

PRINCETON STUDIES IN INTERNATIONAL FINANCE NO. 21

**Patterns of Fluctuation  
in International Investment  
Before 1914**

**Arthur I. Bloomfield**

**INTERNATIONAL FINANCE SECTION  
DEPARTMENT OF ECONOMICS  
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PRINCETON STUDIES  
IN INTERNATIONAL FINANCE

*This is the twenty-first number in the series PRINCETON STUDIES IN INTERNATIONAL FINANCE, published from time to time by the International Finance Section of the Department of Economics at Princeton University.*

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# PATTERNS OF FLUCTUATION IN INTERNATIONAL INVESTMENT BEFORE 1914

## I. CAPITAL MOVEMENTS BEFORE 1914

The strategic role played by international investment before World War I in opening up and developing the newer regions of the world, and in contributing to the expansion of world trade, the diffusion of technology, and the integration of the international economy, has long been recognized and the broad outlines of the story often told.<sup>1</sup> In recent decades, the amount of statistical data relating to the capital movements of that period has been considerably enlarged as a by-product of the heightened interest by economists and economic historians in 19th century processes of growth and fluctuations. Annual series of international capital flows have been compiled for individual countries where none existed before, and pre-existing ones have been revised and extended. This paper proposes, on the basis of these and related series, to make a comparative statistical analysis of the patterns of secular and cyclical fluctuation in foreign investment in the 50 years before World War I and an examination of some of the factors determining them. The assembled data cover the three major net capital exporters before 1914—Great Britain, France, and Germany—and most of the leading net capital-importing countries with the notable exceptions of Russia and Japan.

There is some justification for limiting this study to the period before 1914. Continuous annual series on capital movements for a number of important countries stop in 1913. The complications introduced by two world wars and their aftermaths are avoided. Of more importance, the period roughly from 1870 to 1914 constituted a unique historical episode: the so-called golden age of the international economy. International movements of capital were almost entirely free

The author gratefully acknowledges the assistance of Balwant Singh and Miss A. R. Lokamatha on the statistical work underlying in this study.

<sup>1</sup> See, for example, Herbert Feis, *Europe: The World's Banker, 1870-1914* (New Haven, 1930); Charles K. Hobson, *The Export of Capital* (London, 1914); Leland H. Jenks, *The Migration of British Capital to 1875* (London, 1938); Alec K. Cairncross, *Home and Foreign Investment, 1870-1913* (Cambridge, England, 1953); and Douglass C. North, "International Capital Movements in Historical Perspective," in *U. S. Private and Government Investment Abroad*, ed. by Raymond F. Mikesell (Eugene, Oregon, 1962), pp. 10-43.

of formal restrictions.<sup>2</sup> Exchange and direct trade controls were virtually unknown. Tariff barriers, while high as compared to earlier levels, were low relative to those which were to prevail after 1914. Stable exchange rates prevailed over a large part of the world, devaluations of gold currencies were highly exceptional, and few countries were forced off the gold standard once adopted. Labor could move freely across national boundaries in search of better job opportunities, and the volume of intercontinental migration reached levels in excess of anything experienced before or since. Capital-exporting countries devoted far larger proportions of their savings to foreign investment than has been the case since 1914, even with the inclusion of foreign aid in the latter after 1945. The volume of world trade grew at a rate not subsequently exceeded until the 1950's. The ratios of international investment and of international trade to world production appear to have been at all-time highs.

