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

INDUSTRIAL BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1888.....	11,250,000			
1889.....	12,600,000			
1892.....		6,000,000		
1893.....		34,000,000		
1895.....		11,500,000		
1896.....	1,250,000	7,500,000		
1897.....	2,500,000			
1898.....		12,000,000		40,000,000
1900.....				35,000,000
1901.....	4,000,000	10,000,000	1,000,000	45,500,000
1902.....	13,500,000	3,000,000		36,000,000
1903.....	8,451,000			12,000,000
1904.....	3,200,000	20,000,000	10,000,000	
1905.....	1,600,000	10,000,000	2,500,000	6,000,000
1906.....		82,500,000		17,147,500
1907.....		33,970,000		27,500,000
1908.....		43,000,000		171,320,000

A. SCHAFFHAUSEN'SCHR BANKVEREIN.

Total value of securities issued at the Berlin Stock Exchange during the years 1882-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1890.....				20,100,000
1891.....				450,000,000
1892.....	18,000,000		3,000,000	346,000,000
1893.....	19,980,000	3,000,000		
1894.....	36,189,000		12,000,000	110,500,000
1895.....	106,000,000	17,000,000	2,500,000	15,500,000
1896.....	40,870,000	7,121,000	18,850,000	5,050,000
1897.....	127,558,600	11,000,000	17,870,000	20,000,000
1898.....	135,589,000	43,544,000	5,000,000	23,000,000
1899.....	69,950,000	27,780,000		29,700,000
1900.....	45,700,000	18,600,000	12,500,000	130,450,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Total value of securities issued at the Berlin Stock Exchange during the years 1882-1908—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1901.....	4,800,000	33,700,000	21,000,000	101,500,000
1902.....	44,500,000	11,000,000	26,000,000	76,000,000
1903.....	8,600,000	43,400,000	30,000,000	37,000,000
1904.....	37,784,000	231,179,000	60,000,000	68,797,000
1905.....	13,550,000	290,297,770	30,000,000	749,600,000
1906.....	60,500,000	185,815,200	31,000,000	140,359,000
1907.....	4,684,600	154,920,000	31,520,000	105,500,000
1908.....	600,000	238,320,000	30,000,000	216,870,000

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1891.....				450,000,000
1892.....			3,000,000	340,000,000
1894.....	2,500,000			
1895.....	5,500,000	3,000,000	2,500,000	12,000,000
1896.....		2,321,000	8,100,000	2,800,000
1897.....	3,500,000		17,500,000	20,000,000
1898.....		4,000,000		
1899.....		7,500,000		15,700,000
1900.....			10,000,000	40,000,000
1901.....		2,500,000	15,000,000	5,000,000
1902.....	23,000,000		26,000,000	50,000,000
1903.....	5,000,000	6,000,000	30,000,000	
1904.....		39,779,000	60,000,000	18,000,000
1905.....		10,000,000	30,000,000	
1906.....		2,000,000	30,000,000	
1907.....		41,220,000	30,000,000	
1908.....		96,500,000	30,000,000	65,000,000

FOREIGN PUBLIC SECURITIES.

1905.....		77,625,170		678,300,000
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^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

GERMAN MORTGAGE BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1894.....	20,000,000			
1895.....	80,000,000			
1897.....	20,000,000			
1898.....	60,000,000			
1900.....	30,000,000			
1902.....	20,000,000			
1903.....		20,000,000		
1904.....		110,000,000		
1905.....		165,000,000		15,000,000
1907.....		45,000,000		50,000,000
1908.....		60,000,000		

GERMAN RAILWAY SHARES.

1898.....			5,000,000	5,000,000
1899.....				5,000,000
1900.....				9,200,000
1904.....				14,297,000
1906.....				4,024,000
1908.....				11,000,000

FOREIGN RAILWAY SHARES.

1901.....				60,000,000
1904.....		25,500,000		
1905.....		15,300,000		
1906.....				1,687,500

GERMAN RAILWAY BONDS.

1898.....				10,000,000
1900.....				13,000,000
1901.....				9,500,000
1905.....				11,900,000
1906.....				4,500,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

FOREIGN RAILWAY BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1894.....				100,000,000

BANK SHARES.

1892.....	12,000,000			
1894.....	4,000,000			4,500,000
1895.....	12,000,000	7,500,000		
1896.....	4,000,000			2,250,000
1897.....	30,000,000	6,000,000		
1898.....	5,500,000	9,000,000		8,000,000
1899.....	34,800,000			
1901.....	600,000		6,000,000	24,000,000
1904.....	25,000,000			12,500,000
1905.....	8,750,000	6,500,000		16,000,000
1906.....	35,200,000	22,100,000		16,250,000
1907.....				20,000,000

INDUSTRIAL SHARES.

1890.....				20,100,000
1892.....	1,500,000			
1893.....	16,980,000	3,000,000		
1894.....	3,689,000		12,000,000	6,000,000
1895.....	8,500,000	3,000,000		
1896.....	33,620,000	4,800,000	750,000	
1897.....	74,058,600		370,000	
1898.....	29,589,000	16,044,000		
1899.....	35,150,000	8,280,000		9,000,000
1900.....	15,700,000	18,600,000	2,500,000	43,250,250
1901.....	4,200,000	15,200,000		
1902.....	1,500,000	8,000,000		
1903.....	3,600,000	11,400,000		25,000,000
1904.....	12,784,000	25,400,000		21,000,000
1905.....	4,800,000	5,872,600		22,400,000
1906.....	25,300,000	104,415,200	1,000,000	89,500,000
1907.....	4,684,600	51,000,000	1,520,000	20,500,000
1908.....	600,000	22,700,000		34,550,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of securities issued and listed at the Berlin Stock Exchange during the years 1882-1908—Continued.

