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Canadian Balance of Payments since 1868

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CONCERNED primarily with estimates of the Canadian balance of payments for 1868–99, this paper contains also estimates already available for 1900–55 to provide an unbroken record covering almost a century. Except for enumerating some of the more impressive facts revealed by the record, the report makes no attempt to go beyond the balance of payments estimates themselves. It is hoped that the estimates will further the work of scholars interested in the economic history of Canada and also provide part of the raw material needed by economists concerned with the relations among foreign trade, international capital movements, and economic development.

The three main sections deal with (1) long-term changes in Canada's balance of payments since 1868, (2) the estimates for 1868–99, and (3) comparison of the current account balance for 1868–99 with independently derived estimates of the capital movement. The appendix contains only a general statement of the methods and sources used to derive the current account estimates; the details were included in an earlier, unpublished report and are available in mimeographed form in the National Bureau library.

The methods employed by Jacob Viner in his study, now over thirty years old, were tested with other possibilities for deriving balance of payments data for 1868–99, and his techniques still seemed the best choice.[1] The research worker today cannot fail to be impressed by the insight he revealed in his quantified assumptions.

Long-Term Changes in the Balance of Payments, 1868–1955

The more important long-run changes in the Canadian balance of international payments and its component items are contained in Tables 1 and 2. The net movement of capital across the Canadian border (Table 1) was consistently inward from Confederation until World War I. Although the absolute amounts of the capital inflow in relation to gross domestic investment were small before 1900, the role of foreign capital was impressive. In 1870 the gross inflow was about

[1] Jacob Viner, *Canada's Balance of International Indebtedness, 1900–1913*, Harvard University Press, 1924 (hereafter referred to as *Canada's Balance*).

TABLE 1

The Net Inflow of Foreign Capital, 1868–72–1955

(millions of dollars per calendar year or annual average; minus sign indicates a net outflow)

Year	*Net Inflow of Foreign Capital*	Year	*Net Inflow of Foreign Capital*
1868–72	16.5	1912	418.7
1869–73	21.7	1913	400.4
1870–74	29.8	1914	290
1871–75	34.3	1915	47
1872–76	34.2	1916	−58
1873–77	32.0	1917	−210
1874–78	29.0	1918	64
1875–79	22.7	1919	−52
1876–80	18.2	1920	299
1877–81	17.5	1921	156
1878–82	19.6	1922	46
1879–83	23.4	1923	−65
1880–84	28.4	1924	−131
1881–85	33.7	1925	−255
1882–86	37.9	1926	−128
1883–87	39.4	1927	17
1884–88	40.0	1928	−17
1885–89	42.6	1929	274
1886–90	45.2	1930	373
1887–91	46.3	1931	141
1888–92	46.6	1932	93
1889–93	45.3	1933	−4
1890–94	42.3	1934	−64
1891–95	38.0	1935	−123
1892–96	33.0	1936	−244
1893–97	26.7	1937	−180
1894–98	23.7	1938	−100
1895–99	22.7	1939	−126
1896–1900	24.1	1940	−228
1897–01	23.7	1941	−651
1898–02	27.0	1942	−957
1900	35.8	1943	−842
1901	19.2	1944	−740
1902	26.4	1945	−879
1903	69.2	1946	−727
1904	90.2	1947	−791
1905	81.8	1948	41
1906	109.4	1949	−49
1907	183.0	1950	999
1908	122.5	1951	428
1909	147.7	1952	−327
1910	234.4	1953	159
1911	337.9	1954	272
		1955[a]	426

[a] Preliminary.

Footnotes to Table 1 on facing page.

30 per cent of gross investment, in 1900 about 25 per cent.[2] Between 1900 and the outbreak of World War I, its volume was multiplied many times, rising even more rapidly than domestic investment; during 1900–1905 it accounted for 26 per cent of gross domestic investment, in 1906–10 for 38 per cent.[3]

In 1915, the direction of the net movement of Canadian capital shifted abruptly to a net outflow. In the interwar period, although there were years during which the net inward movement reappeared (e.g. 1929–32), the trend was outward, because of redemptions and repatriations of Canadian securities. More recently Canada again experienced a net capital inflow (since 1950 an annual average of about $960 million, over 20 per cent of gross domestic investment[4]), despite postwar foreign aid programs and an increase in Canadian direct and portfolio investment abroad.

The variations in individual balance of payments items, measured as per capita values and as percentages of total debits or credits, are sketched in Table 2 for the time between Confederation and the post-World War II prosperity. The averages are shown also for the turn of the century, the conclusion of the economic "stagnation" of the first three decades of Confederation, and for the years of rapid economic expansion just before the outbreak of World War I.[5]

[2] That is, import of foreign capital, without deduction of export of Canadian capital. See Table 10 in the appendix.

[3] Estimates of gross investment for 1870 and 1900 ($68 million in 1870 and $139 million for 1900) are from O. J. Firestone, *Canada's Economic Development, 1867–1953*, p. 248; the estimates of investment for 1901–1905 (an aggregate of $1,283 million) and 1906–10 (an aggregate of $2,287 million) are from K. A. H. Buckley, "Capital Formation in Canada," in Volume Nineteen (1957) of Studies in Income and Wealth (see the list of publications of the conference at the back of this volume). In computing the ratios of capital inflow to investment for 1870 and 1900, the averages of gross capital inflow for 1868–72 and 1898–1902 were used. It would be desirable to compare the net capital inflow with net investment, but for these years no capital consumption estimates have been made.

[4] Gross capital inflow computed from *Canadian Balance of International Payments, 1955*, Dominion Bureau of Statistics, 1956, p. 42. Gross domestic investment for this period excluding inventory changes averaged $4,532 million ($5,066 million including inventory changes, a capital inflow amounting to 19 per cent of domestic investment) (*Canada Yearbook*, 1955, and *Canadian Statistical Review*, January 1957).

[5] The description of the period from about 1875 to 1895 as one of economic stagnation

1868–99: Table 3. *1900–13:* Table A–2. *1914–36:* Table A–3. Imports of gold coin and bullion have been adjusted for under-reporting for the years 1900–25 and are the official estimates of the Dominion Bureau of Statistics for the later years. Data on commodity trade exclude in-transit trade, and are not adjusted for net changes in customs warehouses. *1937–45: 1948 Balance of Payments* (pp. 154 and 158). *1946–52: Canadian Balance of International Payments, 1946–1952*, pp. 90 and 107; for 1953–55 from the *Canadian Balance of International Payments, 1955*, pp. 34 and 37. Commodity trade is adjusted for net warehousing; mutual aid exports are included, gold production available for export (i.e. net export of nonmonetary gold) excluded. Excluding mutual aid exports, the net capital inflow since 1946 has been as follows (minus indicates outflow): 1946, −630; 1947, −791; 1948, +41; 1949, −49; 1950, +1,056; 1951, +573; 1952, −127; 1953, +405; 1954, +556; and 1955, +648.

TABLE 2

Long-Term Changes in the Canadian Balance of International Payments, Selected Periods, 1869–73—1951–55

	Per Capita Annual Averages (dollars)					*Percentage of Total Current Debits or Credits*				
	1869–73	1895–99	1909–13	1946–50	1951–55	1869–73	1895–99	1909–13	1946–50[a]	1951–55[a]
CREDITS										
1. Merchandise exports	22.36	28.36	47.90	218.68	279.72	82.4	84.8	75.8	72.6	79.7
2. Freight receipts	3.16	2.32	2.30	23.96	23.65	11.7	7.0	3.6	8.0	6.1
3. Tourist receipts	0.71	1.10	3.62	16.96	20.07	2.6	3.3	5.7	6.7	5.2
4. Insurance receipts	0.01	0.09	0.46			[b]	[b]	0.7		
5. Immigrants' capital	0.62	0.42	6.14	3.22	5.81	2.3	1.3	9.7	1.1	1.5
6. Personal remittances	0.04	0.43	1.18	1.62	1.42	[b]	1.2	1.9	[b]	0.4
7. Interest and dividends	0.26	0.77	1.36	5.78	9.86	0.1	2.3	2.1	2.0	2.6
8. Total	27.16	33.49	62.96	270.22	340.54	99.1	99.9	99.5	90.4	95.5
9. Capital import (net)	6.05	4.41	42.17	−8.15	12.97					
DEBITS										
1. Merchandise imports	28.52	26.35	74.22	195.23	278.51	85.5	69.3	70.4	67.2	67.8
2. Freight payments	1.72	1.61	3.34	20.39	25.20	5.2	4.2	3.1	7.1	6.1
3. Tourist expenditures	0.70	1.00	3.49	13.12	24.66	2.1	2.6	3.3	4.5	6.0
4. Insurance payments	0.13	0.19	0.71			[b]	[b]	[b]		
5. Emigrants' capital	0.27	0.26	2.81	2.60	6.08	[b]	[b]	2.6	[b]	1.5
6. Personal remittances	0.23	0.72	6.35	3.38	3.85	[b]	1.9	6.0	1.2	0.9
7. Interest and dividends	1.72	7.76	14.39	28.09	29.26	5.2	20.7	13.8	9.7	7.1
8. Total	33.29	37.89	105.31	262.81	367.63	98.0	98.7	99.2	89.7	89.4

In this and the following tables, a blank indicates that the figure was not available.

[a] For 1946–55 more items are contained in the official balance of payments than are presented here; consequently the sum of percentages is lower than for the other periods.

[b] Less than 0.1 per cent.

Table 2 shows the smaller increases in per capita values of most items between Confederation and the turn of the century in contrast to the rapid subsequent growth. The reader should keep in mind, however, that prices in Canada declined between 1873 and 1896, rose in the decade before World War I. The change in the internal structure of the balance of payments since 1950 is most noticeable, reflecting the influence of prosperity and the sizable capital inflow. Highlights of the long-term changes in the balance of payments follow.

1. The per capita values of merchandise exports increased more than tenfold during the eighty-odd years after Confederation, and at the same time the relative importance of commodity exports declined as a source of current foreign exchange receipts. The value of commodity imports per person, although increasing nearly tenfold since 1870, has declined in relative importance among total current debits. The balance of commodity trade was passive at the time of Confederation, and except for an export surplus in 1894–99, remained so until World War I. Since the early 1920's the balance of trade has been consistently active, showing an import surplus in only 1929, 1930, 1951, 1953, and 1955.

2. Per capita freight receipts have increased nearly eight times and freight payments more than twelve times over the history of Confederation. The relative importance of receipts on freight account as a source of foreign exchange declined with the decrease in size of the Canadian merchant marine between 1870 and World War I, then increased with recent levels fluctuating around the turn-of-the-century relative level. Freight payments relative to total current debits have followed a similar pattern, except that the levels since 1946 are higher in proportion to total debits than was the 1900 level.

The estimates show during the nineteenth century a persistent credit balance on freight account, with reverses during the years of rapid expansion 1904–21, in the late 1920's, and in the 1930's. Since 1950 the balance on freight account has been passive. The estimated debit balance on freight account is smaller from 1900 to 1925 than that estimated by Viner and Knox for the same years. The earlier estimates, however, took inadequate account of the earnings of Canadian railroads in carrying Canadian exports, and of the earnings of the Canadian-owned ocean fleet in the 1930's.

