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Canada's International Investment Position: Recent Trends and Implications for Aggregate Measures of Income and Wealth

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Authors' names are listed alphabetically.

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- .
 - ..
 - ...
 - 0
 - 0^s
 - ^p
 - ^r
 - X
 - E
 - F
 - *
- not available for any reference period
not available for a specific reference period
not applicable
true zero or a value rounded to 0 (zero)
value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
preliminary
revised
suppressed to meet the confidentiality requirements of the *Statistics Act*
use with caution
too unreliable to be published
significantly different from reference category ($p < 0.05$)

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Abstract

This paper highlights the large progressive decline in Canada's net financial liabilities to non-residents that has occurred over the last fifteen years. It reports tabulations on changes in Canada's international investment position and the associated cross-border income flows, and evaluates the extent to which these investment income flows have affected the size of Canada's gross national income relative to its gross domestic income. The paper also examines the extent to which changes in Canada's net international investment position have increased the national net worth of Canadians relative to the country's stock of national wealth.

Executive summary

Over the last fifteen years, there have been substantive changes in Canada's net international investment position, owing to sizable gains in the value of Canadian financial assets abroad. In recent years, Canada's net financial liabilities to the rest of the world have, on balance, declined, mainly due to the cumulative value of Canadian investments abroad which has increased sharply both in absolute terms and relative to the value of Canada's financial liabilities to non-residents. These changes in Canada's net financial position occurred even as the absolute value of foreign claims on Canadian assets increased at a rate comparable to the rates observed in previous decades.

This paper examines this shift in the relative value of Canada's external assets and liabilities, presenting data on positions and income flows for three broad categories of investment—direct investments, portfolio investments, and other investments. It notes that the aggregate reduction in net financial liabilities reflected *inter alia* sizable gains in the value of Canada's stock of foreign portfolio assets relative to the value of its portfolio liabilities to non-residents.

The data on cross-border investments and investment income flows presented herein reveal an important structural shift in Canada's economy in recent years—the sharp reduction in Canada's net foreign debt. They underscore the increasing importance of international investments and investment incomes to changes in the incomes and wealth of Canadians. The cross-border income flows that derive from Canada's investments abroad and from foreign investments in Canada have, in recent years, brought gross national income closer into line with gross domestic income, reflecting declines in the net outflow of investment income to non-residents. Furthermore, reductions in Canada's net foreign debt, as measured by the decline in the value of Canada's net investment liabilities, have substantially narrowed the gap between national net worth and national wealth.

These changes in net investment position yield new perspectives on the international dimensions of Canada's economy—perspectives that, on balance, are incongruent with the traditional notion of a domestic economy whose international investment activities reflect a singular dependence on foreign capital.

1 Introduction

The *Report by the Commission on the Measurement of Economic Performance and Social Progress* (Stiglitz-Sen-Fitoussi report) (Stiglitz, Sen, and Fitoussi 2009) has occasioned much discussion within national statistical offices on the conceptual adequacy of different macroeconomic statistics and on the appropriateness of the different uses to which these statistics should be put. A key issue examined in the Stiglitz-Sen-Fitoussi report is the ability of standard production-based measures of gross domestic product (GDP) to provide timely information on a range of emerging structural developments within national economies. The Stiglitz-Sen-Fitoussi report argues for the use of a variety of different statistical indicators—on income, consumption, and wealth—in order to allow for a richer, more comprehensive assessment of changes in economic and social well-being.

What is not always appreciated is that a rich set of statistical indicators is already produced by the System of National Accounts. This paper examines several aggregate measures in the areas of income and wealth. In each case, it focuses on a related pair of indicators—gross domestic income (GDI) and gross national income (GNI) with respect to income, and national net worth and national wealth with respect to wealth. The analysis highlights relative changes in these measures of income and wealth, and examines recent trends in Canada's international investment position (IIP) that lie behind these changes.

The extent to which different statistical aggregates on income and production shed light on emerging structural developments in Canada's economy was recently examined by Macdonald (2007). Macdonald demonstrated that estimates of real GDP and real GDI can create divergent impressions of short-run changes in economic performance during years, such as the post-2000 period, in which the economy experiences large terms-of-trade shocks. In a small open economy like Canada's, trading gains, which are excluded from volume estimates such as real GDP, have a measurable impact on the growth of real GDI, consumption, and business investment (Macdonald 2008). The real absorption capabilities of an economy can differ from its production capabilities during periods in which the terms of trade fluctuate significantly. These trading gains are highly relevant to comparative assessments of Canada's economic performance vis-à-vis that of the United States.

Macdonald (2007) also examined other metrics that are germane to a more comprehensive assessment of recent developments, including comparisons of real GDI and real GNI. These two aggregate income concepts differ in terms of the nationality of the agents being evaluated and the geographic origin of the incomes being considered. GDI measures the incomes generated from domestic production irrespective of whether the nationality of the producer is Canadian or foreign; and matches estimates of nominal GDP in Canada. GNI measures the incomes accruing to Canadian nationals from their production activities regardless of whether these activities are domestic- or foreign-based.¹ Estimates of GNI are thus obtained by adding to GDI the incomes accruing to Canadians from their investment activities abroad, and then subtracting out the payments to non-residents that derive from their claims on Canadian investments (see Cross 2004). Published in the Balance of International Payments Account of the Canadian System of National Accounts, these data on cross-border investments and investment income flows reveal an important structural shift in Canada's economy in recent years—a sharp reduction from the early 1990s until 2008 followed by a moderate expansion in Canada's net foreign debt occasioned by the changes in the value of Canada's foreign investment activities.

This sharp reduction and subsequent expansion in Canada's net foreign debt is the topic of this analysis. The 2000 to 2008 period saw a progressive decline in Canada's net financial liabilities

1. GNI was formerly referred to as Gross National Product (GNP).

vis-à-vis non-residents. The value of Canada's stock of external financial assets—direct investments in foreign companies, portfolio investments in foreign debt and equity instruments, and other investment claims on non-residents—increased markedly in relation to the size of its liabilities to non-residents. After 2008, a pullback began in response to the global financial crisis, one that was centered on portfolio investments. This analysis highlights the extent to which these changes in IIP and their associated income flows have affected the size of Canada's GNI relative to its GDI. It also discusses how these changes in net IIP have increased the national net worth of Canadians relative to the country's stock of national wealth. Comparisons between these aggregate income and wealth measures can facilitate a more comprehensive assessment of structural developments in Canada's economy.

The cross-border investment flows that are examined in this paper also shed light on the extent to which traditional characterizations of Canada as primarily an importer of foreign capital present an increasingly limited perspective on the scope of Canada's international financial activities with the rest of the world. Foreign capital inflows into Canada, particularly those that result in the acquisition of Canadian-based companies and foreign holdings of government debt, have long garnered attention in business, policy, and academic circles. Capital outflows from Canada to other countries, on balance, have received somewhat less attention. Over the last fifteen years, there have been substantive changes in Canada's IIP, owing to rapid growth in the value of Canadian financial assets abroad in relation to the size of the country's external liabilities to non-residents. This reduction of net foreign debt and the corresponding changes in investment income flows have become increasingly germane to assessments of economic well-being and have had direct implications for estimates of GNI and national net worth. The extent of these changes is summarized in Table 1.

First, the analysis examines two flow-based measures of aggregate income: nominal GDI and nominal GNI. Conceptually, these two concepts differ in their treatment of cross-border income receipts and in their treatment of payments that arise from Canadian international investments and foreign investments in Canada. These international income flows are included in estimates of GDI, which is a measure of the income payments to factors based solely on production activity that occurs in Canada. By contrast, cross-border income flows are netted off GDI when GNI is estimated.²

Table 1 examines nominal GNI by benchmarking it to nominal GDI in select years from 1980 to 2010. From 1980 to 2000, changes in cross-border investment income flows had little impact on the relative size of these two income measures. GNI was around 97% of GDI. In the post-2000 period, there was a modest, but appreciable, increase in the value of GNI relative to GDI, as Canada's annual receipts from foreign investment began to expand in relation to its payments to non-residents. This has brought GNI to about 98% of GDI in recent years.

2. For examples of analyses that highlight differences between GNI and GDI, see Cross (2004) and Macdonald (2007).

Table 1
Estimates of gross national income and national net worth,
select years

	Gross national income as a percentage of gross domestic income	National net worth as a percentage of national wealth
	percent	
1980	97.3	90.3
1985	96.9	88.4
1990	96.4	89.3
1995	96.5	88.1
2000	97.4	95.4
2005	98.1	97.6
2010	98.3	97.2

Source: Statistics Canada, CANSIM tables 380-0030 and 378-0049.

Second, changes in financial position can also be evaluated by means of two stock-based measures of economic capability that are available from the national balance sheet: national wealth and national net worth. National wealth is a measure of the physical assets of the country—it is the economic value of all non-financial assets (the cumulative depreciated stock of investments by all units within the economy). National net worth differs from national wealth in that it adjusts the latter in order to account for the country's net IIP, that is, its net foreign debt to non-residents. The net IIP is a direct measure of the net value of the stocks of external assets and liabilities that generate cross-border investment incomes (i.e., the receipts paid to Canadians from Canadian investments abroad and the payments paid to non-residents from their investments in Canada). It is by examining relative movements in national wealth and national net worth that the magnitude of these recent changes in net IIP comes into clearer focus. For Canada, past estimates of national net worth have been lower than estimates of national wealth—because of the large net claims that foreign investors had on Canadian assets. In recent years, however, changes in international investment patterns have significantly narrowed the gap between national wealth and national net worth. From 1980 to 1995, estimates of national net worth consistently remained between 88% and 90% of national wealth. Beginning in the late 1990s, the relative value of national net worth began to increase. In the early 2000s, national net worth grew to about 95% of national wealth; in more recent years, it has increased further, reaching just over 97% of national wealth, a record high.

What follows is a descriptive assessment of the reduction in Canada's net financial liabilities, followed by an evaluation of these changes in net liabilities and cross-border investment incomes for different aggregate measures of income and wealth accumulation. The organization of the paper is as follows. Section 2 describes the investment data under study and presents detailed tabulations on the stock of cross-border assets and liabilities and on the income flows that accrue from these investments. Section 3 describes the income and wealth aggregates of interest—GDI, GNI, national wealth, and national net worth—and discusses how the recent changes in the value of Canada's external assets and liabilities relate to these measures. Section 4 concludes.