### *Geographical Patterns, Components, and Purposes*

Some key facts regarding the geographical distribution and pattern of international investment before 1914 can be quickly summarized. At the outbreak of World War I, the total stock of long-term foreign investments, according to an informed estimate,<sup>3</sup> was about \$44 billion, of which \$18 billion was held by Great Britain, \$9 billion by France, almost \$6 billion by Germany, \$5.5 billion by Belgium, the Netherlands, and Switzerland, and the balance mainly by the United

<sup>2</sup> For political reasons, however, France and Germany exercised some measure of restraint on capital exports through formal controls on the flotation or listing of foreign securities in their markets and especially through a variety of informal pressures on banking and issuing houses. These countries also took a number of steps to encourage the export of capital to particular countries or regions, again for political reasons. For the relations between *haute finance* and *haute politique* in the period before 1914, see Feis, *op.cit.*; A. Eugene Staley, *War and the Private Investor* (New York, 1935); and Jacob Viner, "Political Aspects of International Finance," *Journal of Business*, Vol. 1 (April and July 1928), pp. 153-73, 349-63, and *International Economics* (Glencoe, Ill., 1951), pp. 49-85. Great Britain encouraged capital exports to countries of the British Empire primarily through legislative measures, such as the series of acts, culminating in the Colonial Stock Act of 1900, that regulated the investment of Trust Funds. Cf. also S. Herbert Frankel, *Capital Investment in Africa* (London, 1938), p. 21: "The general atmosphere of optimism engendered by glowing descriptions of, and imperialist propaganda about, the potentialities of the new [British] African possessions had a powerful effect in making not only the loan issues of Colonial Governments, but also the shares of innumerable exploration, mining and financial companies, acceptable to the investor."

<sup>3</sup> *International Capital Movements during the Inter-war Period*, United Nations (New York, October 1949), p. 2.



States, Russia, and Japan. (In 1874 the combined total for Britain, France, and Germany had amounted to only \$6 billion.) Of the outstanding total, \$14 billion was invested in Europe—probably to the extent of one-third in Russia—\$10.5 billion in the United States and Canada, \$8.5 billion in Latin America, and the balance mainly in Asia and Africa. Over the period 1870-1913 as a whole, British long-term capital exports flowed predominantly to the United States, Canada, Australia and New Zealand, India, South Africa, and Argentina. As much as 75 per cent of Britain's stock of foreign investments in 1913 was concentrated in these countries (as compared with about 60 per cent in 1870). On the other hand, French and German long-term capital exports went mainly to European countries—in the case of France, about one-third to Russia alone—although after 1900 they went in increasing proportion to other continents. In 1913 some 60 per cent of outstanding French foreign long-term investments, and half of the German, were still in Europe. Among the capital-importing countries to be discussed here, the United States drew some 55-60 per cent of its foreign capital (net) from Britain over the whole period 1870-1914,<sup>4</sup> and Canada over 70 per cent.<sup>5</sup> The proportions drawn from Britain were undoubtedly even higher in the cases of Australia, India, New Zealand, South Africa, and (at least up to 1900) Argentina. Italy, Sweden, and Norway obtained their foreign capital largely from France and Germany, with French capital definitely predominating in the case of Sweden.<sup>6</sup>

Portfolio investment was a far more important component of long-term capital movements before 1914 than direct investment;<sup>7</sup> and it

<sup>4</sup> Jeffrey G. Williamson, *American Growth and the Balance of Payments, 1820-1913* (Chapel Hill, N.C., 1964), p. 145.

<sup>5</sup> The figure was 70 per cent for the period 1900-13, according to Jacob Viner, *Canada's Balance of International Indebtedness, 1900-1913* (Cambridge, Mass., 1924), p. 139. It may have been closer to 80 per cent in 1870-99, if one is to infer from data presented in Penelope Hartland, "Canadian Balance of Payments since 1868," in *Trends in the American Economy in the Nineteenth Century*, National Bureau of Economic Research, Studies in Income and Wealth, Vol. 24 (Princeton, 1960), pp. 488-93.

<sup>6</sup> Rondo Cameron, *France and the Economic Development of Europe, 1800-1914* (Princeton, 1961), pp. 488-93.

