

International Accounts of British North America with Britain,
the United States and Other Countries, 1868 -1929:
Primary Sources and the Secondary Literature

Introduction and Overview of the Merchandise Account

Note: The results are close to completion but require further revision before final publication. Comments welcome but please do not cite.

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Introduction to the McMaster Working Paper Series

The international accounts record the economic transactions of a country's residents with the rest of the world. The balance of payments statement measures the international transactions of products and financial instruments between Canadian and foreign residents. These 'flows' across a country's border have direct links to economic accounts such as the national income and expenditure. The second international account is the international investment position of a country. It is a 'stock' concept with parallels to the balance sheet of firms and national economies. It identifies the liabilities of Canadian residents with the rest of the world and financial assets our residents own in other countries. This Working Paper is the first in a series of research papers on the international accounts of Canada from 1868 to 1929. Each research paper has three general purposes. The first is a comprehensive review of previous research effort. Many research studies have constructed Canada's international accounts for the years up to the official estimates of the Dominion Bureau of Statistics (henceforth the DBS). The review of the literature in each Working Paper provides deeper understanding of the difficulties prior academic researchers have encountered. It will also highlight the gap between the conclusions of narrative histories in the literature and solid empirical evidence. It has also forced me to ask an important question. Am I just revising existing estimates or am I building a completely new data set? I realized over time that it was not sufficient to revise prior research findings but the task required a fresh 'bottom up' approach.

The second purpose of this research project is to identify new sources of data for Canada's international accounts. New primary sources will improve the accuracy of these accounts and provide greater level of assurance to academic researchers who use the data. The third goal of the research papers is to expand the scope of the new estimates and to construct international accounts with the same format as contemporary statements. This requires greater levels of detail than previous studies and the construction of accounts for Canada's bilateral relationships with its economic

partners. It will also conform to recent revisions to these accounts for the period 1926 to the present.

¹ A consistent, uniform statement of the Dominion's international payments with Great Britain, the United States (hereafter the U.S.) and all other countries from Confederation to 1929 will enable researchers to use a set of international accounts that conform to the latest format and up-to-date definitions of official documents published by Statistics Canada. The publications consulted throughout this project are:

Statistics Canada; Canada's Balance of International Payments and International Investment Position, Catalogue No. 67-506 XPE (2000)

International Monetary Fund; Balance of Payments Textbook (Washington: Publication Services, 2005)

Dominion Bureau of Statistics; The Canadian Balance of International Payments: 1926 to 1948 (Ottawa: King's Printer, 1949)

Dominion Bureau of Statistics; The Canadian Balance of International Payments: A Study of Methods and Results (Ottawa: King's Printer, 1939)

This series of Working Papers will do more than simply supplant the existing research studies summarized in Marshall's section of the first edition Historical Statistics of Canada. His international accounts are broken down into 'five stages' for the years 1900 to 1960 and the 'private estimates' of academic studies only cover the years 1900 to 1925. Marshall presents them in a 'multiform' series "because strict comparability cannot be maintained between the different periods and, indeed, there are elements of incomparability within a single period".² Marshall believes that it was best "to deal with the data by periods in each of which they are largely comparable as to method, range and concept and to explain the new developments in each period so that those who use them may make their own attempt at continuity according to the purpose in view".³ The second edition of the Historical Statistics of Canada reduced the number of 'stages' to three by amending the data and modifying the format of earlier periods. A higher degree of consistency was achieved but neither edition has estimates for Canada's bilateral relationships with major trading partners prior to 1926. My Working Papers will rectify this situation. I will present a new series for the post-

confederation era that is consistent with the method, format, definitions and concepts developed by the Dominion Bureau of Statistics (DBS) and Statistics Canada. Improvements in the accuracy of the private estimates of Canada's international accounts for the pre-1926 era are also a key aim of each research paper. They will identify new and reliable sources for the components of the balance of payments: the current, capital and financial accounts. A single and consistent series of values from 1868 onward will enable historians to examine Canada's long run interaction with the international economy with greater confidence.

I believe that the time is ripe to write a thorough review of all prior efforts to construct Canada's international accounts for the post Confederation years. The McMaster Working Paper series will therefore contain a comprehensive review of the multitude of existing estimates for the period under study. All research papers begin with a review of the primary sources and secondary literature related to each major account in Canada's balance of payments. After each review, it will become obvious that estimates with new formats and more accurate source data are necessary. This is especially true for the merchandise account, a key account in the balance of payments and the primary focus of the first Working Paper. All new estimates will include provinces and territories within British North America from 1868 to 1874 and for the Dominion up to 1929. Newfoundland will receive special consideration. I will deal with Canada's tenth province in the same manner that I deal with all new estimates for Canada's balance of payments. Throughout the research series, my findings have the same presentation as Robert Gallman when he developed new estimates for the capital stock of the U.S. in the nineteenth century.⁴ Gallman presents the 'old' series of estimates alongside two new series of the capital stock that he developed under different assumptions and techniques. He names them Variant A and Variant B. In following his example, one can use the national estimates that exclude Newfoundland. Those who wish to include Newfoundland will have two options. The first is the method used by the DBS for the years leading up to Newfoundland's

entry into Canada. Canada's international accounts include Newfoundland starting in 1940.⁵ The second option is to treat it as a province in the Dominion. There are many reasons for including Newfoundland in Canada's international accounts. An important goal of the Working Papers is a uniform and continuous set of data for Canada's economic relationship with its key economic partners and the rest of the world. Newfoundland's special status with the Dominion guaranteed them free entry into Canadian markets for many of their fish products. Canada also had a privileged relationship with Newfoundland because they adopted the Canadian dollar as legal tender, used our banking system for international business and Canada was their largest supplier of imports. Its inclusion is also consistent with the broader goals of my PhD dissertation, which includes the colonial period for the whole of British North America. Because all previous studies and the most of my new data sources relate to the Dominion of Canada, I will review the political geography of the country for the years under study.

The Political Geography, 1868 -1949

The end of the colonial era in British North America begins in the 1840s and comes to full fruition with the Confederation movement. The international boundary negotiated by Great Britain and the United States was established in 1848, a border that defines the spatial patterns of the northern economy. The geo-political economy of the continent determined the fundamental character of the northern economy in the late 1860s. Morton summarizes its essential features as follows.

British [North] America was left the country of the northern economy, the economy of the great staples of fish, fur and timber. Habitable farmland there was, but small in relation to the whole enough to feed the staples trade and even to export surpluses, but not enough to support a population comparable with that so rapidly growing in the United States. Thus, though a continental country, Canada was still dependent, as the northern maritime frontier had always been. Moreover, though continental in extent, it was still surprisingly maritime in character. The Atlantic islands and the Acadian peninsula, the St. John, the St. Lawrence, Hudson Bay, the Saskatchewan, the Fraser, the Gulf of Georgia, it was by their sea inlets and inland waterways the British [North] America lived.⁶

Each region was developing independently from each other before Confederation. All were

British subjects and shared the same allegiance to the Crown but regional communities had few direct relations with each other. Despite this separation, the colonies created a new federal state to embrace the benefits of economic and political nationhood. Political union would eventually lead to economic integration in a Dominion that stretched from sea to sea to sea. This process started modestly with three founding provinces in 1867: Canada (which split into Ontario and Quebec), Nova Scotia and New Brunswick. It grew with the acquisition of Rupert's Land from Hudson Bay Company and the first western province of Manitoba entered Confederation in 1871. British Columbia joined the same year and Prince Edward Island entered in 1874. It took decades for Confederation to fulfill its original design. The entry of two more western provinces and federal administration of the Yukon, the Northwest Territories and the Arctic Islands completed the development of western political institutions. The population of British North America has always been relatively small compared to its southern neighbour. Its population was less than four million at Confederation and slightly more than ten million in 1929 (see **Table #1**). Just over 20% of Canadian residents were born outside the country in 1931 (see **Table #2**). The late entry of Newfoundland in 1949 followed many prior negotiations to join their neighbours in British North America. It had strong ties with the Maritimes, used the same currency and mercantile channels to gain access to foreign markets and was a pivotal member of the economy in Atlantic Canada for centuries.

In the following, I give an overview of previous studies of Canada's international accounts for the years under study. Dominion statisticians at the turn of the century recognized that merchandise trade was only one of several economic transactions with the international economy. Jacob Viner's seminal study for the early years of the twentieth century demonstrated the need to collect information beyond product flows and include all foreign exchange transactions with the rest of the world. However, I start with an examination of the initial efforts of the DBS to construct the balance of payments for the 1920s and then shift the focus to the earlier years for the period under study.

DBS Estimates of Canada's International Account, 1920 to 1929

The Dominion Bureau of Statistics began the arduous process of compiling a detailed record of Canada's international transactions in the first half of the 1920s. The first systematic effort to estimate the foreign direct investment in Canada and domestic investments abroad occurred in the early 1920s. The first 'official' balance of payments statement in 1929 covered the years 1920 to 1926 -- a publication that "predates all other components of the System of National Accounts".⁷ The results were never included in future publications of the DBS. This initial effort contained a number of omissions and employed definitions and concepts that were inconsistent with official statements published from 1926 forward. New surveys and techniques gathered accurate information and it took two decades before the DBS was satisfied with their tabulations. The last set of fundamental amendments for the years 1926 - 29 was in the late 1940s.⁸ The current generation of DBS statements of international accounts is the result of many iterations and revisions spanning several decades. **Table #3** illustrates the various estimates of Canada's current account for the years 1926 to 1929 that the DBS published from 1929 to 1949.⁹

It took several decades for the DBS to publish detailed economic relations with Great Britain and the U.S. The publication of the international accounts with our major economic partners began in 1939 with estimates reaching back to 1926. Contemporary publications by Statistics Canada use the same figures but employ a modern format and provide greater levels of detail. Accurate estimates for Canada's financial accounts required the DBS to collect information from private sector sources in a systematic manner. The systems required to identify the financial flows with the international economy were not in place in the 1920s. **Table #4** shows the financial flows for the years 1927 to 1929 estimated by the DBS in the 1930s. Several iterations were required before the DBS was satisfied with their initial efforts. The first column shows the figures released by the DBS in a major revision of the balance of payments in 1939. The figures in the second column are the values in the

Table # 4: Evolution of the Canada's Financial Accounts

(\$'000,000's)

	1927		1928		1929	
	DBS 1939	HSC 1965	DBS 1939	HSC 1965	DBS 1939	HSC 1965
Short-Term Financial Flow						
Change in Net of Cdn Banks Abroad	16.1	16	86.6	87	87.8	88
Other Transactions in Securities						
Insurance Transactions						
Inflows	10.0		8.0		30.0	
Outflows	25.0		20.0		11.0	
Total	15.0	-15	12.0	12	19.0	19
		-13				-26
Long-Term Financial Flow						
Portfolio Transactions in Cdn Securities						
Outstanding Bonds		-40		20		35
Outstanding Stocks		0				
Net Purchase of Outstanding Securities		-40		20		35
Portfolio Transactions in Foreign Securities						
Outstanding Issues		-83		-112		-10
New Issues		-35		-24		-1
Retirements		0				
Net Flows		-118		-136		-11
Net Purchase of Outstanding Short- and Long-term Securities	184.0	-171	188.0	126	105.0	-2
Net Purchase of New Issues of Long-term Securities						
Net New Issues	318.6		223.4		312.8	
Value Sold Abroad at Par Value	18.0		16.1		16.2	
Less Commission and Discounts	300.6	301	207.3	207	296.6	297
Total	160.0	-160	200.0	200	150.0	-150
Retirements	140.6	141	7.3	7	146.6	147
Total						201
Other Long-Term Financial Transactions						
Canadian Government Loans	3.7	4	1.3		0.2	0
Reparations	6.8		4.7		4.3	
Other		11		6		4
Total	10.5	11	6.0	6	4.5	4
Direct Investments						
Inflows from Non-Residents		49		40		38
Outflows by Cdn Residents		-14		-19		-20
Net Flows	27.6	35	18.1	21	15.0	18
Balance of Long-Term Financial Flows	0.5	17	80.7	17	168.1	274

Sources: DBS; The Canadian Balance of Payments: A Study of Methods and Results (1939)

HSC 1965 is found in the first edition of the Historical Statistics of Canada, Series F91 to F103

Stats Can is found in the second edition of the Historical Statistics of Canada Series G57- G69 and G70 - G83

first edition of the Historical Statistics of Canada. They are the result of a major DBS revision of the financial accounts in 1949 for the post-1926 era. The financial accounts published recently by Statistics Canada draws on the data collected for 1949 revision but contain more detailed information for each sub-account. The latter format will be my template in constructing the financial accounts for the pre-1926 era.

The final set of international accounts considered in this section is Canada's international investment position. Knox's estimate of total foreign investments begins in 1900 and has generally been the accepted as the 'semi-official' statement of Canada's international investment position for the quarter of the 20th century. DBS conducted a major survey in 1921 to determine the value of equity shares and debentures owned by Canadian, British, American and other investors.¹⁰ Annual surveys of the direct investment of Canadian firms in other countries were conducted from 1920 to 1926 and superseded by the DBS publication 'British and foreign direct investment in Canada and Canadian direct investment abroad'. In 1937, the DBS stock of foreign investment in Canada for 1926 was \$5,890,700,000. The DBS estimate for 1926 grew to \$6,003,000,000 by 1949 and Statistics Canada revised it upward to \$6,403,000,000 in the 1980's. This higher level of international liabilities calculated by Statistics Canada requires an upward revision in the annual financial inflows in the years preceding 1926 to reach. **Table #5** shows the details of Canada's external obligations for 1926 by sector. It is my goal to construct the same level of detail for Canada's statement of international investment when the primary data sources permit.

Historical Balance of Payment Statements in the U.S. and Great Britain for the Years under Study

The United States was a pioneer in preparing and publishing official statements of their international accounts. The compilation of their early estimates required detailed information regarding the economic relationship between the U.S. and its major economic partners. Their 'official' balance of payment statements begin with the year 1922. They provided a template for the

Table # 5 : Canada's International Liabilities by Sector, 1926

	Portfolio Investment			Direct Investment			Total Investment		
	United States \$ 000,000's	Great Britain \$ 000,000's	Other Countries \$ 000,000's	United States \$ 000,000's	Great Britain \$ 000,000's	Other Countries \$ 000,000's	United States \$ 000,000's	Great Britain \$ 000,000's	Other Countries \$ 000,000's
Public Sector Bonds									
Dominion	382	250	6	638			382	250	6
Provincial	342	73	7	422			342	73	7
Municipality	185	187	2	374			185	187	2
Total Public Sector Bonds	909	510	15	1,434			909	510	15
Manufacturing									
Vegetable Products	13	12	1	26	69		82	67	1
Animal Products	4	1	1	6	18	2	22	3	2
Textile Products	4	7	-	11	18	11	22	18	-
Wood and Paper Products	65	29	1	95	256	39	321	68	1
Iron and Steel Products	40	37	4	81	180	3	220	40	5
Non-Ferrous Products	3	5	1	9	83	2	86	7	1
Non-Metallic Products	3	1	-	4	109	3	112	4	-
Chemical and Allied Products	1	9	-	10	60	8	61	17	1
Miscellaneous Products	2	10	-	12	25	-	27	10	-
Total Manufacturing	135	111	8	254	818	123	953	234	11
Mineral Resources									
Petroleum and Natural Gas	-	-	-	-	-	-	-	-	-
Mining and Smelting	24	24	2	50	141	27	165	51	3
Total Mineral Resources	24	24	2	50	141	27	165	51	3
Utilities									
Railroads	551	1,442	65	2,058	249	26	800	1,468	65
Other	10	6	-	16	89	43	99	49	2
Total Utilities	561	1,448	65	2,074	338	69	899	1,517	67
Merchandising									
Financial	67	62	6	135	58	114	125	176	43
Other Enterprises	12	1	-	14	48	3	60	4	-
Total Merchandising	79	63	6	149	106	117	185	180	43
Private Sector	799	1,646	81	2,527	1,403	336	2,202	1,982	124
Miscellaneous *									
Subtotal **	1,708	2,156	96	3,961	1,403	336	3,256	2,577	169
Other Foreign Investment **									
Total Foreign Investment							211	107	82
							3,467	2,684	251
							3,464.5	2,354.7	146.3
									5,965.5
									1,562.4

* Real estate, mortgages, assets administered for non residents, private investment companies etc.

** DBS: The Canadian Balance of International Payments, 1926 to 1948

*** Later adjustment by Statistics Canada in the late 1980s

Source: Canada International Investment Position: Historical Statistics, 1926 to 1967 (67-202)
Canada International Investment Position: Historical Statistics, 1926 to 1992 (67-202)

DBS efforts in the late 1920s and were a major source of data for Canada's early statements for the financial accounts, tourism, commercial services and transfers. The League of Nations was also an important catalyst in urging governments to prepare the international accounts for their national economies. They were especially important in establishing standard definitions and international formats for those member countries' wishing to prepare statements of the balance of payments. **Table #6** shows the Leagues' publication of Canada's statement for the years 1920 -33.