2 International investment position and cross-border investment incomes

2.1 Data and concepts

Data on the inward and outward flows of financial investments are recorded in *Canada's Balance of International Payments*, which provides quarterly, detailed information on transactions between Canadians and non-residents. Estimates of the value and composition of Canada's cross-border investment flows are reported in the capital and financial account, while the investment incomes that derive from these international assets and liabilities are reported in the current account.

The value of the cumulative stocks of external financial assets (Canada's claim on foreign assets) and external financial liabilities (non-resident claims on Canadian assets) is reported quarterly in *Canada's International Investment Position*. The difference between the values of these stocks—external financial assets less external financial liabilities—is a measure of the value of claims on Canada less the value of claims owing to Canada. Given Canada's net international debtor status over the last fifty years, this is often referred to as Canada's *net foreign debt*, and it is deducted from estimates of national wealth on Canada's national balance sheet in order to produce a measure of national net worth.³

3. These data are published in nominal dollars by the Balance of Payments Division of Statistics Canada. Accordingly, all statistical tabulations reported herein are in nominal dollars. For more detail on concepts and data sources, see Lajule (2001) and Statistics Canada (2010a and 2010b).

Figure 1 Description of international investment position, by investment category

Direct investments

External assets (Canadian claims on investments abroad):

Debt and equity claims between a Canadian transactor (investor) and a non-resident transactor (investee) that exhibit “a direct investment relationship” (in which the Canadian investor controls 10% or more of the voting shares in the non-resident investee).

Covers the direct investments of Canadian multinational corporations into foreign affiliates and foreign subsidiaries.

External liabilities (non-resident claims on investments in Canada):

Debt and equity claims between a foreign transactor (investor) and a Canadian transactor (investee) linked by “a direct investment relationship” (one in which the foreign investor controls 10% or more of the voting shares in the Canadian investee).

Covers investments of foreign corporations in Canadian affiliates and subsidiaries.

Portfolio investments

External assets (Canadian claims on investments abroad):

Forms of investment between Canadian investors and non-resident investees that do not maintain a foreign direct investment relationship.

Covers holdings of foreign stocks and foreign debt securities via Canadian pension and mutual funds.

External liabilities (non-resident claims on investments in Canada):

Forms of investment between foreign investors and Canadian investees that do not maintain a foreign direct investment relationship.

Covers holdings of foreign stocks and foreign debt securities via Canadian pension and mutual funds.

Other investments

External assets (Canadian claims on investments abroad):

Canadian holdings of foreign deposits, loans, international reserves, and other assets.

External liabilities (non-resident claims on investments in Canada):

Non-resident holdings of loans to Canadians, Canadian deposit liabilities, as well as other Canadian liabilities.

Net international investment position = Sum of all external assets minus the sum of all external liabilities.

Source: Statistics Canada (2010a and 2010b).

The international investment position distinguishes between three categories of investment—direct investments (investment flows between transactors in which the investor can be expected to exert a “significant voice” in the affairs of the investee), portfolio investments (transactions in stocks and debt securities between transactors for whom no such relationship exists), and a residual category of other investments (e.g., claims on loans and deposits) (Figure 1).

Some measure of caution is required when assigning an analytical interpretation to changes in these investment position data. While investment transactions and income flows in the balance of payments are at market value, the aggregate positions recorded in the IIP refer to the value of the stock of external assets or liabilities. In accounting terms, these stocks of international assets and liabilities are valued at book. For the direct investor, this represents the underlying book value of the direct investment enterprise, whether a subsidiary or an affiliate. For all other international assets and liabilities, this represents the face value of the investments.⁴ However, it should be noted that the period-end stocks of international assets and liabilities are adjusted for exchange rate fluctuations as required, and that some of these adjustments have been very significant in recent years. Accordingly, changes in overall investment position thus should not be construed necessarily in each period as changes in the overall flow of the volume of investment, since these changes in position occasionally reflect both a transactional component and a revaluation component that can give rise to changes in the investment stock without an accompanying change in the flow.⁵

Changes in investment positions are affected broadly by the economic environment, as a range of macroeconomic and regulatory factors can be expected to affect the relative returns to outward and inward investments. A short list of other factors that could be expected to shift the relative attractiveness of outward and inward investment would include the implementation of trade agreements designed to remove impediments to the cross-border flows of capital and labour, the emergence of new investment opportunities abroad, and the reduction (and eventually the full removal) of foreign investment restrictions from pension funds. As noted, exchange rate fluctuations also play a key role in determining the relative value of these investment stocks and factor heavily into the cost of borrowing. All of the above factors provide relevant contextual information for examining these capital flows over the last several decades. Precisely measuring the causal relationships that link these factors to investment flows is beyond the scope of this analysis, though reference will occasionally be made to underlying events. The task here is to call attention to the large qualitative shift in Canada’s net IIP that has occurred in recent years and to underscore its relevance for different measures of income and wealth accumulation.

2.2 Changes in international financial position

Changes in the IIP occur, to a large extent, when investors adjust their portfolios across global markets. These changes in position can be occasioned by changes in the relative rates of return associated with different investment opportunities, changes in the regulatory regime governing the free flow of capital, and changes in the exchange rate that affect the desirability of holding foreign, as opposed to domestic, wealth (see Macklem 1993).

Changes in the net IIP stem from changes in the value of both Canada’s external assets and its external liabilities. The last two decades have witnessed a substantial reduction in Canada’s net foreign debt (external assets less external liabilities). During the 1980s and early 1990s, the value of Canada’s external assets remained relatively constant, at about one-half of the value of

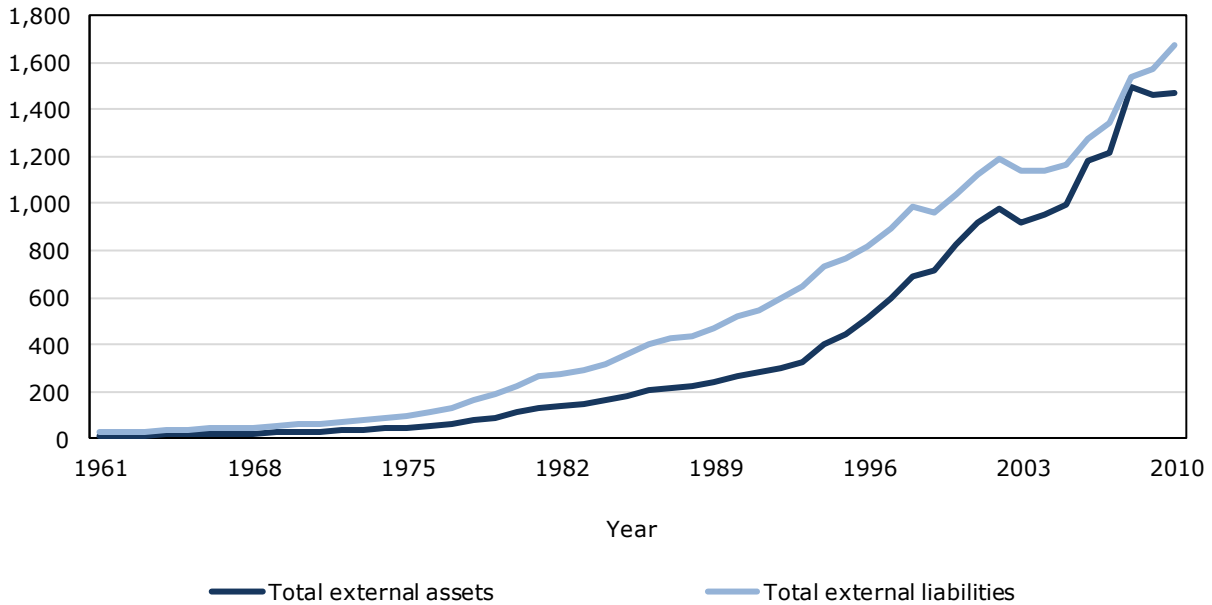
4. The IIP is also measured with tradable portfolio assets and liabilities at market value; these are excluded from this analysis.

5. For more background on conceptual issues, see Statistics Canada (2010a, 2010b). These revaluations coincide with major stock-market or exchange-rate movements.

its external liabilities. Since the mid-1990s, the relative value of these assets has increased markedly (Charts 1 and 2). From 1995 to 2005, holdings of external assets grew at an annualized rate of 8.4%, twice the rate of liabilities (4.2%).

Chart 1
Stocks of external financial assets and external financial liabilities

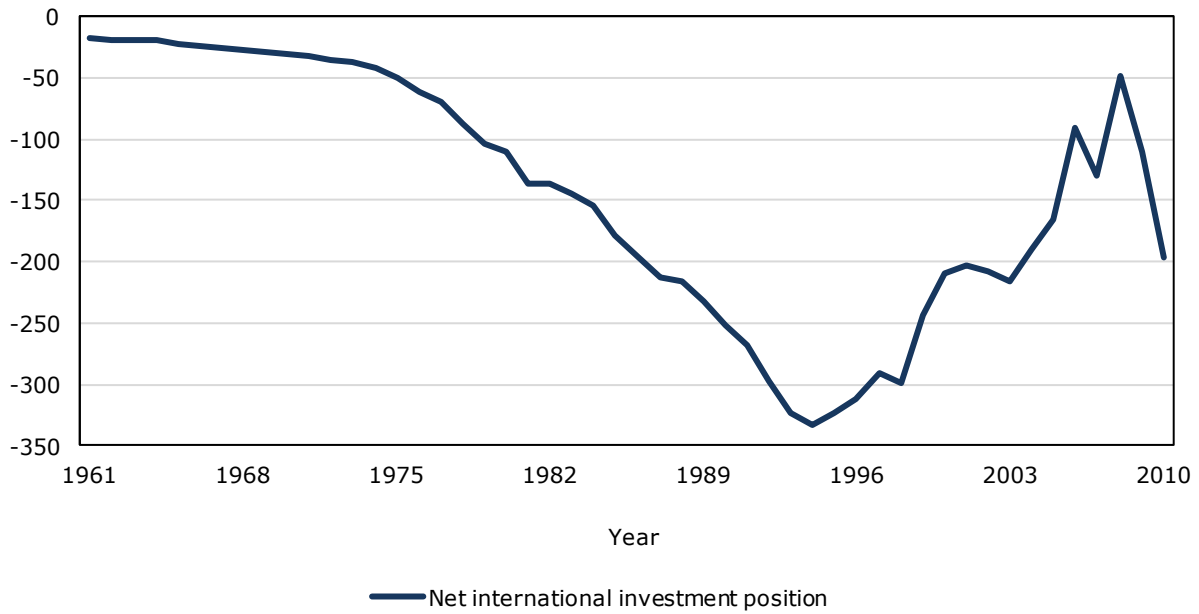
billions of dollars



Source: Statistics Canada, CANSIM Table 376-0037.