3. Canadian per capita receipts from foreign tourists have grown steadily (more than twenty-fivefold since Confederation), and until the

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is frequently given by students of Canadian economic history (see, for example, Firestone, p. 38; O. D. Skelton, *General Economic History of the Dominion, 1867–1912*, Toronto, Publishers' Association of Canada, 1913). It is debatable whether the description is appropriate, or whether historians of the present have overemphasized the facts of falling prices, emigration, and the relatively more buoyant U.S. economy.

1950's more rapidly (about thirty-fivefold) than Canadian tourist expenditures abroad. The relative importance of the tourist account in both total credits and debits has more than doubled. Canada experienced an unfavorable balance of payments on tourist account only before 1873, in the late 1890's, just before World War I, and since 1951; in all other years, receipts exceeded Canadian tourist expenditures abroad.

4. The insurance account has always been one of the least important items in the balance of payments. Expansion of the foreign business of Canadian insurance companies from Confederation to World War I raised the per capita receipts of Canada on insurance account from an insignificant amount to about 50 cents and per capita insurance payments to 70 cents. The balance has been a small net indebtedness of Canada to the rest of the world, except in some isolated nineteenth century years when, because of the widespread use of wood in construction, frequent destructive fires occasionally resulted in an excess of payments over receipts by foreign fire insurance companies operating in Canada.

5. The amount of capital brought to Canada by immigrants, varying with immigration rates, reached its highest importance in the years before World War I as a source of foreign exchange both per capita and in relation to total current credits. From Confederation until the 1950's international migration of people consistently brought a net receipt of migrants' capital, even during periods of net emigration, before 1900. In the 1950's, a drop in the rate of immigration and an increase in the average capital transfer per emigrant brought a net debit.

6. Per capita remittances of Canadian residents to friends and relatives in other countries grew consistently until the 1920's, then declined; such gifts have always exceeded similar receipts by Canadians. The amounts have never been large, either per capita or in relation to total current credits or debits.

7. Receipts of interest and dividends from foreign investment by Canadians grew steadily from a per capita level of about 25 cents to $6 in 1929, when growth ended with the depression. Since World War II per capita receipts have grown consistently, to an average of nearly $10, but have remained a relatively small percentage of total current receipts throughout the twentieth century.

On the debit side, Canadian interest and dividend payments grew similarly until the 1930's from about $1.50 per capita in 1870 to $32 in 1929. It was not until the 1950's that the 1929 per capita level of payments was again approached. The importance of capital returns among all current debit items was greatest at the turn of the century when

falling commodity prices for imports and a low rate of foreign investment caused the total of current payments to decline while interest and dividend payments were growing.

Between 1894 and 1903, payments of interest and dividends exceeded the net capital inflow. Since then, only in 1930, 1950–51, and 1953–55 did any net capital inflow that occurred exceed the level of interest and dividend payments for the same year.[6]

8. The net inflow of foreign capital to Canada, as measured by the debit balance of payments on current account, amounted to a total of about $1,000 million, 1868–99; in 1900–13 the net inflow was $2,277 million and the gross $2,414 million. The average net per capita capital import increased from about $6 in the early 1870's to more than $40 in the pre-World War I years, and fell to about $13 after 1950.

The computation of $8 as the average per capita capital outflow, 1946–50, and of $13 as the inflow, 1951–55, shown in Table 2 includes wartime and mutual aid grants of the Canadian government. Whether such unilateral transactions should be included in a measure of capital movements depends on the purpose of the user. They should be included if the net capital movement is being considered in relation to the ability of the economy to support its own exports via the payments it makes to foreigners, or to the amount of saving out of current income provided by the economy. On the other hand, foreign aid grants would be more appropriately excluded if study of the net capital movement is concerned with market investments as opposed to gifts. For 1946–50, excluding wartime and mutual aid grants from the net balance on current account, the net capital outflow measures $373 million (as opposed to $527 million) or the per capita capital export measures $5.70 (as opposed to $8.15). For 1951–55, the exclusion of foreign aid would raise the per capita capital import from $12.97 to $28.44. Thus Canada's foreign aid program has meant a sizable per capita effort.

Estimates for 1868–1899

NET BALANCE ON CURRENT ACCOUNT AS A MEASURE OF NET CAPITAL INFLOW

Table 3 contains five-year moving averages of the major credit and debit items in the Canadian balance of payments on current account, 1868–99.[7] The current account before 1900 was dominated by receipts

[6] In 1951 and 1953–55, the net capital inflow including foreign aid was smaller than interest and dividend payments.

[7] Tables 11 and 12 containing similar and, on the whole, comparable estimates for 1900–36 reproduce, with certain revisions, the data from the following: Viner, *op. cit.*; F. A. Knox, *Dominion Monetary Policy, 1929–1934*, a study prepared for the Royal Commission on Dominion Provincial Relations, 1939. It contains revisions of balance of payments estimates, which had first appeared in the "Excursus" to Herbert Marshall, Frank Southard,

and payments for commodity trade, which represented more than two-thirds of total current credits or debits. Payments on freight and for interest and dividends on foreign capital each accounted for about 5 per cent of total debits in the early years, but by the turn of the century the latter had grown to about 20 per cent of the total. Receipts and payments on all other services, especially in the early years, were so small and so nearly equal that only a negligible error would have been introduced into the net current account balance by their omission.[8] The results confirm the a priori notions of others, that at the time of Confederation the balance of trade was an adequate measure of the net capital movement.[9]

The aggregated difference for 1868–99 between total current receipts and payments gives an indirect estimate of the net inflow of capital into Canada from foreign sources, $957 million. If the estimate of $109 million derived below of Canadian capital invested abroad over the same period is added, a gross inflow of foreign capital of $1,066 million is derived. This measure, however, is the result of rough and often subjective estimating techniques applied to scanty pertinent data; and the method used to estimate payments of interest and dividends admits a possibility of cumulative errors. These factual and methodological weaknesses made imperative an independent estimate of the extent of foreign investment in Canada during the period to check estimates of the balance of payments on current account.

The two independent estimates of the inflow of foreign capital are shown in Table 4; the difference between them can be considered a measure of the errors and omissions in the entire balance of payments. The inflow of capital as measured by the debit balance on current account, however, is expected to be larger than the direct estimate of

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and Kenneth Taylor, *Canadian-American Industry*, Yale University Press (Toronto, Ryerson for the Carnegie Endowment for International Peace), 1936. In both, the estimates for 1914–25 were made by Knox, who quoted, with some revisions, Viner's for 1900–13. And the following DBS publications: *The Canadian Balance of International Payments, 1926–48*, 1949 (hereafter *1948 Balance of Payments*); *The Canadian Balance of International Payments in the Post-War Years 1946–1952*, 1953; *The Canadian Balance of International Payments, 1953*, 1954 (also *1954*, *1955*); *The Canadian Balance of International Payments, A Study of Methods and Results*, 1939 (hereafter *1939 Balance of Payments*); and *The Canada Yearbook*, 1951, p. 932.

The official estimates extend from 1926 to the present. About 1936, a system of direct reporting by individual firms (e.g. railroads, ocean carriers, stock brokers, insurance companies) was substituted for indirect estimating methods similar to those used here, making the DBS data after 1936, reproduced here, considerably more reliable than those of the earlier official accounts.

[8] Other service items include receipts and payments on insurance account, on tourist account, migrants' capital, and immigrants' remittances.

[9] See, for example, H. C. Pentland, "The Role of Capital in Canadian Economic Development before 1875," *Canadian Journal of Economics and Political Science*, November 1950.

TABLE 3

Canadian Balance of Payments on Current Account, 1868–72—1898–1902
(five-year moving averages, millions of dollars)

Years	*Commodity Trade*[a] (1)	*Freight and Shipping* (2)	*Interest and Dividends* (3)	*All Other Services*[b] (4)	*Total* (5)	*Net Debit Current Account Balance* (6)
			CREDITS			
1868–72	72.9	10.5	0.9	4.1	88.4	
1869–73	79.0	11.2	0.9	4.9	96.0	
1870–74	82.3	11.6	0.9	5.5	100.3	
1871–75	83.4	11.7	0.9	5.8	101.8	
1872–76	83.5	11.4	0.9	5.9	101.7	
1873–77	81.7	11.0	1.0	6.0	99.7	
1874–78	78.9	10.1	1.0	5.7	95.7	
1875–79	78.1	9.5	1.0	6.0	94.6	
1876–80	80.8	9.4	1.0	6.5	97.7	
1877–81	85.2	9.9	1.0	7.0	103.1	
1878–82	89.7	10.1	1.0	8.2	109.0	
1879–83	93.6	10.5	1.1	9.3	114.5	
1880–84	95.7	10.4	1.2	10.1	117.4	
1881–85	94.5	10.1	1.2	10.6	116.4	
1882–86	92.0	9.7	1.2	10.9	113.8	
1883–87	89.9	9.6	1.3	10.8	111.6	
1884–88	88.9	9.6	1.4	10.6	110.5	
1885–89	89.3	9.8	1.6	10.7	111.4	
1886–90	91.2	10.0	1.9	10.8	113.9	
1887–91	94.7	9.9	2.0	11.2	117.8	
1888–92	99.8	9.9	2.2	10.8	122.7	
1889–93	105.2	10.0	2.4	10.4	128.0	
1890–94	109.6	9.8	2.5	9.9	131.8	
1891–95	113.5	9.8	2.7	9.5	135.5	
1892–96	118.2	10.2	3.0	8.9	140.3	
1893–97	125.2	10.6	3.4	8.7	147.9	
1894–98	133.9	11.0	3.7	9.0	157.6	
1895–99	145.9	11.9	4.0	10.4	172.2	
1896–1900	159.6	13.3	4.3	10.8	188.0	
1897–01	175.0	13.8	4.5	13.3	206.7	
1898–02	188.2	14.0	4.9	18.2	225.3	

continued on next page

TABLE 3 concluded

Years	*Commodity Trade*[a] (1)	*Freight and Shipping* (2)	*Interest and Dividends* (3)	*All Other Services*[b] (4)	*Total* (5)	*Net Debit Current Account Balance* (6)
			DEBITS			
1868–72	89.6	5.7	5.1	4.5	104.9	16.5
1869–73	100.8	6.1	6.1	4.7	117.7	21.7
1870–74	111.3	6.7	7.1	5.0	130.1	29.8
1871–75	115.9	6.7	8.5	5.0	136.1	34.3
1872–76	114.4	6.4	10.0	5.2	136.0	34.2
1873–77	109.8	6.2	11.5	4.2	131.7	32.0
1874–78	101.8	5.9	12.9	4.2	124.8	29.0
1875–79	93.6	5.3	14.2	4.2	117.3	22.7
1876–80	91.2	5.1	15.2	4.5	116.0	18.2
1877–81	94.4	5.3	16.0	4.9	120.6	17.5
1878–82	100.1	5.2	16.7	6.6	128.6	19.6
1879–83	107.3	5.4	18.0	7.2	137.9	23.4
1880–84	112.8	5.5	19.1	8.4	145.8	28.4
1881–85	114.9	5.5	20.5	9.3	150.2	33.7
1882–86	114.1	5.4	22.1	10.1	151.7	37.9
1883–87	111.3	5.4	23.9	10.4	151.0	39.4
1884–88	109.0	5.3	25.3	11.0	150.6	40.0
1885–89	110.2	5.5	26.8	11.5	154.0	42.6
1886–90	113.0	5.7	28.5	11.9	159.1	45.2
1887–91	115.9	5.7	30.6	12.0	164.2	46.3
1888–92	119.0	5.9	32.5	11.9	169.3	46.6
1889–93	121.5	6.0	34.4	11.4	173.3	45.3
1890–94	120.9	6.0	36.3	10.9	174.1	42.3
1891–95	119.5	6.1	37.4	10.5	173.5	38.0
1892–96	118.5	6.2	38.1	10.5	173.3	33.0
1893–97	118.7	6.5	38.7	10.7	174.6	26.7
1894–98	123.7	7.3	39.2	11.1	181.3	23.7
1895–99	135.6	8.3	39.9	11.1	194.9	22.7
1896–1900	151.0	9.3	41.1	10.7	212.1	24.1
1897–01	166.2	10.2	42.4	11.5	230.4	23.7
1898–02	183.4	11.1	44.1	13.7	252.2	27.0

[a] Based on f.o.b. valuations and including gold.

