

doc  
CA1  
EA533  
93P07  
ENG

62523929(E)

File

**UNCLASSIFIED**

**POLICY PLANNING STAFF PAPER**

**NO. 93/7**

Dept. of External Affairs  
Min. des Affaires extérieures

JAN 6 1994

RETURN TO DEPARTMENTAL LIBRARY  
RETOURNER A LA BIBLIOTHEQUE DU MINISTERE

**Globalization: The Impact on the Trade and Investment Dynamic**

by

Dennis Seebach  
Economic Planning Division (CPE)  
Policy Planning Staff  
External Affairs and International Trade Canada

June 1993

Policy Planning Staff Papers are written to stimulate discussion within the foreign policy community of international trends and specific issues. The views expressed in Policy Planning Staff Papers do not represent those of the Government of Canada.

Copies of Policy Planning Staff Papers can be obtained through the Department's Info-Export Center (BPTE) (telephone: (613) 944-4000 or 1-800-276-8376; fax: (613) 996-9709), quoting the code SP25A. Comments or enquiries on this paper should be addressed to the Policy Planning Staff (CPD), External Affairs and International Trade Canada, 125 Sussex Drive, Ottawa, Ontario, K1A 0G2 (telephone: (613) 944-0367, fax: (613) 944-0687).

Ce document contient un résumé en français. La version française du document est également disponible.

Affaires extérieures et  
Commerce extérieur Canada  
External Affairs and  
International Trade Canada

Canada

## Table of Contents

	Page
Executive Summary/Résumé	3
1. Introduction	11
2. Trade and Economic Growth	13
3. Trade and Investment	15
3.1 Trade and Investment Linkages: Causality	15
3.2 Direct Investment Impacts on the Balance of Payments	17
3.2.1 Host Country Impacts	17
3.2.2 Home Country Impacts	18
3.3 Expanding the Trade and Investment Linkages	20
3.3.1 Foreign Direct Investment-Related Trade	20
3.3.2 Local Sales and Purchases by Foreign-owned Firms	22
3.3.3 An Alternative Trade Performance Measure	23
4. Globalization and Trade-Investment	25
4.1 Foreign Direct Investment Boom	25
5. Intra-Firm Trade	30
6. The Canadian Experience	34
6.1 Foreign Direct Investment in Canada	34
6.2 Canadian Direct Investment Abroad	39
6.3 Research Activities	42
6.3.1 Globalization Information in Statistics Canada	42
6.3.2 Related Analysis and Policy Issues	43
7. Policy Considerations	44
7.1 Canada as a Host Country Attracting FDI	44
7.2 Canada as an Outward Investing Country	45
7.3 Canada as a Trading Nation in World Markets	46
8. Annex: An Ownership-Based Trade Measure	48
9. Bibliography	54

## **Executive Summary**

One of the primary characteristics that have contributed to the globalization of the world economy has been the growth in the volume of world merchandise exports which has consistently outpaced the growth in world output. As well, the growth in trade in services has also outpaced world output growth. However, since 1985 foreign direct investment (FDI) outflows have significantly outpaced both exports and output. The purpose of this paper is to examine the relationship and linkages between trade and investment flows and provide policy considerations based on Canada's roles as a country attracting FDI, as an outward investing country, and as a trading nation in world markets.

As a **host economy attracting FDI**, a number of factors are important when discussing potential trade and investment policy options. First, the impact of FDI on the host economy cannot be predetermined, because FDI interacts intimately with the host economy environment. For example, stimulating investment in sectors protected by import restrictions can lead to a misallocation of resources toward uncompetitive industries and a suboptimal level of welfare. Second, the trade policy environment of the host economy can influence the export performance of multinationals investing and operating in the host economy. Third, government domestic policies have an important role in attracting FDI. The domestic policy environment should be one of neutrality or non-discrimination between trade and investment policies. Fourth, the domestic policies of the host government can complement the promotion of an open, competitive, trading environment through the provision of public goods such as infrastructure, information and education. Fifth, the transfer of intangible assets is viewed in some analyses as providing more positive impacts on a host's economy than capital transfers. An investment policy environment emphasizing the transfer of technology and other intangibles should be promoted, but not at the expense of distorting the neutrality condition for trade and investment policies.

For Canada as a host economy attracting FDI, the government should continue to promote trade liberalizing policies, evaluate trade and investment policies on a neutrality or non-discrimination basis, and maintain a high priority for infrastructure development and maintenance, the efficient exchange of information, and an emphasis on education and training.

Canada is also a **source for outward FDI**. As outward FDI is often the result of changing locational comparative advantage patterns, the investing economy may develop problems related to structural adjustments. An important policy response for the investing economy would be to adopt policies which facilitate smooth adjustment, especially in the labour market. Moreover, although the rationale that leads a firm to invest abroad is complex, there are several net benefits to the source country, including some evidence that exports from the home country are stimulated by investment abroad.

