**Appendix.Sources for Table 1.**

Data usually relate to the end of the calendar year or the end of the fiscal year ending in the stated year, occasionally to specific census dates or an annual average and in a small number of cases (noted below) to data for one or two years earlier or later. Countries differed in the speed with which corporations entering the bankruptcy process (or simply defunct) were removed from the register and in how they treated subsidiary companies, so only large international differences in corporate numbers per million people should be considered significant.

US: 1909 from Commissioner of Internal Revenue*, Annual Report*, 1910, p. 12; for 1919-79 *Historical Statistics of the United States*, series ch 13, and from the IRS *Statistics of Income* (online at [www.irs.gov](http://www.irs.gov)) thereafter. 1899 is the authors’ estimate based on the assumption that the number of establishments reported as owned by corporations in the *Census of Manufactures 1910* (p. 135), which rose from 37,123 in 1899 to 69,501 in 1909, reflects the movement in numbers of extant corporations in all sectors between those dates. Some subsidiaries that were excluded in other years are counted in 1909 and 1939, though this would have been (to an unknown extent) cancelled out in 1909 by initial undercounting, as the IRS began assembling lists of potential corporate taxpayers. The earlier years include a few old forms such as joint stock associations subject to the corporate tax, but not limited partnerships. In 1909 including limited partnerships would increase the number of limited liability entities by around 11,000 (4% of the number of corporations, extrapolating from the evidence in the manufacturing census) and by 2009 (when the IRS reported their exact numbers as 396,611) by 5%.

UK. Data are from various issues of the *Annual Abstract of Statistics* and, latterly, *Annual Reports* of Companies House, the British Department of Trade and industry and the Northern Ireland Department of Commerce. 1939 data were not published: the mean of the 1938 and 1940 figures is substituted. These exclude statutory and royally-chartered companies (i.e those created individually by parliament rather than incorporated by simple registration), some insurance companies (which had separate legislation) and some older forms (such as “deed-of-settlement” companies, ship parts and “cost book” mining companies) and companies chartered abroad but registered as operating in Britain. Statutory and chartered companies tended to be larger than registered ones (all railways, for example, were statutory) so their omission has less impact on numbers than on estimates of the size of corporate capital. Hannah estimates (for all but insurance companies and foreign-registered ones) that there were 3,000 omitted in 1910, less than 7% of those included. Many of these companies (notably statutory ones) disappeared in mergers in the 1920s and still more in the nationalizations of 1945/51 (and when re-privatized from 1980 on they typically became registered companies), but the listing in the *Stock Exchange Official Year Book 1936* appears to be incomplete even for statutory and chartered companies. More recently the Registrar of Companies reported for Britain in 2009 that there were an additional 1,178 companies noted as operating on the mainland but registered in British offshore islands (including northern Ireland), 8,925 foreign companies similarly operating in Britain, plus 928 assurance companies (registered under other legislation), 9,547 industrial and provident societies (mainly non-commercial and properly excluded), 803 royally chartered companies, a rump of 47 statutory companies, 530 anomalously still registered under an 1881 Newspapers Act (and mainly defunct) and 219 constituted under EU legal forms. The omissions are to some extent compensated by Britain’s role before 1914 as a place where some European and Empire companies with few or even no operations in Britain registered, a role recently revived by a 2003 EU court decision, which has enabled thousands of EU companies – à la Delaware - to register in the UK even though they do no business there (Becht et al 2008 report that 16,438 German private limited companies newly registered in the UK in 2006).