Major research projects in the U.S. and Great Britain have successfully reconstructed the international accounts that begin decades before official statements prepared by national statisticians. **Table #7** summarizes the results for Great Britain and **Table #8** for the U.S. These statements are the result of 'private' estimates that official agencies in both countries accept. Similar research projects in Canada have compiled accurate measures for this country. The following section looks at the 'private' estimates of international accounts for the years 1900 to 1925. In some cases, they precede the 'official' estimates of the DBS that only cover the post 1926 era. A detailed review of the literature for the years 1868 to 1900 will follow. To assist the reader, **Table #9** shows the major accounts examined in previous studies of Canada's balance of payments for the years 1900 to 1925.

Overview of the First Generation of International Accounts for Canada, 1900 - 1925

The Dominion Statistician, R.H. Coats, was the first to compile Canada's balance of payments and international indebtedness in 1915. ¹¹ The study is surprising in its sophistication. The format is different from contemporary statements but many items are similar. The current account includes merchandise account, several commercial services, investment income and private transfers for the period 1900 to 1914. The financial account cites British sources to identify financial inflows and official data for domestic banks and insurance companies to measure outflows. Jacob Viner, an undergraduate student at McGill and a graduate student under Taussig at Harvard, refined Coats estimates in the first section of his Ph.D. dissertation published in 1924. ¹² He notes that Coats study

“covers approximately the same period as that investigated in this study”, and states that it “follows the same lines” though its results were “not in close agreement”.¹³ Viner provided a summary comparison of the two studies for the period 1900 to 1913.¹⁴ A detailed comparison of the two studies in **Table #10** employs categories found in contemporary statements of the balance of payment. All values represent cumulative figures for this unique period of economic growth.¹⁵

Table # 10 : First Balance of Payment Statements for Canada

	Viner		Coats	
	<u>Receipts</u>	<u>Payments</u>	<u>Receipts</u>	<u>Payments</u>
Current Account				
Merchandise *				
Exports	3,801,138		4,031,000	
Imports		5,112,610		5,360,000
Commercial Services				
Transportation	74,439	222,223		56,000 net
Insurance	31,324	45,764	18,700	102,000
Travel and Tourism	<u>245,311</u>	<u>240,390</u>	<u>130,000</u>	<u>140,000</u>
	351,074	508,377	148,700	298,000
Investment Income	87,991	960,200	30,963	1,113,000
Current Transfers	<u>91,153</u>	<u>355,956</u>	<u>45,000</u>	<u>120,000</u>
Total Current Account	4,331,356	6,937,143	4,255,663	6,891,000
Capital Account	411,809	175,272	630,000	235,000
Financial Account	<u>2,506,434</u>	<u>137,184</u>	<u>2,205,337</u>	<u>35,000</u>
	7,249,599	7,249,599	7,091,000	7,161,000

* Includes all gold flows

Source: Department of Labour; Report of the Board of Inquiry in the Cost of Living, Volume 2
Jacob Viner; Canada's Balance of International Indebtedness, 1900-13 (Toronto:
McClelland and Stewart, 1975).

Harvey Fisk uses a similar procedure in an article written in 1923. He estimates Canada's balance of payments for two periods 1900-14 and 1915-22.¹⁶ His primary goal was to examine the geographical balance of payments of Canada with Great Britain, the United States and other countries. His results, shown in **Tables #11** and **#12**, uncover the 'triangular' relationship of Canada's transactions with its major trading partners. This theme was also central to Viner's study of a newly settled country receiving large capital inflows from Great Britain via U.S. financial markets. In 1967, John Stovel measured Canada's multilateral relationships with international accounts for the beginning and end years of the wheat boom era. **Table #13** summarizes the geographical structure of Canada's balance of payments for 1900 and 1913.

All countries rely on private studies to estimate the international accounts for the years prior to 'official' publications prepared by national statisticians. Private estimates have been accepted with minor revision for the period 1790 to 1918 in the U.S.¹⁷ Frank Knox filled the gap between the Coats -- Viner studies and the official DBS reports that covered the years from 1926 forward. Knox's first results in 1934 were an 'Excursus' in Canadian-American Industry as. A second set of estimates appeared in a research report for the Royal Commission on Dominion-Provincial Relations in 1939.¹⁸ His primary purpose was to develop a format for the international accounts in the 1900-25 era, which would link directly into the balance of payments of the DBS for years 1926 forward. Knox also made a few revisions to Viner's study so the new estimates for the 1900 to 1913 period would be same as his own for the years 1914 to 1925. The Viner and Knox studies of Canada's balances for the pre-1926 years obtained 'semi official' status when Herbert Marshall, the retired Dominion Statistician, published them in the first edition of Historical Statistics of Canada. John Stovel made improvements in the format and presentation of Knox's figures in 1959 and presented an integrated series for the period 1900 to 1957.¹⁹ Unfortunately, neither Marshall nor Stovel questioned the results of earlier studies. Both ignored a NBER research study by Penelope Hartland

Table # 11 : Balance of Payments of Canada, 1900 - 14 (\$ 000,000's)

	United Kingdom		United States		Other Countries		All Countries	
	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments
Current & Capital Account								
Merchandise								
Exports	2,026		1,423		467		3,916	
Imports		1,209		3,094		768		5,071
Interest Income		1,263		175		50		1,488
Commercial Services and All Transfers							103	
Financial Account	1,700		550		50		2,300	
Gold Specie (Net)	2		22				24	
Total	3,728	2,472	1,995	3,269	517	818	6,343	6,559

Table # 12 : Balance of Payments of Canada, 1915 - 22 (\$ 000,000's)

	United Kingdom		United States		Other Countries		All Countries	
	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments
Current & Capital Account								
Merchandise								
Exports	3,964		2,978		1,585		8,527	
Imports		887		5,043		811		6,741
Interest Income		1,155		627				1,782
Commercial Services and All Transfers								444
Financial Account	50		1,750				1,800	
Gold Specie		17	303			3	303	444
Total	4,014	2,059	5,031	5,670	1,585	814	10,630	9,411

Source: Harvey Fisk; 'The Flow of Capital - Canada' in the Annals of the

American Academy of Political and Social Science, pp 170-82

Table # 13 : The Geographical Structure of Canada's Balance of Payments, 1900 and 1913

	Great Britain		United States		Commonwealth		Other Countries		Other		All Countries	
	Credits	Debits	Balance	Credits	Debits	Balance	Credits	Debits	Balance	Debits	Credits	Balance
1900												
Merchandise	93	43	50	44	107	-63	9	4	5	23	-13	-21
Non-Monetary Gold			0	28		28			0		0	28
Freight & Shipping	1	2	-1	3	5	-2		0	0	1	-1	-4
Tourists	1	2	-1	5	3	2	1	1	1	1	0	2
Interest & Dividends		20	-20	2	12	-10		2	-2	2	0	-32
Other	3	3	0	7	3	4		0	0	1	0	4
Current Account	98	70	28	89	130	-41	10	6	4	28	-14	-23
Long-term Borrowing			10			18					11	39
1913												
Merchandise	201	143	58	158	414	-256	25	23	2	75	-16	-212
Non-Monetary Gold			0	17		17			0		0	17
Freight & Shipping	2	6	-4	5	20	-15		0	0	3	-1	-20
Tourists	5	18	-13	20	10	10	1	1	0	8	-4	-7
Interest & Dividends		99	-99	6	30	-24		0	0	8	-5	-128
Other	12	8	4	40	33	7	1	1	0	50	-47	-36
Current Account	220	274	-54	246	507	-261	27	25	2	144	-73	-386
Long-term Borrowing			376			135					36	547

Source: John Stovel; Canada and the World Economy (Cambridge: Harvard University Press, 1967), pp 111, 120

that generated new estimates for international accounts for the post-Confederation era. Her research paper, plus the results of the O.J. Firestone publication of national accounts in 1958, is examined in the next section.

Overview of Private Estimates of Canada's International Accounts, 1868 to 1900

Canada's relationship with other countries has been an enduring theme in Canadian economic history of the nineteenth century. The first effort to compile estimates of the external trade flows for British North America, as a single economic unit was by Hugh Murray for the early 1830s.²⁰ Another was contained in an 1864 publication by Alexander Munro.²¹ Both studies examined the geographic structure and commodity compositions of the trade flows for British North America as a single entity. Colonial and Dominion governments published trade data annually throughout the second half of the nineteenth century but the first 'official' publication of a continuous series of trade flows covering the period 1850 onward was a special report in 1897. Total trade flows and trade with the United States from 1850 to 1874 was recorded for each province in Central Canada and the Maritimes.²² Few official records exist for other international transactions. It has been left to economic historians to construct estimates for these accounts from Confederation to 1925. **Table #14** provides a road map of these private estimates for Canada's balance of payments for the last decades of the 19th century.

O. J Firestone constructed Canada's first national income accounts and created the first international accounts for the pre-1900 era. Firestone completed this pioneering project in the early 1950s and published it in 1958. It included estimates of Canada's current account for 1870, 1890, 1900, 1910 and 1920.²³ Penelope Hartland independently started a major study of Canada's balance of payment at the same time for the National Bureau of Economic Research (NBER). A detailed paper was completed in the mid-1950s but it was not released for general viewing. A summary appeared in a 1960 NBER volume, the same publication containing the 'semi-official' balance of

Table # 14 : Canada's International Accounts, 1868-1900

Author	Date of Publication	Period Covered	Merchandise	Transportation Services	Travel & Tourism	Insurance	Net Bankers Commissions	Income					
								Business Services	Other Services	Investment	Labour		
Hartland #1	1955	1868-1900	XXX	X	X	X				X			
Hartland #2	1960	1868-1900	XXX	X	X	X				X			
Firestone	1958	1850-1900	XXX	X	X					X			
Rich	1988	1868-1900	XX										
Sinclair	1993	1870-1900	XX	X	X	X				X			
Holmes	2008	1868-1900	X	X	X	X	X	X	X	X			
<p>X Balance of Payments Basis XX Partially Adjusted Merchandise Trade Data XXX Based on Total Export and Import Data</p>													
Author	Date of Publication	Period Covered	Transfers			Gold Movements			Items in Financial Account			International Investment Position	
			Private Sector	Public Sector		Monetary	Non-Monetary	Net Only	Bank	Other	Long-term		
Hartland # 1	1955	1868-1899	X			X			X	X	X	X	X
Hartland #2	1960	1868-1899	X			X			X	X	X	X	X
Firestone	1958	1870-1900											
Rich	1988	1868-1913				X			X				
Sinclair	1993	1870-1925	X					X	X	X	X	X	
Holmes	2008	1868-1900	X			X			X	X	X	X	X

payments for the U.S. by Douglass North for years 1790 to 1860 and by Matthew Simon for 1861-1900. Her research was more detailed than Firestone's study. She even suggested ways to revise the service accounts for prior studies of the balance of payments covering the period 1900 to 1925.²⁴

Hartland's primary focus was the construction of the balance of payments for the period 1868 to 1900. The methods, procedures and sources for her 1955 research paper parallel the path breaking study by Jacob Viner covering the 'wheat boom' era 1900 to 1913. Unfortunately, economic historians are familiar with her 1960 NBER article - an abbreviated summary of her earlier two hundred and ninety-three-page study. Herbert Marshall, for example, only acknowledges her 1960 article when the balance of payments section of the Historical Statistics of Canada was published in 1965. He completely ignores her earlier NBER study.²⁵ He did not include Hartland's findings in his section because "these estimates are not so firmly based as those of Viner".²⁶ This claim is not correct. She adopted the same methodology and went beyond his efforts to identify appropriate historical sources for her estimates covering 1868 to 1900. Douglass North comments of Hartland's research paper proclaimed her study as "a first class job". He goes to say that it "combines an intimate knowledge of the problems involved in making estimates of international (and interregional) economic accounts."²⁷ It is regrettable that Marshall dismissed Hartland's research because it diminished the importance of her pioneering study for several decades. Georg Rich drew attention to the NBER paper in his study of Canada's international monetary system from 1868 to 1913.²⁸ Rich made modest adjustments to the values of her merchandise trade statistics and adopted her estimates for the commercial service, investment income and transfer accounts. He questioned Hartland's estimates of capital inflows, especially the ones for the federal government, and rejected the Custom data for gold flows for the entire period. He developed new estimates of monetary and non-monetary gold flows using Hartland's method but improved the accuracy of this component of Canada's balance of payments. Alastair Sinclair sought to publish the definitive statement on

Canada's balance of payments for the pre-1926 era in Chapter 11 of Urquhart's Gross National Product.²⁹ His research falls short of the detailed and stringent methodology found in the other chapters. The information in Sinclair's chapter is difficult to understand, contains little documentation and has numerous errors and omissions. His merchandise data for Canada's balance of payments from 1868 to 1900 is inconsistent with the DBS concepts, methods and procedures used in the post 1926 era.

Overview of the Merchandise Account, 1868-1929

This section of the research paper examines Canada's merchandise accounts for the years 1868 to 1929. My first task is an examination of the primary sources used in prior studies to construct estimates of the merchandise account. Attention will then shift to a new set of primary sources prepared by the DBS. Its monthly trade statistics were not included in prior estimates of Canada's merchandise trade for the twenty-five year period 1875 to 1925. This information will be instrumental in the construction of new aggregate data for each calendar year in the latter part of the 19th century. A reliable set of annual trade data compiled by the DBS will be the basis of the merchandise account in the first three decades of the 20th century. It includes bilateral trade flows with Great Britain and the U.S. for the years 1901 to 1925. The trade statistics of our major economic partners will assist in determining the accuracy of Canada's trade records. They will also be an important source for revisions to the merchandise trade statistics. Throughout the analysis, the definitions and format of Canada's trade flows will conform to those used in the balance of payment statement from 1926 to the present. I will also expand the initiative of the DBS to give Newfoundland special consideration in Canada's merchandise account. The trade statistics of Newfoundland can be treated in one of two ways for the period 1868 to 1929: the same manner as the DBS did for the 1940s or as a province that entered Confederation in the 1870s.³⁰ Both options are presented here but I believe that the integration of Newfoundland's data from Confederation

forward to be the most desirable.

Overview of Aggregate Trade Flows, 1868 - 1900

The trade statistics published by the Dominion reflect the categories designed by Custom authorities in measuring the Dominion's trade flows. An endnote contains the procedures for collecting trade data at customhouses.³¹ **Table #15** provides an overview of the official import statistics of the Dominion of Canada for each fiscal year ending June 30th between 1868 and 1900. Total Imports include all the foreign goods that entered the jurisdiction of custom authorities who separated them into three general categories: dutiable merchandise, free merchandise, and coin and bullion. For balance of payment purpose, only those imports acquired by Canadian residents with foreign exchange are relevant. Imports for domestic consumption are the best candidate for this concept and fits the definition used by DBS for merchandise imports. Jacob Viner provides insights into source documents used to collect this data and the definition of each category of goods passing through Canadian customs.

The Canadian statistics for exports and imports are primarily collected and tabulated ... on the basis of declarations of value by importers and exporters, checked, especially for imports, by the valuations of the customs inspectors... Statistics of imports are published both for 'total imports' and for 'imports entered for consumption.' 'Total imports' are all imports which reach the customs warehouses. 'Imports entered for consumption' are all imports which pass *through* the customs warehouses and enter into the Canadian channels of trade. 'Imports entered for consumption' is a technical term, used in both Canada and the United States for imports to which it does not always accurately apply, since it includes goods not consumed in Canada, if they are re-exported after passing through the customhouse.³²

Total general imports minus the inflow of coin and bullion equals merchandise imports, the sum of all foreign goods that enter customs for valuation. Not all merchandise imports entered the Canadian economy. Some foreign products were re-exported directly from custom warehouses. They used Canadian transportation, storage or docking facilities en route to their final destination but never left the supervision and jurisdiction of custom officials. These products were often dutiable goods and never entered domestic commercial channels. Precise information about this category of

foreign goods is not available until the mid-1870s when the Department of Customs published detailed accounts of their warehouse operation. **Table #16** shows the value of goods passing through Canadian custom warehouses and the inventory levels at the end of each fiscal year. From these records, we can identify the re-exports that bypassed domestic commercial channels. Most likely, these goods maintained their status as foreign owned goods. If they did, then they were classified as transshipments after 1921. For now, these re-exports are designated Custom Re-Exports to distinguish them from those imports entering Canada's domestic economy before they are re-exported. The second category of re-exports is comprised of foreign products purchased by Canadian importers, shipped through Canadian commercial channels and then sold abroad with no change in their nature or form. These goods were mostly duty free products transferred under bond and were mainly comprised of grain and flour from the U.S. For this research paper, Domestic Re-Exports are those goods where Canadian merchants obtain clear legal ownership of foreign imports before their shipment abroad. Domestic merchants purchased these products as part of Canada's 'imports for consumption', a misleading term as it relates to all foreign goods entering the physical distribution system of the Canadian economy. The term Imports for Domestic Use identifies those imports entering the Canadian commercial economy and actually consumed in Canada.