<sup>7</sup> Foreign investment in China provided one exception to this rule. See Chi-ming Hou, *Foreign Investment and Economic Development in China, 1840-1937* (Cambridge, Mass., 1965). The investments abroad of the United States before 1914 also appear to have been primarily direct investments, if one is to judge from estimates of the main categories of American long-term assets abroad on selected dates by Cleona Lewis, *America's Stake in International Investments* (Washington, 1938), p. 442. Before 1914, it might be noted, the concept of direct

consisted much more of transactions in bonds and other debt instruments than in equities. In turn, the flotation of new issues on foreign capital markets appears, with the possible exception of the United States, to have influenced the country totals of portfolio investment flows more than did net international transactions in outstanding securities.<sup>8</sup> Borrowings on foreign capital markets by governments (national, state, and local) went primarily for railroad construction, utilities, and public works;<sup>9</sup> and a high proportion of the foreign borrowings of private enterprise was undertaken by privately-owned railroad companies, often with assistance in the form of government guarantees. In 1914 as much as 70 per cent of the outstanding volume of British and of French long-term foreign investments abroad consisted of government and railway bonds; and the corresponding proportion in the case of Germany might have been only somewhat smaller. When allowance is made for the volume of governmental borrowing abroad and for the extent of the assistance provided to private railroad companies in the form of guarantees, land grants, and cash subsidies, one might conclude that the bulk of the international long-term borrowings in the period before 1914 depended directly or indirectly on government action in the capital-importing countries.<sup>10</sup> On the other hand, foreign investment was financed almost entirely from private sources.

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investment (in its present-day sense) was not clearly distinguished in the statistics from other (noncontrolling) equity investments in private foreign enterprises.

<sup>8</sup> This statement is not intended to minimize the importance of international movements of outstanding securities before 1914. There is, on the contrary, reason to believe that such movements were often on a very large scale indeed, although statistical data are almost completely lacking. For evidence of the importance of these movements, see Raphaël G. Levy, "Rôle des Valeurs Mobilières dans le Commerce International et dans les Règlements Financiers Internationaux," *Congrès International des Valeurs Mobilières*, Vol. IV (Paris, 1901); Charles A. Conant, "Securities as a Means of Payment," *Annals of the American Academy of Political and Social Science* (September 1899), pp. 25-47; and Arthur I. Bloomfield, "The Significance of Outstanding Securities in the International Movement of Capital," *Canadian Journal of Economics and Political Science*, Vol. 6 (November 1940), especially pp. 496-503, and the literature cited therein.

<sup>9</sup> Important government borrowings abroad were also undertaken at times to restore convertibility (Argentina, Italy), to protect convertibility (Russia, Japan, the United States), to finance wars or preparations for wars (Japan, Russia, South Africa), or to make loans to the private sector (Sweden). Foreign borrowings by state or private mortgage banks or building societies were of importance in the cases of Sweden, Norway, Australia, and Argentina.

<sup>10</sup> Ragnar Nurkse, *Equilibrium and Growth in the World Economy* (Cambridge, Mass., 1961), p. 140; and Penelope Hartland, "Private Enterprise and International Capital," *Canadian Journal of Economics and Political Science* Vol. 19 (February 1953), pp. 70-80. But see Matthew Simon, "The Enterprise

A large but indeterminable part of the long-term capital that flowed to the "newer" overseas countries before 1914 was undoubtedly stimulated directly or indirectly by the actual and prospective expansion of demand in the industrial centers for the primary products of these countries. Some foreign capital moved directly into the export sectors of these countries in search of profit, but, of much more importance, capital was borrowed abroad for the construction of transport and other overhead facilities, in part to enlarge the flow of these products to world markets and to support the expansion of domestic activities stimulated directly by export growth. Nurkse has in fact argued that 19th century growth in the "newer" regions of the world was *predominantly* a reflection of the expansion in world demand for their exports and of the foreign investment (and immigration) thereby induced.<sup>11</sup> But this generalization seems to be too sweeping. It may apply to some countries (Canada and South Africa), but not to others (the United States). It neglects the powerful domestic forces, on both the demand and supply sides, making for growth. It disregards the fact that the prospect of expanding exports was only one of the factors, and not always the most important one, stimulating the building of railroads and other communications systems which absorbed so large a fraction of the long-term capital imports; political considerations, such as the need to unify the countries concerned, and other purely domestic factors, may have played an equal if not larger part.<sup>12</sup>

