National Security and National Finance: Locating the Origins of Modern Financial Capitalism

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National Security and National Finance:
Locating the Origins of Modern Financial Capitalism

RICHARD CARNEY
Abstract

Modern political economies are distinguished from each other by the institutions that mediate actors’ interactions, falling somewhere along a spectrum between pure market and non-market mechanisms. But how did these institutions originally emerge? With regard to the financial sector, I argue that higher levels of national security threats in combination with economic backwardness lead to a financial system more dominated by banking relationships. To evaluate the argument, I conduct a focused comparison of Japan and Germany before WWII since they had similar political and legal institutions and were both ‘backward’, but differed with regard to the security threats they faced. Germany confronted more menacing threats from neighbouring great powers as well as greater domestic unrest following unification in 1871, which led the government to direct lending to sectors vital to the nation’s security via banks. Japan, by contrast, did not face the same level of threats to its security, and consequently securities markets were more dominant.
I. Introduction

How did different types of national financial systems originally emerge? The study of financial systems is one aspect of national political economies that falls within the Varieties of Capitalism (VoC) literature (Hall and Soskice, 2001). Coordinated market economies (CMEs) privilege relationship-based interactions over the more market-based forms of coordination found among actors in liberal market economies (LMEs). Accordingly, banking finance is more prevalent in CMEs, while securities markets are more dominant among LMEs. VoC analysis embeds national financial systems into a broader set of institutional practices including corporate governance, wage determination, job security, welfare systems, education and training, product-market competition, monetary and fiscal policy. They argue that financing practices interact with these other variables, so that the elements need to be treated as a whole, not in isolation. I am sympathetic to that interest in institutional complementarity, but I narrow the research focus to national financial systems in order to emphasize and measure them.

In this paper, I examine the effects of a variable commonly disregarded by scholars of comparative political economy: national security threats. While such threats are ever present to greater or lesser degrees, little work has been done to illustrate whether there is a systematic effect on the structure of national political economies. I seek to fill this void by examining whether severe security threats, in combination with economic backwardness, cause governments to move the domestic financial system toward a greater reliance on banks than capital markets since banks allow savings to be mobilized more effectively in economically backward countries, and allow the government to direct financing to those sectors that best contribute to the nation’s security.

To evaluate the argument, I compare Germany and Japan in the late nineteenth and early twentieth century since they shared several important features in common, but differed with regard to the severity of the national security threats they faced. Their commonalities included: (1) similar government institutions and legal systems (Japan’s 1889 Meiji Constitution was modeled after Germany’s 1871 Constitution and Japan adopted Germany’s civil law system), (2) well-functioning capital markets, and (3) late industrialization. Despite these similarities, German firms relied heavily upon banking finance, while Japanese firms depended far more extensively on securities markets. I argue that Germany relied heavily on banks partly because banks permitted leaders to funnel money to those sectors that bolstered Germany’s national security apparatus. On the one hand, there were geopolitical concerns: Russia in the east, France in the west, Austria-Hungary to the south, and the UK at sea. On the other hand, there was also considerable domestic instability following Germany’s unification in 1871, which threatened the power and authority of the ruling elites, thereby leading to a build-up of military forces for domestic security purposes. When Bismarck instituted Germany’s constitution in 1871, he granted the military considerable independence from the legislature, placing it under the control of the emperor. Consequently, the emperor, with support from others in government, used banks as policy allies of the government to direct financing to those sectors that either served the dual purpose of enhancing economic growth and national defence, such as railways, or which bolstered national security alone. While early modern Japanese leaders are well-known to have employed the slogan ‘rich nation, strong army’ to guide national policymaking, Japan did not face the same level of threats to its national security. Consequently, Japanese businesses had greater scope for private action in comparison to their German counterparts who worked more closely with the government during its industrializing period.

This study seeks to complement the Gerschenkronian argument that large banks acted as effective mobilizers of capital for German industrialization, not to discredit it. That is, I see these large banks as serving the dual purpose of propelling Germany’s industrialization as well as serving as useful government allies to bolster the young republic’s national security. Because the origins of contemporary Germany’s coordinated market economy can be traced to the strong ties that developed
between banks and firms in its industrializing period, the paper seeks to illuminate the link between national security and the origins of modern capitalism.

In the next section, I discuss various explanations for Germany’s reliance on banks, as opposed to securities markets, during its period of late industrialization. I then delineate my argument. The majority of the paper is devoted to the following section which contrasts Germany and Japan, with focused comparisons of their financial systems, pace of industrialization, political systems, and the influence of interest groups. Because railways were the cornerstone of German industrialization, I illustrate the dual purpose they served for economic growth and military strategy, and the government’s close involvement with their development in contrast to Japan’s hands-off approach. Finally, I conclude.

II. Alternative Explanations

The most prominent argument with regard to Germany’s high level of banking concentration and dominance at the end of the nineteenth century is Alexander Gerschenkron’s. He argues that late industrialization pushed Germany (among other European nations) toward a reliance on a concentrated banking sector dominated by universal banks:

The industrialization of England had proceeded without any substantial utilization of banking for long-term investment purposes. The more gradual character of the industrialization process and the more considerable accumulation of capital, first from earnings in trade and modernized agriculture and later from industry itself, obviated the pressure for developing any special institutional devices for provision of long-term capital to industry. By contrast, in a relatively backward country capital is scarce and diffused, the distrust of industrial activities is considerable, and, finally, there is greater pressure for bigness because of the scope of the industrialization movement, the larger average size of plant, and the concentration of industrialization processes on branches of relatively high ratios of capital to output. To these should be added the scarcity of entrepreneurial talent in the backward country. It is the pressure of the circumstances which essentially gave rise to the divergent development in banking over large portions of the Continent as against England.1 (italics mine)

Many have argued, however, that Gerschenkron’s thesis does not fully consider political and legal factors in the development of financial systems. One view considers the development of the banking system and the role of the central bank in facilitating different kinds of industrialization. The Bubble Act of 1720 and the monopoly of the Bank of England over limited liability banking until 1825, for example, kept the British banks excessively small and conservative. Moreover, the lack of a dependable lender of last resort made bankers reluctant to invest in new, risky and potentially illiquid enterprises (Kennedy, 1992, and Tilly, 1994). According to this argument the Reichsbank both squeezed other banks out of much of the short-term commercial business and facilitated those banks’ provision of riskier investment services. Capie (1999), however, argues that the lender of last resort function did not become dependable in Europe until after the turn of the twentieth century. Thus, there is scepticism about the timing and role of the central bank with regard to Germany’s industrialization.