As a trading nation in world markets and a continuing participant in and beneficiary from FDI flows, Canadian policy makers need improved access and information on international investment policies to construct effective policy frameworks which will attract investment, promote efficient production in Canada and assist Canadian investors abroad. To achieve a more open environment for FDI, and to increase the transparency of international FDI policies, it is recommended that Canada support the establishment of an FDI policy review mechanism similar to the GATT Trade Policy Review, while continuing to support and promote multilateral trade liberalization policies.

The paper develops the aforementioned policy considerations by examining key relationships between trade flows, economic growth and FDI flows.

Traditionally, the relationship between trade and economic growth suggests that trade is an important contributor to economic growth by allowing the optimal allocation of resources resulting from the specialized production of goods and services. In addition, countries will trade according to their comparative advantage in the production of goods and services. Export growth permits economies of scale and a degree of specialization that allow higher levels of production and hence, output, than could be sustained by a country's domestic demand. Import growth lessens potential supply shortages of goods and services used in production. International trade generates positive externalities that can raise the efficiency of production and stimulate economic growth.

Studies exploring the relationship between trade and investment have focused, due in most part to data limitations, on the impact of foreign direct investment (FDI) on trade flows. Early work showed that tariff barriers could cause the exporting country to invest (relocate production) in the importing country, completely substituting for commodity trade, while later studies have emphasized the complementary nature of FDI and trade.

The impact of FDI on merchandise trade balance for an economy depends on whether the economy is acting as a host economy attracting FDI or as an outward investing home economy. For host economies, the sourcing of production inputs due to a direct investment, whether local or offshore, will be related to the ability of local sources to meet the needs for capital equipment, intermediate goods, services and raw materials for the investment project and will likely be sector dependent.

For exports, the impacts are dependent on whether the FDI is export-oriented or local market-oriented. If the investment is the result of import substitution policies by the host country, then imports should be reduced. Export-oriented investments, unless heavily subsidised, have to be efficient to compete on the world markets; exports should increase.

Government policies can also have important effects on the balance of payments impact of direct investment projects. Government policies which aim to maximize balance of payments flows may encourage non-competitive production due to price distortions created by government policy. The benefits of a government policy designed to allow for market forces to

set prices through low tariffs and open investment policies would be to align investment more closely along a country's natural comparative advantages.

For an outward direct investment, the impacts on a home country's balance of payments include: an increase in exports as the foreign plant production generates a demand for parent or home country inputs; a fully productive subsidiary servicing the foreign market will displace exports from the home country; an export-oriented subsidiary competing in the home country's market would increase the home country's import level; and, as the foreign subsidiary matures and develops, demand would be created for complementary goods and services produced by the parent or home country enterprises.

The above discussion illustrates FDI impacts on traditional balance of payments measurements of trade performance. An analysis is provided expanding the measurement of trade performance and competitiveness beyond the traditional balance of payments measurements into an ownership-based measure. This alternative measure of trade performance is based on translating export and import data into "foreign sales" and "foreign purchases" data. This alternative measure is based on the assumption that a firm can supply an external market through exports or by relocating its production through direct investment and local sales. The results of adjusting the data will, consequently, be on an ownership basis, rather than a residency basis.

An ownership-based trade measure is constructed for the U.S. and Japan, translating export and import data into "foreign sales" and "foreign purchases" data. The results show that on a traditional balance of payments (residency-based) measure a U.S. trade deficit in 1986 of U.S. \$144.4 billion on a residency basis becomes a U.S. \$56.7 billion trade surplus on an ownership basis, while for Japan a trade surplus of U.S. \$31.6 billion (residency-based) in 1983 expands to U.S. \$41.7 billion (ownership-based). This broader measure of a country's balance of payments also provides a measure of a country's real competitiveness.

The globalization of the world economy in the eighties has also been characterized by an FDI boom, with the growth in FDI stock significantly outpacing the growth in world merchandise trade and output. This FDI boom has been seen as a strong indication of the increasing globalization process. Another important and integral component of the globalization of economic activities is intra-firm trade. An examination of Canada-U.S. intra-firm trade shows that U.S. parents and Canadian affiliates trade goods on a 1:1 basis, while Canadian parents exported 5 times the amount of goods to U.S. affiliates as compared to imports by Canadian parents from their U.S. affiliates. The first ratio is heavily influenced by integrated automotive trade by the Big 3 and may overstate the value of Canadian affiliate exports to the U.S. (due to high U.S. content in vehicles assembled in Canada). The second ratio seems to provide good evidence that investment abroad can sustain healthy export flows from the home country.

A major problem in examining the linkages between merchandise trade, intra-firm trade, FDI-related trade and FDI flows is the lack of relevant data needed to perform a

quantifiable analysis. Statistics Canada is advancing the analysis on trade and investment linkages by creating a database that will link companies with trade and investment data. This database will provide the framework for analysis and policy considerations on issues such as, inter-industry goods and services trade, cross-border business relationships and activities, commodity and industry profiles of exports, imports and investment with impacts on output, employment and economic growth, direct investment across industries and impacts on the Canadian economy, substitution linkages between foreign direct investment and exports on an industry basis, and intra-firm merchandise and services trade linkages.