Chart 2
Net international investment position

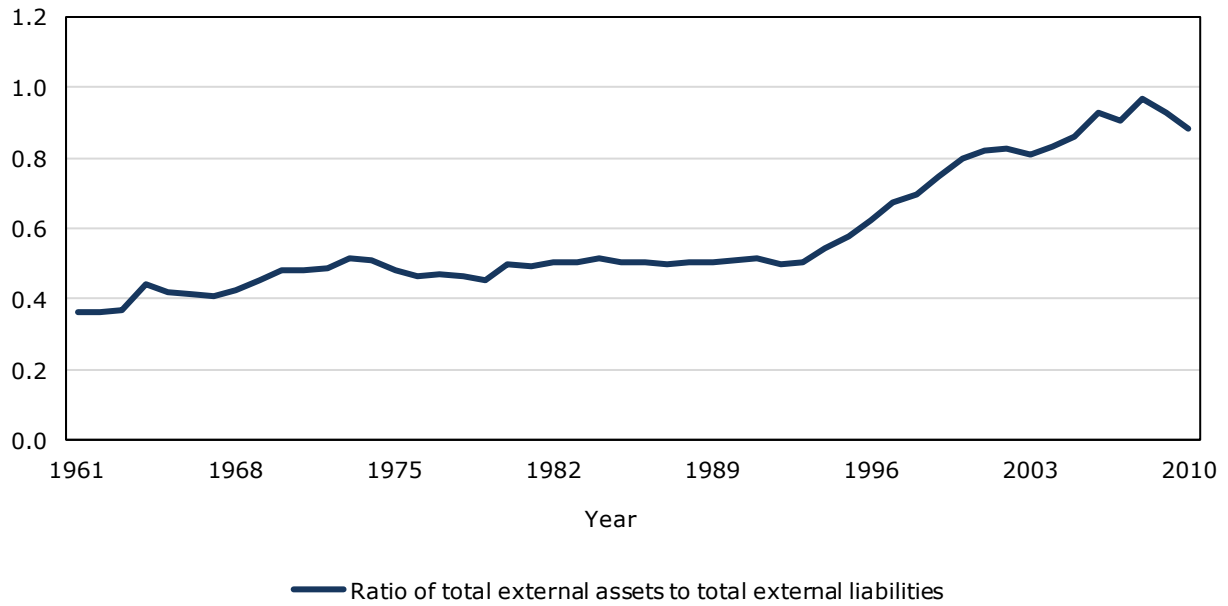
billions of dollars



Source: Statistics Canada, CANSIM Table 376-0037.

Chart 3
Ratio of external financial assets to external financial liabilities

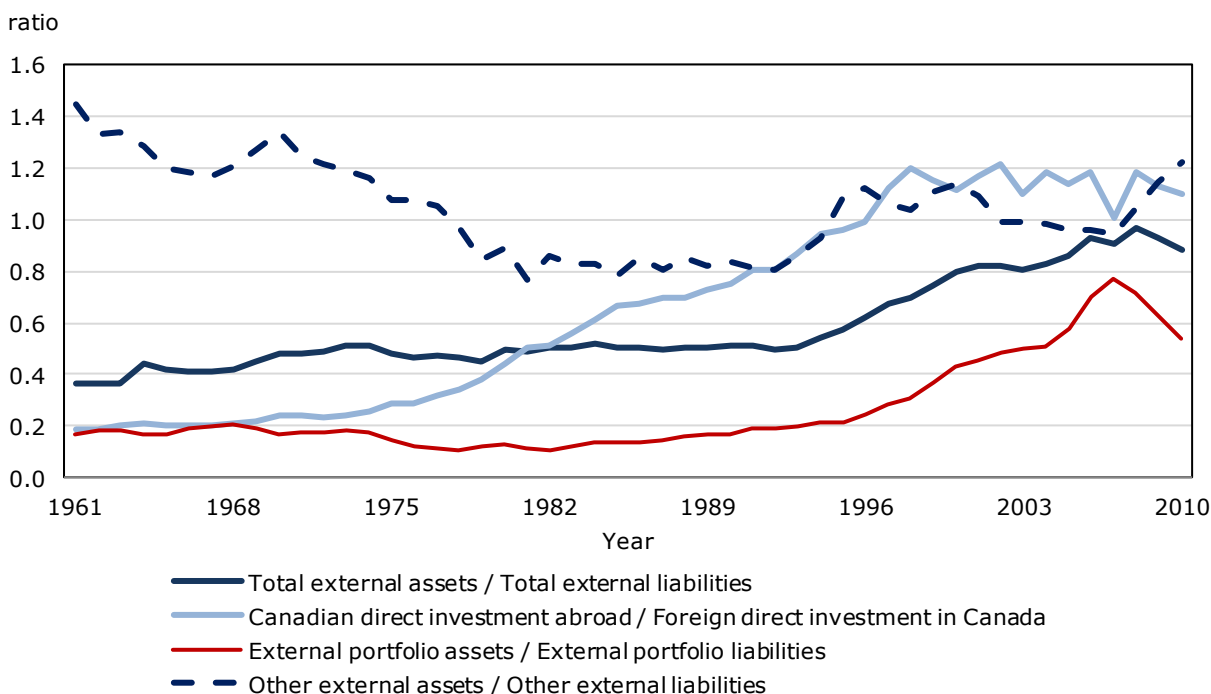
ratio



Source: Statistics Canada, CANSIM Table 376-0037.

This relative increase in Canadian assets led to a sizeable reduction in net financial liabilities during the 1990s and 2000s (Chart 2). Over this period, the ratio of external financial assets to external financial liabilities grew dramatically (Chart 3). In 2005, the value of Canada's external financial assets stood at 86% of the value of Canada's financial liabilities to non-residents (up from 58% in 1995). In more recent years, the value of these foreign assets was at or above 90% of the value of foreign liabilities.

Chart 4
Ratio of external assets to external liabilities, by investment class



Source: Statistics Canada, CANSIM Table 376-0037.

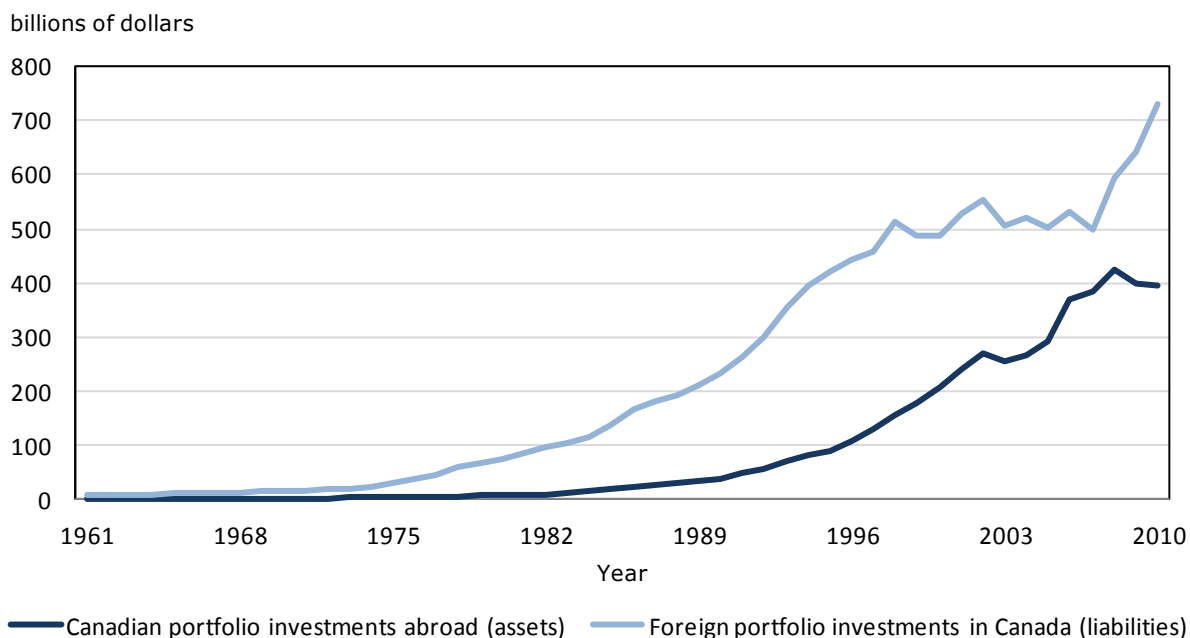
Chart 4 examines changes in the relative value of external assets and liabilities for different investment categories.⁶ The rapid gains in the value of Canada's external assets relative to the value of external liabilities that began in earnest in the mid-1990s were associated with sharp increases in the value of portfolio assets. From 1995 to 2005, the ratio of external portfolio assets to external portfolio liabilities increased sharply, from 0.21 to 0.58. Gains in the portfolio position were also apparent from 2006 to 2007; the ratio of assets to liabilities in these years stood at 0.70 and 0.77, respectively. Following the onset of the US recession in late 2007, the ratio of external assets to liabilities declined, predominantly due to changes in portfolio investment.