INDUSTRIAL BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1892.....	4,500,000			6,000,000
1893.....	3,000,000			
1894.....	6,000,000			
1895.....		3,500,000		3,500,000
1896.....	3,250,000		10,000,000	
1897.....		5,000,000		
1898.....	40,500,000	14,500,000		
1899.....		12,000,000		
1900.....				25,000,000
1901.....		16,000,000		3,000,000
1902.....		3,000,000		26,000,000
1903.....		6,000,000		12,000,000
1904.....		30,500,000		3,000,000
1905.....		10,000,000		6,000,000
1906.....		57,300,000		24,397,500
1907.....		17,700,000		15,000,000
1908.....		59,120,000		106,320,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

APPENDIX VI.

TOTAL VALUE OF SECURITIES ISSUED AT ALL GERMAN STOCK EXCHANGES BY THE GREAT BANKS DURING THE YEARS 1897-1908.

BANK FÜR HANDEL UND INDUSTRIE.

Total value of securities issued at all German stock exchanges during the years 1897-1908.

[To page 396.]

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	421,644,000	5,700,000	.....	74,750,000
1898.....	269,840,000	68,156,500	25,703,000	451,400,000
1899.....	85,500,000	36,500,000	6,939,500	118,700,000
1900.....	31,600,000	8,200,000	83,139,500	247,400,000
1901.....	73,100,000	34,500,000	5,079,000	386,691,250
1902.....	187,815,700	43,000,000	12,500,000	1,261,099,500
1903.....	421,374,700	30,000,000	11,906,800	3,434,609,074
1904.....	54,509,000	44,000,000	38,500,000	586,040,570
1905.....	90,050,000	81,450,000	21,400,000	1,183,611,000
1906.....	203,250,000	184,000,000	82,497,200	420,158,200
1907.....	14,550,000	190,000,000	9,750,000	7,008,815,232
1908.....	48,810,000	142,700,000	3,300,000	1,573,185,000

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	287,500,000	.....	.....	20,000,000
1898.....	14,703,000	.....	24,703,000	6,000,000
1899.....	26,500,000	7,500,000	4,939,500	27,700,000
1900.....	2,300,000	3,000,000	3,639,500	57,500,000
1901.....	4,500,000	14,500,000	1,079,000	28,000,000
1902.....	1,050,000	6,000,000	8,500,000	17,000,000
1903.....	13,000,000	.....	10,656,800	26,960,100

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

GERMAN PUBLIC SECURITIES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1904.....		16,000,000	35,000,000	405,317,000
1905.....	12,500,000	12,000,000		387,000,000
1906.....	2,000,000	50,000,000	9,017,200	44,000,000
1907.....	5,000,000	42,500,000	2,250,000	438,500,000
1908.....	6,000,000	67,000,000		1,133,325,000

FOREIGN PUBLIC SECURITIES.

1898.....		46,406,500		377,400,000
1900.....				102,000,000
1901.....				226,191,250
1902.....				1,166,599,500
1903.....	280,000,000			3,383,148,974
1904.....				90,426,570
1905.....				678,300,000
1906.....	80,000,000		48,480,000	28,350,000
1907.....				6,481,565,232
1908.....				191,760,000

GERMAN MORTGAGE BONDS.

1897.....	115,000,000			
1898.....	85,300,000			
1900.....	20,000,000		75,000,000	
1902.....	66,040,700	30,000,000		
1903.....	124,324,700	20,000,000		
1904.....	21,500,000	25,000,000		
1905.....		65,000,000	20,000,000	
1906.....	45,000,000		25,000,000	95,360,200
1907.....				10,750,000
1908.....	30,000,000			

FOREIGN MORTGAGE BONDS.

1897.....				51,000,000
1904.....				34,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

GERMAN RAILWAY SHARES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....				1,250,000
1898.....	19,800,000			
1900.....				1,200,000
1902.....	11,450,000			2,000,000
1904.....				14,297,000
1906.....				4,024,000
1908.....				11,000,000

GERMAN RAILWAY BONDS.

1897.....		5,700,000		2,500,000
1898.....	7,500,000			
1900.....	1,300,000			3,000,000
1901.....				5,500,000
1902.....				4,000,000
1905.....	10,000,000			5,000,000
1906.....	7,000,000			4,500,000
1908.....		4,000,000		

FOREIGN RAILWAY BONDS.

1898.....	48,000,000			
1899.....	48,000,000			
1901.....				80,000,000
1906.....				1,687,500
1907.....		42,000,000		

BANK SHARES.

1897.....	16,200,000			
1898.....	78,101,000			8,000,000
1899.....	1,500,000			17,000,000
1900.....	3,000,000			
1901.....				24,000,000
1902.....	52,000,000			
1903.....		4,000,000		

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during
the years 1897-1908—Continued.

BANK SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1904.....				12,500,000
1905.....	22,000,000	3,000,000		16,000,000
1906.....	19,000,000	18,000,000		33,250,000
1907.....	3,400,000			20,000,000
1908.....	6,000,000			8,000,000

INDUSTRIAL SHARES.