#### *The Statistical Series: Methods of Compilation and Constituents*

The annual series on capital movements to be examined here, which are plotted in Charts 1 and 2 and given with their sources in Appendix 1, were constructed in nearly all cases on the basis of the so-called indirect method. That is, all of the items in the balance of payments except capital movements were estimated separately, and the residuals needed to balance the totals of payments and receipts were taken to constitute the net flow of long- and short-term capital along with errors and omissions. For a number of the countries concerned, *direct* estimates of the net and/or gross annual flow of *long-term* capital alone

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and Industrial Composition of New British Portfolio Foreign Investment, 1865-1914," *Journal of Development Studies*, Vol. 3 (April 1967), pp. 282-3.

<sup>11</sup> Nurkse, *op.cit.*, pp. 283-90, and 304-5.

<sup>12</sup> On the substance of this paragraph I have benefitted from discussions with Irving B. Kravis and from a reading, in draft form, of a forthcoming paper of his on trade and growth.

are also available,<sup>13</sup> but in some of the cases these are incomplete or cover shorter periods than do the corresponding series obtained by the indirect method.<sup>14</sup> For these reasons, and for purposes of consistency among the series, the data derived by the latter method are used wherever possible. Direct estimates are employed only in the few instances (Argentina and New Zealand) where no other exists.

Little or nothing can be said here as to the extent to which net short-term capital movements and errors and omissions distort the accuracy of the various indirect estimates as a measure of the net flow of long-term capital alone. For only two of the series (the Canadian and Swedish) is it possible for the whole periods covered to eliminate the aggregate net flow of short-term capital<sup>15</sup> in view of the avail-

<sup>13</sup> The most ambitious direct estimates available are for Great Britain. Matthew Simon has compiled monthly totals of new foreign capital issues purchased by British investors from 1865 to 1914 according to the individual borrowing countries, the categories of borrowers, and the broad purposes of the borrowings. Some of his results, though not his data on the borrowings of *individual* countries, are to be found in his articles, "The Pattern of New British Portfolio Foreign Investment, 1865-1914," in *Capital Movements and Economic Development*, ed. by John H. Adler (New York, 1967), pp. 33-60, and *Journal of Development Studies*, Vol. 3 (April 1967), pp. 280-92. While Simon's data cover by far the largest component of gross British long-term capital exports, they do not include direct investments abroad, international transactions in outstanding securities, or private placements of foreign issues in London. In view of these and other considerations, such as the exclusion of short-term capital movements, the Simon series shows substantial differences in many years, in volume or direction of change, from the indirect estimates used here. On the other hand, the broad similarity in the longer-term fluctuations and cumulated totals of the two series is unmistakable.

<sup>14</sup> A comparison of the indirect and direct estimates for those countries, in addition to Great Britain, for which both are available (France, Canada, Australia, and India), likewise reveals that the cumulated totals over a period of years are similar, but that the data in individual years often differ substantially. These differences reflect in part the facts that each of the two sets of estimates do not measure exactly the same thing and that each is subject to errors and omissions. Besides, some differences are to be expected in view of the time lag (often variable) between the act of investing or borrowing abroad and the actual transfer of the capital as reflected in the estimates derived by the indirect method.