This change in the net portfolio position was fuelled by sizable year-to-year increases in the cumulative value of Canada's external portfolio assets (Chart 5). From 1995 to 2005, the value of Canadian portfolio investments abroad increased at an average annual rate of 12.4%; this increase was driven by large annualized gains in holdings of foreign bonds (15.9%) and foreign stocks (10.6%). In nominal dollars, the value of these external portfolio assets increased from \$90.8 billion in 1995 to \$292.2 billion in 2005. By 2008, these assets totalled \$426.3 billion. These gains occurred despite the appreciation of the Canadian dollar over the period, which

6. Changes in the shares of external assets and liabilities accounted for by different investment categories are presented in Appendix A.

reduced the Canadian-dollar value of Canada's external investments. After 2007, net portfolio investment began to reverse course, and the gap between Canadian investment abroad and foreign investment in Canada began to widen. This occurred because of reduced levels of Canadian investment abroad, and because of renewed investment by foreigners in Canada.

Chart 5
Value of the stocks of portfolio assets and liabilities



Source: Statistics Canada, CANSIM Table 376-0037.

Foreign claims on Canadian portfolio assets also increased during the 1990s, but at a more modest rate.⁷ From 1995 to 2005, portfolio liabilities to non-residents grew, on average, by 1.7% per year, as the absolute value of these liabilities increased from \$422.9 billion to \$502.2 billion. Large increases in these liabilities have also been apparent in recent years. The data for the most recent years, 2008-2010, diverge from recent trends: a large reduction in the value of external portfolio assets was accompanied by a large increase in portfolio liabilities to non-residents as a result of the impact of the 2008–2009 global recession. This noted, the qualitative effect of recent changes in the portfolio position remains—over the last two decades, the value of Canada's external portfolio assets has grown substantially relative to portfolio liabilities, greatly reducing the longstanding gap between the values of the two stocks.⁸

The regulatory framework under which this reduction in net portfolio liabilities occurred warrants mention. The relative growth of portfolio assets over the last two decades was congruent with changes in the domestic regulatory environment that one would expect to increase the volume of the outward stock relative to the inward stock. Of central interest was the liberalization of foreign-content restrictions governing pension investments that began in the early 1990s. These changes enabled domestic investors to avail themselves of a much broader set of external investment opportunities. They were consistent with a broader international trend towards the

7. Portfolio liabilities rose sharply during the first half of the 1990s, but levelled off in the 2000s. This coincided with a period of fiscal consolidation across federal and provincial governments.

8. In every year from 1961 to 1993, the value of external portfolio liabilities exceeded the value of external portfolio assets by a ratio of five to one.

establishment of a regulatory framework designed to facilitate cross-border movements of capital and labour, as evidenced by the establishment of bilateral and multilateral trade agreements. These changes occurred during periods in which there were expanded opportunities for outward portfolio investments resulting inter alia from technological advances, which increased the integration and efficiency of capital markets, and from the advent of new external investment opportunities in the emerging economies of Asia and South America.

Conclusively linking these regulatory or economic factors to movements in the investment data reported herein is beyond the scope of this paper. As noted in Section 2, changes in these investment stocks reflect both a transactional component (i.e., new investment flows) and a revaluation component (i.e., valuation adjustments due to exchange rate movements and/or asset reclassifications). These changes in the investment environment are noted here simply to put the net reduction in net portfolio liabilities into better context.

In contrast to portfolio investment, the relative value of the stocks of inward and outward direct investment has remained similar since the mid-1990s. Since that time, Canada has been a net exporter of direct investment—the value of the stock of Canadian direct investment abroad (CDIA) has exceeded the value of the stock of foreign direct investment in Canada (FDIC) (Chart 6). This was the culmination of a gradual increase in the value of outward-to-inward direct investment that occurred from the early 1960s to the mid-1990s (the ratio of foreign direct investment (FDI) assets to liabilities stood at 0.19 in 1961).

While the size of the inward and outward direct investment stocks has been similar in recent years, it is important to note that both have grown rapidly during the post-1995 period. From 1995 to 2005, the stock of CDIA increased in value at an annual rate of 10.9%, while the corresponding annual rate for FDIC was 9.0%. In nominal dollars, CDIA grew from \$161.2 billion in 1995 to \$452.2 billion in 2005; by comparison, FDIC increased from \$168.2 billion to \$397.8 billion. Large nominal increases in both stocks were also apparent after 2005, although the stock of CDIA declined in 2009 and 2010. In 2010, the outward stock of CDIA was valued at \$616.7 billion, while the inward stock of FDIC stood at \$561.6 billion.⁹

Changes in these aggregate direct investment stocks warrant some contextual discussion, as direct investment data are often used to evaluate the scope and breadth of multinational activity. Numerous Canadian studies have evaluated the economic activities of foreign multinationals operating in Canada and, to a lesser degree, the economic activities of Canadian multinationals operating abroad.¹⁰ Focusing on the former, Baldwin and Gellatly (2006) used aggregate data on the share of domestic business revenues generated by foreign-controlled firms to evaluate the extent to which changes in the intensity of multinational activity were congruent with changes in the regulatory regime governing foreign direct investment. They found that, between 1970 and 2000, foreign multinationals operating in Canadian industry underwent a “retrenchment and a resurgence in their activities” as the policy regime governing FDIC transitioned from more restrictive to more liberal.¹¹

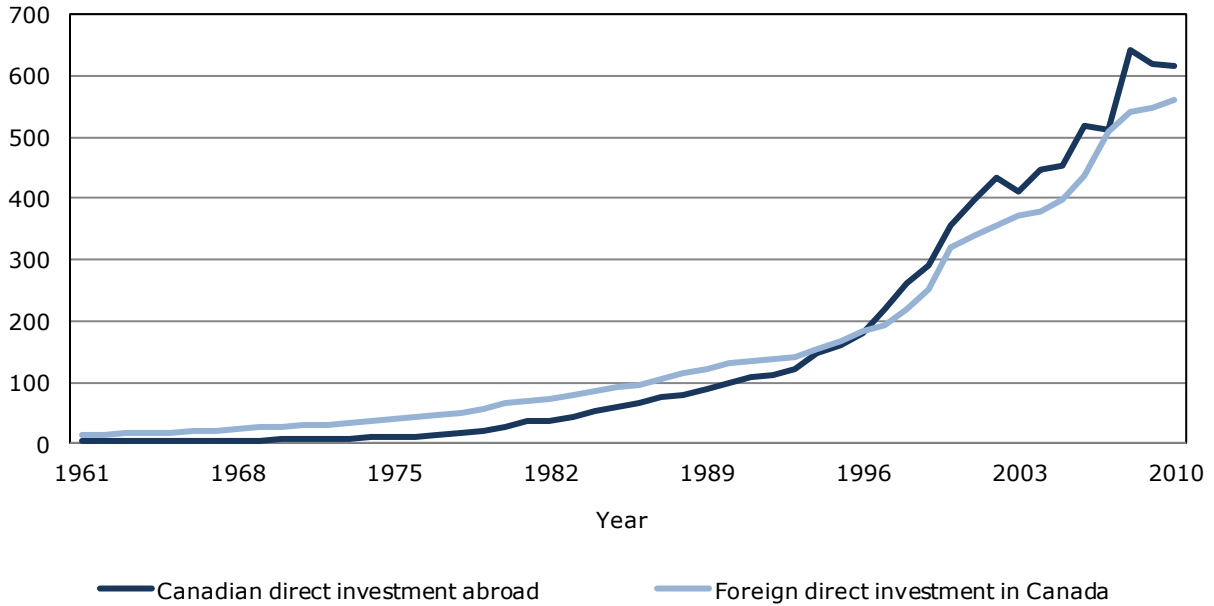
9. The value of CDIA would have been attenuated by the rapid appreciation in the Canadian dollar in the post-2000 period.

10. For a summary of research on multinationals at Statistics Canada, see Baldwin and Gellatly (2007).

11. For discussion and analysis of these changes, see Baldwin and Gellatly (2006).

Chart 6
Value of the stocks of direct investment assets and liabilities

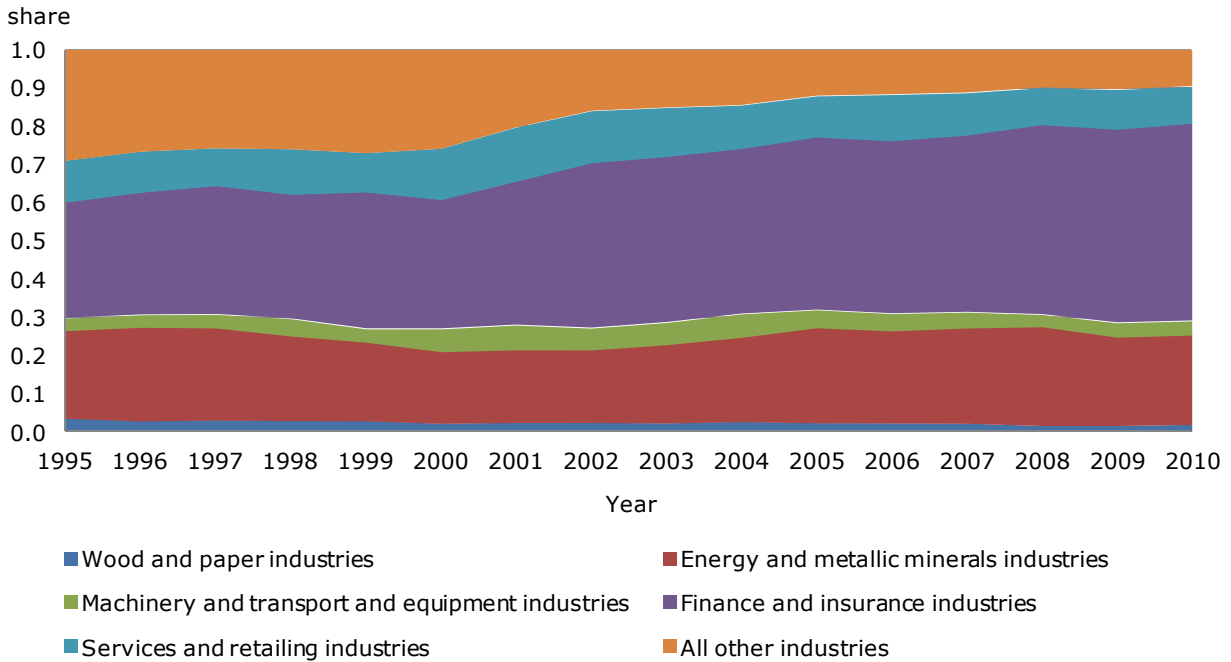
billions of dollars



Source: Statistics Canada, CANSIM Table 376-0037.