1897.....	2,944,000			
1898.....	2,936,000	9,750,000		20,000,000
1899.....	9,500,000	29,000,000	2,000,000	74,000,000
1900.....		5,200,000	2,500,000	48,700,000
1901.....	41,000,000			
1902.....	30,675,000	1,000,000	2,750,000	28,000,000
1903.....	4,050,000	5,000,000	1,250,000	12,500,000
1904.....	19,009,000	3,000,000		25,000,000
1905.....	33,000,000	1,450,000	1,400,000	80,311,000
1906.....	49,500,000	96,000,000		173,589,000
1907.....	5,150,000	102,000,000	7,500,000	43,000,000
1908.....	6,810,000	24,200,000	3,300,000	54,530,000

INDUSTRIAL BONDS.

1898.....	13,500,000	12,000,000	1,000,000	40,000,000
1899.....				
1900.....	5,000,000		2,000,000	35,000,000
1901.....	27,600,000	20,000,000	4,000,000	23,000,000
1902.....	26,600,000	6,000,000	1,250,000	43,500,000
1903.....		1,000,000		12,000,000
1904.....	14,000,000		3,500,000	4,500,009
1905.....	12,550,000			17,000,000
1906.....	750,000	20,000,000		35,397,500
1907.....	1,000,000	3,500,000		15,000,000
1908.....		47,500,000		174,570,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

BERLINER HANDELS-GESELLSCHAFT.

Total value of securities issued at all German stock exchanges during the years 1897-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	25,848,000	29,350,000	65,685,500	288,760,000
1898.....	13,980,000	69,700,500	40,700,000	313,598,500
1899.....	19,600,000	85,000,000	85,198,000	155,100,000
1900.....	10,500,000	15,200,000	28,500,000	104,300,000
1901.....	4,000,000	54,200,000	.....	235,000,000
1902.....	171,508,800	73,300,000	22,350,000	478,800,000
1903.....	10,225,000	63,000,000	16,100,000	3,396,623,974
1904.....	19,000,000	35,500,000	38,250,000	65,100,000
1905.....	28,350,000	112,150,000	14,000,000	604,000,000
1906.....	21,173,750	69,100,000	.....	254,309,000
1907.....	8,000,000	73,296,000	24,920,000	6,591,435,232
1908.....	18,000,000	69,910,000	62,000,000	438,920,000

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	2,750,000	.....	.....
1899.....	6,000,000	15,700,000
1900.....	14,000,000	.....
1901.....	3,000,000
1902.....	12,000,000	.....
1903.....	3,000,000	.....	.....
1904.....	27,000,000	.....
1905.....	8,000,000	.....	.....	24,000,000
1906.....	26,000,000
1907.....	9,796,000	12,000,000	20,000,000
1908.....	3,000,000	60,000,000	85,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during
the years 1897-1908—Continued.

FOREIGN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1898.....		46,406,500		
1902.....		66,300,000		393,000,000
1903.....				3,379,323,974
1905.....				500,000,000
1906.....				28,350,000
1907.....				6,481,565,232
1908.....				127,500,000

GERMAN MORTGAGE BONDS.

1898.....			20,000,000	
1899.....		70,000,000	20,000,000	
1901.....		20,000,000		
1903.....		40,000,000		
1904.....		15,000,000		
1905.....		75,000,000		
1907.....			10,000,000	
1908.....		20,000,000		

FOREIGN MORTGAGE BONDS.

1902.....			6,750,000	
1904.....			11,250,000	
1906.....		22,500,000		

GERMAN RAILWAY SHARES.

1897.....				3,500,000
1898.....	1,400,000			6,500,000
1899.....	2,100,000			11,050,000
1900.....			8,500,000	8,600,000
1902.....	1,350,000		600,000	
1903.....	3,725,000			
1904.....	1,500,000			5,300,000
1906.....				4,024,000
1908.....		4,210,000		11,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

GERMAN RAILWAY BONDS.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....				2,300,000
1898.....	1,830,000			10,000,000
1899.....				12,500,000
1900.....				14,000,000
1901.....	4,000,000			4,000,000
1902.....				19,650,000
1903.....	1,500,000			
1904.....	2,000,000			4,300,000
1906.....				11,700,000
1907.....		2,000,000		10,000,000

FOREIGN RAILWAY BONDS.

1897.....			36,955,500	243,210,000
1898.....				228,300,500
1899.....			44,800,000	
1900.....				27,000,000
1901.....				160,000,000
1902.....	170,158,800			
1906.....				1,687,500
1907.....		42,000,000		

BANK SHARES.

1897.....	3,498,000			25,500,000
1898.....	7,500,000			8,000,000
1899.....	10,000,000		5,000,000	
1901.....				8,000,000
1903.....		4,000,000		
1904.....	10,000,000	5,000,000		12,500,000
1905.....				16,000,000
1906.....	10,923,750	24,000,000		10,000,000
1907.....				20,000,000
1908.....	18,000,000			8,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during
the years 1897-1908—Continued.