La Porta, Lopez-de-Silanes, Shleifer, and Vishny (LLSV, 1996, 1999) argue for the importance of legal traditions in determining the character of a country’s financial system. They argue that common law countries are more market-oriented than civil law countries because of the legal protection for investors. Because common law judges can make rulings based on whether a defendant has violated the spirit of the law, investors in these countries have greater protection from managers’ actions that violate the law’s intent. In civil law countries, on the other hand, if a manager does not contravene an explicitly detailed edict, courts have a more difficult time punishing the manager. Common law systems are found in Anglo-American states such as Britain, the US, New Zealand, Australia, and Canada, while civil law systems are found in most other democracies, including Japan, but are especially prominent in Europe.

1 Gerschenkron, 1952.
However, LLSV’s argument is not robust when tested across the entirety of the twentieth century since many civil law countries, such as France and Japan, had well-developed capital markets at the beginning of the century. Moreover, the argument is also theoretically unappealing since recent research on political influence on the American judicial system illustrates that politics influences court decisions even in a common law country, suggesting that politics plays the more fundamental role (McNollgast, 1995; Pablo T. Spiller, and Rafael Gely, 1990; John DeFigueiredo, and Emerson H. Tiller, 1996; G. Zuk, G.S. Gryszki, and D. Barrow, 1993; Gary Zuk, Deborah J. Barrow, and Gerard S. Gryszki, 1996).

Verdier (1997 and 1999) argues that universal banking is prevalent when there is both a segmented deposit market, dominated by non-profit and provincial banks, and a reliable lender of last resort that could ensure liquidity in the banking system. Furthermore, he argues that these two preconditions for universality emerged simultaneously only when state centralization was sufficient to provide a strong central bank with credible lender of last resort status, but limited enough to permit coexistence of provincial and, in his terms, ‘center’ banks. However, Verdier acknowledges that political centralization was neither solitary nor decisive in determining financial structure in most cases. Moreover, the lender of last resort function was not well dependable until after the turn of the twentieth century as Capie (1999) argues. Thus, Verdier does not offer a convincing alternative to Gerschenkron’s hypothesis.

So far, the literature has not offered a convincing and central role for political or legal explanations that would account for the different forms of financial development in Germany and Japan at the turn of the twentieth century.

III. Argument

Gerschenkron uses the term ‘backward’ to refer to those countries which are relatively more dependent on a ‘pre-modern’ agricultural sector than their neighbours, and which likewise lack a well-developed industrial sector with associated financing institutions that can mobilize vast amounts of capital via markets. The extent of a country’s backwardness acts as the key causal mechanism for determining whether large banks are used to mobilize and transfer savings for industrializing purposes. I seek to modify this view by emphasizing the importance of an additional factor which also influences whether a country mobilizes savings and lends funds via large banks: national security threats. A ‘backward’ country will seek to mobilize savings via large banks only when it faces a severe and persistent security threat. Banks are useful for mobilizing capital if markets are underdeveloped, and because it is easier for government leaders to direct financing to those sectors which best bolster the nation’s security. In this view, countries will depend more heavily on banks as the interaction of the extent of underdevelopment and the level of the security threat increases. The longer that this situation endures, the more entrenched that the bank-firm relationships and the affiliated political economic institutions will become.2

In the late nineteenth century, both Germany and Japan were ‘backward’, but only Germany turned to banks to industrialize. I argue that Germany faced more severe threats to its national security than Japan, and that German political leaders consequently favoured the development of a banking dominated financial system since this would allow them to direct financing to sectors that would bolster national security and foster industrialization. In Japan, national security threats were not as high, and so political leaders did not intervene as heavily in the economy, thereby allowing the development of a financial system more reliant on equities markets. But once security threats became sufficiently high during the war with China and during World War II, Japanese leaders also moved the financial system toward greater banking dominance, laying the groundwork for Japan’s postwar banking-oriented financial system.3

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2 Additionally, the government will be more likely to accommodate labor demands to ensure that industrialization proceeds as quickly as possible.

3 Japan’s postwar industrialization also saw accommodations being made to labor to ensure rapid rebuilding of the economy (e.g., life-time employment). During the interwar period, by contrast, labor was treated in a manner very similar to the United States;
IV. Comparing Germany and Japan

In this section, I first show that Germany had a banking-dominated financial system while Japan relied extensively on securities markets. Next, I show that Japan industrialized late—later than Germany, in fact—but relied on markets. I then detail the structure of their governments, illustrating that they had similar institutions and delineating which groups actually had political power. In particular, I show that large firms and the military both had considerable political influence, but that the German government paid far greater attention to its military needs while pursuing its industrialization policies.

IV.A. The Financial Systems

Japan relied heavily on its securities markets from the 1880s to the 1930s. Hoshi and Kashyap (2001) describe the character of the financial system:

The first financial regime starts in the 19th century and continues until the beginning of Japanese hostilities with China in the late 1930s. […] this era was characterized by the relatively low importance of banks in the financing of corporations. For instance, bank financing of large firms was often less important than bond financing. Even among the large industrial alliances known as zaibatsu, bank financing was not a very important funding source during this period.

In contrast, securities markets were quite active. New shares were routinely issued by the leading corporations and shares were traded actively on stock exchanges and over-the-counter. The trading was done by a diverse group; the banks as a rule did not own much equity and the notion of “shares held in friendly hands” was rarely mentioned. Bond markets were also deep and vibrant. It was not unusual to see years where more net corporate funding was done in bond markets than through bank borrowing.  