One way to evaluate the significant increase in both inward and outward direct investment since the early 1990s is to examine the size of these stocks as a percentage of nominal GNI. In 1995, both the inward and outward direct investment stocks were around 21% of the value of nominal GNI; by 2010, the inward stock had increased to around 35% of the value of GNI, while the outward stock was close to 39%. The regulatory environment provides an appropriate contextual framework for examining these increases in investment, as the regulatory changes that occurred during the two decades have been aimed at facilitating *inter alia* the movement of international capital. During this period, many firms may have had greater incentive and opportunity “to go global,” as the perceived returns from direct investment may be larger in a world in which producer and consumer markets are increasingly international in scope. One factor worth emphasizing on the outward side is the extent to which the sectoral distribution of the CDIA stock has changed over the last fifteen years (Chart 7). In 1995, 30% of the value of the outward stock of CDIA was in the finance sector; by 2010, this share had increased to over 50%. This underscores the importance of Canadian multinationals in the financial sector to the scale and composition of Canada’s direct investment activity abroad.

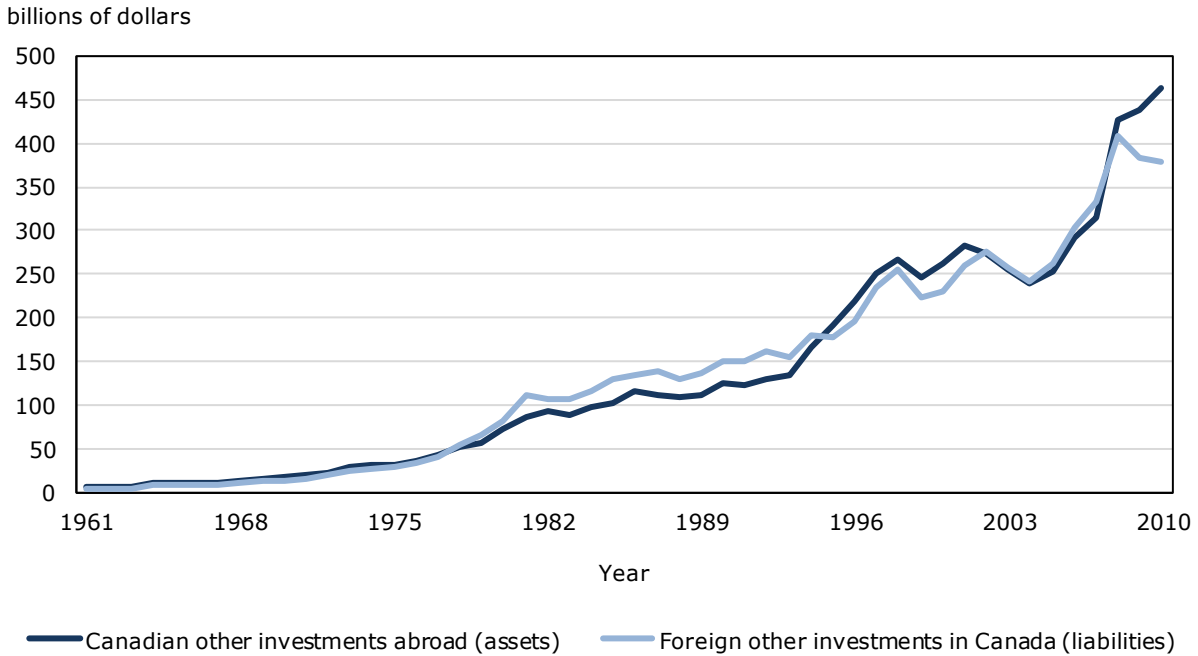
Chart 7
Composition of the stock of Canadian direct investment abroad, by sector



Source: Statistics Canada, CANSIM Table 376-0038.

The last investment category examined in the IIP is other assets and liabilities. Unlike stocks of direct investments and portfolio investments, Canada’s stock of other foreign investments—the combination of loans, deposits, currency reserves, allowances, and miscellaneous asset holdings—had historically been larger than the non-resident claims on comparable Canadian assets (Chart 4; Chart 8). In 1961, the ratio of external assets to external liabilities within this “other investments” category was 1.45, compared to 0.19 for direct investment assets and 0.17 for portfolio assets. The relative value of foreign liabilities increased substantially during the ensuing decades; the ratio of other assets to other liabilities settled below one for much of the 1980s. Since the 1990s, the stocks of external assets and liabilities have been comparable in size.

Chart 8
Value of the stocks of other investment assets and other investment liabilities



Source: Statistics Canada, CANSIM Table 376-0037.

In recent years, there has been little volatility in the composition of this asset stock in terms of contribution of loans and deposits. From 1995 to 2005, external loans and deposits accounted for about two-thirds of the value of these assets. For more recent years (2007 to 2010), loans and deposits amounted to about three-quarters of these investments. On the inward side, loans and deposits consistently make up about 90% of this investment category.

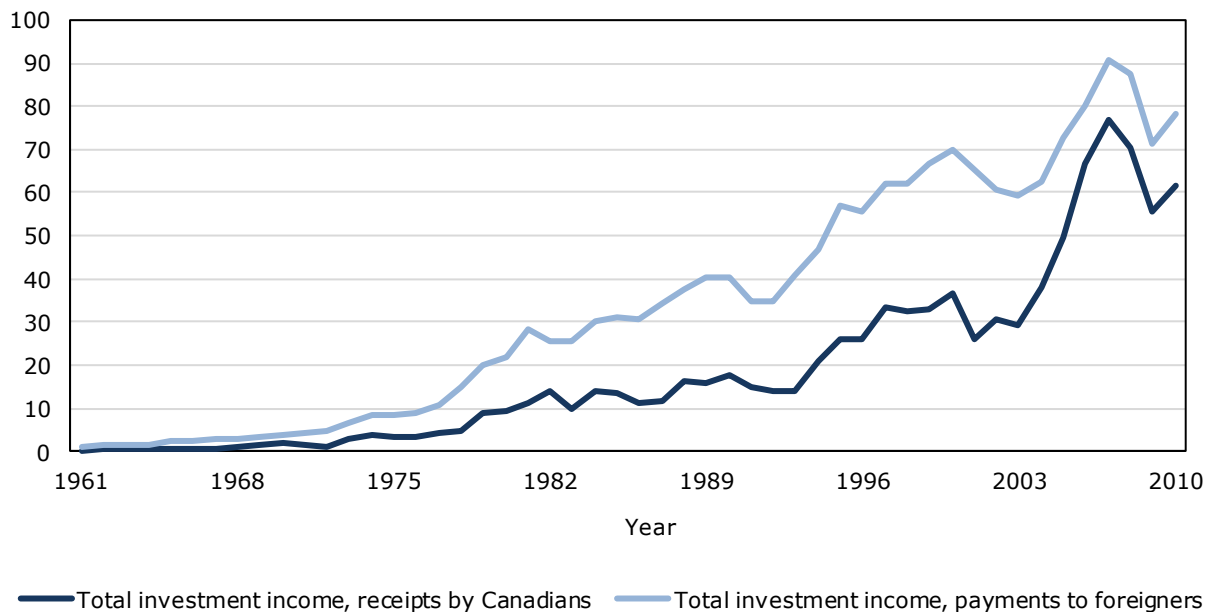
2.3 Changes in investment incomes

The investment data evaluated in the previous section focus on the cumulative value of external financial assets and liabilities—which is a measure of Canada’s net financial obligations to non-residents. Also of interest are the annual incomes that accrue from these inward and outward investment stocks. Importantly, it is these annual income flows (and not the cumulative value of the stock position) that figure directly into annual estimates of GNI and the current account balance.

The income payments that derive from external assets and liabilities reflect the investment-driven changes in the underlying asset and liability positions as well as exchange rate fluctuations. In the years between 2001 and 2006, the annual receipts from Canadian investments abroad began to increase sharply relative to payments to non-residents. This substantially reversed the long decline in these investment balances that was evident from the 1970s through to the 1990s (Charts 9 and 10). After 2006, payments once again began falling behind receipts.

Chart 9
Total investment income receipts and payments

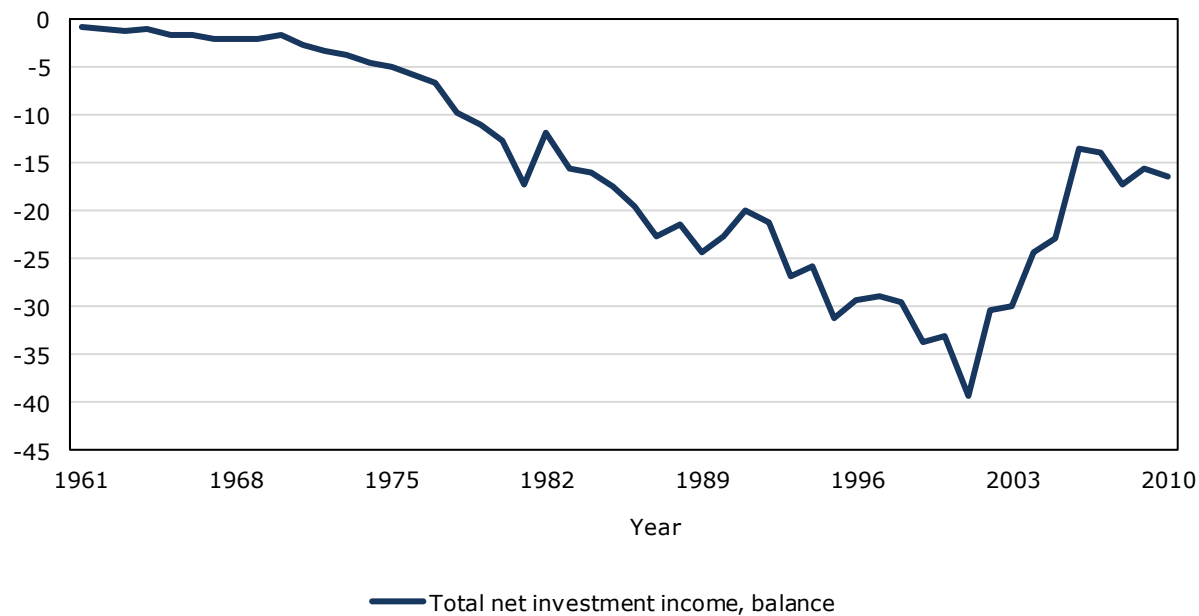
billions of dollars



Source: Statistics Canada, CANSIM Table 376-0001.