INDUSTRIAL SHARES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1897.....	12,350,000			14,250,000
1898.....	3,250,000	6,294,000	10,000,000	40,798,000
1899.....	7,500,000	8,000,000	9,398,000	91,850,000
1900.....	3,000,000	15,200,000	6,000,000	25,700,000
1901.....		18,200,000		5,000,000
1902.....		1,000,000		29,050,000
1903.....	5,000,000	10,000,000	11,600,000	
1904.....	1,000,000	11,000,000		35,000,000
1905.....	13,850,000	1,750,000	14,000,000	56,500,000
1906.....	10,250,000	17,800,000		152,200,000
1907.....	4,000,000	9,000,000		55,870,000
1908.....		21,200,000	1,000,000	46,100,000

INDUSTRIAL BONDS.

1897.....	10,000,000	26,600,000	28,730,000	
1898.....		17,000,000	10,700,000	20,000,000
1899.....		7,000,000		24,000,000
1900.....	7,500,000			29,000,000
1901.....		16,000,000		55,000,000
1902.....		6,000,000	3,000,000	37,100,000
1903.....		6,000,000	4,500,000	17,300,000
1904.....	4,500,000	4,500,000		8,000,000
1905.....	6,500,000	35,400,000		7,500,000
1906.....		4,800,000		20,347,500
1907.....	4,000,000	10,500,000	2,920,000	4,000,000
1908.....		21,500,000	1,000,000	161,320,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

DEUTSCHE BANK.

Total value of securities issued at all German stock exchanges during the years 1897-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	103,955,000	11,700,000	27,950,000	65,800,000
1898.....	258,279,480	68,406,500	247,149,480	489,004,900
1899.....	347,330,000	77,500,000	10,000,000	606,430,000
1900.....	476,497,000	74,591,200	61,228,000	133,350,000
1901.....	98,347,550	261,700,000	125,320,000	206,000,000
1902.....	217,030,000	140,500,000	172,632,000	705,650,000
1903.....	656,134,040	60,750,000	131,566,300	3,221,204,490
1904.....	736,019,800	82,887,000	843,338,408	527,417,000
1905.....	688,797,900	235,687,000	129,842,000	1,346,550,000
1906.....	762,043,800	267,037,000	291,125,000	1,555,674,856
1907.....	262,763,600	370,270,000	107,915,000	7,100,435,232
1908.....	241,945,000	221,264,000	318,900,000	1,315,865,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	37,950,000	.....	2,450,000	24,000,000
1898.....	8,000,000	4,000,000	3,000,000	.....
1899.....	208,200,000	7,500,000	.....	10,000,000
1900.....	48,200,000	5,000,000	3,228,000	59,000,000
1901.....	13,310,000	172,500,000	94,570,000	42,000,000
1902.....	13,800,000	45,000,000	5,272,000	388,000,000
1903.....	11,873,200	3,500,000	1,000,000	81,865,000
1904.....	17,600,000	20,937,000	3,800,000	448,317,000
1905.....	28,000,000	58,937,000	3,952,000	450,000,000
1906.....	42,400,000	83,437,000	32,000,000	1,321,720,600
1907.....	59,464,000	125,000,000	10,165,000	481,500,000
1908.....	52,575,000	123,654,900	245,000,000	1,016,325,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

FOREIGN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1898.....	116,767,080	46,406,500	86,551,080	423,806,500
1899.....				463,080,000
1901.....	7,818,750			
1902.....		66,300,000	85,860,000	242,250,000
1903.....			4,387,500	3,121,539,490
1904.....			798,219,408	
1905.....	216,960,000			698,700,000
1906.....	75,850,000		173,400,000	
1907.....		142,800,000		6,481,565,232
1908.....				64,260,000

GERMAN MORTGAGE BONDS.

1898.....	80,000,000		120,000,000	
1899.....	5,000,000	70,000,000	10,000,000	
1900.....	55,000,000		10,000,000	
1901.....	30,000,000	35,000,000	30,000,000	
1902.....	101,000,000	10,000,000	60,000,000	
1903.....	126,000,000	45,000,000	110,000,000	
1904.....	45,000,000	29,000,000		
1905.....	82,420,000	100,040,000	90,000,000	
1906.....	45,000,000	15,000,000	50,000,000	34,000,000
1907.....	80,000,000	10,000,000	60,000,000	
1908.....	30,000,000	30,000,000	55,000,000	

FOREIGN MORTGAGE BONDS.

1898.....	8,100,000			
1899.....	11,250,000			
1900.....		13,931,200		
1902.....	33,750,000			
1903.....	45,000,000			
1904.....	67,500,000			
1905.....	56,250,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

GERMAN RAILWAY SHARES

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....			8,500,000	3,500,000
1898.....	5,400,000			
1899.....				5,000,000
1900.....				600,000
1901.....	1,800,000			
1902.....				2,000,000
1904.....				26,300,000
1906.....	1,700,000	40,000,000		
1908.....		4,210,000		

GERMAN RAILWAY BONDS.

1897.....		5,700,000		2,300,000
1899.....	5,000,000			12,500,000
1900.....				10,000,000
1901.....	900,000			
1902.....				23,650,000
1903.....	2,000,000			
1904.....				4,300,000
1906.....	2,500,000			16,204,256
1907.....		2,000,000		10,000,000

FOREIGN RAILWAY SHARES.

1899.....	52,500,000			
1900.....	331,162,000	48,960,000		
1901.....				80,000,000
1902.....	23,100,000			
1903.....	404,835,840			
1904.....	525,000,000			
1905.....	136,743,600			105,000,000
1906.....	481,042,800			
1907.....	73,500,000			

BANK SHARES.

1897.....	52,000,000	6,000,000		25,500,000
1898.....	24,201,600	9,000,000		8,000,000
1899.....	20,880,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during
the years 1897-1908—Continued.