[b] Includes insurance and tourists accounts, migrants' capital, and other noncommercial remittances.

TABLE 4

Comparison of Capital Inflow Estimates, 1868–72—1895–99
(five-year moving averages millions of dollars)

Years	*Balance of Payments Measure* (1)	*Direct Estimate* (2)	*Errors and Omissions* (3)
1868–72	16.4	4.8	11.6
1869–73	21.4	9.7	11.7
1870–74	30.8	16.9	13.9
1871–75	33.7	17.8	15.9
1872–76	35.1	20.7	14.4
1873–77	32.0	22.0	10.0
1874–78	29.6	18.6	11.0
1875–79	22.5	15.1	7.4
1876–80	19.2	17.1	2.1
1877–81	18.8	16.5	2.3
1878–82	21.4	20.4	1.0
1879–83	25.9	22.6	3.3
1880–84	29.5	27.2	2.3
1881–85	34.5	31.8	2.7
1882–86	38.7	34.0	4.7
1883–87	42.1	32.2	9.9
1884–88	43.9	40.8	3.1
1885–89	47.4	37.7	9.7
1886–90	50.4	35.2	15.2
1887–91	52.8	39.9	12.9
1888–92	53.1	41.4	11.7
1889–93	51.3	34.4	16.9
1890–94	49.4	37.5	11.9
1891–95	45.8	32.8	13.0
1892–96	41.3	25.8	15.5
1893–97	34.3	28.1	6.2
1894–98	30.5	23.7	6.8
1895–99	30.7	21.4	9.3

Col. 1: Table A–1, col. 1. *Col. 2:* Calculated from Table 8, col. 7. *Col. 3:* Col. 1 minus col. 2.

the capital movement, since the latter omits commercial credits and direct investment in Canada by foreigners.

The size of the residual seems to be related to the level of business activity, increasing in periods of prosperity such as the early 1870's and the mid-1880's, and declining in the years of falling business activity such as the late 1870's. The movement probably reflects the fact that the items omitted from the direct estimate vary cyclically, as the volume

of both short-term commercial capital and direct investment would be likely to do. Omissions from the annual estimates of the capital account, therefore, probably represent most if not all of the difference between the two measures, and net errors consequently would be small. The independent estimates of the aggregate volume of the omitted capital transactions for 1868–99 could not be distributed annually or decennially. However, addition of the supplementary estimates to the annual estimates of the capital account yields a direct measure of the capital inflow, $1,105 million for the whole period, which differs from the indirect estimate ($1,066 million) by less than 4 per cent.

CAPITAL ACCOUNT

Canadian Foreign Investment

That in the last decade of the nineteenth century the relative supply of savings and investable funds in Canada increased substantially is suggested by a number of indicators: increases in the volume of insurance issued in Canada, in the proportion and absolute amounts of savings and land mortgage company debentures held in Canada, in the volume of bank deposits, and so on. Since the volume of investable funds was apparently small before 1890, the amount of foreign investment by Canadian individuals and institutions was also probably slight before then, but of increasing size in the twentieth century.

BY RAILROADS. The only industry to undertake direct foreign investment in any magnitude before 1900 was railroads. Railroad mileage owned by Canadian companies in the United States increased from 227 miles in 1860 to 2,435 in 1900.[10] After the completion of its main line in 1885, the Canadian Pacific, in consolidating and improving its position, acquired mileage there both by construction and purchase. About half the investments, column 5 of Table 5, were by the Canadian Pacific, mostly in the 1890's, to acquire control of the Minneapolis, St. Paul, and Sault Ste. Marie, and the Duluth, South Shore, and Atlantic. Among other Canadian railroads that acquired mileage in the United States, the Grand Truck spent $1.5 million in 1878–79 to purchase 330 miles of existing road from Port Huron to Chicago.[11]

BY BANKS. Portfolio investment in this period was undertaken primarily by Canadian banks. The Canadian system of chartered banks, each having a comparatively large amount of capital and the ability to establish an unlimited number of branches, customarily kept a sizable

[10] Computed from G. P. Glazebrook, *History of Transportation in Canada*, Yale University Press (Toronto, Ryerson for the Carnegie Endowment for International Peace), 1938, passim. From 1860 to 1875 there was no change in Canadian holdings of U.S. mileage (see H. A. Innis and A. R. M. Lower, *Select Documents in Canadian Economic History, 1873–1885*, University of Toronto Press, 1933).

[11] G. P. Glazebrook, *op. cit.*, p. 213.

TABLE 5

Canadian Foreign Investment and Interest Receipts, 1868–72—1895–99
(five-year moving averages; millions of dollars; minus sign indicates net inflow)

Years	*Change in Bank Balances Abroad* (net) (1)	*Change in Call Loans Abroad* (2)	*Purchase of Foreign Securities by Insurance Companies* (3)	*Miscellaneous Investment* (4)	*Total Investment* (5)	*Volume of Capital Abroad* (6)	*Interest Receipts* (7)
1868–72				0.5	−0.1	15.0	0.9
1869–73		1.0		0.5	−0.3	14.7	0.9
1870–74		3.2		0.5	1.1	15.8	0.9
1871–75		0.0		0.5	− 0.6	15.2	0.9
1872–76	−1.6	2.0		0.5	0.9	16.0	0.9
1873–77	−0.4	0.0		0.5	0.0	16.1	1.0
1874–78	0.3	−0.2		0.5	0.6	16.6	1.0
1875–79	4.7	−5.4		0.5	−0.2	16.4	1.0
1876–80	4.7	−4.3		0.6	1.0	17.4	1.0
1877–81	3.9	−3.1	−0.11	0.7	1.3	18.7	1.0
1878–82	1.0	0.1	0.01	0.8	1.8	20.6	1.0
1879–83	3.0	−1.4	−0.02	0.9	2.5	23.1	1.1
1880–84	−1.4	1.5	0.00	1.0	1.1	24.2	1.2
1881–85	−2.4	2.1	0.05	1.0	0.7	24.9	1.2
1882–86	−1.6	1.4	0.05	1.0	0.8	25.8	1.2
1883–87	0.6	0.6	−0.01	1.0	2.7	28.5	1.3
1884–88	0.1	1.8	−0.01	1.0	3.9	32.4	1.4
1885–89	−0.7	3.5	0.03	1.0	4.8	37.2	1.6
1886–90	−1.6	4.7	0.03	1.0	5.2	42.3	1.9
1887–91	1.2	3.2	−0.05	2.0	6.4	48.8	2.0
1888–92	0.8	2.0	−0.04	3.5	6.5	55.2	2.2
1889–93	−0.7	2.4	0.01	4.1	6.0	61.3	2.4
1890–94	2.2	−0.1	0.02	4.5	7.1	68.4	2.5
1891–95	2.0	0.4	0.02	4.6	7.8	76.1	2.7
1892–96	0.0	2.0	0.12	5.2	8.3	84.4	3.0
1893–97	3.9	−1.4	0.15	3.5	7.6	92.0	3.4
1894–98	3.0	0.6	0.12	2.8	6.8	98.8	3.7
1895–99	0.9	2.7	0.12	2.8	8.0	106.7	4.0

Col. 1: Computed from C. A. Curtis, *Statistical Contributions to Canadian Economic History*, Macmillan, 1931, Vol. I.

Col. 2: Computed from *ibid.* on the assumption that call loans abroad are equal to the difference between 50 per cent of deposit liabilities and the sum of cash, government bonds, foreign balances, and call loans in Canada.

Col. 3: Computed from annual reports of the Superintendent of Insurance.

Col. 4: Includes the following foreign investments of the Canadian Pacific Railroad, in millions—1887–89, $5.1, and 1890–99, $23.2—computed from the railroad's annual reports.

Col. 5: The sum of cols. 1–4 plus the following amounts of purchases of foreign securities by banks, computed from Curtis, in millions—1892–96, $0.9; 1893–97, $1.4; 1894–98, $1.4; and 1895–99, 1.5.

Col. 6: Col. 5 cumulated. See text, p. 60 for source of 1868–72 figure.

Col. 7: Col. 6 times 6 per cent for 1868–79; times 5 per cent for 1880–89, and times 4 per cent for 1890–99.

portion of resources in the United States and Great Britain, one purpose being to deal in foreign exchange. Because U.S. national banks were prohibited from accepting bills, foreign banking transactions were confined to a few private firms and the agencies of foreign banks, primarily Canadian.[12] Canadian banks bought a large portion of the bills drawn against cotton, grain, and other U.S. exports, and also arranged payments for U.S. importers. During the Spanish–American War a Canadian bank acted as the agent of the U.S. government in the Philippines for paying troops and making other disbursements.[13]

In addition to financing their far-flung foreign exchange business, Canadian banks as early as the 1860's kept funds in New York as a second line of reserves for investment in the call loan market. According to custom (rather than law) Canadian bank reserves were approximately 50 per cent of their deposits, and composed of cash (15 per cent of deposits), government bonds, call loans, and deposits with banks in foreign countries.[14] Call loans abroad, reported in the 1800's with domestic short-term loans, were not separately reported until 1900. From 1900–28, however, total call and short-term loans and call loans abroad varied in the same fashion, for the total short-term (call) loans in Canada of necessity remained relatively constant from year to year.[15]

The volume of call loans abroad before 1900 was estimated (Table 5) as the difference between 50 per cent of total deposits of the chartered banks and the sum of cash, government bonds, net foreign balances, and call loans in Canada.[16] The estimating procedure is exceedingly rough, for the 50 per cent reserve agreed upon was probably the average of a range of permissible reserve ratios, which varied according to the demand for accommodation.[17] Thus the procedure probably overstates the volume of call loans abroad for years of brisk business (the early seventies and eighties) and understates it for depression years (the later seventies and early nineties). For the same reason estimates of call loans abroad would be expected to exceed the actual, 1900–10, and especially 1905–10 when boom conditions and strong demand for accommodation prevailed in Canada. The following tabulation shows the estimates computed by the above procedure and the actual given by Viner:

[12] See Hartley Withers, *International Finance*, Dutton, 1916; and Victor Ross, *Eistory of Canadian Bank of Commerce*, Toronto, Oxford University Press, 1920, Vol. II.

[13] Ross, p. 63.

[14] B. H. Beckhart, *Banking System of Canada*, Holt, 1929, p. 430.

[15] *ibid.*, p. 416.

[16] The net rather than gross amount (i.e. due from banks abroad) is used because deposits of foreign banks are not included in the measure of deposits, and because banks presumably consider net rather than gross foreign balances in reviewing their reserve position.

[17] Cf. Beckhart, pp. 434–435, quoting the testimony of the General Manager of the Canadian Bank of Commerce: "a bank that is on a safe basis should have anywhere from 40 to 60 per cent of this class of securities and cash."