There is one remaining category of foreign goods. They physically travelled through Canada but did not enter a custom's warehouse for inspection. The Treaty of Washington permitted the transfer of foreign goods over their neighbour's transportation system. The U.S. called these transshipments and Canada named them 'in transit goods'.³³ American custom officials carefully recorded this traffic through the U.S from 1846. The transshipment of goods through Canada never received the same attention. Canada kept few records of this transit trade and did not publish any estimates until 1886. This information is also incomplete because it only records the value of products transferred through Montréal. This trade was chiefly goods received from the United

States and transshipped to other countries via the St. Lawrence route. Transit trade is not included in the general trade statistics and included Custom Re-exports after 1921.³⁴

Customs officials had three broad classifications for goods shipped to other countries: domestic exports from Canadian producers; coins and bullion; and the re-export of foreign products destined for final sale abroad. The latter does not include transshipments. Custom officials recorded the country of destination for domestic exports from 1868 and re-exports from 1874. All export figures represent market values of shipments at the location of production. In the case of domestic re-exports, it ought to be the market values paid by merchants at the point of purchase. One exception to this rule was the sale of grain products, which were often valued at the port of shipment to foreign markets. Canadian re-exports are allocated into one of two classes. The first group includes those imports entering custom warehouses and then transported directly to foreign markets. These Custom Re-exports had no contact with Canadian channels of commerce and were classed as 'transit goods' after 1921. The second category is Domestic Re-exports discussed above. Canadian merchants take ownership of these foreign goods and bring them into Canadian channels of domestic commerce. From here, they were shipped to foreign buyers without changing the nature of the products. **Table #17** shows the data for each category of Canadian exports.

Accurate measures of merchandise trade require an understanding of the method and location where commodities are valued by custom authorities. They employed this 'general trade basis' system from Confederation to 1917. The system is consistent with a system of valuation based on a 'general trade' basis i.e. when they crossed the national border. In 1917, imports were tabulated if they entered the Canadian economy. After 1920, trade flows were measured "at the 'customs frontier', the point at which imports leave, or exports enter, customs supervision".³⁵ This system remained in place for decades and reverted to a 'general trade basis' in 1964. For consistency, I have adopted the procedures associated with the 'custom frontier' basis. By doing so, one can

construct a merchandise account for the fifty years following Confederation that is consistent with the years 1918 to the mid-1960s. The most important adjustment requires the separation of re-exports into the two categories used above.³⁶ The only ‘gap’ in my data series that required estimates of custom re-exports was the period 1868 to 1875 shown in italics in **Table #17**.

Modification of Dominion Trade Statistics to Account for the Provinces outside Confederation from 1868 to 1874

The Trade and Navigation section of the Dominion government’s Sessional Papers contained the trade statistics for Canada from the fiscal year ending June 30th 1868. It was ‘politically correct’ to print the trade flows of the provinces before the national figures for three decades after Confederation. A set of data for the trade flows of PEI, British Columbia, Manitoba and the Northwest were estimated. The late entry of PEI into Confederation required two sets of adjustments. The first is the elimination of PEI imports and exports with the Dominion for the years under consideration.³⁷ The second is the adjustment in the PEI trade flows with Quebec, Nova Scotia and New Brunswick. PEI’s figure for 1874 was doubled because the original statistics were only for the last six months of the fiscal year ending June 30. The main source for the trade flows of PEI from 1868 to 1873 is S.A. Saunders and the Department of Trade and Commerce.³⁸ The exports for British Columbia came from two sources: official estimates of gold and coal production in the province and export values for furs, lumber, fish and other products.³⁹ Imports were estimated to be 95 percent of exports. The exports for Manitoba⁰ (including the Northwest) come from two sources. The Annual Statement of the Trade and Navigation of the U.K. gives the British imports from the Hudson Bay Company. Arthur Ray’s figures for the fur sales of the Hudson Bay Company from 1870 to 1872 were the basis for revising the extremely low Dominion estimate for the years 1871 to 1873.⁴⁰ Imports for Manitoba are assumed to be 150 percent of exports.

Custom authorities kept very incomplete records for the sale and purchase of ships for the years 1868 to 1925. There are no export values for ships built in the Maritimes and sold abroad for

the years 1868 to 1875. I corrected this omission by assuming that these export values were 75 % higher than the ones from Quebec. Custom officials kept no records of the importation of ships from Great Britain. **Table #18** provides a summary of these revisions and others. The format is the same used by the DBS and Statistics Canada. The second edition of the Historical Statistics of Canada (1982) provides an illustration of the procedures used to calculate the merchandise trade account. Note that trade with Newfoundland can be treated in the same way that it is in Canada's balance of payments from 1940 to 1948 or as a province just like the others in British North America. ⁴¹

Official Annual Estimates of Trade Flows by the DBS, 1875-1900

The DBS examined the original Custom records in the mid-1960s and published the Historical Monthly Statistics starting with the year 1875. It contains the monthly trade statistics of total exports and imports for domestic consumption for the years 1875 to 1962. The explanatory statement in the introduction provides an authoritative overview of the sources and methods used in collecting the information. ⁴² **Table #19** gives the unadjusted trade flows for 1875 to 1900. Total export for the fiscal years ending June 30, 1875 to 1900 do not include the arbitrary shortfall estimates of custom authorities for inland shipments to the U.S. The explanation for this omission and the lack of data for two Western provinces is as follows.

[Inland shipments to the U.S.] originated mostly on the St. Lawrence and crossed the border at points without custom ports. Their total amount was estimated at year's end but there was no allocation by months. There are also other omissions; thus from January 1875 to July 1883, total exports exclude goods cleared through British Columbia custom ports; similarly from January 1875 to June 1892, British Columbia imports are excluded. Statistics on exports and imports through Manitoba custom ports are excluded for May 1875; exports from Manitoba are excluded in November and December 1881, but the sum of these two months is included in the January 1882 figured. Exports for the month of October 1880 are not at present accessible and were estimated by using the difference between the annual total and the eleven-month total omitting October. ⁴³

The raw data published by DBS for the years 1875 to 1900 require several revisions before they accurately measure monthly flows of goods. The first adjustment requires an estimate of the

**Table # 18 : Adjustments to Trade Statistics Collected by Custom's
Required for Balance of Payments Purposes, 1868 - 1900**

Merchandise Exports

Year	Domestic Exports No Shortfall	Domestic Re-Exports	Shortfall	Dominion Exports to PEI	Maritime Ships to G.B.	Total Exports for Provinces Outside Confederation			Non-Commercial Items	Canadian Production	Dominion Exports	Non-Monetary Gold	B.C. Exports	Difference Production and Export	Canadian Exports B of P Basis	
						PEI	Manitoba *	B.C.							Variant I with gold exports	Variant II no gold exports
1868	47,700	1,595	3,031.2	-	1,720.3	1,582.5	720.7	705.1	-	2,773.5	111.2	2,373	2,373	289	58,589.8	56,105.7
1869	53,229	2,108	3,008.4	-	1,517.3	2,058.3	558.0	771.6	-	2,123.4	148.6	1,775	1,775	200	64,166.0	62,242.4
1870	55,391	4,609	2,654.2	-	1,093.6	2,437.2	578.4	736.9	-	1,724.3	150.3	1,337	1,337	237	67,920.7	66,433.5
1871	59,033	8,695	2,711.7	-	739.6	2,556.3	570.0	277.8	-	2,174.4	805.9	1,799	1,799	431	75,981.6	73,376.2
1872	68,010	8,084	3,130.3	-	1,054.6	2,627.7	550.0	-	-	1,866.3	1,114.9	-	-	751	83,266.6	82,151.7
1873	72,596	7,657	3,006.1	-	1,384.5	1,541.1	220.0	-	-	1,536.9	1,058.5	-	-	478	86,488.8	85,430.4
1874	69,369	6,794	2,457.5	-	1,386.6	1,107.6	-	-	-	2,022.9	1,393.0	-	-	630	81,968.4	80,575.3
1875	62,667	5,611	2,465.3	-	552.6	523.4	-	-	-	2,693.5	1,525.8	-	-	1,168	72,951.1	71,425.3
1876	65,432	5,227	2,351.2	-	-	-	-	-	-	2,020.2	1,302.4	-	-	718	73,965.1	72,662.7
1877	66,420	8,256	2,216.1	-	-	-	-	-	-	1,949.4	1,094.5	-	-	855	77,616.5	76,522.0
1878	60,743	7,053	2,304.7	-	-	-	-	-	-	1,538.4	979.1	-	-	559	70,677.9	69,698.8
1879	63,805	2,438	2,618.7	-	-	-	-	-	-	1,582.4	1,029.8	-	-	553	69,348.0	68,318.2
1880	80,441	699	2,935.4	-	-	-	-	-	-	1,304.8	895.2	-	-	410	84,346.4	83,451.3
1881	82,131	704	3,666.3	-	-	-	-	-	-	1,313.2	865.0	-	-	448	86,801.0	85,935.9
1882	86,402	1,086	3,688.0	-	-	-	-	-	-	1,246.3	918.9	-	-	327	91,566.3	90,647.4
1883	80,615	1,568	2,987.3	-	-	-	-	-	-	1,113.2	935.8	-	-	177	85,564.7	84,628.9
1884	74,572	1,236	2,849.3	-	-	-	-	-	-	1,058.4	980.3	-	-	78	79,089.8	78,109.6
1885	71,819	1,313	2,848.0	-	-	-	-	-	-	1,148.8	1,126.1	-	-	23	76,531.8	75,405.7
1886	76,346	1,645	2,910.6	-	-	-	-	-	-	1,463.2	1,094.8	-	-	368	81,379.6	80,284.8
1887	79,088	1,615	3,049.3	-	-	-	-	-	-	1,187.8	893.2	-	-	295	83,939.6	83,046.5
1888	74,790	1,426	3,076.1	-	-	-	-	-	-	1,098.6	698.2	-	-	400	79,229.3	78,531.0
1889	81,504	1,154	2,981.5	-	-	-	-	-	-	1,295.2	643.6	-	-	652	85,437.8	84,794.2
1890	83,483	1,595	2,917.2	-	-	-	-	-	-	1,149.8	595.3	-	-	554	87,546.7	86,951.4
1891	91,161	1,980	3,174.5	-	-	-	-	-	-	930.6	411.4	-	-	519	95,499.2	95,087.9
1892	100,891	2,193	3,428.7	-	-	-	-	-	-	907.6	275.2	-	-	632	105,423.9	105,148.7
1893	71,675	1,553	3,351.9	-	-	-	-	-	-	976.6	290.1	-	-	687	75,672.0	75,381.9
1894	69,537	1,339	3,286.0	-	-	-	-	-	-	1,128.7	494.9	-	-	634	73,583.1	73,088.2
1895	99,847	1,547	3,317.5	-	-	-	-	-	-	2,083.7	904.5	-	-	1,179	104,293.0	103,388.5
1896	106,811	2,089	3,699.9	-	-	-	-	-	-	2,754.8	2,122.1	-	-	633	113,455.3	111,333.3
1897	139,698	5,206	4,355.5	-	-	-	-	-	-	6,027.0	3,274.4	-	-	2,753	151,434.2	148,159.8
1898	129,828	7,940	4,586.8	-	-	-	-	-	-	13,775.4	3,398.8	-	-	10,377	144,603.7	141,204.9
1899	135,433	7,793	5,100.7	-	-	-	-	-	-	21,261.6	9,798.2	-	-	11,463	156,811.5	147,013.3
1900	152,495	7,664	2,184.6	-	-	-	-	-	-	27,908.2	20,326.5	-	-	7,582	181,312.0	160,985.5
Ave 1868-1900										3,489.1				1,399.9	91,104.9	89,015.8

Source: B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Historical Statistics of Canada, the second edition (Ottawa: Statistics Canada, 1983), Series G443 - G472

Merchandise Exports

BNA Exports on a B of P Basis

	Dominion Exports to Nfld	Nld Exports to ROW	Revisions for Shortfall to			Total	Variant III no gold exports
			Great Britain	U.S.	Other		
1868	- 1,029	4,076.8	4,546.8	- 2,020.8	2,020.8	4,546.8	63,699.8
1869	- 1,095	5,773.2	4,512.6	- 2,005.6	2,005.6	4,512.6	71,432.9
1870	- 1,158	5,814.9	3,981.2	- 1,769.4	1,769.4	3,981.2	75,071.4
1871	- 1,240	5,959.1	4,067.6	- 1,807.8	1,807.8	4,067.6	82,162.4
1872	- 1,607	5,446.1	4,695.4	- 2,086.8	2,086.8	4,695.4	90,686.7
1873	- 1,686	7,280.3	4,509.2	- 2,004.1	2,004.1	4,509.2	95,533.8
1874	- 1,619	6,896.2	3,686.2	- 1,638.3	1,638.3	3,686.2	89,538.7
1875	- 1,750	6,239.8	3,698.0	- 1,643.5	1,643.5	3,698.0	79,612.9
1876	- 1,955	6,304.9	3,526.8	- 1,567.5	1,567.5	3,526.8	80,539.6
1877	- 2,038	6,556.1	3,324.1	- 1,477.4	1,477.4	3,324.1	84,364.4
1878	- 1,720	5,362.2	3,457.1	- 1,536.5	1,536.5	3,457.1	76,797.9
1879	- 1,520	5,602.3	3,928.0	- 1,745.8	1,745.8	3,928.0	76,328.9
1880	- 1,458	5,254.0	4,403.1	2,935.4	7,338.5	7,338.5	94,586.0
1881	- 1,427	7,432.0	5,499.4	3,666.3	9,165.7	9,165.7	101,106.4
1882	- 1,780	6,644.4	5,532.0	3,688.0	9,220.0	9,220.0	104,731.8
1883	- 1,617	6,676.9	4,481.0	2,987.3	7,468.3	7,468.3	97,156.6
1884	- 1,312	6,241.5	4,274.0	2,849.3	7,123.3	7,123.3	90,162.6
1885	- 1,384	4,498.5	4,272.0	2,848.0	7,120.0	7,120.0	85,640.2
1886	- 1,655	4,673.5	4,365.9	2,910.6	7,276.5	7,276.5	90,580.3
1887	- 1,610	4,865.7	4,574.0	3,049.3	7,623.4	7,623.4	93,926.0
1888	- 1,289	6,112.8	4,614.2	3,076.1	7,690.3	7,690.3	91,044.8
1889	- 1,148	6,286.4	4,472.3	2,981.5	7,453.8	7,453.8	97,385.9
1890	- 1,195	5,468.7	4,375.8	2,917.2	7,293.1	7,293.1	98,518.7
1891	- 1,524	6,642.3	3,174.5	3,174.5	3,174.5	103,380.5	103,380.5
1892	- 2,141	6,173.1	3,428.7	3,428.7	3,428.7	112,609.3	112,609.3
1893	- 2,923	5,661.3	- 3,351.9	3,351.9	3,351.9	81,472.2	81,472.2
1894	- 2,319	5,047.6	- 3,286.0	3,286.0	3,286.0	79,102.5	79,102.5
1895	- 1,533	5,528.9	- 3,317.5	3,317.5	3,317.5	110,701.4	110,701.4
1896	- 1,534	5,223.6	- 3,699.9	1,849.9	5,549.8	-	115,022.6
1897	- 2,071	4,596.1	- 4,355.5	- 2,177.7	6,533.2	-	150,685.0
1898	- 2,095	5,569.5	- 4,586.8	- 2,293.4	6,880.2	-	144,679.7
1899	- 2,088	7,251.0	- 5,100.7	- 2,550.4	7,651.1	-	152,176.4
1900	- 2,507	7,877.8	- 2,184.6	- 1,092.3	3,276.9	-	166,356.2
							97,781.7