Chart 10
Total investment income, balances

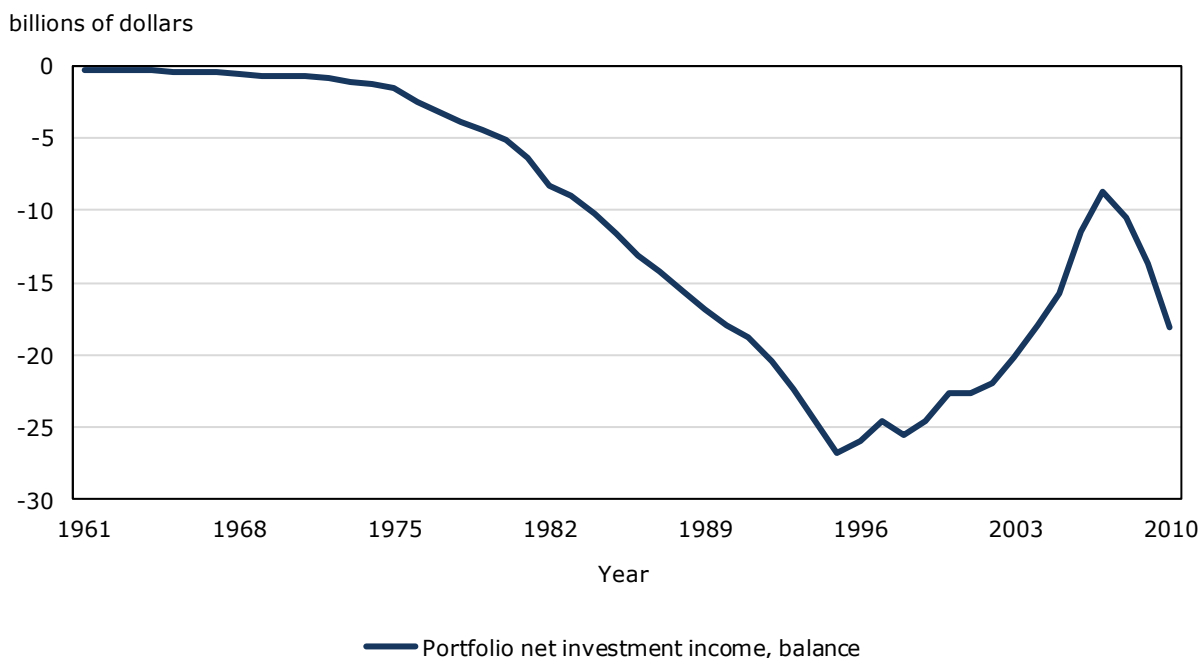
billions of dollars



Source: Statistics Canada, CANSIM Table 376-0001.

Beginning in the mid-1990s, the receipts from Canadian portfolio investments abroad began to grow markedly relative to the payments that non-residents received from their Canadian portfolio holdings (Chart 11). These income flows reflected both increased investments abroad by Canadian institutional investors and reduced foreign holdings of Canadian securities,¹² as well as the changing relative returns on these securities.¹³ This reversed the trend in negative annual balances that occurred prior to the mid-1990s, and coincided with years in which the share of portfolio income increased as a percentage of total Canadian receipts from investments abroad. After 2007, as the US recession took hold, portfolio investment receipts dropped sharply relative to payments. During the 1980s and the early 1990s, portfolio receipts accounted, on average, for about 10% of Canadian investment receipts from abroad. From 1995 onward, the portfolio share accounted, on average, for nearly one-quarter of receipts.

Chart 11
Portfolio investment incomes, balances



Source: Statistics Canada, CANSIM Table 376-0001.

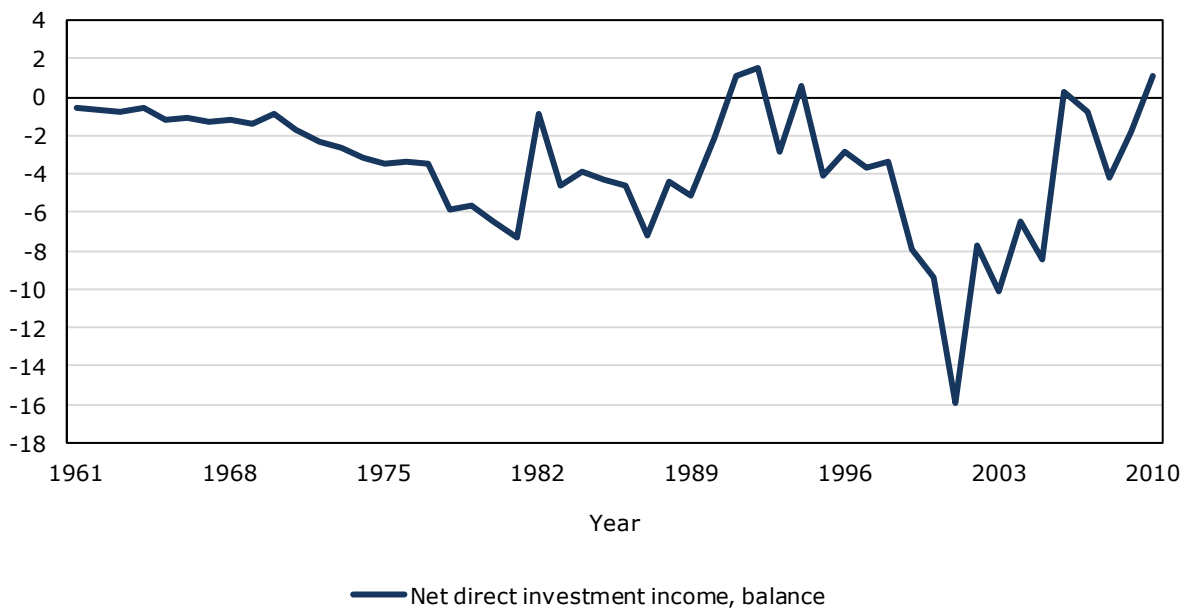
There is less variation, but more volatility, in the annual income balances from direct investments and other investments, as both series have oscillated between positive and negative balances in recent years (charts 12 and 13). Unlike portfolio investments, the stocks of “direct investments” assets and liabilities and of “other investments” assets and liabilities that generate these respective income flows are comparable in value. Worth noting is the increasing contribution of direct investment receipts to total receipts since the mid-1990s—to, on average, about 44% of receipts (about twice the portfolio share). Accordingly, the share of total receipts accounted for by incomes from “other investments,” such as loans and deposits, has declined precipitously.

12. This was especially true for government securities as the Canadian fiscal situation improved.

13. Canadian foreign investments are largely in the form of equity while foreign holdings of Canadian securities contain more fixed income instruments, which were affected by the trend to declining yields.

Chart 12 Direct investment incomes, balances

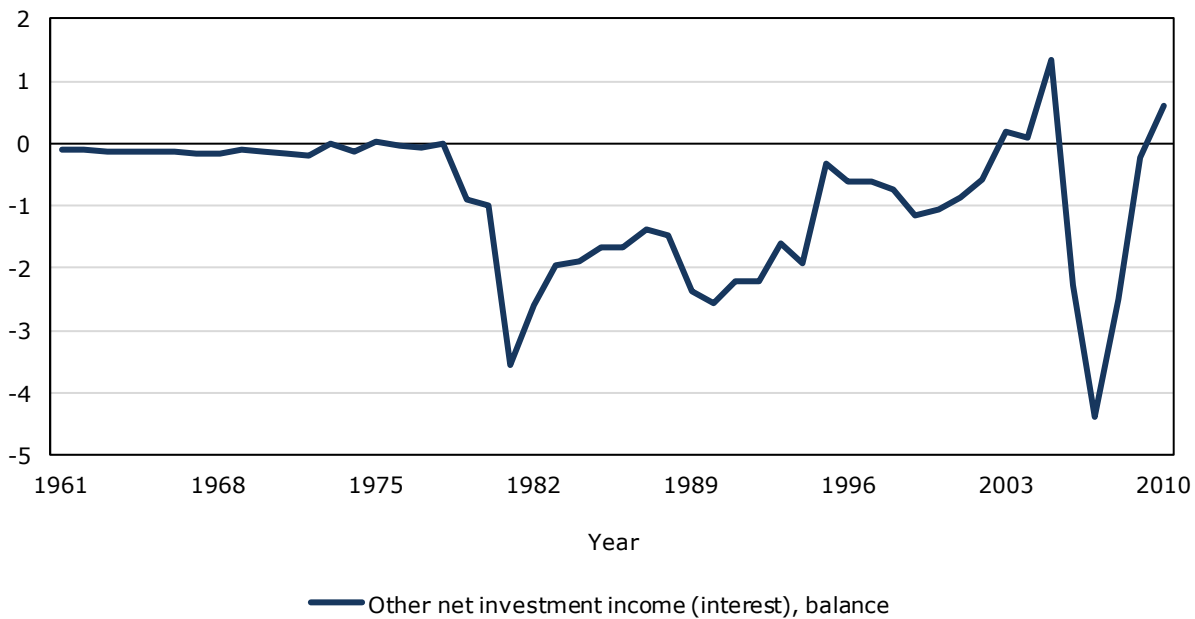
billions of dollars



Source: Statistics Canada, CANSIM Table 376-0001.

Chart 13 Other investment income, balances

billions of dollars



Source: Statistics Canada, CANSIM Table 376-0001.

The aggregate reduction in net financial liabilities in the period up to 2007, and the subsequent reversal in most investment categories, represent important structural developments in Canada's economy, one that challenges traditional perceptions of how investment flows link the Canadian economy to the rest of the world. More importantly, understanding these changes helps to reconcile the different income and wealth measures that can be used to evaluate the Canadian economy. As argued in the Stiglitz-Sen-Fitoussi report (Stiglitz, Sen, and Fitoussi 2009), a fuller understanding of the economy requires the use of a battery of statistics and the related, but sometimes differing, perspectives that these statistics yield. It is therefore important to understand the extent to which the reduction in Canada's net foreign debt has affected different measures of income and wealth accumulation, aggregate indicators that are germane to assessments of economic well-being. This is discussed in the following section.