Figure one places the evolution of Japan’s financial system in historical perspective, clearly illustrating its reliance on markets prior to 1937, and its subsequent move to banking dominance. Table 1 likewise illustrates the increasing concentration of the five largest banks from 1900 to 1945.

![Figure 1: Japan: Allocation of Private Sector Assets, 1900-1970](image)


(Contd.) _______________________________

layoffs were common with downturns in the business cycle and employers successfully discouraged the formation of unions, following the methods used in the United States after visits by business executives in the early 1920s (Garon, 1990).

4 Hoshi and Kashyap, 2001, p. 2.

5 Data calculated as demand deposits relative to securities (net).
Table 1: Relative Size of the Five Largest Banks (in percents of total for all ordinary and savings banks)

<table>
<thead>
<tr>
<th>Year</th>
<th>Paid-in-capital</th>
<th>Deposits</th>
<th>Lending</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>5.4</td>
<td>15.1</td>
<td>10.6</td>
</tr>
<tr>
<td>1910</td>
<td>10.2</td>
<td>17.4</td>
<td>15.1</td>
</tr>
<tr>
<td>1920</td>
<td>13.9</td>
<td>20.5</td>
<td>16.5</td>
</tr>
<tr>
<td>1930</td>
<td>24.1</td>
<td>31.0</td>
<td>27.6</td>
</tr>
<tr>
<td>1940</td>
<td>31.6</td>
<td>35.4</td>
<td>44.7</td>
</tr>
<tr>
<td>1945</td>
<td>40.4</td>
<td>45.7</td>
<td>58.6</td>
</tr>
</tbody>
</table>


Germany, by contrast, is well known for its continually heavy reliance on banks, and the development and concentration of its universal banks. Speculative excesses after the unification of Germany in 1871, and ending in the bust of 1873, led to slow economic growth in the ensuing decade, and initiated consolidation in the banking industry. Consolidation continued during the next several decades, and by 1914 there were 8 ‘Great Banks’ (the Great Banks were simply a group of very large Berlin banks, such as the ‘4 D-Banken’—the Deutsche, Dresdner, Darmstädter, and Diskonto-Gesellschaft—along with the Schaafhausen’scher Bankverein and the Berliner Handelsgesellschaft) and 86 major regional credit banks. But large banks also formed long-term relationships with smaller banks in which they had no formal ownership interest. A Great Bank’s ‘group’ could control assets considerably larger than those of the bank alone. And, according to Whale (1930), nine Berlin banks with their groups controlled 83 percent of all working funds owned by the 160 largest credit banks in 1913. Indeed, by World War I Germany’s banks were by world standard enormous. In 1913 the three largest incorporated entities (by assets) in Germany were banks, and banks comprised 17 of the 25 largest German firms in that year (Guinnane, 2002). That relative bank position was equaled in no other industrial country at the time.

At the same time, however, Tilly (1999) illustrates that, over the period from 1883-1913, Berlin’s capital markets were well-functioning and could meet the demands of industrial finance placed on them. He finds that German spreads were, in fact, significantly lower than in the US, and comparable to Great Britain’s, and that new issues of ordinary shares were far more important in Berlin than in London over the 1880-1913 period. Indeed, data on Berlin’s capital market relative to London’s suggests that it ‘developed more adequate facilities for the finance of equity capital than did Great Britain.’ Analysis by Calomiris (1993) confirms this. Thus, it seems reasonable to conclude that German institutional arrangements for the supply of industrial finance via securities markets were, by international comparative standards, more than adequate.

**IV.B. Industrial Development**

Germany and Japan both industrialized late. In fact, Japan actually developed later than Germany which, according to Gerschenkron, should correspond to a heavier reliance on banking finance. Table two illustrates Japan’s development from 1879 to 1930, and the growing reliance on manufacturing as agriculture’s share of the nation’s national product declined.
Table 2: Percent of Net National Product in Japan, 1879-1930

<table>
<thead>
<tr>
<th>Year</th>
<th>Agricultural Output</th>
<th>Output of Factory Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1879</td>
<td>64.4</td>
<td>3.2</td>
</tr>
<tr>
<td>1885</td>
<td>55.7</td>
<td>4.1</td>
</tr>
<tr>
<td>1886</td>
<td>53</td>
<td>5.2</td>
</tr>
<tr>
<td>1898</td>
<td>52.2</td>
<td>5.9</td>
</tr>
<tr>
<td>1899</td>
<td>43</td>
<td>8.1</td>
</tr>
<tr>
<td>1905</td>
<td>39</td>
<td>9.1</td>
</tr>
<tr>
<td>1906</td>
<td>41</td>
<td>8.9</td>
</tr>
<tr>
<td>1919</td>
<td>36.5</td>
<td>14.3</td>
</tr>
<tr>
<td>1920</td>
<td>33.7</td>
<td>14.9</td>
</tr>
<tr>
<td>1930</td>
<td>18.6</td>
<td>17.3</td>
</tr>
</tbody>
</table>


Looking more closely at manufacturing we can see which particular sectors grew quickly (metals and machinery, chemicals and ceramics, and electricity and gas) and which grew more slowly (textiles, wood products, food products, and other).

Table 3: Growth of Manufacturing Production in Japan (indices; 1910-14=100)

<table>
<thead>
<tr>
<th></th>
<th>1895-99</th>
<th>1900-04</th>
<th>1905-09</th>
<th>1910-14</th>
<th>1915-19</th>
<th>1920-24</th>
<th>Approximate Growth % per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles</td>
<td>41</td>
<td>50</td>
<td>70</td>
<td>100</td>
<td>152</td>
<td>185</td>
<td>5.3</td>
</tr>
<tr>
<td>Metals and Machinery</td>
<td>25</td>
<td>33</td>
<td>61</td>
<td>100</td>
<td>162</td>
<td>244</td>
<td>8.2</td>
</tr>
<tr>
<td>Chemicals and Ceramics</td>
<td>na</td>
<td>na</td>
<td>53</td>
<td>100</td>
<td>186</td>
<td>252</td>
<td>8.5</td>
</tr>
<tr>
<td>Wood Products</td>
<td>na</td>
<td>56</td>
<td>91</td>
<td>100</td>
<td>142</td>
<td>na</td>
<td>5</td>
</tr>
<tr>
<td>Food Products</td>
<td>80</td>
<td>88</td>
<td>85</td>
<td>100</td>
<td>123</td>
<td>170</td>
<td>2.6</td>
</tr>
<tr>
<td>Electricity and Gas</td>
<td>na</td>
<td>10</td>
<td>27</td>
<td>100</td>
<td>198</td>
<td>356</td>
<td>16</td>
</tr>
<tr>
<td>Other*</td>
<td>49</td>
<td>90</td>
<td>126</td>
<td>100</td>
<td>248</td>
<td>190</td>
<td>4.8</td>
</tr>
<tr>
<td>Total Manufacturing</td>
<td>(37)</td>
<td>(48)</td>
<td>69</td>
<td>100</td>
<td>160</td>
<td>217</td>
<td></td>
</tr>
</tbody>
</table>