Ave 1868-1

Source: f

Merchandise Imports

1868	Imports for Domestic Consumption	Adjustment for Smuggling & Undervaluation	Maritime Ships from G.B.	Total Imports for Provinces Outside Confederation				Silver Bullion	Subsidiary Coin at cost	Canadian Imports on a B of P Basis			BNA Imports on a B of P Basis						
				Maritime Ships from G.B.	Dominion Imports from PEI	PEI	Manitoba			B.C.	Commercial Items	Variant I no smuggling	Variant II with smuggling	Canadian Imports from Nfld	Imports from ROW	Nfld Imports	Variant III with smuggling		
1869	50 : 50	%	\$																
1868	67,366.2	3	2,021.0	850.0	-	477.6	1,181.8	1,135.4	3,044.6	-	1,009.1	159.1	72,250.4	74,271.4	-	1,419.8	3,333.1	76,184.7	
1869	68,323.4	3	2,049.7	950.0	-	599.4	1,218.7	841.4	1,991.2	-	1,109.4	0.3	71,616.2	73,665.9	-	1,237.5	4,102.1	76,530.5	
1870	81,919.3	3	2,457.6	1,050.0	-	733.9	1,276.8	1,002.7	1,952.5	-	1,212.2	0.1	85,885.4	88,343.0	-	1,612.6	5,227.1	91,957.5	
1871	101,018.3	3	3,030.5	1,150.0	-	769.7	1,381.3	1,515.8	1,054.0	-	1,331.5	-	104,312.0	107,342.6	-	1,960.1	4,758.3	110,140.8	
1872	116,841.3	3	3,505.2	1,250.0	-	793.8	1,527.5	1,849.7	-	-	1,406.1	0.1	119,940.6	123,445.9	-	1,868.4	5,251.2	126,828.6	
1873	124,498.1	3	3,734.9	1,250.0	-	742.8	1,585.6	927.1	-	-	1,610.6	10.1	125,917.4	129,652.4	-	1,394.9	4,953.7	133,211.2	
1874	122,425.2	3	3,672.8	1,150.0	-	343.0	789.4	-	-	-	1,797.3	10.3	122,654.6	126,327.4	-	947.5	5,416.3	130,796.2	
1875	99,656.7	3	2,989.7	1,292.7	-	-	1,292.7	-	-	-	1,528.1	0.6	99,757.8	102,747.5	-	787.3	4,737.7	106,697.9	
1876	91,838.5	2	1,836.8	1,511.5	-	-	1,511.5	-	-	-	1,183.2	37.9	92,238.3	94,075.0	-	685.8	5,107.6	98,496.9	
1877	96,387.4	2	1,927.7	1,258.1	-	-	1,258.1	-	-	-	1,098.6	42.0	96,588.9	98,516.6	-	677.3	5,230.0	103,069.4	
1878	84,211.3	2	1,684.2	635.4	-	-	635.4	-	-	-	1,034.5	10.5	83,822.8	85,507.0	-	630.7	4,715.5	89,591.8	
1879	65,045.5	2	1,300.9	324.1	-	-	324.1	-	-	-	1,080.4	18.4	64,307.7	65,608.6	-	519.9	5,002.3	70,091.0	
1880	81,268.2	2	1,625.4	257.3	-	-	257.3	-	-	-	1,150.1	28.8	80,740.2	82,365.6	-	627.3	5,193.2	86,931.5	
1881	100,970.0	2	2,019.4	402.8	-	-	402.8	-	-	-	1,526.5	27.2	100,268.4	102,287.8	-	571.5	4,907.2	106,623.5	
1882	121,411.8	2	2,428.2	626.2	-	-	626.2	-	-	-	2,043.7	12.2	120,292.1	122,720.4	-	652.6	6,223.4	128,291.1	
1883	116,204.1	2	2,324.1	637.4	-	-	637.4	-	-	-	2,217.8	1.9	114,877.6	117,201.7	-	784.1	6,791.3	123,208.9	
1884	99,835.1	2	1,996.7	537.1	-	-	537.1	-	-	-	2,160.8	2.1	98,255.5	100,252.2	-	546.1	5,925.8	105,631.8	
1885	94,630.6	2	1,892.6	366.5	-	-	366.5	-	-	-	1,918.8	5.2	93,183.7	95,076.3	-	354.2	4,658.0	99,380.0	
1886	101,595.4	2	2,031.9	553.2	-	-	553.2	-	-	-	1,830.6	3.4	100,542.0	102,573.9	-	371.1	4,082.4	106,285.2	
1887	103,713.8	2	2,074.3	640.1	-	-	640.1	-	-	-	2,010.9	-	102,413.0	104,487.3	-	387.3	3,411.2	107,511.2	
1888	104,163.6	2	2,083.3	451.9	-	-	451.9	-	-	-	2,287.2	-	102,517.2	104,600.5	-	448.0	5,379.3	109,531.8	
1889	114,053.7	2	2,281.1	561.9	-	-	561.9	-	-	-	2,544.3	-	112,166.9	114,448.0	-	491.9	4,530.8	118,486.9	
1890	111,011.4	2	2,220.2	473.9	-	-	473.9	-	-	-	2,506.9	73.1	109,153.7	111,374.0	-	604.4	3,945.5	114,175.1	
1891	111,194.2	1	1,111.9	485.4	-	-	485.4	-	-	-	2,593.9	210.0	109,428.7	110,540.6	-	734.5	4,369.5	114,175.1	
1892	114,843.8	1	1,148.4	596.9	-	-	596.9	-	-	-	2,942.3	235.2	112,925.8	114,074.2	-	697.6	3,031.4	116,408.1	
1893	114,356.1	1	1,143.6	381.3	-	-	381.3	-	-	-	3,751.2	169.3	111,267.2	112,410.7	-	745.8	4,705.7	116,370.6	
1894	101,816.2	1	1,018.2	281.9	-	-	281.9	-	-	-	4,001.5	139.3	98,331.8	99,349.9	-	746.2	4,521.7	103,125.5	
1895	103,468.9	1	1,034.7	188.3	-	-	188.3	-	-	-	3,566.3	135.8	100,234.1	101,268.8	-	640.3	3,113.7	103,742.2	
1896	105,340.2	1	1,053.4	178.7	-	-	178.7	-	-	-	3,499.4	99	102,267.4	103,320.9	-	485.0	4,049.7	106,885.5	
1897	113,588.4	1	1,135.9	240.1	-	-	240.1	-	-	-	3,775.1	195.3	110,298.9	111,434.8	-	413.8	3,855.0	114,876.0	
1898	141,910.3	1	1,419.1	239.7	-	-	239.7	-	-	-	4,253.9	134.0	138,130.0	139,549.1	-	471.1	3,794.4	142,872.3	
1899	161,766.8	1	1,617.7	114.8	-	-	114.8	-	-	-	4,665.1	92.2	157,571.0	159,188.7	-	567.8	4,457.4	163,078.2	
1900	172,825.2	1	1,728.3	130.9	-	-	130.9	-	-	-	5,519.0	72.4	167,803.3	169,531.5	-	647.9	4,839.3	173,722.9	

Ave 1868-1

Source: F

missing export and import values. This is accomplished by comparing the figures in the DBS study with the official values for each fiscal year. One can then apportion the total difference by the same monthly pattern as the existing data. If one assumes that the exports of domestic and foreign products followed the same pattern as unadjusted total export, then **Table #20** provides the most accurate estimates of trade flow for the calendar years 1875 to 1900. The first page shows the total exports with Great Britain, the U.S., Newfoundland and all other countries. The second page gives the imports for domestic consumption. Traditional techniques are required for the years 1868 to 1874. The obvious seasonal variation requires that all fiscal year data be converted on the assumption trade flows from January 1 to June 30 were equal to 40% of the total and 60% from July 1 to December 31.

Assessment of the Primary Source Data Collected by the Department of Customs and Used in Previous Studies, 1868 - 1900

The data collected by a country's Custom authorities must be the starting point for any of the merchandise trade in the balance of statements. This is true whether one examines Canada's merchandise trade or American trade flows. If one compares original trade data and the balance of payment measures for the U.S. between 1868 and 1929, the discrepancies between the two series were substantial for both merchandise imports and exports. Additions, subtractions and corrections were required to obtain accurate trade flows for the U.S. balance of payments. The average increase in exports for the period 1868 to 1900 was 5.8% for exports and 6.3% for imports. A similar reconstruction of the trade flows on a balance of payment basis is also required for Canada beyond the changes suggested above. Previous studies of Canada's balance of payments for the 19th century disagree with the necessity to adjust the figures published by Custom authorities. They assumed that the Custom's data for each fiscal year was sufficient to be the core estimates for their merchandise accounts of the post-Confederation era. Penelope Hartland believed that Canada's trade statistics were credible enough to avoid any revision. "Official data on the value of commodity imports and

exports... compared with those reported by Canada's most important trading partners appear to be as accurate as could be expected for such a type of transaction at such a time." ⁴⁴ Sinclair and Rich also accepted this verdict. Their merchandise trade data is simply a minor modification of Pentland's trade figures. Other economic historians such as Kenneth Taylor have been more sceptical about the accuracy Canada's official trade statistics in the middle decades of the nineteenth century. For the first decade 'the methods of compilation and classification left much to be desired; but there has been steady improvement in the quality of the statistics, and from about 1880 they are substantially satisfactory." ⁴⁵ Official statements present a similar viewpoint for the decades leading up to the 1890s. "The accuracy of the statistical results may at times be affected by fraudulent misdescription or undervaluation by importers." ⁴⁶ Accurate statistics for inland exports were impossible to record because "large quantities of goods are shipped at remote points where no officer is stationed, and the prescribed entry outwards is not infrequently neglected." ⁴⁷ In other situations, "exports already entered outwards at the inland port of shipment are recorded also at the point of exit from Canada." ⁴⁸ Problems in identifying the destination of Canadian exports were also commonplace.

The country of origin of imports is the country of purchase or whence shipment was made to Canada; the country of destination is that to which shipment is made. Thus Canadian wheat purchased by New York dealers, shipped to and entered in bond at New York, and thence exported to Great Britain, would appear only as exported from Canada to the United States. ⁴⁹

Smuggling received no attention in the prior studies of Canada's merchandise account. The propensity for smuggling and the level of import duties was obvious to public officials.

Smuggling flourishes wherever there are high duties or outright prohibition on imports... Joseph Howe, Nova Scotia's reluctant Father of Confederation, said in 1865: "The only way we can keep out smuggling is to keep our tariff so low as to make it not worth while for any one to smuggle." (At that time, Nova Scotia's import tariff was about ten per cent.) Writing in 1871, John Banks said in his *Smugglers and Smuggling*: "We may lay it down as an axiom that whenever the duties exceed 30 per cent ad valorem it is impossible to prevent a contraband traffic." ⁵⁰

The introduction of people and goods crossing borders on trains introduced special problems for custom officers. In a letter sent to the officials at Niagara Falls in 1881, the Commissioner called special attention “to the practice of Pullman car conductors or porters of bringing over in concealment, for traders or others, smuggled goods... I cannot sufficiently enforce upon you the necessity of unwearied vigilance in reference to these cars, and the employees connected with them.”⁵¹ It is safe to assume that smuggling existed during the post-Confederation and ought to receive some attention. So too must the issue of the undervaluation of declared import values to lessen the burden of tariffs levied on many imports. I have therefore raised the level of imports in the same manner as the ‘official’ U.S. imports in the Historical Statistics of the United States. These U.S. import figures are based on an NBER study, which increased the data collected by custom authorities to account for smuggling and the undervaluation of foreign goods facing tariff duties.⁵² I will follow this example and increase all imports by 3% for the years 1868 to 1876, 2% for 1877 to 1890 and 1% for 1891 to 1900.

Further Modification of Custom Trade Statistics Required for Balance of Payment Purposes, 1868 - 1900

Trade flows on a balance of payments basis must conform to the concepts and definitions developed by national statisticians. The valuation procedures used by Canadian customs are ideal for this purpose. “Custom valuations upon goods imported subject to duties are made at the fair market value thereof, value of packages included, when sold for home consumption in the principle market of the country whence they were exported.”⁵³ Balance of payment imports only include commercial products ‘entered for consumption’, a technical term adopted by custom officials to identify those foreign goods purchased by Canadian importers and entering the domestic economy. Non-commercial imports should be excluded because no payment through foreign exchange markets was necessary. These items include settlers effects; articles to be ex-warehoused for ships stores; free advertising materials; royalty-related products such as scripts and music that require payment at a

later date; apparel of Canadians dying abroad; trophies won in competition abroad; animals imported for competitions or exhibition purposes and staying in Canada for three months or less; donations and gifts from abroad; identifiable product shipments by tourists; and imports and exports by foreign and domestic diplomats and armed service personnel; re-imports; gifts in the form of parcels, packages and personal items that were not purchased abroad.⁵⁴ The importation of non-commercial goods required no payment of foreign exchange so they are excluded from the balance of payment.

Inflows of subsidiary coins and silver bullion flows are also included in the merchandise import account for balance of payments purposes. Canada relied on Great Britain to mint its subsidiary coins and the U.S. was an important supplier of silver bullion for commercial purposes. The custom authorities did not have separate categories for these items but were part of 'coins and bullion', which included gold, silver and copper coins plus gold and silver bullion. Reliable data is available for subsidiary coin from other sources but only rough estimates are possible for silver bullion prior to 1899. **Table #21** lists the amount of subsidiary coin prepared by the British mint and the imports of coin and bullion entering the domestic economy from Great Britain. The year-to-year differences are the result of two factors: the lag between production and shipment of subsidiary coins and the importation of gold coins and bullion. The monetary cost of producing this coinage (i.e. the monetary value minus the seignorage calculated by Rich) was used to estimate the outlay of foreign exchange in acquiring subsidiary coins from the British mint in **Table #21**. No primary sources for the importation of silver bullion exist before 1899. However, the recorded values of silver exported from the U.S represent the best estimate of this inflow of precious metal. I will use the U.S. silver exports to Canada for my bullion estimates of imports for 1868 to 1893. The silver bullion estimates for 1893 to 1898 are similar to Rich's and the official DBS estimates are used for 1899 and 1900.

Exports for balance of payment purposes include domestically produced goods and those re-exports entering domestic distribution channels and then sold abroad by Canadian merchants. These

sales abroad account for the largest source of foreign exchange. They do not include any foreign products re-exported directly from custom warehouses or transhipped across Canadian territory as 'goods in transit'. Flows of monetary and non-monetary gold have their own accounts because this precious metal had a special status of in the era of the gold standard. I will use the procedure adopted by the DBS of assigning them to their own accounts. One must also exclude non-commercial items such as household effects and re-imports to obtain export on a balance of payments basis (see **Table #22**). Re-imports are Canadian exports shipped abroad but returned to the original seller in Canada because the foreign importer would not accept them.

Critique of Previous Estimates of the Merchandise Trade Accounts, 1868 - 1900

Economic historians traditionally relied on the unadjusted trade figures published by custom authorities. More recently, they have used the balance of payment trade flows of Penelope Hartland, Georg Rich and Alastair Sinclair. Penelope Hartland followed the methods and procedures devised by Jacob Viner for his 'wheat boom' era study of Canada's balance of payments.⁵⁴ Viner compiled his estimates of commodity trade flows before 'official' definitions of the merchandise account were developed. His results are inconsistent with modern procedures because he included custom re-exports, precious metals (including coins and bullion) and non-commercial items in his merchandise accounts. Curiously, Hartland adopts Viner's methodology in her 1955 study with minor adjustments. She recognized that "the foreign trade data reported by the Department of Custom for the years prior to 1900 are imperfect for the purpose at hand" but her 'corrections' fall short of modern definitions.⁵⁵ The only adjustment Hartland makes to the raw trade data was a deduction for the imports of settler effects.⁵⁶ Hartland recognizes the need to convert the trade statistic from fiscal year July 1st to June 30th values to calendar year estimates but fails to take into account the seasonality of Canadian exports. She is aware that the ports on the St. Lawrence and the Great Lakes close from November to March and those exports were concentrated in the first five months of each

fiscal year.⁵⁷ Despite this awareness, she converts her trade statistics to calendar years values by assuming an equal flow of goods in each month of the year.