<sup>15</sup> At least through banking channels. There are no available data for short-term commercial credits. For some countries, such as Sweden, these may have been relatively large. See Lennart Jörberg, "Structural Change and Economic Growth: Sweden in the 19th Century," *Economy and History*, Vol. VIII (1965), p. 22. For some of the series it would, of course, have been possible to eliminate only *some* components of the net flow of short-term capital through banking channels, notably the changes in official holdings of foreign exchange. For details on 19th century short-term capital flows, see my paper, *Short-Term Capital Movements under the Pre-1914 Gold Standard*, Princeton Studies in International Finance No. 11 (Princeton, 1963).

ability of the relevant data. In these two cases, however (especially the Canadian), the net movement of short-term funds was generally only a minor component of the annual totals; and it may be assumed that this usually held true also for those series for which no such elimination was possible.<sup>16</sup> The relative magnitude of the errors-and-omissions component is, of course, unknown. In many of the series, and for many of the years covered, this item was undoubtedly large, as various of the compilers have themselves cautioned. But the assumption will have to be made that errors and omissions do not seriously impair the usefulness of the individual series as a measure of the net flow of long-term capital.

The various series include, of course, net international movements of both foreign and domestic long-term capital,<sup>17</sup> although the one probably predominated heavily over the other in individual cases. This at least was true for Canada and France, for which there exist direct estimates of each. The net movement of foreign capital to Canada was far in excess of the net outflow of Canadian capital; and the net outflow of French capital was much larger than the net inflow of foreign capital. Even in those years when a predominantly debtor country, such as Italy, was on balance exporting capital, the net outflow undoubtedly reflected mainly a repatriation of foreign capital rather than a movement of domestic capital. The United States, however, might have constituted a possible exception to this general rule, especially in the later years of the period when the net movement of domestic capital might have been roughly of the same order of magnitude as that of foreign capital.

### *What the Charts Reveal*

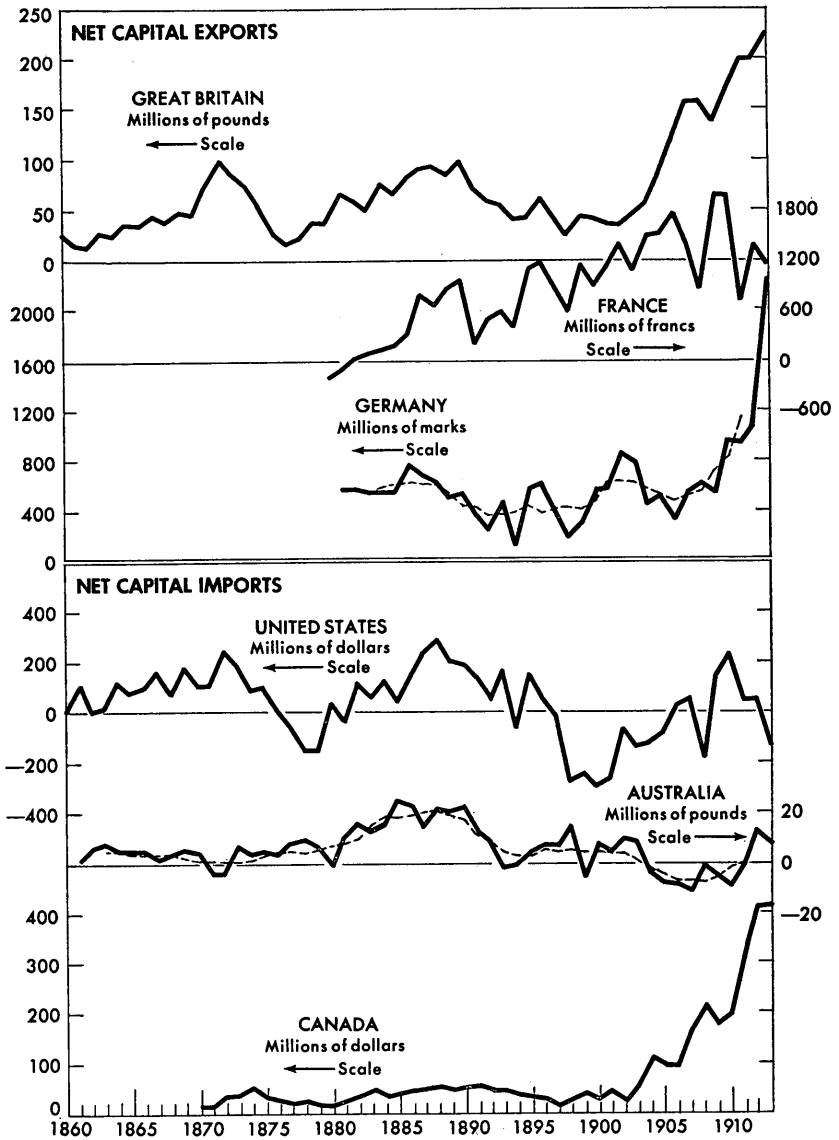
The various series on capital movements are plotted in Charts 1 and 2.<sup>18</sup> Each series is measured in terms of the currency of the country concerned. It was not possible to convert all the observations into a common unit in view of the fact that several of the currencies, including the dollar, fluctuated in terms of gold during part of the periods covered. The charts, then, are designed to show the behavior and