Year	*Call Loans Abroad* (thousands of dollars) Estimated	Actual
1900	50,202	47,313
1901	63,256	77,423
1902	60,571	77,835
1903	75,260	53,607
1904	85,012	66,126
1905	108,150	91,892
1906	132,784	95,433
1907	133,311	66,437
1908	116,351	127,487
1909	170,752	178,577
1910	184,359	131,110
Total:		
1900–04	334,301	322,304
1905–10	845,707	690,936
1900–10	1,180,008	1,013,240

The fact that the actual reserve ratio was more or less elastic and tended to decline when demand for funds was brisk is probably illustrated by the negative volume of estimated call loans abroad which appears (Table 5) for 1877–85 (Manitoba land boom and construction of Canadian Pacific Railroad). If, however, the 50 per cent reserve ratio is an average of actual performance and not a standard of perfection, then although the estimating error may be considerable for any one year, the estimated volume of call loans abroad for a period of years should not be much distorted. This is all the more likely because the swings in business conditions in Canada during these years were not especially sharp after the boom of the early 1870's.

In addition to liquid assets kept abroad, Canadian banks have held sizable amounts of foreign securities, largely railroad bonds. Holdings of railroad securities by the chartered banks were reported only for 1891–1900; from 1900 on, the series was for "railway and other bonds, debentures and stocks," which could include any industrial security but was in fact confined to the best railroads and industrials.[18]

BY OTHERS. Although the portfolios of Canadian insurance companies increased considerably over the period, most of the investment was in

[18] W. A. Mackintosh and C. A. Curtis, *Statistical Contributions to Canadian Economic History*, Toronto, Macmillan, 1931, Vol. I. Apparently Viner referred to this series when he estimated that two-thirds of the holdings consisted of foreign railroad securities (p. 90, referring to an estimate of Eckhardt in the *Journal of the Canadian Bankers Association*, January 1903, p. 4), although the level of the series jumped from $14.7 million in 1899 to $25.5 million when the change occurred in 1900. The estimate in the present study is that two-thirds of the holdings consisted of foreign securities.

Canadian securities. As Table 5 indicates, the purchase of foreign securities by insurance companies was slight until the turn of the century.

Miscellaneous foreign investments purchased by individuals of securities in New York and London, lines acquired in the United States by railroads other than the Canadian Pacific, manufacturing enterprises established in the United States by Canadians—are estimated annually at $500,000 for 1868–80, at $1 million for 1880–96, and, in the burgeoning of confidence at the turn of the century, at $2 million for 1897–1900.[19] The estimate for Canada's foreign investments before 1868 (based on scanty information) is $15 million, primarily bank assets and railroad mileage.[20]

Viner assumed that Canadian capital investments abroad at the end of 1899 amounted to $100 million.[21] The present estimate of about $124 million raises the estimate of interest receipts by Canada for 1900–13 by 13 per cent from $88 to $101 million. For the years after 1913 both Knox and the DBS computed Canadian interest receipts (and payments also) from a direct estimate of the capital account in the balance of payments.[22]

Direct Estimate of Foreign Capital Invested in Canada

The prime purpose of attempting to measure the volume of foreign investment in Canada before 1900 is to provide a check on the measure of net foreign investment obtained indirectly from the balance of payments on current account. It is therefore desirable to measure the funds actually passing into the possession of Canadian individuals or institutions, rather than the claims for them held by the foreign investor. This purpose implies that Canadian securities purchased by foreigners, for example, should be valued not at their face or par value, but rather in actual amounts of Canadian dollars paid by foreign purchases, less any foreign brokers' fees or promoters' shares. The dollar amounts actually transferred to Canada would be reflected in the balance of payments. Also, since the indirect balance of payments estimate is a residual item, it is the difference between the gross inflow of foreign capital and any redemptions (or refunding operations) occurring at the same time. The direct estimate of foreign investment in Canada is accordingly computed net of redemptions, and in terms of purchase price rather than par or book value, wherever possible.

A balance of payments estimate of the inflow of foreign capital during a given period further measures the total volume of claims or

[19] See Marshall, Southard, and Taylor, p. 17.

[20] Viner, p. 88. Canadian bank balances abroad in 1871 (the first year reported) amounted to $14 million; in 1868 Canadian railroads owned just over 200 miles of line in the United States (see the subsection above on investment by railroads).

[21] *ibid.*, p. 94.

[22] For Knox, see the "Excursus," p. 311.

evidences of indebtedness acquired by foreigners against the given country. Thus, it includes not only foreign portfolio investment but also the volume of direct investment by outsiders in the property of the country (land, buildings, and industrial equipment) and, where the use of credit is involved in financing commodity trade, the short-term claims of foreigners would be part of the net inflow of foreign capital. Changes in the level of mercantile credit extended by English wholesale houses to Canadian importers or of net balances of U.S. banks with Canadian correspondents, for example, would be part of the claims of outsiders acquired against Canada in any one year. Similarly, an increase in the cash balances of the Canadian branch of a U.S. manufacturing firm reflects an increase in the claims of an outside agency against a Canadian institution, but if such increases represent the retained earnings of the Canadian branch, they are not usually included in the balance of payments concept of the capital movement.

An attempt to trace such multifarious investment activity of more than a half-century ago is obviously doomed to be incomplete. Even today the data-collecting activities of the U.S. federal government cannot always prevent large discrepancies in official balance of payments estimates, because of inability to trace completely diverse international capital movements. Therefore the present attempt is confined to obtaining an estimate of the volume of foreign funds acquired by the largest borrowers or provided by the largest lenders. Since it is bound to be incomplete, the direct estimate of foreign investment activity would inevitably be smaller than the estimate from the balance of payments.

Direct Estimate of Foreign Portfolio Investment in Canada

From contemporary records and secondary sources it is possible to obtain an estimate, more or less complete, of the value of Canadian *securities* purchased by foreigners (Tables 6, 7, and 8). The figures are most complete for Canadian issues publicly offered; private issues are included wherever possible but coverage on this score is imperfect, especially for bank and mining securities.

Government and railroad issues, with the most complete coverage, account for the bulk of foreign funds obtained by Canadian agencies in these years. Canada's primary source of foreign capital was the London money market, and a careful compilation of Canadian issues in London should account for the bulk of foreign portfolio investment. While certain Canadian securities originally floated in England eventually found their way to Europe or the United States, only two public offerings made abroad before 1900 were floated in the United States.

The first issue of foreign bonds to be floated on the New York money market was $3 million of the province of Quebec in 1879. In the 1880's

TABLE 6

Direct Estimate: Receipts from Issues less Redemptions and Interest Paid on Foreign Investment, Actual Amounts 1868–1899

(thousands of dollars)

Year	*Interest Paid on Foreign Investment* (1)	*Receipts From New Borrowing Less Redemptions* (2)	*Receipts Cumulated* (3)
Pre-1868			70,000
1868	3,899	11,532	11,532
1869	4,418	−591	80,941
1870	4,923	8,411	89,352
1871	4,923	4,308	93,660
1872	5,127	422	94,082
1873	5,538	36,088	130,170
1874	6,439	35,105	165,275
1875	7,544	12,873	178,148
1876	8,072	18,882	197,030
1877	9,347	6,909	203,939
1878	9,611	19,235	223,174
1879	10,415	17,363	240,557
1880	11,772	23,201	263,758
1881	12,791	15,862	279,620
1882	12,833	26,324	305,944
1883	16,477	30,322	336,266
1884	16,512	40,381	376,647
1885	18,024	46,327	422,974
1886	20,352	26,570	449,544
1887	20,864	17,238	466,782
1888	21,411	73,571	540,353
1889	23,752	24,589	564,942
1890	25,564	33,874	598,816
1891	27,865	50,319	649,135
1892	28,507	24,748	673,883
1893	29,382	38,262	712,145
1894	30,405	40,370	752,515
1895	29,449	10,214	762,729
1896	29,374	15,155	777,884
1897	29,338	36,344	814,228
1898	31,553	16,923	831,151
1899	33,096	28,197	859,349
Total:			
1868–79	80,256	170,557	
1880–89	174,788	324,385	
1890–99	294,533	294,406	
1868–99	549,577	789,349	

In this and the following tables, detail will not necessarily add to total because of rounding.

Source: Official accounts of the dominion government, the provinces, and municipalities; *Yearbook of the London Stock Exchange* (1875–1901), *London Stock Exchange Official Intelligence* (1883–1901), *Investors Monthly Manual* of the *Economist* (1868–1882); weekly issues of the *Statist*, the *Economist*, the *Canadian Gazette*, and the *Monetary Times* of Toronto; and various official reports in the *Sessional Papers of the Dominion of Canada* e.g. the annual reports of building and land mortgage companies in Canada.

TABLE 7

Direct Estimate: Issues Less Redemptions, Actual Amounts, 1868–1900
(thousands of dollars)

Year	Government (1)	Railroads (2)	Banks (3)	Land and Mortgage Companies[a] (4)	Mining Companies (5)	Miscellaneous (6)	Total (7)
Pre-1868	70,000						70,000
1868	10,014	1,518					11,532
1869	−689				97		−591
1870		8,411					8,411
1871	−36	2,879			1,465		4,308
1872	−6	−269			258	438	422
1873	14,171	21,917					36,088
1874	25,592	8,540				973	35,105
1875	10,718	186	1,217	752			12,873
1876	15,251	2,262		1,369			18,882
1877	992	3,630		1,605	681		6,909
1878	13,200	4,495		1,540			19,235
1879	11,096	5,366		921			17,383
1880	−1,398	7,741		16,858			23,201
1881	−4,120	18,291		1,136	394	162	15,862
1882	1,550	14,041		9,709		1,024	26,324
1883	−250	27,557		2,578		437	30,322
1884	21,453	16,078		2,566		284	40,381
1885	20,443	19,972	169	5,229		515	46,327
1886	−1,218	23,197	141	1,905		2,545	26,570
1887	4,462	11,603		431		743	17,238
1888	26,091	39,251	268	4,520		3,441	73,571
1889	2,578	13,209		3,806		4,997	24,589
1890	3,798	19,428	1,467	6,364		2,816	33,874
1891	13,463	33,665		1,711		1,479	50,319
1892	8,971	11,978		2,300		1,498	24,748
1893	12,382	20,545		856	608	3,870	38,262
1894	21,559	19,294		−2,255	764	1,009	40,370
1895	−1,346	6,517		−1,299	1,653	4,689	10,214
1896	6,342	6,768		−1,118	3,241	−78	15,155
1897	13,493	356		−3,381	14,309	11,568	36,344
1898	−5,108	1,302		−982	15,796	5,915	16,923
1899	7,874	15,201		−3,000	6,038	2,084	28,197
1900	−4,104	16,002		−1,722	4,954		
Total							
1868–79	100,304	58,936		6,187			170,557
1880–89	69,590	190,939		48,738			324,387
1890–99	81,248	135,056		−804			294,406
1868–99	251,322	384,930		54,121			789,349

[a] Debentures in terms of par value.

Source: See note to Table 6.