Hartland also accepts the arbitrary adjustments of the ‘shortfall’ in domestic exports to the U.S despite her own comparisons between official Canadian and U.S. trade statistics that indicate otherwise. She dismisses the discrepancy between Canadian export and U.S. import statistics “because of the differences in the methods of valuation used for Canadian exports and United States imports”.⁵⁸ The Americans valued imports at the Canadian ‘port’ of export that includes inland freight, handling and insurance. “The prescribed value of exports of Canadian merchandise is the actual cost at the time of exportation at the place where consigned for export. Thus according to prescription Canadian export data should include packaging and such costs, but should exclude inland freight.”⁵⁹ According to Harland, the different procedures for valuing the southern flows of goods accounts for the difference for half the years under consideration here.⁶⁰ Hartland’s footnote provides us with some insight into the magnitude of difference that one should expect from the different methods of estimating trade flow. “Insofar as this difference is the result of valuation differences, it would measure the ratio of inland freight charges to import value on Canadian exports to the United States. The same ratio for United States exports is estimated below at 6 to 10 per cent.”⁶¹ This is considerably higher than U.S. estimates for the same value added services. Hartland concludes her analysis by accepting Canadian export valuation for the 1890s over the U.S. import data. She does so despite the fact that Dominion exports prior to any shortfall adjustment is consistently higher than American imports. By her own admission, these exports should be much lower and require investigation.⁶²

Hartland did not have the revised estimates of American trade flows with Canada when she wrote her NBER study. Simon’s wholesale adjustments of the U.S. trade data with its northern neighbour were published in 1960. Still, her rationale for using total export and import statistics

without an allowance for custom re-exports is inconsistent with balance of payment concepts in use at the time of her research study.⁶³ Hartland's confusion spilled over to the studies of Georg Rich and Alistair Sinclair. Both based their own merchandise trade flows for the years 1868 to 1900 with minor adjustments to her annual estimates. Both authors had the opportunity to consult Simon's NBER study and the DBS data for each calendar year starting 1875. The failure of Georg Rich to 'dig deeper' is somewhat understandable. The primary goal of his research was the impact of the international monetary system on Canada's external relationship in the era of the gold standard. His main concern was to trace the impact of changes in liquid international assets and liabilities, namely movements of gold and short-term financial flow, on the economy as a whole.⁶⁴ The details of the current account were peripheral to his study. Rich defines his merchandise exports as total exports minus official values of coin and bullion, outflows of unrefined or non-monetary gold and settler effects shipped abroad. His merchandise imports are equal to total imports minus the inflows of coin and bullion and settler effects. Rich made use of unrevised monthly data of total imports and exports for the period 1894 to 1900 to construct his annual estimates. This calendar year information is more accurate than Hartland's estimates based on the assumption of equal trade flows for each month.

Alistair Sinclair purports to present definitive values of merchandise trade in Urquhart's national income accounts for the post-Confederation era. A footnote outlines his methodology for estimating annual product flows.⁶⁵ Sinclair claims that he adjusts the merchandise values on a balance of payments basis, but this is not consistent with the actual figures he gives for his exports and imports. His trade flows are the same as the Rich study with three exceptions. First, Sinclair's trade statistics for 1870 and 1871 appear to include Manitoba. Second, he does not employ the calendar year values published by the Custom authorities for 1894 to 1900. Finally, Sinclair claims to have made deductions for non-commercial imports. His minor revisions suggest that he did a few items but they fall well short of the non-commercial goods identified in my research. Sinclair's

merchandise trade values, along with Hartland and Rich, are not consistent with the procedures for computing trade flows on a balance of payments basis. Their export figures do not include export data for ships built in the Maritimes from 1868 to 1876 and fail to deduct settler effects from 1868 to 1890. Sinclair combined quartz gold with the coins and bullion account and Rich created a separate export account. The adjustments for imports in all three studies also fell short of the necessary corrections. They did not consider all non-commercial items nor do they include estimates for imported ships from 1868 to 1900. All three studies arbitrarily calculated calendar estimates based on the assumption of a constant flow of products for each month in the fiscal year July 1st to June 30th. Most importantly, no study utilized the calendar year information contained the DBS research study Historical Monthly Statistics.

To date, all prior estimates of merchandise trade suffer from important limitations, so substantial revisions are required for the entire post-Confederation years 1868 to 1900. As stated earlier, I believe that is important to treat Newfoundland as a province in British North America and not to consider it as part of ‘all other countries’. **Tables #23** and **#24** show the merchandise trade values of previous studies. The unadjusted valuations of Custom officials and the annual estimates calculated by the DBS are given on the far left hand side. The balance of payment figures Viner, Knox and Stovel are included here for 1900. Knox and Rich derived some of their trade statistics from official annual data published by Customs. The other studies based their results on the fiscal year trade statistics collected by Customs shown in the first two columns. For the most part, the annual estimates for the period are based on the assumption that trade flows were equal in each month.

My balance of payment imports in **Table #23** contains three versions. The data for Variant I come from the information collected by the DBS and Variant II includes an adjustment for smuggling and the undervaluation of imports. Variant III includes Newfoundland by deducting imports from its British North America neighbour and adding its imports from the rest of the world.

Table # 23 : Previous Estimates of Merchandise Import Account, 1868 - 1900

fiscal year	Custom's Valuation Total Merchandise Imports		Annual Imports for Consumption		Viner B of P Imports 1924	Knox		Stovel B of P Imports 1959	Firestone B of P Imports	Hartland B of P 1955	Rich B of P 1988	Sinclair B of P 1993	Holmes B of P Imports		
	calendar year 50: 50	unadjusted	adjusted	unadjusted		1936	1939						Variant I no smuggling	Variant II with smuggling	Variant III with Nfid
1868	68,564	67,366								70,971	66,400		72,250	74,271	76,185
1869	66,168	68,323								71,557	67,300		71,616	73,666	76,531
1870	70,479	81,919						98,000		84,346	80,800	81,220	85,885	88,343	91,957
1871	93,360	101,018								102,614	99,900	100,267	104,312	107,343	110,141
1872	108,677	116,841								118,494	115,600	115,557	119,941	123,446	126,829
1873	125,006	124,498								126,848	123,200	123,169	125,917	129,652	133,211
1874	123,990	122,425								124,342	121,100	121,044	122,655	126,327	130,796
1875	120,860	105,925	98,900	99,657						106,980	104,600	104,679	99,758	102,748	106,698
1876	90,990	94,072	91,600	91,838						95,344	93,100	93,064	92,238	94,075	98,497
1877	97,154	94,716	95,500	96,387						95,360	93,900	93,785	96,589	98,517	103,069
1878	92,278	86,302	82,600	84,211						86,759	85,500	85,484	83,823	85,507	89,592
1879	80,325	82,487	63,500	65,046						83,480	81,700	81,698	84,308	85,609	90,091
1880	84,608	94,408	78,900	81,268						95,086	93,600	93,565	80,740	82,366	86,931
1881	104,208	111,062	97,800	100,970						111,158	109,800	109,819	100,268	102,288	106,624
1882	117,916	124,447	116,600	121,412						124,209	122,800	122,777	120,292	122,720	128,291
1883	130,978	122,584	111,000	116,204						122,620	120,900	120,823	114,878	117,202	123,209
1884	114,189	110,088	95,500	99,835						111,038	108,500	108,387	98,255	100,252	105,632
1885	105,987	103,401	90,300	94,631						105,239	102,000	101,871	93,184	95,076	99,380
1886	100,814	106,587	97,100	101,595						107,255	105,200	105,090	100,542	102,574	106,285
1887	112,360	110,540	99,800	103,714						110,324	109,000	108,786	102,413	104,487	107,511
1888	108,719	111,684	100,300	104,164						111,327	110,000	109,684	102,517	104,601	109,532
1889	114,650	117,712	109,300	114,054						116,738	115,900	115,652	112,167	114,448	118,487
1890	120,775	119,466	105,700	111,011					116,000	119,119	117,700	117,435	109,154	111,374	114,715
1891	118,156	121,872	105,200	111,194						121,785	120,000	119,736	109,429	110,541	114,176
1892	125,588	124,084	110,800	114,844						126,122	121,900	121,689	112,926	114,074	116,408
1893	122,540	120,996	113,400	114,356						123,508	118,200	117,975	111,267	112,411	116,371
1894	119,452	112,828	-	-						114,197	107,000	109,672	98,332	99,350	103,125
1895	106,205	109,495	103,700	103,700						112,032	107,800	106,921	100,234	101,269	103,742
1896	112,785	113,664	105,500	105,500						116,404	110,800	111,248	102,267	103,321	106,886
1897	114,542	125,237	113,100	113,100						127,240	119,300	122,538	110,299	111,435	114,876
1898	135,932	147,034	140,200	140,200						148,726	146,600	144,055	138,130	139,549	142,872
1899	158,135	169,803	160,700	160,700						173,258	166,800	166,632	157,571	159,189	163,078
1900	181,470	184,289	172,800	172,800					189,000	189,276	180,200	180,572	167,803	169,532	173,723
1901	187,108				189,276	181,600	176,500	176,500							
Average 1870-1900		115,208								116,491	113,335	113,384	107,680	109,665	113,637

Source: See Tables 1,

Table # 24 : Previous Estimates of Merchandise Export Accounts, 1868 - 1900

1868	Custom's Valuation		Total Annual Exports		Viner	Knox	Stovel	Firestone	Hartland	Rich	Sinclair	B of P Exports								
	Total Merchandise Exports		DBS 11-503									B of P Exports	B of P Exports	B of P Exports	B of P Exports	B of P Exports	B of P Exports	Variant I	Variant II	Variant III
	fiscal year	calendar year	unadjusted	adjusted																
	60 : 40				1924	1936	1939		1955	1988	1993									
1868	52,702	54,124						59,021		60,800		58,590	56,106	63,700						
1869	56,257	59,982						67,024		66,400	66,385	64,166	62,242	71,433						
1870	65,571	66,336		71,000				73,874		72,400	72,981	75,982	66,434	75,071						
1871	67,483	71,942						78,407		81,200	81,777	83,267	82,152	90,687						
1872	78,629	81,555						86,215		85,600	85,609	86,489	85,430	95,534						
1873	85,944	86,509						89,571		80,800	80,789	81,968	80,575	89,539						
1874	87,356	83,153						83,619		76,700	76,781	72,951	71,425	79,613						
1875	76,847	77,999	67,800	73,066				79,427		76,100	76,137	73,965	72,663	80,540						
1876	79,726	77,892	71,100	76,114				78,421		76,000	76,080	77,616	76,522	84,364						
1877	75,142	76,747	75,200	79,840				77,600		74,000	74,020	70,678	69,699	76,798						
1878	79,155	75,807	68,400	73,260				75,407		77,400	77,470	69,348	68,318	76,329						
1879	70,787	76,928	73,400	78,634				79,701		90,800	90,841	84,346	83,451	94,586						
1880	86,140	90,612	92,900	98,515				93,101		98,700	98,782	86,801	85,936	101,106						
1881	97,320	99,098	89,400	95,565				100,214		98,700	98,807	91,566	90,647	104,732						
1882	101,766	100,041	93,200	100,145				100,112		98,700	98,807	91,566	90,647	104,732						
1883	97,454	94,161	89,700	94,350				94,746		92,400	92,548	85,565	84,629	97,157						
1884	89,222	88,418	83,600	86,771				90,322		87,200	87,402	79,090	78,110	90,163						
1885	87,211	86,405	80,200	83,071				87,245		85,100	85,252	76,532	75,406	85,640						
1886	85,195	86,921	85,600	88,590				87,384		86,200	86,376	81,380	80,285	90,580						
1887	89,510	89,780	88,300	92,033				89,859		88,900	89,085	83,940	83,046	93,926						
1888	90,185	88,996	82,500	85,815				89,696		88,000	88,164	79,229	78,531	91,045						
1889	87,211	90,050	90,900	93,675				92,969		89,700	89,868	85,438	84,794	97,386						
1890	94,309	95,574	93,000	95,796			96,000	96,616		94,300	94,447	87,547	86,951	98,519						
1891	97,470	103,344	103,200	106,267				105,036		102,900	103,388	95,499	95,088	103,380						
1892	112,154	113,065	111,800	115,180				114,971		111,700	111,896	105,424	105,149	112,609						
1893	114,431	114,933	114,100	117,358				116,856		113,600	113,806	75,672	75,382	81,472						
1894	115,686	113,137	107,300	110,661				114,549		109,200	111,220	73,583	73,088	79,102						
1895	109,313	112,114	107,300	110,503				116,152		108,500	111,004	104,293	103,389	110,701						
1896	116,315	123,572	118,200	121,897				128,327		118,800	122,498	113,455	111,333	115,023						
1897	134,458	144,486	153,500	157,710				150,050		153,500	142,958	151,434	148,160	150,685						
1898	159,530	157,670	151,100	155,677				160,502		151,200	152,908	144,604	141,205	144,680						
1899	154,881	166,224	158,100	163,217				174,287		153,400	153,399	156,812	147,013	152,176						
1900	183,238	187,746	181,000	184,084	184,940	181,200	156,000	163,600	163,600	163,600	168,695	181,312	160,985	166,356						
1901	194,509																			
Average 1870 - 1875		77,915						81,852		77,183	77,387	78,096	76,565	85,434						
Average 1875 - 1900		105,066	101,185	105,300				106,044		102,562	102,840	95,695	93,508	102,256						

Table #24 shows my three estimates for merchandise exports. Variant I is based on ‘official’ trade statistics calculated by the DBS and contains the exports of quartz gold. The information for gold quartz comes from **Table #25**. Variant II contains no exports of unrefined gold, which reflects the DBS definition and concept employed for the merchandise account. Both variants include trades flows for all the provinces in British North America from 1868 to 1874. Both also utilize DBS data that has never been used in a prior study of the balance of payments. For these reasons alone, the new estimates provide a more accurate profile of Canada’s international transaction of goods with the rest of the world. Still, the integrity of these estimates rests on the accuracy of the data collected by Custom officials. My final Working Paper will be posted on a McMaster web addresses this issue by adopting the same methodology used in the construction of the U.S. merchandise account on a balance of payment basis. A bilateral comparison of trade statistics compiled by Canadian, British and American custom authorities is undertaken. A detailed profile of the geographical structure of Canada’s merchandise account emerges and accomplishes two things. It gives assurances about the accuracy of my two estimates of export flows and provides the justification for additional revisions shown in Variant III.

Primary Sources of Merchandise Trade Compiled By Custom Officials, 1900 – 1925

The Department of Trade and Commerce was formed in the early 1890s and one of its priorities of was to improve the accuracy of Canada’s trade flows. Custom officials routinely added an arbitrary ten per cent ‘shortfall’ to the inland exports from Ontario and Quebec to the U.S. The growing two way of trade with the United States required more accurate and detailed information. “The Customs installed a new system of collection of export statistics for overland shipments, and abandoned as unnecessary the allowance for unrecorded items”.⁶⁶ Viner claims that these improvements began in 1900. However, the analysis above indicates that the Custom authorities in the new department made a concerted effort to improve the process of collecting data in the early

1890s. The result was an improvement in the accuracy of trade data on a product and geographic basis. The information published by custom officials for each fiscal year from 1900 to 1925 is in **Tables' #26** and **#27**. The calculation of Domestic Re-Exports for this period is complicated by the lack of information regarding the inventories and shipments abroad from custom warehouses. I therefore calculated the difference between total imports and those foreign goods entering the Canadian economy for each fiscal year 1901 to 1916. The annual values of Custom Re-exports were then estimated from the fiscal year data. The DBS failed to publish total imports from 1917 to 1921, so I estimated the Custom Re-exports to be 67% of total re-exports. My procedure is similar to the one used by Frank Knox in his study.

The long-standing problem of separating imports for domestic use, domestic re-exports or custom re-exports was nearing its end. A comprehensive reorganization of Canadian trade statistics came into effect on April 1, 1921. ⁶⁷ Custom officials found that a high percentage of the goods classed as Custom Re-Exports were grains passing through Canada in bond from the U.S. "Such wheat would now appear only in the statistics of transit trade". ⁶⁸ From 1921 onward to the mid-1960s, all goods exported from warehouses were classified as 'transit trade'. The only information collected was for goods entering as 'imports for domestic consumption'. As noted earlier "this term does not necessarily imply that the goods have been actually consumed in Canada, but only that they have passed into the possession of the importer; the value given of goods thereof when sold for home consumption on the principal markets of the country whence and at the time when the goods were exported to Canada." ⁶⁹ The statisticians were well aware of the problems of making intertemporal comparison with earlier trade statistics. "Difficulties have been met with in maintaining comparable statistics through such a length of time, one of the most serious of these arising through different methods adopted in dealing with exports of foreign produce." ⁷⁰ My revisions to the re-export data make this transition transparent. Previous estimates of Custom Re-

exports shipped directly to foreign buyers are ‘goods in transit’ in the new classification system.

In the mid-1960s, the DBS prepared a continuous series of total exports and imports for consumption on calendar year basis for the years 1875 to 1960. **Table #28** shows the monthly patterns of total exports and imports for consumption that the DBS published for the years 1901 to 1925. Detailed and more accurate measures for annual trade flows are included to eliminate errors incurred in rounding these monthly figures. The information in **Table #28** differs from the unrevised figures published annually by the Custom authorities. The DBS export valuations do not include gold quartz but do include Custom Re-exports until April 1, 1921. The imports for domestic consumption are slightly higher due the inclusion of products left out of the Custom returns (see **Table #29**). The last data set by the DBS should be the basis for any balance of payment calculation for the first twenty-five years of the 20th century. The conversion of these custom valuations into final figures for the merchandise account is in **Table #30**. It is the same format used above and conforms to methods employed by Dominion statistician. (See Series G443 – G472 in the Historical Statistics of Canada, 1982). The information for gold quartz comes from **Table #25**.