3 Impact on aggregate measures of income and wealth

International investments can affect the relationship between different statistical measures of income and wealth accumulation: GDI, GNI, national wealth, and net national worth. The first two aggregates, GDI and GNI, measure the flow of income being generated from economic activity from one period to the next. These two income concepts differ fundamentally in terms of their unit of analysis.

From a Canadian perspective, GDI, the first income measure of interest, is a measure of the incomes that are generated from all production activities located in Canada. It includes incomes that accrue to both Canadian nationals and foreign nationals—as long as the production activity occurs domestically. GDI, expressed in nominal terms, is thus equivalent to GDP. The second income measure of interest, GNI, shifts the focus from the location of production to the nationality of the producer.¹⁴ In the Canadian context, it measures the incomes of Canadians from both domestic- and foreign-based sources.

GNI can be obtained by adjusting nominal GDI for international income flows, that is, by adding to GDI the incomes of Canadians that derive from their investment activities abroad, and then subtracting out the incomes that foreign nationals generate from their investment activities in Canada.¹⁵ While these income flows correspond to investment earnings in any one period, they accrue from the cumulative stocks of investment that have been built up over many periods.

Canada's GNI is smaller than its GDP, because the investment incomes paid to non-residents from investments in Canada have eclipsed those paid to Canadians from foreign-held investments. During the 1960s and the early 1970s, Canada's GNI, evaluated in level terms, was only slightly smaller than its GDI. As a percentage of GDI, GNI was between 98.0% and 98.6% of the incomes earned from domestic production. From the 1970s to the late 1990s, GNI lost ground, reaching a low of 96.4% in 1992. GNI rebounded during the late 1990s as the incomes from Canadian investments abroad expanded in relation to payments to non-residents.¹⁶ In 2004, Canada's GNI was valued at 98% of Canada's GDI; by 2006, the two measures were nearly equivalent (Chart 14). However, from 2007 through 2010 GDI grew more quickly than GNI as the pace of Canadian receipts from foreign investment fell behind payments to foreigners. Nevertheless, over the last two decades Canada's growth performance has been superior when GNI, rather than GDI, has been examined.

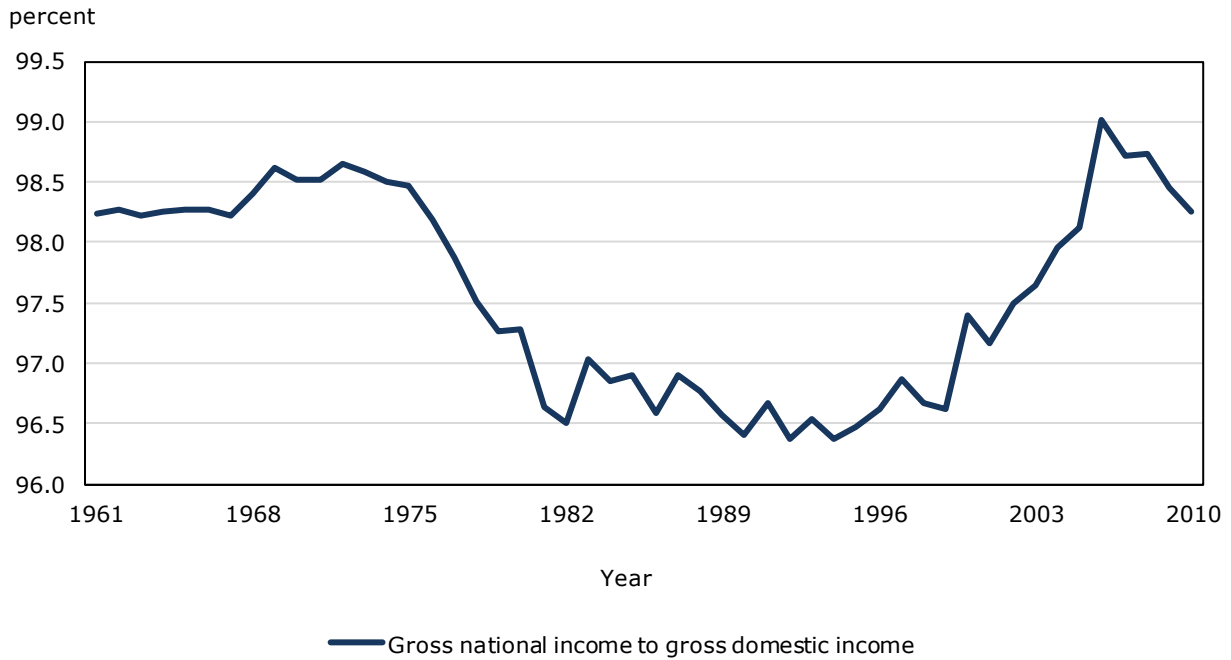
14. GNI was formerly referred to as Gross National Product (GNP).

15. These are, respectively, the investment income receipts and investment income payments, as recorded in the current account.

16. For an analysis of the relationship between GNI and GDI during the 1990s and the early 2000s, see Cross (2004).

Chart 14

Gross national income expressed as a percentage of gross domestic income

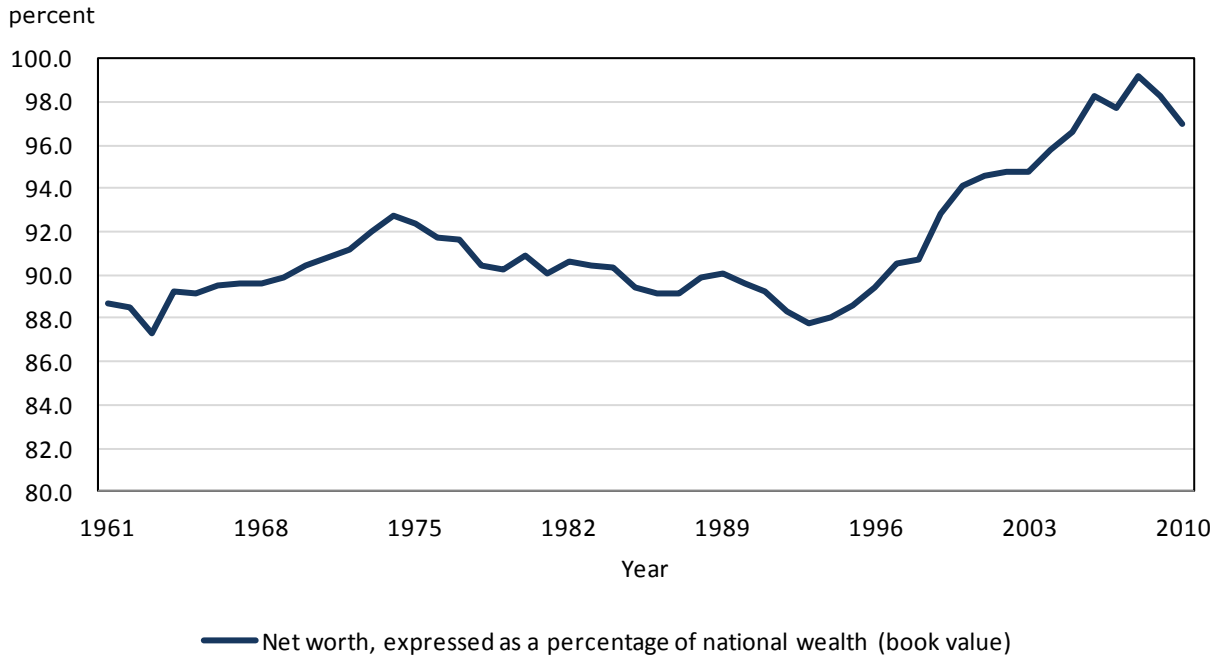


Source: Statistics Canada, CANSIM Table 380-0030.

This structural change has occurred gradually because the net cross-border investment income flows (annual receipts less annual payments) that derive from these cross-border investments constitute only a small proportion of total economy-wide earned income in any period. This said, the relative increase in GNI does call attention to recent increases in the earned incomes of Canadians that are not apparent from estimates of GDI.

The extent to which the reduction in external financial liabilities affects estimates of wealth accumulation, specifically the relationship between national net worth and national wealth, is more striking. National wealth is the stock of non-financial assets that are employed in the economy, some of which are ultimately owned by Canadians, others ultimately owned by foreigners. National net worth is equal to national wealth, less net foreign debt. The national net worth of Canadians historically has been less than the national wealth, because of large net foreign claims on Canadian assets.

Chart 15
Ratio: net worth to national wealth



Source: Statistics Canada, CANSIM Table 378-0049.

From 1961 to 1997, Canada’s net worth was, on average, about 10% lower than the country’s national wealth (Chart 15). Net worth increased relative to national wealth through the 1960s and the early 1970s, and then declined between the 1970s to the late 1990s. The rapid gains in the value of external assets (relative to external liabilities) experienced in recent years have sharply reduced the gap between national net worth and national wealth; by 2008, the national net worth of Canadians was approximately equal to the value of their national wealth. And, even though net worth as a share of national wealth fell during 2008-2009 recession, comparisons between these stock measures of wealth underline the extent to which the expansion of Canada’s investment activities abroad has affected the economic interests of Canadians—through a sizable reduction in the net debt owed to non-residents.

4 Conclusion

This paper highlights changes in Canada's net financial position vis-à-vis non-residents. It concentrates on recent increases in the value of Canada's external assets, relative to its foreign liabilities, and reports on changes in the underlying composition of the three broad categories of investment. It also discusses the implications of these cross-border investment positions on GNI and national net worth—statistical aggregates published by the System of National Accounts that can be used to assess the economic circumstances of Canadians.

Recent changes in the international investment position yield new perspectives on the international dimensions of Canada's economy—perspectives that, on balance, are incongruent with the traditional notion of a domestic economy whose international investment activities reflect a singular dependence on foreign capital. In recent years, Canada's net financial liabilities to the rest of the world have, on balance, declined, as the value of Canadian investments abroad has increased sharply in both absolute and relative terms. This change in net position occurred even as the absolute value of foreign claims on Canadian assets increased at a rate comparable to the rates observed in previous decades.