Germany. Figures from Wagon (1903: 6-7, 164-5) for 1900 (his estimate of 5,400 AGs and 4,077 GmbHs in 1900 is substituted for 1899) and various issues of the *Statistisches Jahrbuch* thereafter (data were not published for 1949 or 1959: we substitute the data for September 1950 and end 1958). Unfortunately the *Jahrbuch* recently stopped publishing its series for extant AGs, KGaAs and GmbHs, substituting data on the number of taxpaying *Kapitalgesellschaften*, which seriously understate the numbers since many (and a varying portion from year to year) made losses or profits under the tax exemption limit. Presumably the original data are available from the *Handelsregister*, but for the moment all we have been able to trace in the literature is Mŭller’s (2006: 4) figure of 950,000 GmbHs at the end of 2002 and 975,000 at the beginning of 2005 (of which about 120,000 were in the hybrid form GmbH & Co KG, that is a limited partnership in which the general partner was a GmbH, thus achieving completely unlimited form and classified by the tax authorities as *Personalgesellschaften* not *Kapitalgesellschaften*); there were also around 15,000 AGs at that time. We temporarily use for 1999 the 2002 figure less 75,000. No allowance is made for earlier quasi-corporate forms (e.g. mining *Gewerkschaften*, shipping *Partenreederei*) but adding these and KGs, judging from the 1907 census of *Gewerbe*, would increase the numbers by only a few thousand. That census also shows that establishments owned by KGs accounted for only 9% of those owned by the entities we have counted as corporations, suggesting (even after reasonable allowances for KGs and GmbHs being less likely to be multi-plant than AGs) that the KG was less important in Germany than in Switzerland or Japan in the early twentieth century. By 2011 there were only 18,627 KGs (accounting for 2.3% of taxable profits) in the non-hybrid form left. The 1899-1909 data relate to the *Kaiserreich*, and 1919-39 data to the post-Versailles boundaries. The yearbooks for 1939/40 and 1941/2 published 1938-40 data on AGs and GmbHs for the expanded Reich, but, to preserve comparability with earlier years, we estimate a figure from their regional breakdowns for Germany in 1939 *within its 1937 borders* (alternatively including Austria, the Sudetenland and other conquests would further lower the number of corporations per capita). From 1949 data are for West Germany, initially excluding West Berlin and Saar, though from 1958/9 the latter are included. Before reunification in 1988, there were many thousands of state enterprises in East Germany, which were taken over by the *Treuhand* and closed, privatized or sold to western companies; liberated private sector *Ossi* capitalists (who had latterly been permitted to produce only about 3% of net national product in East Germany) were also formally able to incorporate. Figures for *Kapitalgesellschaften* published up to 1992 in the *Statistisches Jahrbuch* exclude East Germany, so in 1989 we anomalously use the 79% of the population in the old *Bundesgebiet* (62.063m) rather than of united Germany (78.667m) as the denominator for calculating corporations per million population (reporting 6,513 rather than the 5,137 if we alternatively - and with only mild exaggeration - assumed there were zero capitalist *Kapitalgesellschaften* in re-united East Germany in 1989). The 1992 *Jahrbuch* for the first time reported corporate statistics for Germany as a whole (with East Germany’s new corporations being some undisclosed sub-set of the 99,968 “new” registrations of 1992; the equivalent figure in 1991 had been 47,159 “new” corporations). On the basis of United Germany’s 1992 population of 80.594m and 552,878 extant corporations, the number of corporations per million people that year would have been 6,860, 5% above the figure shown in the table for the old *Bundesgebiet* for 1989 and 34% above the alternative all-Germany figure for 1989. A lot was clearly happening in both east and west in this remarkable springtime of transition and to try to partition the effects quite misses the point.