BANK SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1900.....	18,000,000			
1901.....				24,000,000
1902.....	10,252,000			
1903.....	19,400,000			
1904.....	44,750,800			12,500,000
1905.....	109,500,800	4,500,000	14,400,000	16,000,000
1906.....	72,816,000	34,000,000	13,500,000	6,250,000
1907.....	24,999,600			20,000,000
1908.....	43,220,000			

INDUSTRIAL SHARES.

1897.....	10,505,000		10,500,000	10,500,000
1898.....	7,810,800	4,000,000	36,498,400	37,198,400
1899.....	39,000,000			91,850,000
1900.....	18,135,000	6,700,000	5,000,000	34,750,000
1901.....	44,518,800	18,200,000	750,000	5,000,000
1902.....	22,600,000	19,200,000	5,500,000	29,050,000
1903.....	10,100,000	11,250,000	1,000,000	5,000,000
1904.....	29,669,000	2,450,000	30,969,000	26,600,000
1905.....	20,273,500	59,250,000	12,750,000	69,350,000
1906.....	25,235,000	36,800,000	22,225,000	162,300,000
1907.....	13,000,000	44,000,000	17,000,000	62,670,000
1908.....	75,950,000	35,900,000	18,900,000	67,030,000

INDUSTRIAL BONDS.

1897.....	3,500,000		6,500,000	
1898.....	8,000,000	5,000,000	1,100,000	20,000,000
1899.....	5,500,000			24,000,000
1900.....	6,000,000		43,000,000	29,000,000
1901.....		36,000,000		55,000,000
1902.....	12,528,000		16,000,000	20,700,000
1903.....	36,925,000	1,000,000	15,178,800	12,800,000
1904.....	6,500,000	30,500,000	10,350,000	9,400,000
1905.....	38,650,000	13,000,000	8,740,000	7,500,000
1906.....	15,500,000	57,800,000		15,200,000
1907.....	11,800,000	46,470,000	20,750,000	44,700,000
1908.....	40,200,000	27,500,000		168,250,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

DISCONTO-GESELLSCHAFT.

Total value of securities issued at all German stock exchanges during the years 1897-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks	Marks.	Marks.	Marks.
1897.....	711,692,000	30,350,000	331,900,000	365,960,000
1898.....	67,680,900	27,251,600	632,690,784	417,813,280
1899.....	185,724,000	41,100,000	357,200,000	67,500,000
1900.....	122,610,000	23,031,200	204,200,000	240,450,000
1901.....	49,464,600	179,000,000	89,400,000	561,492,000
1902.....	172,000,000	72,000,000	561,600,000	1,505,349,500
1903.....	213,615,188	32,213,000	159,850,000	3,214,824,590
1904.....	259,000,800	64,937,000	51,500,000	585,540,570
1905.....	2,193,222,000	231,337,000	521,271,330	1,141,250,000
1906.....	93,022,340	180,437,000	25,942,200	246,559,000
1907.....	77,499,600	405,796,000	94,550,000	7,010,415,232
1908.....	137,850,000	169,000,000	75,300,000	1,539,655,000

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	18,552,500	2,750,000	40,000,000	.....
1898.....	.....	4,000,000	.....	6,000,000
1899.....	.....	7,500,000	.....	12,000,000
1900.....	.....	.....	8,000,000	7,500,000
1901.....	6,275,800	169,000,000	67,000,000	10,000,000
1902.....	1,000,000	42,000,000	.....	138,000,000
1903.....	4,092,500	9,500,000	.....	64,960,100
1904.....	94,000,000	11,937,000	30,000,000	408,317,000
1905.....	15,488,000	23,937,000	31,500,000	474,000,000
1906.....	2,000,000	63,937,000	.....	26,000,000
1907.....	.....	127,296,000	25,000,000	434,000,000
1908.....	43,200,000	106,000,000	7,000,000	1,133,325,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during
the years 1897-1908—Continued.

FOREIGN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1897.....			286,900,000	
1898.....			448,200,000	51,000,000
1899.....			357,200,000	
1900.....			151,200,000	102,000,000
1901.....				212,500,000
1902.....			561,600,000	1,317,349,500
1903.....			149,850,000	3,125,364,490
1904.....				90,426,570
1905.....			424,936,530	500,000,000
1907.....		142,800,000		6,481,565,232
1908.....			56,700,000	191,760,000

GERMAN MORTGAGE BONDS.

1897.....	678,139,500			50,000,000
1898.....	31,000,000			
1900.....	10,000,000		30,000,000	
1901.....			22,400,000	
1902.....	70,000,000	30,000,000		
1903.....	150,000,000	10,000,000		
1904.....	66,000,000	29,000,000	12,500,000	
1905.....	32,000,000	115,000,000	40,634,800	
1906.....	65,000,000		17,942,200	
1907.....	24,000,000		23,950,000	
1908.....	55,000,000	20,000,000	11,600,000	

FOREIGN MORTGAGE BONDS.

1897.....				51,000,000
1898.....			184,490,784	
1900.....		13,931,200		
1904.....				34,000,000
1907.....	22,500,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

GERMAN RAILWAY SHARES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....				1,250,000
1898.....				5,000,000
1899.....				5,000,000
1900.....	6,000,000			9,200,000
1901.....	1,560,000			
1904.....				35,297,000
1906.....	3,199,200			4,024,000
1908.....				11,000,000

GERMAN RAILWAY BONDS.