TABLE 8

Direct Estimate: Issues Less Redemptions, Par Value, 1868–1899
(thousands of dollars)

Year	Government (1)	Railroads (2)	Banks (3)	Land and Mortgage Companies[a] (4)	Mining Companies (5)	Miscellaneous (6)	Total (7)
Pre-1868	70,000						70,000
1868	9,464	2,025					11,488
1869	−689				97		−591
1870		9,715					9,715
1871	−36	3,197			1,465		4,626
1872	−6	−84			258	438	607
1873	13,954	50,931					64,885
1874	27,880	9,185				973	38,038
1875	10,860	202	1,217	752			13,031
1876	16,359	2,335		1,369			20,063
1877	977	6,676		1,605	681		9,940
1878	13,683	5,223		1,540			20,446
1879	11,793	5,840		921			18,554
1880	−1,290	7,766		16,858			23,333
1881	−4,120	27,990		1,136	394	162	25,561
1882	1,385	29,367		9,709		1,024	41,486
1883	−318	37,125		2,578		437	39,822
1884	23,617	17,420		2,566		284	43,887
1885	20,136	21,109	144	5,229		515	47,130
1886	−1,252	22,596	141	1,905		2,589	25,980
1887	4,622	11,520		431		724	17,297
1888	27,691	41,105	243	4,520		3,416	76,976
1889	2,696	13,708		3,806		4,997	25,207
1890	4,296	19,931	1,358	6,364		2,816	34,766
1891	13,732	34,318		1,711		1,479	51,240
1892	10,045	11,991		2,300		1,545	25,881
1893	12,846	21,321		856	608	3,881	39,512
1894	17,288	19,495		−2,255	764	1,009	36,301
1895	−1,230	6,517		−1,299	1,653	4,538	10,179
1896	6,162	6,885		−1,118	3,241	−78	15,091
1897	14,508	380		−3,381	14,309	11,536	37,352
1898	−5,110	1,287		−982	15,796	5,911	16,901
1899	7,973	15,891		−3,000	5,973	2,084	28,921
Total:							
1868–79				6,187			210,802
1880–89				48,738			366,678
1890–99				−804			296,145
1868–99	257,917	462,966	3,101	54,121	45,239	50,281	873,624

[a] Securities other than debentures in terms of actual receipts.

Note: Detail will not necessarily add to total because of rounding.
Source: See note to Table 6.

New York financiers participated in the syndicate organized to market the issue of the Canadian Pacific Railroad. Provincial and municipal bonds payable in Canada, London, or New York appeared in the 1880's. Although these were issued first in London or Canada, some undoubtedly were eventually purchased by U.S. investors. In addition certain issues were privately placed in the United States, but the amounts involved were also small.

Private sales of Canadian securities abroad fall into two groups: placement by a Canadian institution of a large issue of securities with a foreign banking house or other large investor; and sale to a foreigner of securities previously owned by Canadians, a group most difficult to trace and most consistently excluded from the direct estimate.[23] Since security dealings in the first group were more newsworthy at the time and often later became listed and traded on the London stock exchange, they are more easily traced. Most of the bank and mining shares included in the present estimate are of this kind.

Not only does the compilation give inadequate coverage to securities sold privately to foreigners between 1868 and 1900, but it excludes entirely the direct investment of outsiders in Canadian property of all kinds. Before the late 1890's the volume of direct investment was small and represented primarily U.S. investment in Canadian railroads, lumber, and mining, and investments of British and U.S. insurance companies operating in Canada. In the late 1890's gold discoveries, a land boom, and a general upsurge of prosperity attracted foreign capital in increasing volume, including an estimated $100 million of U.S. capital, chiefly for mining, lumber, and industrial ventures, between 1896 and 1901.[24]

The direct estimate of the inflow of foreign capital also excludes short-term loans such as those which accompany ordinary commercial transactions.[25] A change in the total value of imports from one year to the next would be accompanied by a change in the volume of short-term loans outstanding for imports purchased on sixty- or ninety-day credits and thus by a positive or negative net inflow of foreign capital. Although the volume of such net changes would ordinarily be small, there is some evidence that occasionally they have been important.[26] And the amount outstanding probably increased over our period with the volume of Canadian trade.

[23] This group probably involved relatively small amounts of foreign funds in the period under consideration.

[24] *Economist*, January 26, 1901.

[25] The estimate includes, however, the change in balances due Canadian banks from abroad, net of the balances due foreign banks from Canada.

[26] "Report of the Select Committee on the Causes of the Present Depression of the Manufacturing, Mining, Commercial, Shipping, Lumber, and Fishing Interests, Dominion of Canada," *Session Papers, 1876*, estimated the foreign mercantile debt of Canada at $75 million, with annual interest of $4 million.

Adjustments for Incomplete Coverage

The results of the direct estimate of the inflow of foreign capital are given in Table 6. Before a comparison of them with those derived indirectly from the balance of payments can be made, they must be adjusted to include estimates of the volume of direct investment in Canada, and for incomplete coverage of private sales of Canadian securities abroad and other forms of foreign investment.

U.S. INVESTMENT IN CANADA. Estimates of the volume of direct investment must be somewhat arbitrary and can only indicate a range of the magnitudes involved. Viner selected $150 million to represent the value of all U.S. capital in Canada in 1900 ($50 million for U.S. holdings of Canadian securities and the assets of U.S. insurance companies in Canada, $100 million for all other U.S. capital in Canada).[27] Adding the above estimates U.S. investment of $15 million in 1868 gives $135 million for 1868–1900. Deducting Viner's U.S. investment figure for 1900 from the *Economist*'s estimate of $100 million invested in Canada between 1896 and 1900, gives $82 million 1897–99. In addition, Marshall, Southard, and Taylor found 82 branches of U.S. manufacturing firms in Canada between 1870 and 1887, with an average capitalization of about $325,000.[28] The branch plants alone would account for about $25 million before 1888, making the estimate of $150 million seem small.

The most careful estimates of U.S. direct investment in Canada made since Viner's are those of Cleona Lewis: total U.S. direct investment in Canada in 1897, $159.7 million; total direct and portfolio investment in the same year, $189.7 million.[29] The direct investment total, in millions of dollars, is composed of 55 in metals and minerals, 6 in oil, 10 in selling organizations, 18 in agricultural enterprises, 55 in manufacturing (including pulp and paper), 12.7 in railroads, 2 in public utilities, and 1 in miscellaneous industries.[30] The only omission is an inadequate estimate of the investment of U.S. insurance companies operating in Canada, which in 1900, according to Field, held 80 per cent of their assets in securities.[31] In 1897 their total assets amounted to $23.6

[27] Viner, pp. 99 and 127–135.

[28] Marshall, Southard, Jr., and Taylor, pp. 13–14.

[29] Cleona Lewis, *America's Stake in International Investment*, Brookings Institution, 1938, pp. 575ff.

[30] The estimates are book values and appear to be conservative averages between high and low estimates taken from annual reports of the Consulate General at Montreal. The estimate for investment in manufacturing subsidiaries (excluding pulp and paper) is based on the data for 1870–87 in Marshall, Southard, and Taylor, extended on the basis of highly conservative assumptions. It was assumed that during 1888–97 new subsidiaries were established at the same rate as during the earlier years, whereas it is generally recognized that the branch plant movement into Canada began to reach significant proportions in the 1890's (Lewis, pp. 595–597).

[31] F. W. Field, *Capital Investments in Canada*, Monetary Times of Canada, 1911, p. 32; and *Annual Report of Superintendent of Insurance*, 1900.

million, a figure considerably overstating the volume of total U.S. investment involved. But the Lewis estimates of pertinent investment are too low to allow for insurance companies' holdings.

Miss Lewis's estimate of U.S. investment in Canadian securities in 1897 was $30 million, about $23 million of it accounted for by public issues of Canadian securities in the United States.[32] This implies an overly conservative estimate (about $7 million) of Canadian securities privately placed in the United States by 1897, since the present study has traced $7.2 million in provincial bonds privately placed there in 1887 and 1891, an estimate far less then complete.

As illustrated by the *Economist*'s estimate of $100 million of U.S. money invested in Canadian industry between 1897 and the end of 1900, foreign investment in Canada was accelerated with the recovery of trade from the depressed conditions of the early 1890's. In view of the activity in British Columbia and the Yukon, and the interest of U.S. investors in the natural resources and expanding market of Canada, it is estimated here that $50 million will cover the increase in U.S. investment in Canada, including that of U.S. insurance companies between 1897 and the end of 1899, giving a total U.S. investment in Canada at the turn of the century of $240 million, considerably greater than Viner's estimate. From the total should be excluded about $23 million of public issues, $10.8 million of private issues in the United States already accounted for, and $15 million of pre-1868 investment, leaving $191 million as the addition to the direct estimate of portfolio investment by foreigners.

OTHER FOREIGN INVESTMENT. The estimate of the annual average volume between 1868 and 1900 of Great Britain's direct investment, private purchases of Canadian securities, and miscellaneous capital movements (such as financing Canadian foreign trade and shipping, and investments of British insurance companies) is about $3 million with a total of about $90 million. This is a smaller proportion of the volume of public issues of Canadian securities in Great Britain ($755 million) than the 20 per cent implied by both Viner and Paish for a later period.[33] It seems likely, however, that the relative importance of direct investment in Canada would be smaller than the average for all British foreign investment in view of the unfortunate experience of British investors in the Grand Trunk Railroad in the 1850's and the relative attraction of investment in other areas before 1900.

Information on the pre-1900 investments in Canada by countries

[32] Composed of $6.9 million in Canadian Pacific Railroad bonds and $13.6 million in shares in the 1880's (representing actual receipts by the issuing company, rather than par or face value) and $3 million in bonds of the Province of Quebec floated in New York in 1879. Computed from H. A. Innis, *History of Canadian Pacific Railroad*, London, P. S. King & Son, Toronto, McClelland & Stewart, 1923, pp. 102, 104, and 108.

[33] Viner, p. 125; Sir George Paish, *Statist* supplement, February 14, 1914.

other than Great Britain and the United States is almost nonexistent. France, Germany, and the Netherlands were the largest lenders, but Canadian securities owned by their nationals probably were acquired almost exclusively through the London market. Viner's rough estimate that French capital invested in Canada aside from securities amounted to $15 million in 1900, the capital of all other countries to $20 million will be used here.

ADJUSTED TOTAL. To recapitulate, the direct estimate of foreign capital invested in Canada, 1868–1900, has been calculated as follows:

	(millions of dollars)
Public issues (Table 6)	789
U.S. direct and private investments	191
British direct and private investments	90
Investments of all other countries	35
Total	1,105

For comparison, the total items supplementary to the direct estimate, $316 million, were distributed by decades in proportion to the variation in the public issues:

	Direct Estimate		*Balance of Payments Estimate*	
Period	(millions of dollars)	(per cent)	(millions of dollars)	(per cent)
1868–79	238.8	22	281.3	26
1880–89	454.3	41	384.3	36
1890–99	412.3	37	400.5	38
Total	1,105.3	100	1,066.0	100

The difference between the total of $1,105 million and the net capital inflow estimated from the balance of payments construction of $1,066 million is less than 4 per cent (3.6 per cent), a deceptively close agreement, for both totals are probably too low.

Since the estimate of direct and private U.S. investment in Canada is nearer to a minimum than an average, the larger total of the direct estimate (adjusted for incomplete coverage) raises the question whether some credit item in the balance of payments estimate is too large or some debit item too small. However, the freight receipt estimates may be overstated. Even a small error in the balance of any one such account could be multiplied in the interest computation and cumulated through time into a sizable error for the entire period. The closeness of the two independently derived estimates indicates either that the credit bias in

the freight account is very small, especially for the earlier years of the pre-1900 period, or that there is a compensating debit bias in some other account.