Critique of Previous Studies of the Merchandise Trade Accounts, 1900 – 1925

Tables #31 provide a comparison of my new estimates with earlier studies. The first ‘official’ statement of the balance of payments was under the direction of Coats in 1915. Its purpose was not to provide annual estimates of the current account or the annual financial flows for the period. Coats goal was to calculate aggregate values for the ‘wheat boom’ era. The merchandise trade account in his pioneer research paper was the unadjusted total exports and total imports for fifteen fiscal years. These values included all gold flows, total re-exports and goods requiring no monetary payment. Viner’s 1924 study for the same period recognized that the trade data collected by the Department of Customs must undergo adjustments. He developed a methodology in the early 1920s that established procedures adopted by the studies for the 1868 to 1900 examined in the

Table # 28 : Monthly Exports and Imports, 1901-25

Unadjusted Total Merchandise Exports (including Re-Exports)

1900 (shortfall)	Jan	Feb	March	April	May	June	July	August	Sept	October	Nov	Dec	Total	Toronto Exports DBS 1960	Great Britain	United States	Other Countries	Re-Exports		Domestic Exports		
	No Gold Quartz																	Custom	Domestic		Total	
1901	9.9	10.6	9.0	9.5	10.3	18.2	14.9	16.0	16.3	23.0	20.9	18.7	177.3	177,502	107,412	48,705	21,385	10,922	6,820	17,742	159,760	
1902	13.1	8.3	9.1	13.4	14.6	21.9	14.6	19.8	19.8	22.6	21.2	23.3	201.7	201,654	127,544	52,137	21,973	7,426	3,450	10,877	190,777	
1903	15.2	11.1	10.0	9.4	17.6	24.1	18.4	20.7	20.0	21.8	21.7	17.8	207.8	207,858	129,161	54,102	24,595	8,558	4,828	13,386	194,472	
1904	11.9	8.9	9.5	8.4	10.6	22.0	14.1	20.1	18.6	18.5	18.2	19.3	180.1	180,727	103,844	55,069	21,814	4,177	3,719	7,896	172,831	
1905	11.8	8.5	11.5	8.9	12.8	23.8	13.9	18.8	19.5	28.7	29.0	22.0	209.2	209,176	120,519	64,014	24,643	4,718	7,330	12,048	197,128	
1906	18.0	12.2	12.7	13.4	18.6	26.9	17.1	24.7	22.6	27.4	26.1	22.0	241.7	241,768	135,051	79,743	26,974	3,785	10,270	14,055	227,713	
1907	17.4	12.7	14.9	9.9	17.2	20.4	28.0	26.6	26.4	25.8	22.7	24.0	246.0	245,954	126,110	90,430	29,414	8,241	5,901	14,142	231,812	
1908	21.2	14.5	17.8	10.6	13.6	20.0	24.0	23.6	21.5	28.8	34.3	27.5	257.4	257,318	141,120	80,233	35,965	13,287	5,686	18,973	238,345	
1909	15.7	14.5	18.5	12.1	15.8	23.8	25.4	24.2	25.6	30.1	37.1	40.2	283.0	282,887	145,763	100,869	36,235	14,106	4,366	18,472	264,415	
1910	20.9	15.3	22.2	14.7	19.9	25.6	24.3	23.7	25.0	32.9	36.6	28.7	289.8	289,844	140,500	108,198	41,146	12,501	4,600	17,101	272,743	
1911	17.3	15.2	20.6	11.3	21.2	25.1	25.2	28.2	25.4	30.1	38.2	31.3	289.1	289,055	147,182	100,770	41,103	11,680	5,774	17,454	271,601	
1912	20.0	19.3	25.4	13.8	33.6	31.0	32.2	30.1	26.8	37.3	44.4	39.0	352.9	352,948	176,646	129,251	47,051	14,804	5,196	20,000	332,948	
1913	19.7	23.1	34.8	22.2	29.0	33.9	36.5	36.2	39.5	59.1	57.7	56.0	447.7	447,699	224,515	167,974	55,210	33,184	11,816	45,000	402,699	
1914	25.0	20.5	26.4	17.9	32.0	29.5	48.1	42.5	38.8	49.8	44.7	37.9	413.1	413,067	184,115	169,318	59,634	31,433	8,567	40,000	373,067	
1915	29.2	29.2	46.5	28.7	42.5	46.3	45.4	43.5	51.8	81.9	92.7	92.2	629.9	629,841	361,486	181,061	87,294	27,427	11,932	39,359	590,482	
1916	84.6	57.8	88.0	55.1	94.7	96.6	104.7	96.3	90.6	85.3	110.5	130.0	1,094.2	1,094,062	718,724	251,599	123,739	74,844	62,457	137,301	956,761	
1917	100.8	70.2	124.8	65.9	151.1	119.2	179.1	150.8	113.8	158.3	193.3	150.3	1,577.6	1,577,567	891,863	405,385	280,319	23,078	23,078	46,155	1,531,412	
1918	99.3	88.5	102.9	71.2	80.6	109.4	103.7	91.9	139.7	129.7	123.3	93.5	1,233.7	1,233,689	586,558	441,273	205,858	25,388	24,612	50,000	1,183,689	
1919	124.6	85.6	106.4	67.1	96.1	90.9	118.0	120.4	107.6	112.8	122.8	137.4	1,289.7	1,289,792	538,974	487,618	263,200	24,228	29,606	53,834	1,235,958	
1920	120.1	89.6	97.8	55.5	80.1	108.2	105.8	113.5	96.3	131.0	148.5	150.7	1,298.1	1,298,162	343,217	581,408	373,537	7,889	22,258	30,147	1,268,015	
1921	81.7	66.0	69.1	43.9	60.6	59.4	56.3	62.3	59.5	81.1	87.5	86.9	814.3	814,144	309,842	334,973	169,329	665	13,330	13,995	800,149	
1922	46.9	46.6	60.5	32.4	70.2	72.7	71.5	74.2	72.6	103.5	131.6	111.6	894.3	894,224	375,627	347,617	170,980		13,815	13,815	880,409	
1923	65.2	57.8	76.5	53.6	74.3	94.3	82.6	81.0	68.5	101.2	137.9	123.0	1,015.9	1,015,986	361,888	420,328	233,770		13,585	13,585	1,002,401	
1924	67.9	66.2	90.9	47.8	103.0	86.3	85.6	72.7	80.3	101.7	117.3	122.5	1,042.2	1,042,253	388,434	394,624	259,195		12,554	12,554	1,029,699	
1925	73.6	69.0	92.7	58.5	95.0	91.4	100.6	108.9	106.6	142.0	138.3	174.9	1,251.5	1,251,666	493,170	450,859	307,637		12,112	12,112	1,239,554	
Average	45.2	36.8	47.9	30.2	48.6	52.8	55.6	54.8	53.3	66.6	74.3	71.2	637.5									

Source: DBS (11-503); Historical Monthly Statistics
Sessional Papers

Table

Unadjusted Merchandise Imports for Consumption

1900 (sh)	Jan	Feb	March	April	May	June	July	August	Sept	October	Nov	Dec	Total	Imports for Consumption	Great Britain	United States	Other Countries
	No Gold Quartz												DBS 1960				
1901	13.0	12.7	14.5	14.0	15.8	19.0	14.1	17.4	15.7	17.4	16.1	15.1	184.8	184,740	42,840	110,863	31,037
1902	14.7	13.5	17.0	17.1	18.0	20.7	13.8	18.9	18.5	18.9	17.1	16.4	204.4	204,396	53,598	116,679	34,119
1903	16.9	15.6	19.9	20.6	21.0	27.9	18.7	23.5	23.5	21.2	18.7	17.3	243.6	243,451	63,579	140,177	39,695
1904	17.3	16.0	20.8	20.1	21.4	26.6	18.0	21.5	21.2	21.5	21.5	18.5	245.4	245,418	58,493	149,356	37,569
1905	17.5	16.3	22.5	20.7	23.7	28.0	18.4	23.7	22.7	23.7	23.5	21.3	262.6	262,765	64,825	155,495	42,445
1906	22.5	21.1	24.9	23.1	26.7	31.4	23.3	29.2	27.3	29.2	35.1	19.5	312.1	312,114	77,664	187,757	46,693
1907	26.5	25.3	36.1	27.8	34.0	34.0	34.0	31.5	28.5	31.5	31.5	24.1	366.6	366,575	96,252	216,769	53,554
1908	23.1	21.0	29.7	19.9	22.9	24.1	22.5	26.3	24.2	26.3	23.6	22.2	282.5	282,707	71,057	166,062	45,588
1909	22.6	23.2	33.9	22.6	28.1	31.3	30.0	30.5	30.4	30.5	33.5	30.8	347.2	347,067	89,565	202,479	55,023
1910	29.3	30.3	43.4	30.7	38.7	38.3	35.8	37.4	37.5	37.4	40.7	34.8	435.4	435,251	107,722	262,142	65,387
1911	35.7	35.1	49.6	31.7	43.3	42.2	39.9	45.4	42.5	45.4	47.1	43.5	503.5	503,542	113,352	319,942	70,248
1912	38.8	42.2	58.3	45.6	53.8	53.8	56.4	61.2	58.0	61.2	59.5	51.2	636.9	636,790	133,429	410,242	93,119
1913	52.8	53.1	67.8	48.5	60.6	58.0	59.0	52.4	54.4	52.4	50.3	45.1	660.0	659,993	139,900	427,974	92,119
1914	41.0	38.6	53.3	37.0	45.2	45.8	43.0	35.2	36.6	35.2	31.6	30.4	482.2	482,076	98,754	308,634	74,688
1915	30.3	35.9	40.5	28.4	34.4	35.3	36.6	38.1	38.1	39.6	45.3	45.7	450.9	450,960	74,364	316,934	59,662
1916	50.2	51.7	62.1	50.2	69.8	66.5	63.7	71.3	68.8	71.3	72.7	68.0	767.5	767,410	117,637	595,369	54,404
1917	72.5	68.1	102.4	86.9	107.7	97.6	90.2	78.1	75.9	78.1	72.9	61.7	1,006.0	1,006,056	76,516	827,401	102,139
1918	60.8	52.3	87.4	78.7	89.9	82.3	82.9	75.7	71.6	75.7	75.0	73.6	910.1	910,171	72,906	741,339	95,926
1919	73.8	64.4	71.9	54.3	71.3	75.0	84.3	81.4	85.5	91.9	92.7	94.6	941.1	941,014	87,659	739,598	113,757
1920	103.6	87.5	142.5	98.3	113.3	134.7	127.3	105.8	115.1	105.8	98.7	85.9	1,337.0	1,336,921	231,488	921,235	184,198
1921	72.3	72.0	92.6	65.3	68.5	57.6	62.4	59.5	59.8	59.5	64.3	60.1	799.5	799,478	123,150	555,091	121,237
1922	51.5	54.3	79.4	47.7	66.1	61.7	60.8	66.9	60.3	66.9	76.3	70.2	762.6	762,409	136,859	509,909	115,641
1923	68.1	65.3	91.9	68.2	84.3	84.6	77.1	75.6	71.4	75.6	72.1	65.7	903.1	903,031	154,479	610,354	138,198
1924	66.6	62.1	87.0	60.2	72.1	66.4	72.6	68.2	63.9	68.2	66.2	60.9	808.2	808,145	148,892	524,473	134,780
1925	58.4	61.4	84.6	59.1	75.9	75.5	81.5	80.8	78.7	80.8	75.3	76.9	890.2	890,193	162,119	578,575	149,499
Average	43.2	41.6	57.4	43.1	52.3	52.7	50.7	50.6	49.2	50.6	50.5	46.1	589.7				

Source: I

**Table # 30 : Adjustments to Custom Valuation of Trade Flows
Required for Balance of Payments Purposes, 1901 - 29**

Year	Domestic Exports No Gold	Domestic Re-Exports	Non-Commercial Items	Production Available for Export	Non-Monetary Gold Exports	Difference Production to Export	Canadian Exports on a B of P Basis		Knox's Exports on a B of P Basis		BNA Exports on a B of P Basis						
							Variant I with gold exports	Variant II no gold export	Difference Variant II with defence goods	Knox	G.B.		U.S.		Other		
											Regular Trade	War Material	Regular Trade	War Material			
1901	159,760	7,900	- 1,390	24,129	21,579	2,550	187,850	166,271	-	369,100	-	12,542	-	12,542	-	-	-
1902	190,777	4,473	- 1,411	21,337	17,730	3,607	211,568	193,839	-	613,900	-	20,551	-	20,551	-	-	-
1903	194,472	3,404	- 1,286	18,844	17,804	1,039	214,394	196,590	-	1,072,400	-	4,855	-	4,855	-	-	-
1904	172,831	4,894	- 1,301	16,463	16,611	- 149	193,035	176,424	-	1,555,200	-	1,452	-	1,452	-	-	-
1905	197,128	5,708	- 1,520	14,159	13,879	281	215,195	201,316	-	1,209,400	-	13,761	-	13,761	-	-	-
1906	227,713	7,249	- 1,382	11,502	9,533	1,969	243,112	233,580	-	1,261,700	-	13,707	5,000	8,707	-	-	-
1907	231,812	9,011	- 1,281	8,383	8,181	202	247,724	239,542	-	1,267,100	-	13,032	5,000	8,032	-	-	-
1908	238,345	4,050	- 1,794	9,842	7,903	1,939	248,503	240,601	-	1,267,100	-	30,450	5,000	30,450	-	-	-
1909	264,415	5,768	- 2,145	9,382	6,527	2,855	274,565	268,038	-	1,267,100	-	29,713	5,000	24,713	-	-	-
1910	272,743	3,497	- 2,040	10,206	5,613	4,593	279,812	274,199	-	1,267,100	-	25,328	5,000	20,328	-	-	-
1911	271,601	5,387	- 1,918	9,781	6,454	3,327	281,525	275,071	-	1,267,100	-	38,363	5,000	33,363	-	-	-
1912	332,590	5,654	- 2,135	12,649	12,487	161	348,596	336,108	-	1,267,100	-	56,521	5,000	51,521	-	-	-
1913	424,484	4,798	- 2,684	16,599	14,575	2,024	441,173	426,598	-	1,267,100	-	82,435	5,000	77,435	-	-	-
1914	368,087	6,794	- 3,472	15,983	16,285	- 302	387,695	371,410	-	1,267,100	-	32,947	5,000	27,947	-	-	-
1915	590,482	10,018	- 4,087	18,978	18,551	427	564,964	546,413	-	1,267,100	-	82,804	5,000	77,804	-	-	-
1916	956,761	15,259	- 4,292	19,235	16,082	3,153	808,810	792,729	-	1,267,100	-	329,430	5,000	324,430	-	-	-
1917	1,531,412	9,278	- 3,684	15,273	10,997	4,276	1,198,003	1,187,006	-	1,267,100	-	257,954	5,000	252,954	-	-	-
1918	1,181,778	15,381	- 4,162	14,464	7,265	7,198	1,100,262	1,092,997	-	1,267,100	-	21,907	5,000	16,907	-	-	-
1919	1,235,958	17,945	- 6,821	15,850	2,735	13,116	1,199,816	1,197,081	-	1,267,100	-	26,497	5,000	21,497	-	-	-
1920	1,268,015	10,049	- 8,525	15,814	4,283	11,532	1,273,822	1,269,539	-	1,267,100	-	63,944	5,000	58,944	-	-	-
1921	800,149	13,995	- 7,012	19,149	12,610	6,539	819,742	807,132	-	1,267,100	-	42,929	5,000	37,929	-	-	-
1922	880,409	13,815	- 7,580	26,116	24,230	1,886	910,873	886,644	-	1,267,100	-	138,542	5,000	133,542	-	-	-
1923	1,002,401	13,585	- 10,090	25,495	14,400	11,095	1,020,297	1,005,896	-	1,267,100	-	117,979	5,000	112,979	-	-	-
1924	1,029,699	12,554	- 8,596	31,532	25,941	5,591	1,059,598	1,033,657	-	1,267,100	-	107,842	5,000	102,842	-	-	-
1925	1,239,554	12,112	- 7,625	35,881	26,674	9,206	1,270,716	1,244,041	-	1,267,100	-	177,329	5,000	172,329	-	-	-
										73,029	Average 1914 - 25						

Official DBS B of P Exports

1926	1,269,453	30,000		1,302,000	1,272,000												
1927	1,225,188	32,000		1,247,000	1,215,000												
1928	1,357,847	40,000		1,381,000	1,341,000												
1929	1,172,001	37,000		1,215,000	1,178,000												

* Dominion Exports = Dominion Domestic Exports + Dominion Domestic Re-Exports

Source: B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Historical Statistics of Canada, the second edition (Ottawa: Statistics Canada, 1983), Series G443 - G472