1897.....				2,500,000
1898.....				10,000,000
1899.....	25,000,000			
1900.....	42,000,000			7,000,000
1901.....	1,560,000			9,500,000
1905.....				5,000,000
1906.....				4,500,000
1907.....	500,000			
1908.....		4,000,000		

FOREIGN RAILWAY SHARES.

1897.....				243,210,000
1898.....				273,013,280
1899.....	126,000,000			
1900.....				27,000,000
1901.....				214,992,000
1903.....	56,522,688			
1904.....	42,000,000			
1905.....	2,100,000,000			105,000,000
1906.....				1,687,500

BANK SHARES.

1897.....		6,000,000		18,000,000
1898.....	24,500,000	9,000,000		8,000,000
1899.....	4,000,000			17,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

BANK SHARES—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1900.....	27,510,000			
1901.....	7,800,000			24,000,000
1902.....	36,500,000			
1903.....		7,713,000	10,000,000	
1904.....	30,000,800		9,000,000	12,500,000
1905.....	30,834,000		16,000,000	16,000,000
1906.....	3,508,000	6,000,000	8,000,000	23,250,000
1907.....	21,999,600		33,600,000	20,000,000
1908.....	4,500,000			

INDUSTRIAL SHARES.

1897.....	15,000,000		5,000,000	
1898.....	12,180,900	11,751,600		24,800,000
1899.....	30,724,000	28,600,000		33,500,000
1900.....	31,100,000	9,100,000	5,000,000	52,750,000
1901.....	4,768,800			
1902.....	62,000,000			20,000,000
1903.....	3,000,000	5,000,000		12,500,000
1904.....	27,000,000			5,000,000
1905.....	14,900,000	50,000,000	6,200,000	41,250,000
1906.....	16,315,140	57,500,000		159,700,000
1907.....	4,500,000	126,000,000		58,450,000
1908.....	14,150,000	21,000,000		22,250,000

INDUSTRIAL BONDS.

1897.....		21,600,000		
1898.....		2,500,000		40,000,000
1899.....		5,000,000		
1900.....	6,000,000		10,000,000	35,000,000
1901.....	27,500,000	10,000,000		45,500,000
1902.....	2,500,000			30,000,000
1903.....				12,000,000
1904.....		24,000,000		
1905.....		42,400,000	2,000,000	
1906.....	3,000,000	53,000,000		27,397,500
1907.....	4,000,000	9,700,000	12,000,000	16,400,000
1908.....	21,000,000	18,000,000		181,320,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

DRESDNER BANK.

Total value of securities issued at all German stock exchanges during the years 1897-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	85,350,000	.....	82,000,000	23,750,000
1898.....	47,451,600	14,001,600	134,000,000	69,200,000
1899.....	101,700,000	40,100,000	605,980,000	44,700,000
1900.....	44,613,400	62,200,000	32,500,000	142,900,000
1901.....	28,439,000	143,000,000	26,991,250	172,000,000
1902.....	59,546,900	35,200,000	280,530,000	480,000,000
1903.....	47,053,100	33,963,000	1,260,000	90,404,900
1904.....	106,893,000	225,229,000	48,200,000	505,714,000
1905.....	136,122,400	458,270,000	721,400,000	541,700,000
1906.....	65,551,400	320,415,200	662,400,000	1,509,720,806
1907.....	56,820,000	357,990,000	15,000,000	7,091,065,232
1908.....	210,734,400	280,654,900	32,500,000	1,222,380,000

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	1,750,000	.....	20,000,000	20,000,000
1898.....	29,000,000	.....	75,000,000	.....
1899.....	10,000,000	.....	112,000,000	15,700,000
1900.....	13,000,000	5,000,000	.....	50,000,000
1901.....	15,000,000	118,000,000	9,800,000	17,000,000
1902.....	14,000,000	3,000,000	37,280,000	416,000,000
1903.....	29,142,100	.....	.....	54,904,900
1904.....	6,000,000	48,779,000	6,200,000	460,317,000
1905.....	5,652,400	67,000,000	16,500,000	443,000,000
1906.....	10,000,000	81,500,000	562,400,000	1,277,720,600
1907.....	25,500,000	63,720,000	12,000,000	460,000,000
1908.....	7,000,000	118,154,900	29,500,000	955,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

FOREIGN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1898.....			51,000,000	
1899.....			463,080,000	
1901.....			13,691,250	
1902.....			242,250,000	
1905.....	7,875,000	77,520,000	698,700,000	
1907.....		142,800,000		6,481,565,232
1908.....	199,834,400			64,260,000

GERMAN MORTGAGE BONDS.

1897.....			60,000,000	
1899.....			30,000,000	
1900.....			30,000,000	
1901.....		15,000,000		
1902.....		10,000,000		
1903.....		25,000,000		
1904.....	30,000,000	120,000,000		
1905.....		220,000,000		15,000,000
1906.....	35,000,000	15,000,000	95,000,000	95,360,200
1907.....		55,000,000		60,750,000
1908.....		90,000,000		

FOREIGN MORTGAGE BONDS.

1905.....	67,500,000			
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GERMAN RAILWAY SHARES.

1906.....		40,000,000		
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GERMAN RAILWAY BONDS.