In the direct estimate, the distribution of the $316 million supplementary estimate, as described, ignores the greater volume of U.S. direct investment in Canada in the 1890's than in any previous decade. Consequently, the volume of direct investment in the 1880's is overstated and in the 1890's is understated. This combined with the minimum nature of the direct estimate strongly suggests that the balance of payments estimate of the capital inflow becomes increasingly too small over the period.

COMPARISON OF RESULTS WITH OTHER ESTIMATES

Since the estimates of the volume of foreign capital invested in Canada derived above represent the total between 1868 and 1900, and existing estimates as of 1900 always imply the total of that date, their comparison requires addition of the volume of foreign investment before 1868. It is estimated that the total volume of foreign capital in Canada at the time of Confederation amounted, in millions of dollars, to about 200, made up of British investment of 70 in provincial bonds, 90 in railroads, 25 in all other forms; and U.S. investment of 15 chiefly in lumber and mines.[34] Thus by the end of 1899, between $1,266 and $1,305 million, or about $1.3 billion, had been invested by foreigners in Canada.

In his balance of payments construction for the later period Viner estimated the total volume of foreign investment in Canada through

[34] Foreign investment in the Canadian provinces before 1868 was essentially of the same type as in the later years—government and railway bonds. At the time of Confederation British investment in provincial bonds was about $70 million, including about $20 million borrowed for canal construction in the 1840's, and about $45 borrowed for investment in and loans to railroads. (*Report*, Royal Commission on Dominion-Provincial Relations, Ottawa, 1939, Book 1, p. 38; A. Shortt, "Railroad Construction and National Prosperity," *Proceedings of the Royal Society of Canada*, December 1914, pp. 295ff.; H. Pentland, *loc. cit.*) In addition, the construction of the Grand Trunk Railroad was a British undertaking. It has been estimated that British investment in the road at the time of Confederation was about $60 million, in the Great Western Railroad (which in its early stages was financed by U.S. capital but was sold in 1852 to London investors) about $30 million (J. H. Jenks, *Migration of British Capital to 1875*, Knopf, 1927, p. 204). Other British investment has been put at about $25 million (*ibid.*; also Shortt, *loc. cit.*).

Most of the pre-Confederation investment of the United States in Canada was in Canadian railroads and the lumber industry. It has been estimated that from 1856 to 1860 about $3.4 million was invested by U.S. citizens in timber mills in Ottawa; that by 1885 about $50 million of U.S. money had gone into Canadian railroads. The construction of the Canada Southern, 1870–73, required $12–15 million and between 1881 and 1883 U.S. syndicates invested an estimated $20.5 million in Pacific. If $5 million more were invested in Canadian railways between 1868 and 1885 by the United States, this would leave about $10 million of investment in railroads before Confederation. See Marshall, Southard, and Taylor, pp. 5 and 113; H. A. Innis, pp. 104ff.; *U.S. Commercial Relations, 1868–69* (reports of the Consulate General at Montreal), U.S. Bureau of Foreign Commerce.

1899 at $1,199 million.[35] He arrived at this figure by using F. Williams-Taylor's estimate of the total British investment in Canada through public flotation of securities up to 1902,[36] and deducting the public issue of new Canadian securities in London in 1900 and 1901 to arrive at $989.2 million as the volume up to 1900. To this he added $150 million for the United States, and $60 million for Great Britain (private) and all other countries.

The data of Williams-Taylor apparently represent par values rather than yields. The issues of the Dominion government exclude refunding issues, but presumably redemptions and conversion issues are not elsewhere deducted. His data according to type of borrower, with the necessary adjustments, are shown in Table 9.

TABLE 9

Public Issues of Canadian Securities in Great Britain
(thousands)

Borrower	Williams-Taylor, to 1902[a]	*Economist*[b] for 1900, 1901	Williams-Taylor Adjusted to Omit 1900 and 1901[c]	Hartland
Governments	£55,202	£500	$266,399	$314,117
Railroads	125,375	1,783	601,893	532,454
All other	24,828		120,912	177,742
Total	205,405	2,282	989,204	1,024,312

[a] *United Empire*, December, 1912, p. 986.
[b] July 8, 1911, p. 62.
[c] Converted at the rate of £1 = $4.87.
[d] Par values; total through 1899 (added $70 million to account for pre-1868 investment, to governments, $90 million to railroads, and $25 million to all other. Public and private issues in U.S. by governments and railroads deducted ($34.3 million total; $13.8 million of government and $20.5 million of railroad).

The chief difference between the Williams-Taylor adjusted estimates and those made here reflects a difference in purpose: the Williams-Taylor estimate, to indicate the value of all Canadian securities ever purchased in Great Britain, with no need to consider redemptions; the present estimate, to examine the balance of payments concept of foreign investment, with redeemed securities properly deducted.

The issues of Canadian government securities in Williams-Taylor's estimates appear to exclude pre-Confederation issues, and not to deduct redemptions, although refunding issues are said to be excluded. In the present compilation refunding issues are included, but retired securities

[35] Viner, p. 99.
[36] Sir Frederick Williams-Taylor, "Canadian Loans in London," *United Empire*, December 1912.

are deducted, and the balance between the two is not always zero. This compilation includes $70 million of pre-1868 government borrowing, but omits $62 million of redemptions and is increased by $1.3 million, net, through refunding operations. The computations were not set up to differentiate between securities retired as part of a refunding operation and those permanently redeemed. It seems likely, however, that the difference between the present estimate (minus $70 million of pre-1868 issues), $244 million, and the Williams-Taylor estimate, $266 million, is fully accounted for by the excess of total over refunding redemptions.

The Williams-Taylor estimate of railroad securities purchased in Great Britain appears also to have no deduction for either refunding or redeemed issues, which in certain instances (for example, the land-grant bonds of the Canadian Pacific and the conversion issues of the Grand Trunk) were sizable. The present estimates of pre-Confederation British investment in Canadian railroads represent actual expenditures rather than par values. Williams-Taylor included nearly £65 million (over $300 million) to cover British investment in the Canadian Grand Trunk system up to 1902. This investment was slight after the 1850's, net of conversion issues, and a large part of the original stock issue was taken by the British contractors in lieu of cash.[37] The pre-1868 foreign investment in the Grand Trunk is carried here at $60 million.

The difference between the two estimates of all other British public investments in Canada is probably due to different definitions of "public issues." The unknown content of the Williams-Taylor estimate probably excludes such securities as, for example, the debentures of Canadian land and mortgage companies (about $30 million), which could be either private or public issues. Redemptions were less important in this "all other" group.

Viner's estimate of the total volume of U.S. investment in Canada, the same as Bacon's,[38] assigned $50 million for insurance companies' or other Canadian securities, and $100 million to cover all other U.S. capital in Canada in 1900—small in comparison with the Lewis estimate of $159 million for direct investment alone in 1897. Miss Lewis, however, made a discriminating search through contemporary documents and the compilations of other authors, and considered the earlier estimates to be too conservative (especially in Canadian mines).[39] But her estimate of $30 million of 1897 U.S. portfolio investment in Canada seems far too low, considering the over $23 million of Canadian securities publicly floated in the United States by the mid-1880's, plus $7 million of private investment in government securities before 1892. Her minimum figure for 1897 is probably not compensated for by the

[37] H. A. Lovett, *Canada and the Grand Trunk*, Toronto, 1924.
[38] N. T. Bacon, "American International Indebtedness," *Yale Review*, November 1900.
[39] Lewis, p. 425.

above addition of about $50 million (to cover 1899 and also Canadian investments of U.S. insurance companies).

Viner does not describe the derivation of his pre-1900 $60 million for the total private British ($25 million) plus the investments of all other countries in Canada ($35 million), but the implied $25 million seems far too low. As noted above, apparent omissions in the Williams-Taylor estimate include the Canadian land mortgage company debentures sold in Scotland (alone, about $30 million), direct investment in mining properties and land, private purchases of Canadian bank shares, investments of British insurance companies (with total assets in 1899 of nearly $40 million), and that amorphous item—capital to finance Canadian foreign trade—all of which must have amounted to several times $25 million by 1900.

In summary, the chief reason that Viner's estimate of the volume of foreign investment in Canada at the end of 1899 is lower than the estimate made here is his lower estimate of the volume of private investment, both by the United States and Britain. The higher present estimates result from further research on the volume of U.S. investment and disclosure of apparent inconsistencies in Viner's estimates of the volume of British investments privately made and the investments of all other countries.

APPENDIX

Sources and Methodology in Current Account Construction

GENERAL METHOD

The annual Canadian balance of international payments, 1868–99, was constructed by estimating separately the major items of Canada's international transactions. Annual measures of the following were used: the value of commodity imports and exports including gold; receipts and payments for international freight and shipping services; expenditures of foreign tourists in Canada and Canadian tourists abroad; receipts and payments for unilateral transactions (personal remittances and migrants' capital); receipts and payments for insurance services; and the volume of Canadian capital invested abroad including interest and dividend receipts.

On the assumption that all other payments and receipts on current account were equal and therefore counterbalancing, the difference between the totals of the credit and debit items listed above was taken as the combined measure of the gross inflow of foreign capital to Canada and the outflow of interest and dividend payments from Canada. Incoming foreign capital was separated from the return paid on it by multiplying its estimated volume in Canada at the start of 1868 by the

average 1868 rate paid on foreign capital, and adding the return to the previously derived debit balance. The inflow of foreign capital for 1868 plus the volume invested in Canada up to 1868 gave an estimate of foreign investment on which a return was paid in 1869. The latter multiplied by the average 1869 rate of return yielded an estimate of interest payments in 1869 and therefore the capital inflow. The process was repeated for each successive year.

CURRENT ACCOUNT ITEMS

Commodity Trade

Since most total credits and total debits on current account (70 to 85 per cent of each) came from commodity exports and imports, obtaining relatively accurate estimates of the commodity trade account would be a long step toward an accurate balance of payments.

Official data on the value of commodity imports and exports were published by the Minister of Customs.[40] The figures, compared with those reported by Canada's most important trading partners, appeared to be as accurate as could be expected for such a type of transaction at such a time. Canadian foreign trade data have always excluded most freight charges from the valuations. Imports are valued in the country from which the goods are consigned to Canada at the market prices in the principal home country markets at the time of export. Exports are valued at the actual cost at the time and points of consignment for export. Although in practice this has usually meant the point of production, in some instances goods were valued at the port of export and therefore included some inland freight. Since 1940 the value of exports has been defined less ambiguously as the actual amount to be received in Canadian dollars, exclusive of freight, insurance, handling and other charges.[41]

Adjustments were made in the official data to shift from a fiscal to a calendar year basis, to exclude settlers' effects, and to include ships.

Freight and Shipping

Omission from Canadian foreign trade data of all freight charges made necessary estimation of the cost of inland and ocean freights on both imports and exports. The estimate for imports was broken into charges on imports from Great Britain (dominated by ocean freight rates), from the United States (dominated by U.S. railroad rates), and from all other regions (a small item). For each import category the

[40] Annual reports, *Tables of Trade and Navigation of the Dominion of Canada*, Dept. of National Revenue.