Switzerland. Data, originally published annually in the *Statistisches Jahrbuch der Schweiz*, are standardized and summarized in the online historical Excel files of the Statistisches Bundesamt ([www.bfs.admin.ch/bfs/portal](http://www.bfs.admin.ch/bfs/portal)). For 1899, we substitute the earliest observation for 1901. Switzerland registered foreign companies operating there, which are omitted from the Table (there were 118 in 1910 and in 4,184 in 2009, increasing the totals by 3.0% and 1.4% respectively). By 1947 (when KGs were first differentiated from general partnerships in the statistics), there were 3,072 (14.6% of the number of corporations) and this fell to 2,368 (0.8% of the number of corporations) in 2009. If slightly less than a quarter of all partnerships were limited, as in 1947, there would have been 1,525 KGs in 1901 (about three-quarters of the numbers of AGs), but if the ratio was then so high (possibly initially higher than in Germany, q.v), it clearly soon declined: by 1926 the numbers of Swiss AGs exceeded the annually reported number of KGs and unlimited partnerships *combined*. It seems unlikely, then, that KGs were as numerous as in twentieth century Japan, though omitting KGs in the first half of the century clearly underestimates the level and exaggerates the rate of growth of limited liability in Switzerland.

Japan

We count only *KKs*  (joint-stock companies, the original standard form), including with them *kabushiki gomei kaisha* (limited partnerships with shares, peaking in 1921 at 57, and disappearing from the statistics in 1956 after falling to 4 in the previous year), *yugen kaisha* (the equivalent of the German GmbH or private limited company, introduced in 1940 and rapidly multiplying in the war and after). *Goshi kaisha* (partially limited liability partnerships without shares, similar to European *commandites*) and a fortiori *gomei kaisha* (unlimited partnerships) are thus excluded throughout.

The statistics omit all foreign corporations registered as operating in Japan (128 in 1949, 750 in 1969 and 3,335 in 2009). Earlier in the century the statistics also exclude a number of companies registered in Hong Kong, Europe and the USA (but operating in Japan), some of whose share quotations were then published in the Tokyo English language press and apparently traded there by expatriate brokers. Such companies were required to register as Japanese companies if mainly operating in Japan (so will be included in the statistics, as formally registered in Japan), but otherwise were required simply to appoint a representative in Japan and register their branch.[[1]](#footnote-1) The latter companies will not be counted.

Japan has fuller annual data on *kaisha* than any other country but in one sense it is too comprehensive: several ministries (at various times Agriculture, Commerce, Finance, Internal Affairs and Justice) produced rival series. They sometimes mildly differed, but at others were rather far apart, as can be seen from comparing various editions of *Financial and Economic Annual of Japan* and *Historical Statistics of Japan,* their related CD-ROMs and the original Japanese sources they use. The disaggregations provided also sometimes varied and we have accordingly used several sources in the footnotes, tailored to the point under discussion.

For table 1 we aimed to produce a series from these sources that was as consistent as possible over time. For 1909-59 and 1979-1999 long series were available in Japanese, from the National Tax Agency. For 1899 we increased the Ministry of Agriculture figure of 3,685 KKs by the ratio of that series to the Tax Agency figures in two overlapping years (1903-4). For 1969, the Ministry of Internal Affairs and Communications reported figures of 346,460 KKs and 256,710 *yugen kaisha* (*Historical Statistics of Japan*, 2006, Vol. 2, p. 49). For KKs and *yugen kaisha* separately, we assumed that the ratios of that triennial series to the annual one we used for other decade-ends was the same as the mean of the two closest years in which the series overlapped (1960 and 1975). The final calculation was as follows:

Year KKs (type A) YKs (type B) Population in millions (C) Corporations

per million (A+B/C)

1899 3,871 0 43.404 89

1909 5,671 0 48.554 117

1919 16,604 0 55.033 302

1929 20,976 0 63.461 331

1939 32,362 0 71.380 452

1949 134,064 36,133 81.773 2081

1959 267,345 183,004 92.641 4861

1969 469,780 336,997 102.536 7868

1979 767,087 584,294 116.155 11634

1989 1,009,817 903,236 123.205 15527

1999 1,089,082 1,366,236 126.667 19384

1. J E de Becker, *Japanese Law of Trading Partnerships and Companies*, Kelly-Walsh, Yokohama, 1906. He also mentions (p. 5) that mining companies in Japan were not considered “commercial” and registered under article 35 of the Civil Code (though they are included in the *kaisha* statistics). [↑](#footnote-ref-1)