BNA Exports on a B of P Basis

Canadian Exports to Nfid	Nfid Exports to ROW	BNA Exports no gold export	Imports for Domestic Consumption	Non-Commercial Items	Unrecorded Imports of Ships Viner	Subsiduary Coin	Foreign Exchange Adjustment with U.S.	Canadian Imports on a B of P Basis Variant I	Knox's Imports on a B of P Basis			BNA Imports on a B of P Basis		
									Adjust-ments	Knox	Canadian Imports from Nfid	Nfid Imports from ROW	Variant II	
- 2,219	7,878	171,930	184,740	- 7,566	217			177,391			- 887	4,839	181,343	
- 2,337	8,077	199,579	204,396	- 8,692	720	378		196,802			- 1,109	5,106	200,799	
- 2,610	8,690	202,669	243,451	- 9,543	7,221	317		241,446			- 1,099	5,417	245,764	
- 3,097	9,077	182,403	245,418	- 10,029	781	176		236,346			- 1,061	5,818	241,103	
- 3,142	9,406	207,581	262,765	- 11,495	2,603	221		254,094			- 1,477	6,100	258,717	
- 2,502	9,921	240,999	312,114	- 10,753	1,332	399		303,092			- 1,582	6,533	308,043	
- 2,789	10,399	247,153	366,575	- 9,718	1,225	576		358,659			- 1,652	6,825	363,831	
- 3,320	10,221	247,501	282,707	- 13,321	128			269,514			- 1,694	7,008	274,828	
- 3,641	9,629	274,026	347,067	- 15,132	941			332,876			- 1,536	7,362	338,702	
- 3,751	9,839	280,286	435,251	- 19,572	1,610			417,289			- 1,678	7,853	423,464	
- 3,965	10,301	281,407	503,542	- 21,924	503			482,121			- 1,961	8,508	488,668	
- 4,494	11,151	342,766	636,790	- 23,851	2,576			615,515			- 1,927	9,345	622,934	
- 4,189	12,243	434,652	659,993	- 23,307	2,264		43	638,993			- 1,482	10,356	647,867	
- 4,483	12,788	379,715	482,076	- 16,774			247	465,055		5,745	- 1,443	10,565	474,176	
- 5,839	12,452	553,027	450,960	- 11,104			1,236	441,093		6,107	- 1,919	9,087	448,260	
- 8,722	14,345	798,351	767,410	- 7,769			1,072	760,712		1,688	- 2,628	9,199	767,284	
- 10,872	18,644	1,194,778	1,006,056	- 10,954			1,489	996,591		91	- 3,038	12,231	1,005,784	
- 14,235	23,871	1,102,632	910,171	- 12,533			11,787	909,425		12,975	- 2,527	14,846	921,743	
- 12,261	33,257	1,218,077	941,014	- 16,759			26,404	950,659		741	- 1,990	21,143	969,812	
- 8,841	26,364	1,287,062	1,336,921	- 19,053			114,878	1,432,746		4,046	- 1,396	17,917	1,449,267	
- 9,714	19,342	816,760	799,478	- 15,477				784,001		43,799	- 1,444	11,600	794,157	
- 11,824	18,748	893,567	762,409	- 13,672				748,737		4,137	- 1,576	10,101	757,263	
- 10,012	19,161	1,015,045	903,031	- 14,163				888,868		3,768	- 1,456	13,089	900,501	
- 12,153	20,476	1,041,980	808,145	- 14,052				794,093		4,193	- 1,601	18,876	811,368	
- 11,633	23,742	1,256,150	890,193	- 15,982				874,211		1,811	- 1,622	19,185	891,774	
									Average 1914 - 25					
												no non-commercial exports		
- 11,197	27,164	1,287,967	1,000,645	- 18,344				973,000			- 1,805	14,952	986,147	
- 11,538	29,879	1,233,340	1,077,525	- 14,836				1,057,000			- 2,040	14,837	1,069,797	
- 11,286	32,378	1,362,092	1,211,483	- 14,657				1,209,000			- 2,409	16,450	1,223,041	
- 11,924	34,913	1,200,989	1,287,529	- 16,361				1,272,000			- 2,412	18,142	1,287,730	

Table # 31: Previous Estimates of Merchandise Account, 1900 - 29

Balance of Payment Exports

1900	Coats 1915		Viner 1924		1936	1939	1959	Rich B of P 1988	Sinclair B of P 1993	Holmes 2008			
	Total Exports fiscal year	Merchandise Exports with gold	Coin & Bullion	Total Exports						Adjust- ments	B of P Exports	Knox B of P	Stovel B of P
1900	191,895	182,432	3,697	186,129	1,189	184,940	181,200	156,000	163,600	168,695	192,458	168,330	173,989
1901	196,488	200,925	2,367	203,292	1,877	205,169	199,500	170,200	177,200	179,216	214,519	193,182	198,922
1902	211,640	216,793	290	217,083	1,183	215,900	215,300	190,400	199,100	198,499	218,753	199,909	205,989
1903	225,850	227,843	310	228,153	1,354	226,799	226,500	201,900	206,500	199,704	218,753	199,909	205,989
1904	213,521	196,941	2,300	199,241	1,182	198,059	195,600	176,100	176,300	188,580	189,878	173,415	179,395
1905	203,317	223,258	1,366	224,624	4,474	229,098	221,600	205,200	207,600	209,015	217,647	203,488	209,752
1906	256,587	254,118	15,360	269,478	1,741	267,737	252,300	254,000	240,100	239,512	248,903	237,400	244,820
1907	205,277	254,607	18,718	273,325	1,999	271,326	252,600	253,800	244,000	250,527	244,191	235,808	243,418
1908	280,007	265,865	4,140	270,005	1,948	268,057	264,000	249,300	255,500	251,756	256,130	246,288	253,188
1909	261,512	289,542	1,420	290,962	2,293	288,669	287,300	269,000	280,800	281,116	277,753	268,371	274,359
1910	301,359	296,866	1,984	298,850	2,202	296,648	294,600	280,800	287,700	285,361	288,260	278,054	284,141
1911	297,196	298,030	5,733	303,763	2,152	301,611	295,900	284,100	286,900	295,366	286,929	277,148	283,484
1912	315,317	364,289	13,805	378,094	2,370	375,724	361,900	351,700	350,600	348,265	349,763	337,115	343,772
1913	393,232	461,853	12,561	474,414	3,013	471,401	458,800	442,900	444,700	421,392	446,850	430,252	438,305
1914	478,998	379,296	33,771	413,067			425,500	369,100	369,100	442,587	398,808	382,825	391,130
1915		614,130	15,711	629,841			650,200	613,900	613,900	678,205	625,081	606,103	612,717
1916		1,091,706	2,356	1,094,062			1,109,400	1,072,400	1,072,400	1,039,296	1,096,062	1,076,827	1,082,450
1917		1,547,341	30,226	1,577,567			1,591,100	1,555,200	1,555,200	1,462,570	1,571,481	1,556,208	1,563,980
1918		1,189,273	44,416	1,233,689			1,239,400	1,209,400	1,209,400	1,336,938	1,223,003	1,208,539	1,218,175
1919							1,286,800	1,261,700	1,261,700	1,300,372	1,276,991	1,261,141	1,282,137
1920							1,291,800	1,267,100	1,267,100	1,265,965	1,298,110	1,282,296	1,299,819
1921							808,000	800,400	800,400	894,290	825,663	806,514	816,142
1922							888,100	884,100	884,100	918,272	912,760	886,644	893,567
1923							1,016,500	1,003,900	1,003,900	1,042,507	1,031,392	1,005,896	1,015,045
1924							1,061,000	1,032,600	1,032,600	1,075,538	1,065,190	1,033,657	1,041,980
1925							1,272,600	1,241,100	1,241,100	1,270,589	1,279,922	1,244,041	1,256,150
Average 1901-25							625,612	625,612	643,018	643,018		623,978	
1926							1,273,800	1,266,500	1,272,000	1,302,000	1,302,000	1,272,000	1,287,967
1927							1,227,800	1,222,400	1,215,000	1,247,000	1,247,000	1,215,000	1,233,340
1928							1,363,300	1,355,400	1,341,000	1,381,000	1,381,000	1,341,000	1,362,092
1929							1,196,700	1,169,300	1,178,000	1,215,000	1,215,000	1,178,000	1,200,989
1930													
1931													

Holmes export figures include double the shortfall to the U.S.A. from 1868 to 1889.

Balance of Payment Imports

Year	Coats 1915										Viner 1924				Holmes 2008			
	Total Imports fiscal year	Merchandise Imports for Consumption	Coin & Bullion	Imports for Consumption	Imports for Re-Export	Total Imports	Adjustments	B of P Imports	Knox B of P	Stovel B of P	Rich B of P	Sinclair B of P	Variant I	Variant II				
								1936	1939	1988	1993							
1900	189,623	176,141	4,524	180,665	8,998	189,663	- 387	181,200	176,500	180,200	180,572	177,174	181,126					
1901	190,416	182,595	4,882	187,477	9,329	196,806	- 4,160	199,500	182,600	187,800	192,136	195,704	199,701					
1902	212,270	203,471	5,698	209,169	8,452	217,621	- 4,791	215,300	203,400	207,800	213,450	233,908	238,226					
1903	241,215	245,680	6,741	252,421	7,686	260,107	5,175	226,500	251,800	251,300	235,037	235,389	240,145					
1904	259,212	246,266	10,369	256,635	6,328	262,963	- 6,136	195,600	249,200	245,300	246,848	251,270	255,893					
1905	266,834	263,258	7,128	270,386	4,417	274,803	- 5,566	221,600	263,600	261,200	263,513	301,361	306,313					
1906	294,286	312,617	7,860	320,477	3,650	324,127	5,433	252,300	312,300	308,100	303,919	356,857	362,030					
1907	259,786	368,219	4,606	372,825	10,112	382,937	9,602	252,600	363,000	367,200	346,256	269,386	274,700					
1908	370,787	283,346	8,943	292,289	11,753	304,042	8,533	264,000	282,600	285,700	307,148	331,935	337,761					
1909	309,757	347,495	4,467	351,962	14,902	366,864	- 5,002	287,300	339,600	352,700	354,317	415,679	421,854					
1910	391,853	436,545	7,260	443,805	11,727	455,532	- 5,161	294,400	429,000	434,400	429,411	481,618	488,165					
1911	472,248	504,413	20,438	524,851	11,453	536,304	- 2,136	295,900	506,300	499,700	500,023	612,939	620,358					
1912	559,321	638,051	7,496	645,547	15,346	660,893	- 9,661	361,900	626,000	637,800	631,720	636,729	645,603					
1913	692,032	660,746	12,495	673,241	17,016	690,257	3,949	458,800	654,900	662,400	632,593	465,055	474,176					
1914	650,747							512,300	470,800	470,800	521,572	441,093	448,260					
1915								466,000	447,200	447,200	516,370	760,712	767,284					
1916								780,000	762,400	762,400	738,825	996,591	#####					
1917								1,023,600	996,500	996,500	958,428	909,425	921,743					
1918								930,700	922,400	922,400	953,372	950,659	969,812					
1919								952,100	951,400	951,400	1,053,065	#####	#####					
1920								1,342,700	1,428,700	1,428,700	1,225,783	784,001	794,157					
1921								792,900	827,800	827,800	890,409	748,737	757,263					
1922								747,500	744,600	744,600	807,417	888,868	900,501					
1923								888,700	885,100	885,100	891,996	794,093	811,368					
1924								793,200	789,900	789,900	840,267	874,211	891,774					
1925								875,700	872,400	872,400	915,483	581,846	581,846					
Average								590,540			598,774	973,000	986,147					
1926								992,500	989,100	973,000	973,000	#####	#####					
1927								1,066,500	1,083,500	1,057,000	1,057,000	#####	#####					
1928								1,220,200	1,224,400	1,209,000	1,209,000	#####	#####					
1929								1,293,800	1,300,600	1,272,000	1,272,000	#####	#####					
1930												#####	#####					
1931												#####	#####					

previous section.⁷¹ Total exports and total imports, including reported and unrecorded transactions of gold coins and bullion were the basis for calculating Viner's merchandise accounts. His reason for doing so is somewhat justified as there was no data on custom warehouse activity like the information published in the 19th century. He did deduct settler effects for his balance of payment exports and imports for the years 1900 to 1913. All trade values are converted from fiscal to calendar years on the assumption that monthly trade flows were equal for the period under study. Knox made minor revisions to Viner's classic work in two research reports. In his 1936 study, Knox deducted his own estimates of gold coin and bullion flows from Viner's total trade figures. Knox also derived his first estimate of balance of payment exports and imports for the period 1914 to 1925 in the same paper.⁷² In a 1939 study, Knox failed to use all the prevailing concepts and definitions of the balance of payment to revise Viner's merchandise account for the 'wheat boom years'. For example, he did not deduct unrefined gold exports for the pre-War years and failed to identify other non-commercial items of trade. However, Knox's estimates for the 1914 to 1925 period conform to proper balance of payment concepts and methods for calculating the merchandise account. An excerpt from an article written by Knox in 1940 indicates a clear understanding of the modern concepts and definitions of the merchandise trade account in the balance of payments statement.⁷³ Stovel accepted Knox's merchandise trade figures but divided the gold flows into two components: nonmonetary gold exports and net monetary gold flows. He also offers an excellent critique of Knox's study that provides a penetrating insight into its strengths, weaknesses and potential source of error.⁷⁴ Stovel's figures for the trade flows from 1926 to 1957 reflect the most up-to-date figures available from DBS revisions for the period. Regrettably, he was unaware of the new estimates for the total exports and imports for consumption published by the DBS in the late 1950s. The Review of Trade gave calendar year values going back to 1901 and Stovel could have used these figures to test the credibility of Knox's estimates for the 1900 to 1925 period.⁷⁵

Assessment of the Accuracy of the Primary Source Trade Data

Accurate estimations of merchandise trade flows require annual data where it is available. The raw information must undergo modifications to convert the export and import data collected by custom authorities to a balance of payments basis. As noted earlier, the data from the Review of Trade should be the foundation for estimates of balance of payment merchandise trade for the years 1900 to 1925.⁷⁶ It is regrettable that Stovel and Rich were not aware of this data source but Alastair Sinclair's failure to use this importance source is a mystery. I checked the references he purports to use in his study and found that his own estimates are conversions of fiscal year trade data to calendar year values. They are different from all the studies examined in this research paper so they are of questionable use. I have therefore prepared a completely new series of balance of payment export and import for the years 1900 to 1925. The DBS figures are ideal starting point for constructing revised merchandise accounts for the period 1901 to 1925 on a total and geographical basis. They contain calendar year data for unadjusted merchandise trade flows with Great Britain, the United States and of other countries. They were also the basis for the DBS calculations of balance of payment trade estimate for the period 1926 to 1960. I use them in compiling my own estimates of the merchandise account with the proper adjustments to present exports and imports on a balance of payments basis. Variants have been prepared using different assumptions.

Conclusion

This research paper is an introduction to the Working Papers that I will complete by the end of 2008. It gave an overview of the project and examined the merchandise account in detail. This account deserves careful scrutiny because it is the largest source and use of foreign exchange in the balance of payments. Considerable attention was given to a review of the secondary literature and the identification of new sources of primary data. Throughout the paper, I demonstrated how previous studies, and especially the 'semi-official' estimates of Alastair Sinclair, contain conceptual

errors, omissions and data sets that do not conform to either the format or definitions of balance of payment valuations.⁷⁷ The next paper will be presented at the CEA conference in Vancouver. It focuses on the remainder of the current account: services, income and transfers. The last paper will examine the financial accounts and the international investment position of Canada. The objective of each research paper is fourfold. First, a comprehensive review of the primary sources used in previous studies and their attempts to construct international accounts for the period under study. Second, I unearth new primary sources for many international accounts. I then reconsider the accuracy of previous studies and provide the basis for verifiable revisions to my own estimates. Third, the each research study expands the scope beyond aggregate measures to reflect bilateral trade relationships with Canada's major economic partners. Finally, my new estimates have the same format used in contemporary statements of international accounts. The result will improve the accuracy of Canada's international accounts for the period 1868 to 1925 and produce a consistent, uniform profile of the Dominion's economic relationship with Great Britain, the United States and all other countries from Confederation to the present.

Endnotes

- 1) Herbert Marshall author of the introduction to Section F in M.C. Urquhart and K.A. Buckley (eds); Historical Statistics of Canada (Toronto: The Macmillan Company of Canada, 1965), pp 142 -43. Herbert Marshall states

for the period commencing with 1926 the foundations were laid in the Dominion Bureau of Statistics for a comprehensive collection of factual data on items for which no such recorded information had previously existed...Some important developments which arose at the beginning of the period commencing with 1939 were closely linked with the work done in the pre-war period... [and] resulted in improved import and export valuations for trade statistics and in a greatly improved system of collecting and tabulating information for tourist and travel statistics.