1898.....			2,000,000	
1899.....	25,000,000			
1900.....	6,479,000			
1901.....	8,839,000			

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

Value of newly issued securities listed at the German stock exchanges during the years 1897-1908—Continued.

GERMAN RAILWAY BONDS—Continued.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1902.....			1,000,000	
1903.....	1,500,000			
1904.....			7,000,000	
1905.....				11,900,000
1906.....				13,504,256
1908.....		4,000,000	2,000,000	

FOREIGN RAILWAY SHARES.

1900.....		48,000,000		
1901.....				80,000,000
1904.....		25,500,000		
1905.....	25,000,000	15,300,000		

FOREIGN RAILWAY BONDS.

1906.....				1,687,500
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GERMAN STREET RAILWAY SHARES.

1897.....	1,350,000			1,250,000
1898.....			6,000,000	
1899.....	26,000,000			
1900.....				1,200,000
1901.....			1,000,000	
1902.....	26,795,000			
1904.....				14,297,000
1906.....				500,000

GERMAN STREET RAILWAY BONDS.

1897.....				2,500,000
1900.....				3,000,000
1901.....				5,500,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during
the years 1897-1908—Continued.

BANK SHARES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1897.....	78,000,000			
1898.....	9,600,000			8,000,000
1899.....	29,600,000			
1901.....				24,000,000
1903.....		7,713,000		
1904.....	41,000,000		25,000,000	12,500,000
1905.....	300,000	6,500,000		16,000,000
1906.....	10,500,000	22,100,000		6,250,000
1907.....	22,600,000	25,500,000		20,000,000

INDUSTRIAL SHARES.

1897.....	1,750,000		2,060,000	
1898.....	8,851,600	2,001,600		21,200,000
1899.....	7,850,000	40,100,000		29,000,000
1900.....	25,134,400	9,200,000		53,700,000
1901.....	600,000			
1902.....	1,500,000	19,200,000		28,000,000
1903.....	7,460,000	1,250,000	1,260,000	23,500,000
1904.....	20,193,000	10,950,000		18,600,000
1905.....	28,195,000	61,950,000	2,200,000	49,800,000
1906.....	9,550,000	79,315,200	5,000,000	91,750,750
1907.....	5,720,000	37,000,000	3,000,000	41,250,000
1908.....	3,900,000	23,000,000	1,000,000	31,800,000

INDUSTRIAL BONDS.

1897.....	2,500,000			
1898.....		12,000,000		40,000,000
1899.....	3,250,000		900,000	
1900.....			2,500,000	35,000,000
1901.....	4,000,000	10,000,000	2,500,000	45,500,000
1902.....	16,000,000	3,000,000		36,000,000
1903.....	8,951,000			12,000,000
1904.....	9,700,000	20,000,000	10,000,000	
1905.....	1,600,000	10,000,000	4,000,000	6,000,000
1906.....	1,501,400	82,500,000		22,947,500
1907.....	3,000,000	33,970,000		27,500,000
1908.....		45,500,000		171,320,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

The German Great Banks

A. SCHAFFHAUSEN'SCHER BANKVEREIN.

Total value of securities issued at all German stock exchanges during the years 1897-1908.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	127,558,600	11,000,000	17,870,000	20,000,000
1898.....	135,589,000	43,544,000	27,250,000	23,000,000
1899.....	85,450,000	27,780,000	1,350,000	29,700,000
1900.....	45,700,000	18,600,000	14,500,000	130,450,000
1901.....	4,800,000	33,700,000	21,000,000	101,500,000
1902.....	46,000,000	11,000,000	26,000,000	76,000,000
1903.....	11,600,000	43,400,000	30,000,000	37,000,000
1904.....	39,284,000	231,179,000	417,617,000	68,797,000
1905.....	20,550,000	290,297,770	31,250,000	749,600,000
1906.....	60,500,000	185,815,200	31,000,000	140,359,000
1907.....	184,684,600	154,920,000	33,470,000	105,500,000
1908.....	5,100,000	238,320,000	30,000,000	216,870,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

Value of newly issued securities listed at German stock exchanges during the years 1897-1908.

GERMAN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	3,500,000	.....	17,500,000	20,000,000
1898.....	.....	4,000,000	.....	.....
1899.....	.....	7,500,000	.....	15,700,000
1900.....	.....	.....	10,000,000	40,000,000
1901.....	.....	2,500,000	15,000,000	5,000,000
1902.....	23,000,000	.....	26,000,000	50,000,000
1903.....	5,000,000	6,000,000	30,000,000	.....
1904.....	.....	39,779,000	408,317,000	18,000,000
1905.....	.....	10,000,000	30,000,000	.....
1906.....	.....	2,000,000	30,000,000	.....
1907.....	.....	41,220,000	30,000,000	.....
1908.....	.....	96,500,000	30,000,000	65,000,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

National Monetary Commission

Value of newly issued securities listed at all German stock exchanges during the years 1897-1908—Continued.

FOREIGN PUBLIC SECURITIES.

Year. ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks. ^b	Issued jointly with other banks and great banks. ^b
	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Marks.</i>
1905.....		77,625,170		678,300,000

GERMAN MORTGAGE BONDS.

1897.....	20,000,000			
1898.....	60,000,000			
1900.....	30,000,000			
1902.....	20,000,000			
1903.....		20,000,000		
1904.....		110,000,000		
1905.....		165,000,000		15,000,000
1907.....		45,000,000		50,000,000
1908.....		60,000,000		

GERMAN RAILWAY SHARES.