*This includes leather goods and straw mats.


Germany’s industrial development can be seen from the following table.
We can also look more closely at the rate of growth of industrial sectors in Germany during this period. The growth sectors resemble those of Japan, and include metallurgy, metalworking and machinery, chemical, and gas, water, and electricity.

**Table 5: Net Output in Branches of German Manufacturing and Construction in Millions of 1913 Marks**

<table>
<thead>
<tr>
<th>Year</th>
<th>Stone, Clay</th>
<th>Metallurgy</th>
<th>Metalworking, Machinery</th>
<th>Chemical</th>
<th>Textile</th>
<th>Leather</th>
<th>Clothing</th>
<th>Wood</th>
<th>Paper</th>
<th>Food</th>
<th>Gas, Water, Electricity</th>
<th>Construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>Na</td>
<td>34</td>
<td>153</td>
<td>Na</td>
<td>439</td>
<td>57</td>
<td>658</td>
<td>232</td>
<td>Na</td>
<td>919</td>
<td>2</td>
<td>434</td>
<td>2928</td>
</tr>
<tr>
<td>1871</td>
<td>238</td>
<td>96</td>
<td>391</td>
<td>96</td>
<td>654</td>
<td>72</td>
<td>911</td>
<td>290</td>
<td>95</td>
<td>1272</td>
<td>2</td>
<td>515</td>
<td>4630</td>
</tr>
<tr>
<td>1880</td>
<td>36</td>
<td>147</td>
<td>491</td>
<td>139</td>
<td>685</td>
<td>85</td>
<td>966</td>
<td>408</td>
<td>Na</td>
<td>1512</td>
<td>17</td>
<td>786</td>
<td>5572</td>
</tr>
<tr>
<td>1890</td>
<td>600</td>
<td>251</td>
<td>491</td>
<td>279</td>
<td>1110</td>
<td>100</td>
<td>1359</td>
<td>488</td>
<td>Na</td>
<td>1937</td>
<td>41</td>
<td>836</td>
<td>5728</td>
</tr>
<tr>
<td>1900</td>
<td>882</td>
<td>447</td>
<td>907</td>
<td>489</td>
<td>1243</td>
<td>154</td>
<td>1697</td>
<td>738</td>
<td>192</td>
<td>2711</td>
<td>97</td>
<td>1236</td>
<td>8038</td>
</tr>
<tr>
<td>1913</td>
<td>1258</td>
<td>1055</td>
<td>1689</td>
<td>1148</td>
<td>1708</td>
<td>235</td>
<td>2384</td>
<td>1284</td>
<td>486</td>
<td>3634</td>
<td>442</td>
<td>1654</td>
<td>11993</td>
</tr>
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</table>


During the period for which we have data for both countries, from 1880 to 1913, Germany increased its manufacturing output by over ten percent. Japan increased its output by around ten percent as well (extrapolating from the trend of the data). However, a far greater proportion of Germany’s output derives from manufacturing during this period. Accordingly, one could argue that this forced Germany to rely more heavily on banking to provide sufficient financing that the capital markets couldn’t handle. However, the prior section illustrated that Germany’s securities markets could adequately meet the demands of industrial finance. Additionally, the data reveal that the growth of particular manufacturing sectors occurred more quickly in Japan than Germany for the dates listed above, and that Japan’s industrial development likely began later than Germany’s if we compare the proportion of manufacturing to each country’s total national output. Even if Japan’s level of industrialization did not reach Germany’s pre-WWI levels until the interwar period, Japan continued
to rely predominantly upon securities markets. Recall that it was not until the war with China in 1937 that Japan began moving toward a greater reliance on banks.

The important point is that German banking became more concentrated and grew in importance during the pre-WWI period of rapid industrial growth, while capital markets remained dominant in Japan. Why did late industrialization in Germany and Japan depend on different forms of financing?

**IV.C. The Political System**

Although Germany had the superficial qualities of a democracy prior to 1914, in fact it was governed by the elites. The following figure details the structure of Germany’s political institutions for the period in order to delineate the power structure (i.e., principal-agent relationships).

**Figure 2: Germany’s Government (1871-1914)**

<table>
<thead>
<tr>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emperor: Selected the Chancellor. Can dissolve Reichstag at will and call for new elections.</td>
</tr>
<tr>
<td>Cabinet ministers: appointed by the Chancellor.</td>
</tr>
<tr>
<td><em>Army and Navy:</em> The army and navy were controlled by the Emperor. The legislature had limited power over the army’s budget. The navy, however, was completely under the control of the Emperor, including the budget.</td>
</tr>
<tr>
<td>Chancellor: chosen by the emperor, without consultation of the Reichstag.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legislative Branch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundesrat: all laws required the consent of the Bundesrat. All proposed legislation came from the Bundesrat. Delegates sent by the governments of constituent states; members not directly elected. Prussia had the most control, and since Bismarck ruled Prussia, he led the Prussian delegation and served as president of the Bundesrat up to 1890.</td>
</tr>
<tr>
<td>Reichstag: Elected based on male suffrage. A majority of its members could refuse to agree to a law proposed by the executive, particularly legislation relating to Imperial finances, and used this refusal as a weapon to force concessions—a weapon blunted by the executive’s right to dissolve the Reichstag and call for new elections.</td>
</tr>
</tbody>
</table>

Although mobilization of the masses occurred, with voter turnout increasing in nearly every federal election from 1871 to 1907, the structure of the political institutions prevented the legislature from having much influence on government policy, except as an obstructionist force. That is, bills required the approval of the legislature and thus it could threaten to veto them, but even in this respect its powers were limited since the legislature could be dissolved at will by the emperor, and this actually happened in 1887 and 1893 over military bills. Thus, for legislation to be passed it required the sponsorship of the emperor.