[41] *Canadian Balance of International Payments, 1926–1948*, Dominion Bureau of Statistics, 1949, pp. 104 and 107.

ratio of freight charges to import value, determined for 1907, was corrected for price, freight rate, and coverage changes for 1868–1936, and applied to import value data to estimate the freight charge on imports for the entire period.[42] A similar breakdown was used for computing Canadian freight account receipts of Canadian railroads on exports, of Canadian railroads carrying foreign goods through Canada, and of Canadian ships carrying both Canadian exports and purely foreign trade freight. For each, the ratio of freight receipts to export value for 1937, determined from the official estimates, adjusted for changes in freight rates and export prices, and for variations in coverage, was applied to export value data for 1868–1937, or the appropriate years.[43]

Sundry Small Items

TOURIST ACCOUNT. The scant data for estimating expenditures of Canadian tourists in foreign countries were estimates of Canadian gross national product before 1900 and recorded numbers of returning Canadian tourists after 1900. Estimates of receipts on tourist account were based on expenditures in Canada by visitors from the United States. For the years before 1920 the figures are little more than an informed guess, subject to much error, but small in magnitude (1900, less than 2 per cent of total debits, and less than 3 per cent of total credits; 1870, about the same proportions and only $2 million).

MIGRANTS' CAPITAL. Estimates of the capital brought to Canada by immigrants and taken out by emigrants were based on estimates of the numbers of migrants, and the average amounts possessed by different classes of them. Again, the estimates are of questionable reliability, but the magnitudes are small—about 1 per cent of total credits or debits in 1900. Personal remittances were estimated on the basis of the volume of postal money orders issued in Canada payable abroad, and issued in other countries payable in Canada (less than 2 per cent of total debits or credits in 1900).

INSURANCE ACCOUNT. More solidly founded in reports of insurance companies operating in Canada, receipts and payments of both foreign insurance companies from and to Canadian residents and of Canadian insurance companies in both directions were estimated to exclude

[42] Correction of several arithmetic errors in Viner's ratios yielded ratios on imports from Great Britain, 3.9 per cent; from the United States, 7.0 per cent.

[43] In all components of the freight account multitudinous small adjustments, many of them subjective, were necessary. Extension of the computations to the 1930's permitted a comparison of the results of the construction used here with the official DBS estimates of payments and receipts on freight account for the overlapping years. Official estimates of Canadian freight payments to the United States, 1926 through 1936, and of ocean shipping before 1935 were based on indirect estimating techniques. In 1937 and 1935 a shift of the basis for the official freight data to a system of direct reporting by rail and ocean carriers considerably increased accuracy.

interest and dividend items. The amounts were less than 1 per cent of total credits or debits in 1900.

Interest and Dividends

CANADIAN FOREIGN INVESTMENT AND INTEREST RECEIPTS. The amount of Canadian capital invested abroad before 1900, primarily the foreign investments of Canadian railroads and banks, was estimated directly. Estimates of interest receipts were based on an average yield on cumulated investment estimates of types of capital for each year. Estimates of yield were 6 per cent in the seventies, 5 per cent in the eighties, and 4 per cent in the nineties. As would be expected for a relatively undeveloped economy like Canada's before 1900, the volume of capital invested abroad each year was small and varied (never more than 5 per cent of total debits). Interest receipts ranged from about $1 million in 1870 to nearly $5 million in 1900.

INTEREST PAYMENTS. Payment of interest and dividends by Canada on foreign capital was estimated by cumulating annual capital inflows, and applying to them for each year a rate of return representing the past yield on sale abroad of Canadian securities outstanding in the given year.

In the course of the direct estimate of the capital inflow into Canada, data were also accumulated on the interest and dividends paid on foreign investments placed after 1868 (1868 estimate of total of foreign capital invested in Canada, $200 million; see footnote 34). From them and the net receipts from new borrowings cumulated, an average rate of return was computed, which is by its nature weighted according to the volume of foreign investment, chiefly government and railroad securities, whose yields primarily determined the average.

Homogeneity of Estimates

In terms of homogeneity of method, the estimates for 1868–1913 are highly comparable; those for 1914–36 relatively comparable. In constructing the pre-1900 estimates, the goal of a continuous homogeneous series from 1868 to the present was roughly achieved, in the limited sense permitted by data of varying degrees of reliability through time. The chief difference between the pre-1914 and post-1914 estimates lies in the treatment of the capital return item, the pre-1914 being derived from the balance of payments estimates of capital inflow, the post-1914 being derived independently. Also in 1914 the definition of commodity imports and exports changed to exclude goods not passing through customs.

The naturally scant and unreliable data used for the earliest years, requiring multitudinous adjustments and more or less arbitrary assumptions, leave the year-to-year changes in figures for the period before 1914 open to question.

TABLE A-1

Net Import of Foreign Capital, 1868–72—1913
(five-year moving averages or calendar years;
millions of dollars)

Years	*Import of Foreign Capital* (1)	*Export of Canadian Capital* (2)	*Net Import of Foreign Capital* (3)
1868–72	16.4	−0.1	16.5
1869–73	21.4	−0.3	21.7
1870–74	30.8	1.1	29.8
1871–75	33.7	−0.6	34.3
1872–76	35.1	0.9	34.2
1873–77	32.0	0.0	32.0
1874–78	29.6	0.6	29.0
1875–79	22.5	−0.2	22.7
1876–80	19.2	1.0	18.2
1877–81	18.8	1.3	17.5
1878–82	21.4	1.8	19.6
1879–83	25.9	2.5	23.4
1880–84	29.5	1.1	28.4
1881–85	34.5	0.7	33.7
1882–86	38.7	0.8	37.9
1883–87	42.1	2.7	39.4
1884–88	43.9	3.9	40.0
1885–89	47.4	4.8	42.6
1886–90	50.4	5.2	45.2
1887–91	52.8	6.4	46.3
1888–92	53.1	6.5	46.6
1889–93	51.3	6.0	45.3
1890–94	49.4	7.1	42.3
1891–95	45.8	7.8	38.0
1892–96	41.3	8.3	33.0
1893–97	34.3	7.6	26.7
1894–98	30.5	6.8	23.7
1895–99	30.7	8.0	22.7
1896–1900	30.4	6.3	24.1
1897–01	33.4	9.8	23.7
1898–02	36.0	9.1	27.0
1900	32.9	−2.9	35.8
1901	47.9	28.7	19.2
1902	29.7	3.3	26.4
1903	52.4	−16.7	69.2
1904	111.3	21.2	90.2
1905	97:6	15.8	81.8
1906	96.9	−12.5	109.4
1907	161.2	−21.8	183.0
1908	215.0	92.5	122.5
1909	181.3	33.6	147.7
1910	208.5	−25.9	234.4
1911	341.3	3.4	337.9
1912	418.6	−0.2	418.7
1913	419.2	18.8	400.4

1868–1899: Col. 1—Col. 3 plus col. 2. Col. 2—From Table 5, col. 5. Col. 3—Table 1.
1900–1913: Col. 1—Col. 3 plus col. 2. Col. 2—From Viner. Col. 3—Table A-2, col. 6.

TABLE A-2

Balance of Payments on Current Account, 1900–1913

(millions of dollars)

Year	*Commodity Imports* (1)	*Freight* (2)	*Interest Payments* (3)	*Other* (4)	*Total Debits* (5)	*Net Debit Balance* (6)
			CREDITS			
1900	184.9	16.8	4.9	10.3	216.9	
1901	205.2	13.8	4.8	21.0	244.8	
1902	215.9	13.1	6.0	33.1	268.1	
1903	226.8	12.9	6.1	36.7	282.5	
1904	198.1	12.0	5.4	38.4	253.9	
1905	229.1	13.0	6.3	46.7	295.1	
1906	267.7	13.5	6.9	55.5	343.6	
1907	271.3	12.8	6.4	59.9	350.4	
1908	268.1	10.6	5.5	59.9	344.1	
1909	288.7	12.3	9.2	68.9	379.1	
1910	296.6	15.2	10.6	81.9	404.3	
1911	301.6	15.9	9.6	86.1	413.2	
1912	375.7	19.3	10.0	87.0	492.0	
1913	471.4	20.6	9.7	86.3	588.0	
			DEBITS			
1900	189.3	11.1	43.6	8.7	252.7	35.8
1901	192.6	11.1	45.5	14.8	264.0	19.2
1902	212.8	12.0	47.5	22.2	294.5	26.4
1903	265.3	12.4	49.8	24.1	351.6	69.2
1904	256.8	12.3	52.2	22.7	344.0	90.2
1905	269.2	14.5	55.7	37.5	376.9	81.8
1906	329.6	15.2	60.7	47.5	453.0	109.4
1907	392.5	16.1	67.4	57.4	533.4	183.0
1908	312.6	14.0	76.1	64.0	466.7	122.5
1909	361.9	16.1	81.5	67.3	526.8	147.7
1910	450.4	18.8	89.5	80.0	638.7	234.4
1911	543.2	23.9	98.2	85.8	751.1	337.9
1912	651.2	32.6	114.0	112.9	910.7	418.7
1913	694.2	30.2	138.2	125.8	988.4	400.4

Col. 1: Viner, pp. 32–33. *Col. 2:* Viner, recomputed to correct for arithmetic errors. *Col. 3:* Computed in the same way as Viner, but with $123.6 million (rather than $100 million) used for value of Canadian investment abroad at the end of 1899, and $1,066.0 million (rather than $1,200.0 million) used for the value of foreign investment in Canada at the end of 1899. *Col. 4:* Noncommercial remittances, tourist account, and insurance account from Viner, pp. 61, 80, and 82, and a revision of the tourist account. The various adjustments made here result in an estimate of gross foreign investment in Canada, 1900–13, of $2,413.8 million compared with Viner's estimate of $2,506.4 million.

TABLE A–3

Canadian Balance of Payments on Current Account, 1914–1936
(millions of dollars)

	TRANSACTIONS ON CURRENT ACCOUNT							
Year	*Merchandise* (1)	*Net Exports of Non-monetary Gold* (2)	*Freight* (3)	*Tourists* (4)	*Insurance* (5)	*Interests and Dividends* (6)	*Other Transactions on Current Account* (7)	*Net Exports of Gold* (8)
1914	−101.7		−27.0	−5.4	−2.2	−164.3	+3.1	+7.7
1915	+166.7		−6.7	+11.6	−3.7	−160.2	−23.2	−31.2
1916	+310.0		−7.7	+24.2	−1.4	−166.9	−93.1	−6.8
1917	+558.7		−23.7	+42.4	−1.7	−175.8	−173.0	−16.9
1918	+287.0		−36.6	+36.1	−5.4	−181.6	−169.6	+6.0
1919	+310.3		−34.3	+26.0	−11.9	−171.9	−74.9	+8.9
1920	−161.6		−13.7	+15.8	−14.6	−166.1	+10.7	+30.4
1921	−27.4		−12.8	+25.0	−6.5	−187.0	+13.2	+39.5
1922	+139.5		+5.0	+38.0	−3.4	−190.4	+15.0	−50.0
1923	+118.8		+4.2	+59.4	−1.8	−213.5	+29.6	+67.8
1924	+242.7		+18.4	+67.9	−3.6	−202.0	+28.4	−21.3
1925	+368.7		+21.6	+72.6	−2.9	−210.5	+17.0	−11.6
1926	+299	+20	(+24) −9	+53		−208	−38	
1927	+158	+32	(+4) −12	+63		−216	−35	
1928	+132	+40	(−2) −20	+79		−229	−34	
1929	−94	+37	(−5) −38	+90		−261	−45	
1930	−93	+39	(−13) −33	+88		−289	−49	
1931	+21	+57	(−20) −25	+82		−282	−27	
1932	+97	+70	(−13) −28	+65		−265	−35	
1933	+164	+82	(+3) −22	+45		−226	−45	
1934	+164	+114	(+5) −27	+56		−211	−28	
1935	+206	+119	(+5) −14	+53		−206	−33	
1936	+342	+132	(+9) −17	+67		−236	−44	

continued on next page

TABLE A-3 concluded

Year	TOTAL BALANCE ON CURRENT ACCOUNT		
	Excluding all Gold (9)	*Including Net Exports of Nonmonetary Gold* (10)	*Including all Gold* (8) + (9) (11)
1914	−297.5		−289.8
1915	−15.5		−46.7
1916	+65.0		+58.2
1917	−415.1		+210.0
1918	−70.2		−64.2
1919	+43.3		+52.2
1920	−329.5		−299.1
1921	−195.5		−156.0
1922	+3.7		−46.3
1923	−3.3		+64.5
1924	+151.8		+130.5
1925	+266.5		+254.9
1926	(+130) +97	(+160) +127	(+161) +128
1927	(−26) −42	(+6) −10	(−1) −17
1928	(−54) −72	(−14) −32	(+35) +17
1929	(−315) −348	(−278) +311	(−241) −274
1930	(−356) −376	(−317) −337	(−353) −373
1931	(−226) −231	(−169) −174	(−136) −141
1932	(−151) −166	(−81) −96	(−78) −93
1933	(−59) −84	(+23) −2	(+29) +4
1934	(−14) −46	(+100) +68	(+96) +64
1935	(+25) +6	(+144) +125	(+142) +123
1936	(+138) +112	(+270) +244	(+270) +244

With the exceptions noted below, all data, 1914–25, are from Knox; for 1926–36 from *Canadian Balance of Payments, 1948*.