- 2) Ibid, pp 142
- 3) Ibid, pp 143.
- 4) Robert Gallman; 'The United States Capital Stock in the Nineteenth Century' in S. Engerman and R. Gallman; Long-Term Factors in American Economic Growth (Chicago: The University of Chicago Press, 1986), pp 165 – 213.
- 5) From 1940 to 1949 when Newfoundland entered Confederation, Canadian exports to and imports from Newfoundland were not included in the commodity trade figures used for balance of payment purposes.

Source: B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Section G in the second edition of the Historical Statistics of Canada

- 6) W.L. Morton; The Canadian Identity, 2nd Edition (Toronto: University of Toronto Press, 1972), pp 30.
- 7) Statistics Canada; A Users Guide to the Canadian System of National Accounts (Ottawa: Minister of Supply and Services Canada, 1989), pp71.
- 8) M.C. Urquhart and K.A. Buckley (eds); Historical Statistics of Canada (Toronto: Macmillan Company of Canada, 1965), pp 142 - 43.
- 9) Dominion Bureau of Statistics; The Canadian Balance of International Payments: 1926 to 1948 (Ottawa: King's Printer, 1949)

Dominion Bureau of Statistics; The Canadian Balance of International Payments: A Study of Methods and Results (Ottawa: King's Printer, 1939)

- 10) Dominion Bureau of Statistics (67-D-57); Statistics Showing Distribution of Securities by Joint Stock Companies Engaged in Industrial Enterprises in Canada as at December 31, 1921.

- 11) Department of Labour; Report of the Board of Inquiry in the Cost of Living, Volume 2 (Ache Printer, 1915)
- 12) Jacob Viner; Canada's Balance of International Indebtedness, 1900-13 (Toronto: McClelland and Stewart, 1975).
- 13) Ibid, pp 23. It is interesting to note that R.H. Coats reviewed Viner's book where he gave qualified praise to many aspects of the study. He concludes that Viner's estimate of "the importations of capital into Canada during the period 1900-1913 at 2,506 millions ... and his statement is probably as accurate as it can be brought without an excessive amount of further research". It is regrettable that a more thorough and comprehensive estimate was not made by Frank Knox who accepted Viner's measures.

Quotation from R.H. Coats; Review of Viner's book in the Journal of the American Statistical Association (December 1924), pp 534-39

- 14) Ibid, pp 107
- 15) Ibid, pp 32, 33, 61, 75, 77, 80, 82, 85, 86, 139 and Department of Labour; Report of the Board of Inquiry in the Cost of Living, Volume 2, pp 889 to 907.

Note that the figures for the Coats study were NOT adjusted in Viner's comparison despite the extra year and the data here reflects my estimates public sector statistics for the years 1900 to 1913.

- 16) Harvey Fisk; 'The Flow of Capital – Canada' in the Annals of the American Academy of Political and Social Science (May, 1923), pp 170 - 82
- 17) Bicentennial Edition of the Historical Statistics of the United States, pp 858-861
- 18) Frank Knox; "An Excursus on the Canadian Balance of Payments" in H. Marshall, F. Southard and K. Taylor; Canadian-American Industry (Toronto: McClelland and Stewart, 1976)

Frank Knox; Dominion Monetary Policy, 1929-1934; A Study Prepared for the Royal Commission on Dominion-Provincial Relations (Ottawa, 1939)
- 19) John Stovel; Canada in the World Economy (Cambridge Mass: Harvard University Press, 1959)
- 20) Hugh Murray; An Historical and Descriptive Account of British America, Volume II (New York: Bradley Publishers, 1840), pp 256-80.
- 21) Alexander Munro; History, Geography, and Statistics of British North America (Montreal: John Lovell, 1864).
- 22) Department of Trade and Commerce; Special Report on Trade between Canada and the United States for Use at Quebec Conference, August 1898 (Ottawa: Government Printing Bureau, 1898)

- 23) O.J. Firestone; Canada's Economic Development, 1867 – 1953 (London: Bowes and Bowes, 1958), pp 140-70.
- 24) Penelope Hartland; Canadian Balance of Payments since 1868 (New York: National Bureau of Economic Research, 1955).
- 25) The same conclusion was contained in B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Section G in F.H. Leacy (ed); Historical Statistics of Canada, Second Edition (Ottawa: Supply and Services Canada, 1983)
- 26) Herbert Marshall; 'The Balance of International Payments, International Investment Position and Foreign Trade', Section F in M.C. Urquhart and K.A. Buckley (eds); Historical Statistics of Canada (Toronto: The Macmillan Company of Canada, 1965).
- 27) Douglass North; 'Comment' at the end of the paper by Penelope Hartland; 'Canadian Balance of Payments since 1868' in National Bureau of Economic Research; Trends in the American Economy in the Nineteenth Century: Studies in Income and Wealth (Princeton: Princeton University Press, 1960), pp 754.
- 28) Georg Rich; The Cross-of Gold: Money and the Canadian Business Cycle, 1867-1913 (Ottawa: Carleton University Press, 1988).
- 29) A.M. Sinclair; "Balance of Payments, 1870-1925" Chapter 11 in M.C. Urquhart; Gross National Product, Canada, 1870-1926: The Derivation of the Estimates (Kingston and Montreal: McGill-Queen's University Press, 1993)
- 30) Herbert Marshall summarized the integration of Newfoundland into the Canadian balance of payment from 1940 to 1948 .

Beginning with 1940 there were important changes in the treatment of transactions on Newfoundland account which continued until Newfoundland entered Confederation in 1949. Even before 1940 Newfoundland used Canadian currency and her banking was done by branches of Canadian banks.... Exports to and imports from Newfoundland, which were financed in Canadian dollars, were not included in the figures for commodity trade used for balance of payments purposes. Newfoundland's dealings in sterling were managed under a similar arrangement but the net balances were small in amount and are included in the capital account in series F 125. Since its confederation in 1949, Newfoundland transactions with other countries have been included in the appropriate parts of the balance of payments along with other Canadian transactions.

- 31) The returns of values of imports and exports are those supplied in entries at the Customs, where imports must be entered for duty at their fair market value as for home consumption in the country of purchase. The recorded *values* of imports are determined by aggregating the total amounts as stated in the entries, free and for duty, of the goods imported into Canada. Such recorded values are arrived at in a similar way, in the case of exports, by aggregating the values as given in the entries of goods for exportation.

The term 'special trade' in Canada is applied to imports from Newfoundland which are exempt from duties leviable on similar goods from other countries.

Source : Dominion of Canada; Statistical Year Book of Canada for 1893 (Ottawa: Government Printing Bureau, 1894), pp

- 32) Jacob Viner; Canada's Balance of International Indebtedness, 1900-13 (Toronto: McClelland and Stewart, 1975), pp 25.
- 33) Dominion of Canada; Statistical Year Book of Canada for 1893 (Ottawa: Government Printing Bureau, 1894), pp 605 – 607.
- 34) Ibid, pp 607
- 35) Commencing with 1964, trade statistics have been tabulated on a 'general trade' basis, that is, according to when they crossed the national boundary. Until then, since 1917 for imports and 1920 for exports, statistics were collected on a 'special trade' basis, that is, measured at the 'customs frontier', the point at which imports leave, or exports enter, customs supervision.

Source: B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Section G in F.H. Leacy (ed); Historical Statistics of Canada, the second edition (Ottawa: Statistics Canada, 1983).

- 36) Earlier Canadian trade statistics were originally compiled on a general trade basis but totals were shown for both special and general trade for imports... In 1920 a similar change was introduced which excluded from exports goods re-exported from bonded warehouses. Re-exports of goods which had been entered for consumption continued to be included in total Canadian exports.

Canada's system of valuing exports and imports has remained unchanged since Confederation. Imports are valued f.o.b. the inland point of purchase in the country from which the goods are shipped to Canada, and exports at the inland point of shipment in Canada for export. Thus, in theory, the value of Canadian imports and exports is exclusive of all costs connected with their movement such as freight, insurance and handling. However, as pointed out in the discussion of the commodity item in the balance of international payments, the valuations of imports and exports have not always been so clear-cut and have included instances where they were f.a.s. or c.i.f. and there were other instances of overvaluation.

Source: Herbert Marshall author of the introduction to Section F in M.C. Urquhart and K.A. Buckley (eds); Historical Statistics of Canada (Toronto: The Macmillan Company of Canada, 1965), pp 155.

Most exports are valued at f.o.b. (free on board) place of lading, that is, at the point of production. But for grain, oilseeds and iron ore, valuation is f.o.b. Vancouver or St. Lawrence ports. Most imports are valued at the 'selling price f.o.b. point of shipment' reported by importers. Thus, inland freight from the point of consignment to the foreign point of exit, transportation, insurance, handling charges and duties are excluded... The value recorded is the 'fair market value' determined according to the Customs Act. It is

generally the wholesale value at which equivalent items could be sold for domestic consumption in the country of origin, less any excise, purchase or sales taxes by the exporting country on domestic sales.

Source: B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Section G in F.H. Leacy (ed); Historical Statistics of Canada, the second edition (Ottawa: Statistics Canada, 1983).

- 37) I used Saunders trade data for PEI to adjust this provinces figures. See S.A. Saunders; The Economic History of the Maritime Provinces (Saint John: Acadiensis Press, 1984), pp 100.
- 38) Department of Trade and Commerce; Annual Report in Sessional Papers (1918), No. 10
- 39) Sessional Papers (1871), No.48, Sessional Papers (1872) No.10 and Yearbook (1911), pp 422
- 40) Arthur Ray; The Canadian Fur Trade in the Industrial Age (Toronto: University of Toronto Press, 1990), pp 28.
- 41) Series G443 – G472 of the Historical Statistics of Canada (1982)
- 42) External trade figures are compiled from information recorded on custom documents, based on declarations of exporters and importers and subsequently checked by custom officials. In general, values are taken f.o.b. point of shipment in the country of export, with imports being converted into Canadian dollars at the prevailing official rates of exchange... For the entire period, exports include re-exports or exports of foreign produce.... Imports include only goods 'entered for consumption'...

Source: Dominion Bureau of Statistics; Historical Monthly Statistics (11-503), Occasional 1963, pp 52

- 43) Ibid, pp 52
- 44) Penelope Harland; 'Canadian Balance of Payments since 1868' in National Bureau of Economic Research; Trends in the American Economy in the Nineteenth Century: Studies in Income and Wealth (Princeton: Princeton University Press, 1960), pp 745.
- 45) K.W. Taylor; Statistical Contributions to Canadian Economic History, Volume II (Toronto: The Macmillan Company of Canada, 1931), pp1. Note that a comma was added to the original text for grammatical reasons.
- 46) Department of Agriculture, Statistics Division; Statistical Yearbook of Canada 1895, pp 466.
- 47) Ibid, pp 466
- 48) Ibid, pp 466
- 49) Dominion of Canada; Statistical Year Book of Canada for 1893 (Ottawa: Government Printing Bureau, 1894), pp

- 50) Dave McIntosh; The Collectors: A History of Canadian Customs and Excise (Toronto: New Canada Publications, 1984), pp 215.
- 51) Ibid, pp 249.
- 52) Matthew Simon; 'The United States Balance of Payments, 1861 – 1900' in National Bureau of Economic Research; Trends in the American Economy in the Nineteenth Century: Studies in Income and Wealth (Princeton: Princeton University Press, 1960
- 53) Dominion Department of Agriculture; Statistical Year Book of Canada for 1893 (Ottawa: Government Printing Bureau, 1894), pp 391
- 54) B.W. Wilkinson; 'The Balance of International Payments, International Investment Position and Foreign Trade', Section G in F.H. Leacy (ed); Historical Statistics of Canada, the second edition
- 55) Penelope Hartland; Canadian Balance of Payments since 1868 (1955), pp I - 3..
- 56) Ibid, pp I-3. Imports of settler effects were deducted for 1868 to 1900 and exports of settler effects from 1891 to 1900.

Hartland does not make any allowance for the systematic undervaluation of exports and imports or any estimate for smuggling. For U.S. estimates, see Matthew Simon; 'The United States Balance of Payments, 1861 – 1900' in National Bureau of Economic Research; Trends in the American Economy in the Nineteenth Century: Studies in Income and Wealth (Princeton: Princeton University Press, 1960), pp 643.

- 57) Ibid, pp I – 3.
- 58) Ibid, pp I – 13 to I - 14
- 59) Ibid, pp I – 15 to I – 16
- 60) Ibid, pp I – 16
- 61) Ibid, pp I – 16. It includes definitions and explanation of the terms used in reports of external trade statistics in the mid-1920s
- 62) Both sets of data seem to include some but not all transportation charges. Some development occurring around 1890 (for example, the change in official valuation of United States import data mentioned above) affected either valuation, coverage or the nature of trade in such a way as to cause the Canadian data to become consistently higher than those of the United States when formerly the opposite had been the case. For example, as exports of grains increased, the amount of inland freight included in the Canadian data probably increased also, since most wheat was sold f.o.b. an ocean port. Or again, over any calendar year the largest part of Canadian export trade is concentrated in the second half... On the whole it appears that the 5 per cent adjustment made by the Canadian Department of Customs does not exaggerate the value of Canadian exports to the United States.

Source: Penelope Hartland; Canadian Balance of Payments since 1868 (1955) pp I – 19 and I – 20.

- 63) Hartland wrote her study in 1955 and uses incorrect definitions and concepts in measuring a country's trade flows on a balance of payments basis. The following statement makes this apparent,

For the purpose of tracing international payments, commodity trade should ideally represent all commercial transactions undertaken by residents of the country, those involving foreign as well as domestic goods. It was for this reason that Viner used total imports rather than imports for consumption in his construction.

Source: Ibid, pp II-2

- 64) Georg Rich; The Cross of Gold: Money and the Canadian Business Cycle, 1867-1913 (Ottawa: Carleton University Press, 1988). Appendix A is entitled "Revised Estimates of the Pre-1914 Canadian Balance of Payments".

- 65) *Trade of Canada* and predecessor volumes (annual) reported in the Canadian Sessional Papers for various years were used as the source of export and import data. Exports and imports are adjusted to exclude and include various items, and in addition, fiscal year estimates are changed to calendar year estimates of the assumption of an equal distribution over months... Basically, 'imports for consumption' are reduced by excluding coin and bullion (included separately under gold), settlers effects (no financial implications) and miscellaneous and non-commercial items. 'Total exports' are reduced by coin and bullion (included under gold), settler effects, gold bearing quartz (included under gold) and exports of foreign produce other than coin and bullion.

Source : A.M. Sinclair; 'Balance of Payments, 1870-1925' in M.C. Urquhart; Gross National Product, Canada, 1870-1926: The Derivation of the Estimates (Kingston and Montreal: McGill-Queen's University Press, 1993), pp 687.

- 66) Jacob Viner; Canada's Balance of International Indebtedness, 1900-13 (Toronto: McClelland and Stewart, 1975), pp 27 – 28. Since the early 1850s, the 'shortfall' was not the 5% claimed by Viner but 10% of inland shipments.

67) Ibid, pp 25

68) Ibid, pp 26

69) Dominion Bureau of Statistics; Canada Yearbook 1921, pp 395.

70) Ibid, pp 396.

- 71) Jacob Viner; Canada's Balance of International Indebtedness, 1900-13 (Toronto: McClelland and Stewart, 1975), pp 25

- 72) Frank Knox; “An Excursus on the Canadian Balance of Payments” in Herbert Marshall et al; Canadian American Industry (Toronto: McClelland and Stewart, 1976), pp 319.

Frank Knox; Dominion Monetary Policy, 1929-1934; A Study Prepared for the Royal Commission on Dominion-Provincial Relations (Ottawa, 1939).

- 73) Frank Knox: ‘Canadian War Finance and the Balance of Payments, 1914-18’ in the Canadian Journal of Economics and Political Science (May, 1940), pp 226-29.
- 74) John Stovel; Canada in the World Economy, Statistical Appendix, pp 323 -336.
- 75) These data for domestic export and imports for consumption are also included in Historical Statistics of Canada (1965), series F348 to F356.
- 76) The 1959 Review of Foreign Trade table contains trade figures for the United Kingdom, the United States and all countries. The footnote also states that all figures after 1925 “have been adjusted to cover the adjustment for ‘Special Transactions – Non-Trade’”. The figures for the period 1901 to 1925 will be revised in subsequent issues of the Review.” Unfortunately, the DBS did not publish these revisions.
- For more detail regarding these changes introduced in 1960, see Statistics Canada, Review of Foreign Trade, Calendar Year 1959 (Catalogue 65-205), Chapter IV.
- 77) A.M. Sinclair; “Balance of Payments, 1870-1925” Chapter 11 in M.C. Urquhart; Gross National Product, Canada, 1870-1926: The Derivation of the Estimates (Kingston and Montreal: McGill-Queen’s University Press, 1993)