With regard to legislation affecting the financial system, Fohlin (2002) identifies 11 laws passed between 1870 and 1908 which caused concentration in universal banking, expanded universal banks, or encouraged the use of banks over securities exchanges. Considering the strong push toward banks, we must determine which interests most heavily influenced the emperor, or which priorities were at the top of the emperor’s list, and why banking concentration would be appropriate. I turn to this in the next section. First, I detail Japan’s political institutions.
Japan used Germany’s constitution as a model for their Meiji Constitution of 1889 (in addition to adopting Germany’s civil law legal system). Figure three illustrates the structure of Japan’s government from 1889 – 1937.6

**Figure 3: Japan’s Meiji Constitution Government (1889-1937)**

### Executive
- **Emperor**: Proposed laws and sent them to the legislature. The Constitution was given to the people by him, making it subordinate to the Emperors.

- **Genrō**: Elder Statesmen. Made all important political decisions in the Emperor’s name and served as the real centralized power of the state up to the 1920’s. Recommended the selection of the prime minister to the Emperor and legislature.

- **Privy Council**: Members appointed by the Emperor for life. Served as an advisory council.

- **Cabinet**: Ministers of State. Signed off on legislation passed by the legislature. The premier appointed the cabinet. Parties attempted to increase their power over the bureaucracy via the cabinet by voting for premiers catering to their interests.

- **Bureaucracy**: Members were hand-picked by the oligarchy (Privy Council, Genrō, and House of Peers) until they changed the requirement to enter via a civil service exam, which further protected them from attacks on their power by parties since university students were usually from the oligarchy. Cabinet ministers ran various departments of the bureaucracy. The bureaucracy implemented the law.

- **Ministers of the army and navy**: Had direct access to the Emperor, and were therefore completely beyond the control of the prime minister. As a result, the administration of the army and navy was entirely beyond the control of a cabinet dominated by political parties. The ministers of the army and navy did not resign with a retiring premier, but continued in office in the cabinet of his successor.

- **Premier**: Selected by the Emperor (Genrō/Privy Council) and approved by the Diet. Selected cabinet ministers and proposed new legislation.

### Legislative Branch

#### Imperial Diet: Coequal Power
- **House of Peers**: Appointed by the Emperor and aristocrats who inherited appointment. Voted on premier. Acted to protect the bureaucracy by vetoing the House’s anti-bureaucracy legislation.

- **House of Representatives**: Popularly elected. Voted on premier. Sought to gain influence over departments of the bureaucracy, but only had minimal success.

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In theory, the Emperor exercised absolute political power. The Constitution was subordinate to the Throne, and thereby to the Sat-Cho oligarchs who controlled the Throne. The Constitution placed the Privy Council, the cabinet, and the House of Peers effectively out of any popular control. Moreover, the powers of the House of Representatives were sufficiently limited to give popular government little positive power. It could only serve as a weak veto-gate. It was weak because the oligarchs retained the ability to circumvent uncooperative legislatures: they could often avoid statutes through Imperial Orders, they could keep the budget beyond real legislative control (e.g., by implementing the previous year’s budget and deflating the currency to increase its relative size), and the oligarchs could even dissolve the legislature if necessary.

One of the most powerful mechanisms for undermining popular rule was the Genrō (Elder Statesmen). They made important political decisions in the Emperor’s name, such as recommending the prime minister to the legislature, and served as the real centralized power of the state up to the 1920’s. No political institution was as powerful as the Genrō in the early constitutional period. Although they lost their influence as fewer members survived to advise the Emperor in the 1920’s, the Privy Council also acted as an advisory council. These members were appointed by the Emperor for life, but the Council was a constitutionally recognized body and could more easily be reined in, unlike the Genrō.

Members of the House of Peers were either appointed by the Emperor or were aristocrats who inherited their membership. The Peers often sought to protect the bureaucracy by vetoing the lower house’s anti-bureaucracy legislation since all policies required concurrent Peer-House approval.

For most of the period, the House of Representatives was not popularly elected since only wealthy taxpayers were permitted to vote—usually businessmen and wealthy landowners. The Elections Act of 1889 enfranchised only 453,000 voters out of a total population of 42 million. Subsequent election laws in 1900, 1919, and 1925 raised the voting population, ultimately to the entire male population aged 25 or more, totalling 12.5 million voters, or 21 percent of the population. Indeed, during the twenties, political parties’ influence increased. Policy outcomes reflected more of the parties’ objectives via the Diet’s power to approve of the premier, who was recommended by the Emperor. Because the premier selected cabinet members, this was the Diet’s one way to influence the administration. Frequently, the premier would bargain with party leaders to ensure his election, and in doing so, would offer cabinet positions to them.

On average, however, the lower house of the legislature had little power throughout most of the period, and was dominated by wealthy farmers and business interests. The twenties witnessed increasing party influence, but it was insufficient to dramatically alter government policies.

The important point is that the levers of power were controlled by the Emperor and Bundesrat in Germany, and by the Emperor and the oligarchy (the Genrō, Privy Council, and House of Peers) in Japan. Thus, we must determine which interest groups most heavily influenced them.

**IV.D. Interests and Government**

*Japan:* The development of Japan’s industrial and commercial sectors initially depended upon intensive government planning, supervision, and subsidization. But in 1880, the government of Japan

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7 Sat-Cho is the abbreviation used by Japanese historians to designate the oligarchy of Satsuma and Choshu men who constituted the supreme governing power of Meiji Japan.