Col. 1: Data for years after 1914 are not homogeneous with those for years before then in that the post-1914 figures were adjusted to exclude imports and re-exports of foreign products in transit across Canadian territory. The 1914–17 data are thus homogeneous with the revised treatment of exports of foreign products after the 1917–20 changes in definition instituted by the Department of Customs. Imports of goods which have not passed through customs houses are thus excluded here, whereas they were included in the earlier tables. After 1940 imports are adjusted for net warehousing.

Col. 3: Figures in parentheses are derived independently as described in appendix to the unpublished mimeographed report, p. 47.

Col. 7: Data from *Dominion Monetary Policy* minus freight and insurance balances from Marshall et al.

Col. 9: Sum of cols. 1 and 3–7. Figures in parentheses computed using figures in parentheses of col. 3.

Col. 10: Sum of cols. 1–7. Figures in parentheses computing using figures in parentheses of col. 3.

Col. 11: 1914–25—Sum of cols. 8 and 9. This is the equivalent of the current account balance including exports of nonmonetary gold plus changes in monetary reserves (which is the way the DBS derives the item for the years after 1925). Figures in parentheses computed by using figures in parentheses of col. 3.

TABLE A–4

Canadian Balance of Payments on Capital Account, 1914–1936

(millions of dollars)

	TRANSACTIONS ON CAPITAL ACCOUNT								TOTAL BALANCE ON CAPITAL ACCOUNT		
	Canadian Securities outside Canada			Net Sales of Outstanding Securities							
Year	*New Issues Sold* (1)	*Retirements* (2)	*Net New Issues (+) or Retirements (−)* (3)	*Estimated* (4)	*Recorded* (5)	*Insurance Transactions* (6)	*Net Change in External Assets of Canadian Banks* (7)	*Other Capital Movements* (8)	*Net Movements of Capital* (9)	*Net Balance on Current Account* (10)	*Balancing Item* (11)
1914			+298.1	−3			+21.2	+25.5	+341.8	−289.8	−52.0
1915			+179.0	−5			+113.4	+60.8	+121.4	−46.7	−74.7
1916			+254.2	−8			−129.4	−44.4	+72.4	+58.2	−130.6
1917			+126.9	−10			+10.8	−100.7	+27.0	+210.0	−237.0
1918			−12.8	−10			−28.5	−113.0	−164.3	−64.2	+228.5
1919			+25.1	−40			−21.7	+5.3	−31.3	+52.2	−20.9
1920			+153.7	−55			+42.4	+44.5	+185.6	−299.1	+113.5
1921			+123.6	−40			+144.4	+54.0	+282.0	−156.0	−126.0
1922			+210.3	−20			+27.0	+46.8	+264.1	−46.3	−217.8
1923			+109.6	−40			−12.7	+72.8	+129.7	+64.5	−194.2
1924			+143.0	−50			−15.7	+20.3	+97.6	+130.5	−228.1
1925			+13.0	−80			−92.8	+16.5	−143.3	+254.9	−111.6
1926			+161.0	−135			−51.8	+28.6	+2.8	+128.0	−130.8
1927	301	160	+141	−171		−15	+16	+46	+17	−17	
1928	207	200	+7	−126		−12	+87	+27	−17	+17	
1929	297	150	+147	−2		+19	+88	+22	+274	−274	
1930	400	110	+290	+56		+9		+18	+373	−373	
1931	200	202	−2	+45		+34	+28	+36	+141	−141	
1932	104	105	−1	+85		−1	+38	−28	+93	−93	
1933	134	166	−32		+51	−1	+24	−59	−17	+4	+13
1934	111	169	−58		+9	+3	−19	−45	−110	+64	+46
1935	117	256	−139		+51	−18		−44	−150	+123	+27
1936	106	270	−164		+8	−26	+3	−62	−241	+244	−3

All data for 1914–25 from Knox, pp. 92–93, unless otherwise specified; for the years after 1925 from *Canadian Balance of Payments, 1948*.

Footnotes to Table A–4 on facing page

The estimates for the years of World War I and its aftermath (1914–21) are of questionable reliability for other reasons. The war-induced price inflation (then sharp deflation in 1921) and distorted patterns of trade and production may have made the adjusting indexes unrepresentative, especially in areas requiring the use of price deflators. Although official balance of payments estimates extend from 1926 to the present, it was not until 1936 that a system of direct reporting by individual firms (e.g. railroads, ocean carriers, stock brokers, insurance companies) was substituted for indirect estimating methods similar to those used here. Thus DBS data for the years after 1936 are considerably more reliable than those for the first decade of official accounts and are reproduced here without comment.

For the whole period, the data relate to calendar years and to the Dominion of Canada excluding Newfoundland.[44] All are stated in Canadian dollars (unless otherwise specified). Over most of the period the Canadian dollar remained in a stable relationship with the pound sterling and the U.S. dollar. The Canadian exchange was raised or lowered from par chiefly by the abandonment of the gold standard by the United States during the Civil War, the depreciation of the Canadian dollar during World War I and especially in 1918, and the worldwide abandonment of the gold standard during the early 1930's.

Table A–1 gives the net import of foreign capital, annually or in five-year moving averages, 1868–72—1913; Table A–2, the balance of payments on current account, 1900–13; Table A–3, the Canadian balance of payments on current account, 1914–36; and Table A–4, the Canadian balance of payments on capital account, 1914–36.

[44] Since 1940 the DBS has treated Newfoundland's balance of payments data essentially as if it were part of the Canadian Confederation, although its union with Canada occurred on April 1, 1949. See the *1948 Balance of Payments*, p. 139.

Col. 6: The investment part of international insurance transactions is included in "other capital movements," col. 9, before 1937 (see Knox, pp. 84–85).

Col. 8: Includes direct investments.

Col. 9: Sum of cols. 3–8. For the years after 1926 this differs from the DBS data in excluding the item "monetary gold," which represents the aggregate change in monetary reserves and includes the contribution of domestic output. Since increases in reserves here carry a minus sign, the "export of nonmonetary gold" in the current account is thus canceled. To exclude these noninternational transactions from the balance of payments and particularly from the estimate of the capital inflow derived from the current account balance, actual gold exports are included in the current account and changes in gold reserves excluded from the capital account. (For the years after 1938 this treatment would involve the omission of the item "changes in holdings of gold" from the capital account.) The balancing item would not, of course, be changed by this treatment.

Col. 10: Includes all gold. Table A–3, col. 11.

Col. 11: The consistently negative balancing item during most of the 1920's (estimates of net capital imports combined with an active current balance) is probably to be explained in terms of Knox's estimates of net Canadian purchases of foreign securities in these years. The figures in col. 4 may be too low by 100 per cent or more. It is known that Canadians were making unprecedentedly large purchases of foreign securities in these years, especially in New York.

COMMENT

DOUGLASS C. NORTH, University of Washington

I was invited to discuss this paper not as an expert in Canadian economic history, but because I have also labored constructing balance of payments estimates. Accordingly my concern will be with the methods employed, with perhaps a few questions about the general economic implications.

It's always a pleasure when you can start out in commenting on a paper and say unequivocally "this is a first class job." Penelope Hartland's paper combines an intimate knowledge of the problems involved in making estimates of international (or interregional) economic accounts with an exhaustive investigation of Canada's international economic relation from 1868 onward. Her earlier unpublished study, on which the present paper was based, was a painstaking investigation of the separate components going into the final balance sheets.

The major problems of accurate estimation of historical balance of payments studies are (1) the accuracy of the merchandise trade figures which, because they usually are overwhelmingly the most important item, must be reliable; (2) the significance of invisible items and the data available with which to estimate them; and (3) the "neutrality" of errors and omissions.

The export and import figures presented by Miss Hartland appear to meet the first condition and I have been led to believe that the problem of undervaluation of imports which plagues U.S. figures is not nearly as important in the case of Canada.

The invisible items of tourist expenditures and immigrants' funds and remittances are, in spite of extensive research, not amenable to very precise calculation. Fortunately they do not loom large in Canadian international accounts. Freight payments and receipts, on the other hand, are a significant item. Their estimation took up at least one-third of the original manuscript.

The problem in Canadian statistics is that this item necessarily includes land and water transport, each of which poses impressive problems. In the case of water transport her method is essentially the same as Viner's of assigning freight factors to heavy and light goods and weighting them according to the composition of imports. Then with a freight rate index and an import price index a series may be calculated.

There are a number of difficulties to this method which are made clear by analyzing the composition of shipping earnings. While aggregate freight earnings are made up from thousands of commodities, the great percentage of them comes from a few bulk commodities with a high freight factor. These commodities may be a very small percentage of the value of imports or exports. Moreover their price movements

may not move with import or export price indexes weighted by value. This is particularly true where there is a disparity between the movements of raw materials and agricultural prices on the one hand and manufactured prices on the other hand. Accordingly using the freight/value method of computing shipping earnings requires (1) a base built up from the bulk commodities which dominate the percentage figure, and (2) a price index weighted by volume rather than value, and a freight rate index weighted by commodity route. Miss Hartland's estimates suffer from all these scores although I should add that the last deficiency, a good freight rate index, is my fault and not hers since I promised her one but did not have it completed in time.

On the third count, the "neutrality" of errors and omissions, the original manuscript presented careful direct estimates which go far toward lending confidence to the final figures even if some of the components may be less firmly grounded.

Since Miss Hartland had done all the dirty work before she assembled the present paper explicitly for the conference, I do wish she had devoted more time to the economic implication of her paper rather than so much time to description of the movement of the figures. Canada clearly represents a case in which capital imports played a far larger role in the country's economic development than they did in the United States. The inflow of capital was also part of the international movement of productive factors in the nineteenth and twentieth centuries whose rhythm and timing offer important clues to the whole pattern of development of the Atlantic economy. I hope she will see fit to explore the larger economic issues now that she has so competently done the necessary spade work and provided us with an excellent source of Canadian international economic accounts.