<sup>16</sup> It held true for the Australian series which, for *part* of the period covered, could be adjusted to exclude net short-term capital movements.

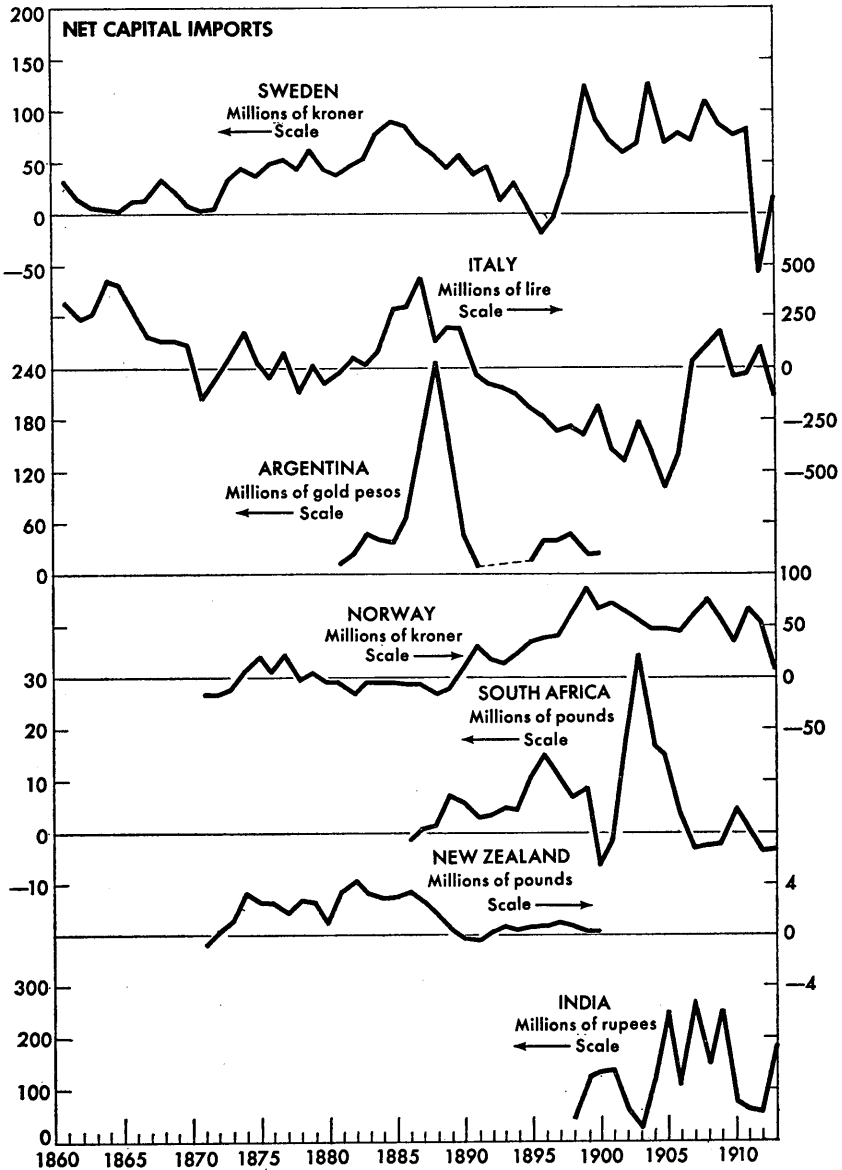
<sup>17</sup> Except for the Argentine and New Zealand series, which are direct estimates of foreign capital flows alone.