9 Scalapino, 1967 and Iwasaki, 1921 offer descriptive historical accounts of the Genrō’s power during this period.

10 Members of the bureaucracy were hand-picked by the oligarchy (Privy Council, Genrō, and House of Peers) until they changed the requirement to enter via a civil service exam, which simply changed it from an aristocratic clique to a university clique. The cabinet ministers ran various departments of the bureaucracy, and the bureaucracy was responsible for implementing the laws.
began to privatize the burgeoning industrialization movement because of the heavy expenditures the government had made, contributing to a budget crisis and inflation.\textsuperscript{11} The sale of these enterprises meant that the government could no longer influence the industrialization process directly and instead had to make it worthwhile for private entrepreneurs to bring about the goal of industrialization. Subsidies, loans, and technical assistance were offered to industries the government considered essential, fostering close, informal ties between big business and the government. For example, ‘large number[s] of new industrial leaders […] were men of the old \textit{bushi} class and consequently men whose political predilections and personal friendships—not to mention economic security—lay with the government. With Meiji political and economic elites extremely small in numbers, with the latter frequently selected by the former and having a similar background, close personalized contacts were most natural’ (Scalapino, 1967, 251). At this early date, Japanese industry was highly centralized, and the zaibatsu were the ultimate recipients of tremendous economic and political power.\textsuperscript{12}

Big business had privileged access to Japan’s political leaders, not simply because they frequently shared a common background, but also because agrarian political power was concentrated in the lower house, which lacked real political influence. Thus, the zaibatsu, who garnered political favors from the oligarchs through their financial influence, frequently prevailed when conflicting urban-rural interests arose, such as nominating premiers and legislation affecting the financial system.\textsuperscript{13} For example, the Genrō’s nominations of premiers illustrate their preference for business-friendly leadership. One early example is Yamagata’s premiership, which began in November 1898. He allied with the Jiyūtō group of the Kenseito (the precursor of the Kenseikai pro-business party and created by the cooperation of the Jiyūtō and Shimpōtō parties) and made a bargain with them which helped to align the political parties to the growing class of capitalists (Umegaki, 1988). Up through the 1920s, premiers were always pro-business (Scalapino, 1967).

However, it would be incorrect to conclude that Japan’s industrial growth succeeded as a result of the government’s leadership. For example, in the textile industry, the most important sector to Japan’s nineteenth century economy, Yamamura (1974: 178-83) shows that the state contributed little to its success. Most of the capital for the textile industry’s expansion came from small-scale ventures making use of local sources of capital. Modern cotton-spinning firms were generally organized as joint-stock enterprises, raising share capital from private sources, having little to do with the state bureaucracy.

While the government was more directly involved in the initial development of railways, especially with their financing, the amounts came nowhere near those of European nations. In the mid-1880s, the rail network had fewer than 200 miles of track (Ericson 1996: 9). With the government having taken the initial risks, \textit{private} investment subsequently boomed and nearly 4000 miles of track were built by the turn of the century, three-quarters of it privately owned. While the government offered subsidies for the construction of many rail lines, with local and national politics playing a role, the vast majority of the financing came from private sources. Some have argued that Japan’s nationalization of the railways in 1906-7 suggests that the government no longer trusted the market to develop such an important national asset, but Ericson shows that nationalization occurred to relieve firms of an increasingly costly burden and to free private sector capital to enter new fields. In this manner, the government assisted and bolstered the private capital markets. Moreover, Japan’s rail lines never acquired the same level of economic importance as in Europe since coastal shipping remained an inexpensive alternative.

\textsuperscript{11} To control inflation, for example, Matsukata Masayoshi, the minister of finance, issued his famous ‘Outline Regulations for the Sale of Government-Operated Factories’.

\textsuperscript{12} Regarding the Meiji era, Iwasaki (1921, 102) remarks, ‘The way to get rich was to become the friend of some high officers in the government. Such friendships were frequent. For example, Marquis Inouye, the great Genrō and leader of financial reform, was an intimate of the Mitsui family. Marquis Okuma and the Iwasaki family, the steamship kings, are also closely associated. The connection between the government and big business in Japan is frankly admitted.’

\textsuperscript{13} See Allen, 1981, \textit{A Short Economic History of Modern Japan}, chapter 8.
In the nascent overseas shipping industry, the state’s intervention was much more pronounced. Military needs provided the impetus for the government’s increasing presence, which was initiated with Japan’s decision to launch a naval expedition to strengthen its claims to sovereignty over Taiwan in 1874. At this time, only four of the seventy-four licensed mariners then operating in Japan were Japanese. But this initiative proved extremely slow; by the late 1890s, no more than 10 percent of Japan’s overseas trade was carried out by Japanese vessels. From 1897 to 1913, however, shipping and shipbuilding together received around 75 percent of all government subsidy payments in the 1897-1913 period, contributing to significant growth in the overseas shipping industry, and to the benefit of the Nippon Yusen Kaisha firm in particular (Blumenthal 1976: 36). Government subsidies declined in importance with the onset of the First World War, which considerably reduced the supply of European ships for sale to and use in Japan, offering Japanese firms an opportunity to fill the vacuum. At the end of the war, the Washington Naval Conference, held between November 1921 and February 1922, called for a ten-year moratorium on the construction of capital ships and limits on armaments and fortifications, leading to an 80 percent drop in Japan’s tonnage between 1921 and 1932, and forcing shipbuilders to move into new fields. Thus, the government’s intervention and subsidization of the shipping industry declined after 1913. While overseas shipping was important to Japan’s economic development, it did not require the same level of capital outlays as railways in Europe since coastal shipping provided an affordable, well established alternative for domestic transport.