This aggregate reduction in net financial liabilities reflected a sizable increase in the relative value of external portfolio assets vis-à-vis external portfolio liabilities. As noted earlier, the ratio of the value of these portfolio assets to portfolio liabilities increased from 0.21 in 1995 to about 0.54 in 2010. Over this period, Canada's net portfolio liabilities—the difference between external liabilities and external assets—declined from \$332.1 billion to \$114.6 billion in 2007 before widening to \$336.6 billion in 2010.

The analysis of these net changes in Canada's external financial position is consistent with one of the central positions advanced in the Stiglitz-Sen-Fitoussi report (Stiglitz, Sen, and Fitoussi 2009)—that a full analysis of the circumstances, prospects, and economic conditions facing national economies requires the use of a battery of different, but related, statistical aggregates. Changes in the value of the net stock of cross-border investment affect measures of gross national income and national net worth, and underscore the increasing importance of international investments and investment incomes to changes in the incomes and wealth of Canadians. The cross-border income flows that derive from Canada's investments abroad and foreign investments in Canada have in, recent years, brought GNI closer into line with GDP, reflecting declines in the net outflow of cross-border investment income. Reductions in Canada's net foreign debt, as measured by the decline in the value of Canada's net investment liabilities, have substantially narrowed the gap between national net worth and national wealth.

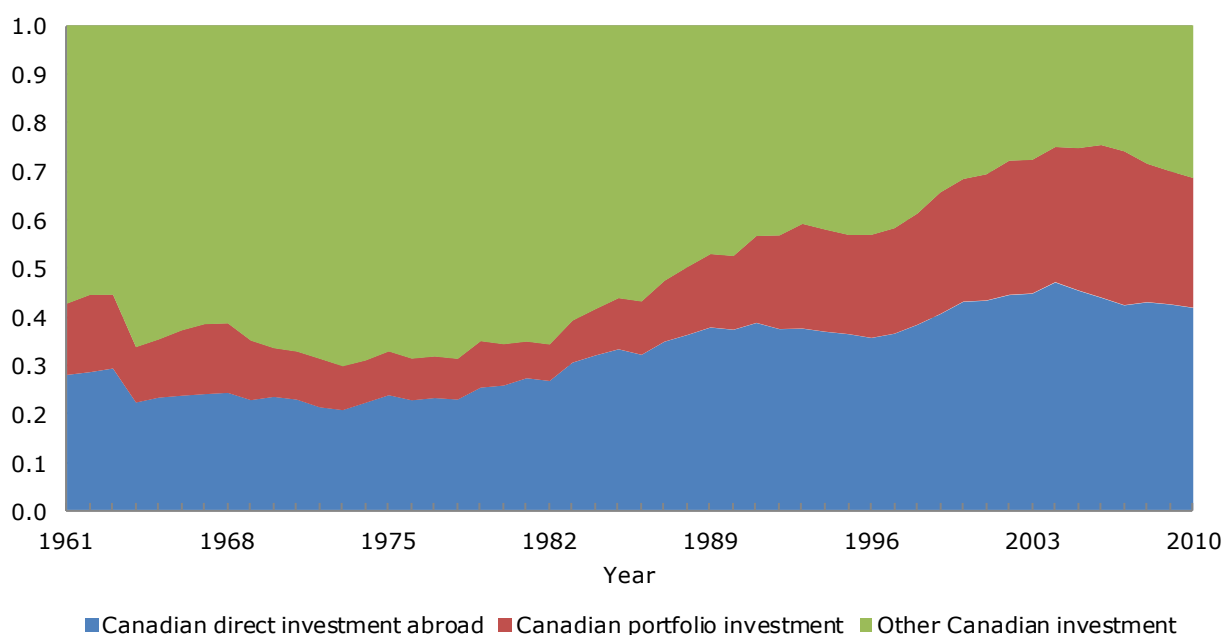
5 Appendix

Changes in the composition of the external financial assets and the external financial liabilities

This appendix complements earlier tabulations on changes in the relative value of external assets and liabilities for each of the three investment categories examined herein (as presented in Figure 1). Below is a review of the broad asset mix and the liability mix, which asks how changes in different types of investment have reflected the overall composition of external assets and liabilities.

Chart 16
Composition of external assets, by investment class

Share of investment abroad



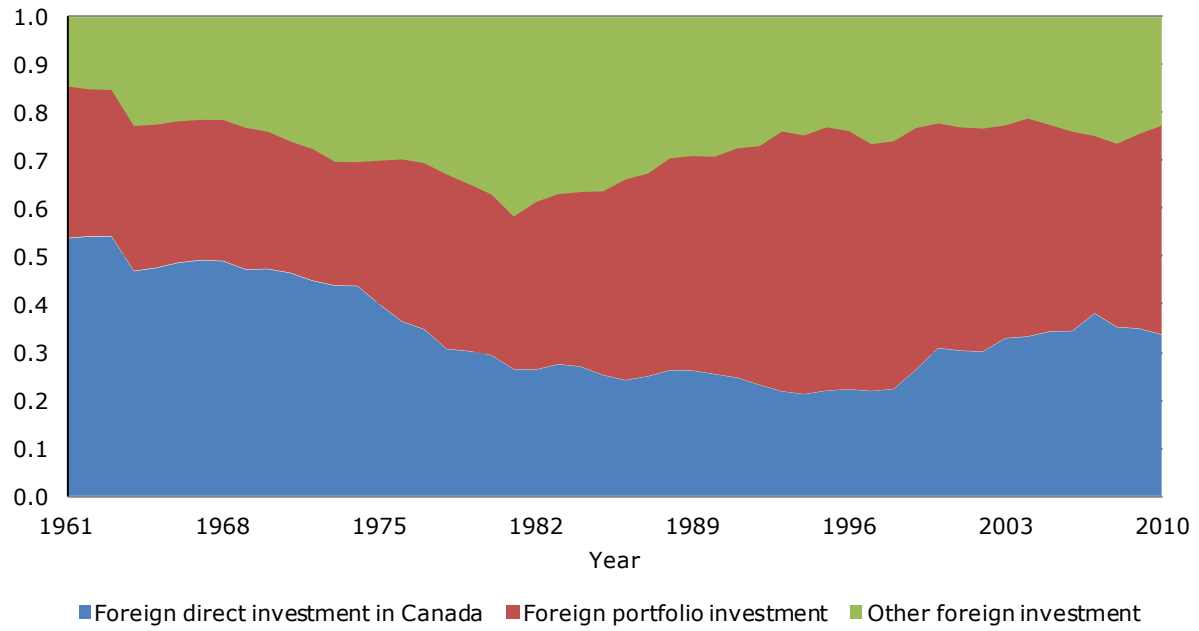
Source: Statistics Canada, CANSIM Table 376-0037.

On the asset side, Canadian portfolio investments and direct investments abroad have occupied an increasing share of the external asset mix since the mid-1990s. Portfolio investments accounted for about 20% of total assets in 1995, and their share has reached highs just over 30% around 2006/2007. Direct investments abroad increased from 36% of total assets in 1995 (the year in which total FDI assets exceeded liabilities) to 42% in 2010 (down from a high of 47% in 2004). Consequently, the importance of the residual category of other assets has declined—though these investments still represented about 30% of total external assets in 2010.

On the liability side, the importance of FDIC has increased relative to that of foreign claims on Canadian portfolio assets. In 2010, FDIC represented about 34% of total external liabilities (up from about one-fifth (22%) of external liabilities in 1995). Portfolio liabilities accounted for 44% of external liabilities in 2010 (down from 55% of liabilities in 1995). The share of other liabilities was 23% in 2010.

Chart 17 Composition of external liabilities, by investment class

Share of foreign investment in Canada



Source: Statistics Canada, CANSIM Table 376-0037.

References

- Baldwin, J.R., and G. Gellatly. 2007. *Global Links: Multinationals in Canada: An Overview of Research at Statistics Canada*. Statistics Canada Catalogue no. 11-622-M. Ottawa, Ontario. The Canadian Economy in Transition. No. 14.
- Baldwin, J.R., G. Gellatly, and D. Sabourin. 2006. *Changes in Foreign Control under Different Regulatory Climates: Multinationals in Canada*. Statistics Canada Catalogue no. 11-624-M. Ottawa, Ontario. Insights on the Canadian Economy. No. 13.
- Boulay, E. 2010. "The evolution of the global financial crisis and cross-border financial activity, 2007-2010." *Canadian Economic Observer*. Vol. 23. No. 9. Statistics Canada Catalogue no. 11-010-X.
- Cross, P. 2004 "National versus domestic output: A measure of economic maturity?" *Canadian Economic Observer*. Vol. 17. No. 12. Statistics Canada Catalogue no. 11-010-X. p. 3.1–3.8.
- Lajule, C. 2001. *Foreign Direct Investment: A Driving Force in Economic Globalization*. Statistics Canada Catalogue no. 67F0001MIE. Ottawa, Ontario. Balance of Payments Division Research Paper Series. No. 20.
- Macdonald, R. 2007. *Canadian and U.S. Real Income Growth Pre and Post 2000: A Reversal of Fortunes*. Statistics Canada Catalogue no. 11F0027M. Ottawa, Ontario. Economic Analysis Research Paper Series. No. 48.
- Macdonald, R. 2008. "The Terms of Trade and Domestic Spending." *Canadian Economic Observer*. Vol. 21. No. 1. Statistics Canada Catalogue no. 11-010-X. p. 3.1–3.10.
- Macklem, R.T. 1993. "Terms-of-trade disturbances and fiscal policy in a small open economy." *The Economic Journal*. Vol. 103. No. 419. p. 916–936.
- Statistics Canada. 2010a. *Canada's International Investment Position*. Statistics Canada catalogue no. 67-202-X. Ottawa, Ontario.
- Statistics Canada. 2010b. *Canada's Balance of International Payments*. Statistics Canada catalogue no. 67-001-X. Ottawa, Ontario.
- Stiglitz, J.E., A. Sen, and J.-P. Fitoussi. 2009. *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Commission on the Measurement of Economic Performance and Social Progress. Paris.