1898.....			5,000,000	5,000,000
1899.....				5,000,000
1900.....				9,200,000
1904.....				14,297,000
1906.....				4,024,000
1908.....				11,000,000

FOREIGN RAILWAY SHARES.

1901.....				60,000,000
1904.....		25,500,000		
1905.....		15,300,000		
1906.....				1,687,500

GERMAN RAILWAY BONDS.

1898.....			10,000,000	10,000,000
1900.....				13,000,000
1901.....				9,500,000
1904.....			3,680,000	
1905.....			1,250,000	11,900,000
1906.....				4,500,000

^a Only those years are given during which issues were effected.

^b Including private banking firms.

The German Great Banks

Value of newly issued securities listed at German stock exchanges during the years 1897-1908—Continued.

BANK SHARES.

Year, ^a	Issued exclusively by the bank.	Issued jointly with other great banks.	Issued jointly with other banks, ^b	Issued jointly with other banks and great banks. ^b
	Marks.	Marks.	Marks.	Marks.
1897.....	30,000,000	6,000,000		
1898.....	5,500,000	9,000,000		8,000,000
1899.....	34,800,000			
1901.....	600,000		6,000,000	24,000,000
1904.....	25,000,000			12,500,000
1905.....	8,750,000	6,500,000		16,000,000
1906.....	35,200,000	22,100,000		16,250,000
1907.....	180,000,000			20,000,000

INDUSTRIAL SHARES.

1897.....	74,058,600		370,000	
1898.....	29,589,000	16,044,000	9,750,000	
1899.....	40,650,000	8,280,000	1,350,000	9,000,000
1900.....	15,700,000	18,600,000	4,500,000	43,250,000
1901.....	4,200,000	15,200,000		
1902.....	3,000,000	8,000,000		
1903.....	3,600,000	11,400,000		25,000,000
1904.....	12,784,000	25,400,000	1,620,000	21,000,000
1905.....	4,800,000	5,872,600		22,400,000
1906.....	25,300,000	104,415,200	1,000,000	89,500,000
1907.....	4,684,600	51,000,000	3,470,000	20,500,000
1908.....	3,100,000	22,700,000		34,550,000

INDUSTRIAL BONDS.

1897.....		5,000,000		
1898.....	40,500,000	14,500,000	2,500,000	
1899.....	10,000,000	12,000,000		
1900.....				25,000,000
1901.....		16,000,000		3,000,000
1902.....		3,000,000		26,000,000
1903.....	3,000,000	6,000,000		12,000,000
1904.....	1,500,000	30,500,000	4,000,000	3,000,000
1905.....	7,000,000	10,000,000		6,000,000
1906.....		57,300,000		24,397,500
1907.....		17,700,000		15,000,000
1908.....	2,000,000	59,120,000		106,320,000

^a Only those years are given during which issues were made.

^b Including private banking firms.

APPENDIX VII.

THE DEVELOPMENT OF CONCENTRATION OF THE GERMAN GREAT BANKS.¹

I. BANK FÜR HANDEL UND INDUSTRIE IN DARMSTADT.

[Founded in 1853. Capital, 154,000,000 marks. Surplus, 30,250,000 marks.]

[To page 64r.]

Branches (7).—Frankfort on-the-Main since 1864 (agency as early as 1854); Berlin since 1871; Hannover since 1900; Strassburg since 1901; Halle and Stettin (with deposit office Bollwerk) since 1906; Leipzig (with deposit office Leutzsch) since 1908.

*Commandites*² (4).—Rümelin & Co. in Heilbronn; Wingenroth, Scherr & Co. in Mannheim; Schmitz, Heidelberger & Co. in Mainz; Fuld & Co., Pforzheim.

Deposit offices (31).—Since 1900, viz, 16 in Berlin; 2 in Charlottenburg; 1 each in Halensee, Gross-Lichterfelde W., Zehlendorf, Kottbus, Forst (Lausitz), Frankfort-on-the-Oder, Greifswald, Guben, Lahr (Baden), Offenbach-on-the-Main, Prenzlau, Spremberg (Mark), Stargard (Pomerania).

Establishments (*Niederlassungen*) (5).—In Freiburg-in-the-Breisgau, Giessen, Landau (Pfalz), Neustadt (Haardt), Quedlinburg.

Agencies (7).—In Alsfeld, Butzbach, Herborn, Pasewalk, Sangerhausen, Senftenberg, and Sorau.

The Darmstädter Bank has founded or participated in the founding of the following subsidiary institutions (*Tochtergesellschaften*).³

1871. The *Amsterdamsche Bank* in Amsterdam (share capital 6,000,000 florins.)

The Bank für Handel und Industrie is represented on the supervisory board by three members of its own managing board. 1881. The *Württembergische Bankanstalt*, formerly Pflaum & Co., in Stuttgart (share capital 10,000,000 marks). Since 1881 it has had a contractual community of interest with the *Württembergische Vereinsbank* in Stuttgart, founded in 1869 (share capital 30,000,000 marks; branches in Heilbronn, Reutlingen, and Ulm; commandites in Ellwangen, Esslingen, and Gerabronn). The two banks share up to 1930 profits and losses pro rata of their share capital, i. e., in the proportion of 1 to 3.⁴

The Bank für Handel und Industrie is represented on the supervisory board of the *Württembergische Bankanstalt* by two members of its own managing board.