Foreshadowing the government’s privatization of its major industrial enterprises, and the liberalizing trend after 1880, the first Stock Exchange Act was passed in 1874. It was patterned after the rules of the London exchange, but was considered too restrictive and too different from the practices of the already extant rice and commodities markets which participants were more used to. Consequently, the government passed new legislation in 1878 which recognized many of the more familiar transaction formats. The Tokyo Stock Exchange was established in May, followed by several more exchanges in the major cities shortly thereafter. Corporate bond markets developed slowly until the 1890 Commercial Code was passed, which specified rules regarding corporate form and liability as well as guidelines regarding the issuance of bonds. Both prospered. Indeed, despite the 1923 earthquake (measuring 7.9!) and the 1927 financial crisis, the government and the zaibatsu ensured that stock and bond markets recovered quickly and remained deep and vibrant. Banking services were largely used to bolster firms’ securities markets financing activities, making bank financing ‘the least important source of funds’ for the Japanese economy during the 1889-1937 era.

The US economy’s entry into a deep depression which spread around the globe, as well as Japan’s decision to revert to the gold standard following the crash on the New York Stock Exchange, led Japan’s export trade to fall 27 percent from 1929 to 1930 (Allen, 1981: 107–8). Labour and farmers were especially hard hit as exports and wages dropped because of lower exports and as a result of the deflationary policies to keep Japan on the gold standard; prices on all farm goods fell an average of 34% from 1929 to 1930 (Nakamura, 1981: 216–7). The economic effects on the average worker and farmer were worse than the Great Kantō earthquake in 1923 or the financial crisis in 1927. Consequently, party government became the victim of the public’s growing anger over their dire economic straits. Ultranationalism spread and resentment toward party leaders grew as they were increasingly perceived as corrupt. The military became emboldened, and Prime Minister Hamaguchi was attacked in November 1930, and later died, for supporting the London Naval Treaty over the objections of the navy. In February 1932 Finance Minister Inoue was assassinated, and Takuma Dan, a top manager of Mitsui, was killed in March. The murder of prime minister Tsuyoshi Inukai by young

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14 For information on business elites’ preference for capitalism (but not with regard to bank or securities markets), see Marshall, 1967, Capitalism and Nationalism in Prewar Japan. For a thorough account of Japan’s prewar financial system, including the formation of securities markets, see Adams, 1964, A Financial History of Modern Japan.

15 See Adams, 1964, chapters 1, 2, 3, and 4; and Hoshi and Kashyap, 2001, chapter 2.

16 Hoshi and Kashyap, 2001, chapter 2.
military officers on May 15 1932 (the May 15 Incident) marked the end of party–led government. From then until August 1945, Japan had eleven military–backed non–party governments.

In July 1937, war broke out with China and the government enacted legislation mobilizing the country’s resources for war. Of primary importance was the ability to direct finance. When the war with China began, a series of laws were passed to put the allocation and control of finance firmly under government control. To this end, banks were consolidated. The 424 ordinary banks at the end of 1936 were reduced to 186 in 1941, and further consolidated to just 61 in 1945. In May 1943, ordinary banks were granted the right to collect small deposits, causing the number of savings banks to fall from 69 in 1941 to 4 in 1945. More important, however, were consolidations among the zaibatsu banks, with four major zaibatsu banks controlling almost half of the capital of Japan’s financial institutions in 1945.

Hoshi and Kashyap (2001) find that the relations formalized by the munitions companies system of WWII (where a bank is assigned to a particular firm) lasted into the post-war period. Even after 30 years (1974), 79% of 157 munitions companies from WWII still had close ties to their designated wartime financial institution, suggesting that the wartime transformation was very important to the structure of the post-war banking-oriented financial system. Moreover, because the designated institution typically had been involved in a firm’s post-war reorganization, Occupation period policies further cemented these relationships.

**Germany:** The new German Reich of 1871 was a ‘Great-Prussian militaristic’ enterprise (Stig, 1996):

The Prussian army had been the key instrument in the creation of the empire, and by virtue of its prestige and constitutional position, it became a main pillar of that state. Henceforth the emperor, the government, and the military administration itself all regarded the Prussian army as a major integrating factor, which would hold the empire together and preserve its semiconstitutional structure. In this respect, the political structure of Imperial Germany was indeed militaristic, for its rulers intended, if necessary, to use the army for domestic purposes, to defend the existing social and political order.

Most significantly, the emperor, who was also King of Prussia, was the supreme commander of the German army in both peace and war, according to Article 63 of the constitution. This permitted him to devote considerable government resources to the military if he so desired. As a consequence of the wars in 1864, 1866, and 1870-1 that ultimately led to the unification of the German state, there was an emphasis on maintaining domestic security and creating more centralized administrative powers in the immediate decades that followed. Central to this effort was railroad construction and its administration by the new federal government. Fremdling (1977) shows that this single innovation was also vital to Germany’s economic growth and industrialization during the nineteenth century because of its backward linkages, such as iron production and development of the engineering sector, as well as its trade enhancing effects. Equally important was the federal government’s growing control over it, which began dictating how rail lines would be laid down for strategic military reasons (Veblen, 1915). Specifically, railways had become crucial to the military’s quick mobilization of troops from across Germany to specific battle areas, to supplying them after they arrived, and to the conduct of battle itself (e.g., flanking enemy troops; Showalter, 1975). A biographer of Moltke, the Prussian army’s Chief of Staff from 1858 until Germany’s unification, wrote:

Hardly a single important railway line was built […] in Prussia and later in Germany, without Moltke submitting an opinion on the most favorable routing, or the construction of bridges, tunnels, etc. […] Moreover he endeavored to make clear the general viewpoints influencing his thinking in memoranda to the responsible authorities in order to create understanding for the interests of the military and give them emphasis.

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17 See Adams, 1964, 128-59; and Hoshi and Kashyap, ch. 3.
18 Chickering, p. 460.
19 Cited in Showalter, 1975, 39.
While commercial interests generated considerable demand for railway construction, this proved dangerously inadequate to the Confederation’s, and later to Germany’s, military needs, leading to renewed efforts at railway improvement and additional construction. In 1861, a special commission was established to evaluate the suitability of Germany’s railway network for military purposes. It concluded that there were wide differences in the construction and administration of the railroads, too few junctions in many regions, and that three-fourths of the German Confederation’s railways required upgrading from single-tracked to double-tracked lines since only double-tracked lines could fulfill military requirements (Showalter, 1975, 45). The Commission also recommended the closest possible cooperation of military and civilian authorities at all levels, with a combined central authority controlling the work of the agencies supervising individual routes.