<sup>18</sup> The Canadian and Swedish series have been adjusted to eliminate net short-term capital movements through banking channels.

**CHART 1**



**CHART 2**



fluctuations of each series individually, not to compare their relative magnitudes.<sup>19</sup>

The different periods covered by the series reflect the availability of the annual data. Only the series for Great Britain and the United States could have been carried back farther, in each case to 1820, but 1860 appeared an appropriate starting point in view of the lengths of the other series. France was a substantial net capital exporter for several decades before 1880,<sup>20</sup> when the French series starts, as was Germany during part of the 1870's, but annual estimates for these earlier years are not available. The Argentine and New Zealand series end in 1900, but there is evidence of a marked resumption of capital imports into each of these countries after 1905.<sup>21</sup> India appears to have been a relatively large capital importer before 1898,<sup>22</sup> when the series starts, but no comparable annual data are available for the earlier period. On the other hand, South Africa, for which the data start in 1886—the year of the Witwatersrand gold discoveries—does not seem to have imported capital on any substantial scale before that date. An annual series is available for Japan from 1904 to 1913—before then capital imports are believed to have been relatively trifling in size—but the series is too short to be included here.<sup>23</sup> There are no annual estimates

<sup>19</sup> After 1880, however, it is possible to convert all the series except for Italy into dollars. The resulting data for 1881-1913 are shown for quinquennial periods in Appendix 2. They bring out the predominance of Britain among the three capital-exporting countries and the relative importance, among the capital-importing countries, of the United States, Australia, and Argentina in the 1880's and of Canada, India, and South Africa in the 1900's.

<sup>20</sup> Cameron, *op.cit.*, p. 79 and *passim*.

<sup>21</sup> Alec G. Ford, *The Gold Standard, 1880-1914: Great Britain and Argentina* (Oxford, 1962), pp. 155-6; and Wolfgang Rosenberg, "Capital Imports and Growth: Foreign Investment in New Zealand, 1840-1958," *Economic Journal*, Vol. 71 (March 1961), pp. 95-6, 109-10.

<sup>22</sup> For example, outstanding British investments in India rose by £110 million between 1870 and 1885, an amount as large as the increase between 1885 and 1913. Changes in outstanding totals are not, of course, an accurate measure of cumulated capital flows.

<sup>23</sup> There are actually two available series for this period: Margaret S. Gordon, "Japan's Balance of International Accounts, 1904-31," in *The Industrialization of Japan and Manchukuo, 1930-1940*, ed. by Elizabeth B. Schumpeter (New York, 1940), pp. 865-72; and Henry Rosovsky, *Capital Formation in Japan, 1868-1940* (Glencoe, Ill., 1961), p. 129. It is not clear if these two series purport to measure exactly the same thing. While they differ substantially on a yearly basis, the cumulated totals for 1904-13 are in each case in the neighborhood of 1 billion yen, or roughly \$500 million on the basis of exchange rates before 1914. Still another annual series, based on direct estimates of net foreign capital flows alone, is to be found in Harold G. Moulton, *Japan: An Economic and Financial Appraisal* (Washington, 1931), p. 379. In this case, the cumulated total for 1904-13 comes