At the same time, the revolution in military technology accelerated. All of Europe’s armies were caught up in a technological race. The introduction of smokeless powder, advanced breech-loading rifles, machine guns, and heavier, more accurate, and faster-firing artillery contributed to an enormous increase in firepower. In 1897, Tirpitz, the new State Secretary for the Navy, launched Germany’s successful effort to build a world class navy, which ranked third in size behind the UK and the US in 1914 (Owen, 1978). Automobiles, zeppelins, and the first airplanes likewise opened new military prospects on the eve of the war. Through all of this, the relationship between heavy industry, the military, and government was notoriously close. For example, the Krupp firm, Germany’s leading arms manufacturer, kept in close contact with the Hohenzollerns, especially Wilhelm II, as well as the Prussian military and government officials (Boelcke, 1970).

As Germany industrialized, the executives of the great banks exercised considerable power, as indicated by the large number of banks they took over, the resultant increase in their share of total bank deposits, the large number of directorships they occupied in German business corporations, their ability to control strategic decisions through the institution of proxy voting in shareholders meetings, by the close links between leading bankers and the political elite of the German government, and by a number of well documented cases of enterprise decision making in which conflicts resolved themselves in favour of intervening banks (Feldenkirchen, 1981; Tilly, 1992). The influence of the banks was most acute in the heavy and electro-chemical industries—industries central to the expansion of the nation’s military-industrial complex (Feldenkirchen, 1991).

Relative to Japan prior to 1937, Germany’s military was far more important to national security and required a far higher proportion of the government’s total expenditures (except for the 1894-95 Sino-Japanese War, and the 1904-05 Russo-Japanese War). The following figures from Castillo et al (2001) clearly illustrate the difference.

**Figure 4. Germany’s Military Expenditures as a Share of Central Government Expenditure**

![Graph showing Germany’s military expenditures as a share of central government expenditure.](image)
Because of the domestic instability that lingered after the three wars that led to unification in 1871, as well as its proximity to other great powers including Russia, France, Austria-Hungary, and the UK, Germany’s military played a far bigger role in national politics than Japan’s. Indeed, Van Evera (1984) discusses the ‘cult of the offensive’ that swept through Europe at the turn of the twentieth century, and which led states to adopt more aggressive foreign policies. The belief that the offence had the advantage, based on their observations of how wars were won during the nineteenth century, helped to mould the offensive military doctrines which every European power adopted during the period leading up to the First World War. Van Evera explains that threats to national security are increased when it is believed that the offence has the advantage since expansion becomes more tempting; specifically, the cost of aggression declines when the offence has the advantage. Also, the advantage goes to the state striking first, raising the risk of pre-emptive war. Finally, ‘windows’ of opportunity and vulnerability open wider since smaller shifts in force ratios have larger effects on relative capacities to conquer territory, again raising the risk of preventive war. Because Germany was surrounded by great powers who subscribed to this perception, it was particularly vulnerable to an offensive strike, forcing German leaders to remain continually vigilant with regard to their national security interests. Moreover, this perception created strong incentives to build a militarily suitable railway network that could quickly move troops across the country. A centrally controlled, double-tracked, and efficiently run railway network was critical to Germany’s military needs, and likewise acted as the key factor to Germany’s rapid industrialization through backward and forward linkages.

Japan did not have these same security concerns with its relatively stable domestic politics, and remoteness from threatening powers. There was also no equivalent belief in the cult of the offensive, which would have been less troublesome since Japan could more easily defend its shores from sea-based aggression. Not until the 1930’s did the military dominate Japanese policy making in the same way that it did in Germany’s pre-WWI government.

V. Conclusion

The bank-firm relationships prevalent in contemporary Japan and Germany are frequently identified as exemplars of the coordinated market economy in the VoC literature. How did these relationships originate? In both cases, national security needs motivated the state to intervene in the economy in order to funnel money to militarily important industries via banks. Economic ‘backwardness’ simply added to this need to funnel money to industrializing sectors of the economy since a state’s overall power is determined by both its economic and military might. The construction of railroads in Germany had the fortuitous effect of contributing significantly to both of these ends. While the market, without state intervention, likely would have succeeded in fostering economic growth through private investment in
railways, the government had to intervene to ensure that military needs were also attended to, including both the scope and speed of railway construction. The prolonged duration of this government-guided investment cemented these bank-firm relationships so that they endured into the post-war period. The China and Pacific Wars for Japan led to similar bank-firm relationships that lasted into the post-war period.

While a nation’s relative power is implicit in Gerschenkron’s identification of economically backward states, he does not consider military priorities to have guided how industrialization occurred. But it is clear from the German case that military needs were of great importance to the construction of railroads; and this certainly influenced other European states as well. Germany, and Moltke in particular, was constantly worried about the speed with which French and Austrian railways could mobilize troops along the German border. Moreover, adding national security as a factor that determines whether late industrializers rely on banks explains why Japan remained reliant on securities markets until the mid-1930s—resolving an old empirical puzzle for the Gerschenkronian argument.

This paper illustrates that the origins of the Japanese and German bank-firm financing relationships can be located in their preparations for war, in combination with the need to become less economically ‘backward’. However, these relationships persisted after the war because interests found these relationships expedient to their own ends. In particular, several authors (e.g., Allen and Gale, 2000; Carney, 2003; Perrotti and von Thadden, 2003) have argued that labour favours bank financing over securities markets because it offers greater employment stability. After WWII, labour gained considerable political influence in both Germany and Japan—largely because big businesses were seen to have benefited from the war—and modified only slightly the existing bank-firm relationships. In Germany, this led to a private banking system in which banks acted as policy allies of the government, and labour was given representation in corporate boardrooms (Zysman, 1983; Deeg 1999). In Japan, labour struck bargains with the reincarnated zaibatsu, now known as keiretsu, and also achieved many concessions including representation in corporate boardrooms, but perhaps best exemplified by the new lifetime employment policies (which did not exist in the interwar period). Thus, labour’s newfound political power propelled the wartime bank-firm relationships into the decades following WWII.
References