## Résumé

L'un des grands facteurs qui ont contribué à la globalisation de l'économie mondiale a été la croissance du volume des exportations mondiales de marchandises, qui a toujours dépassé celle de la production mondiale. De plus, la croissance du commerce des services a elle aussi dépassé celle de la production mondiale. Mais depuis 1985, les investissements directs à l'étranger dépassent nettement les exportations et la production. Nous voulons, dans ce document, examiner la relation et les liens qui existent entre les courants commerciaux et les flux financiers, et mentionner des considérations fondées sur les rôles que joue le Canada sur la scène mondiale en tant que pays attirant les investissements étrangers directs (IED) et que nation commerçante.

Comme l'économie canadienne attire les IED, il faut tenir compte d'un certain nombre de facteurs importants dans l'analyse des options de politique qui s'offrent aux plans du commerce et de l'investissement. Premièrement, l'impact local des IED ne peut être déterminé à l'avance, parce que ces investissements sont en étroite interaction avec l'économie hôte. Par exemple, le fait de stimuler les investissements dans des secteurs protégés par des restrictions à l'importation peut amener à allouer erronément des ressources à des industries non compétitives et à sous-optimaliser le niveau de bien-être. Deuxièmement, l'environnement dans lequel est établie la politique commerciale du pays hôte peut influencer les résultats d'exportation des multinationales et le fonctionnement de l'économie hôte. Troisièmement, les politiques intérieures du gouvernement peuvent grandement contribuer à attirer les IED. La politique intérieure devrait avoir un effet neutre ou non discriminatoire sur les politiques touchant le commerce et l'investissement. Quatrièmement, les politiques intérieures du gouvernement hôte peuvent compléter la promotion d'un environnement commercial ouvert et concurrentiel par la prestation de biens publics comme l'infrastructure, l'information et l'éducation. Cinquièmement, certains analystes jugent que le transfert d'actifs incorporels est plus avantageux que le transfert de capitaux. Il faudrait promouvoir une politique de l'investissement privilégiant les transferts de technologie et d'autres actifs incorporels, mais sans compromettre la neutralité à maintenir entre les politiques touchant le commerce et l'investissement.

Pour que le Canada reste un pays attirant les IED, il faudrait que le gouvernement continue de promouvoir les politiques de libéralisation du commerce, d'évaluer les politiques touchant le commerce et l'investissement sur une base neutre ou non discriminatoire, d'accorder une haute priorité au développement et au maintien de l'infrastructure et à l'échange efficace de l'information, et de mettre l'accent sur l'éducation, la formation et le perfectionnement.

Le Canada est aussi une source d'investissements directs vers l'étranger. Comme ces investissements résultent souvent de l'évolution des structures de l'avantage géographique relatif, l'économie qui investit peut connaître des problèmes d'ajustement structurel. Elle aurait grandement intérêt à adopter des politiques qui facilitent l'ajustement, et surtout l'adaptation des travailleurs. De plus, malgré la complexité des motifs qui incitent une

entreprise à investir à l'étranger, le pays source en tire plusieurs avantages nets, notamment lorsque ses exportations sont stimulées par les investissements à l'étranger.

Le Canada étant une nation commerçante et une source d'investissements directs à l'étranger, il faut que les décisionnaires canadiens soient mieux informés des politiques d'investissement des autres nations s'ils veulent élaborer des politiques efficaces qui attireront les investisseurs, favoriseront une production efficiente au Canada et aideront les investisseurs canadiens à l'étranger. Pour libéraliser davantage le climat des IED et pour améliorer la transparence des politiques internationales en matière d'IED, il est recommandé que le Canada appuie l'établissement d'un mécanisme d'examen des politiques sur les IED semblable au Mécanisme d'examen des politiques commerciales du GATT, sans cesser d'appuyer et de promouvoir les politiques multilatérales de libéralisation du commerce.

Le document développe les considérations de politique susmentionnées en examinant les grandes relations qui existent entre les courants commerciaux, la croissance économique et les flux d'IED.

La relation établie entre commerce et croissance économique a toujours suggéré que le commerce contribue grandement à la croissance économique en permettant l'allocation optimale des ressources résultant de la production de produits et de services spécialisés. De plus, les pays axeront leur commerce sur leur avantage relatif dans la production de certains biens et services. La croissance des exportations permet des économies d'échelle et un degré de spécialisation qui accommodent des niveaux de production dépassant ceux qui pourraient être soutenus par la demande intérieure. La croissance des importations atténue les risques de pénuries de biens et de services utilisés pour la production. Le commerce international génère des effets externes positifs qui peuvent améliorer l'efficacité de la production et stimuler la croissance économique.

Les études explorant la relation entre commerce et investissement se sont concentrées sur l'impact que les investissements étrangers directs (IED) exercent sur les courants commerciaux. Cela surtout en raison des contraintes posées par les données disponibles. Les premières études ont montré que les barrières tarifaires peuvent amener le pays exportateur à investir (relocaliser sa production) dans le pays importateur pour remplacer totalement ses exportations. Les études postérieures ont par ailleurs souligné la complémentarité qui existe entre IED et commerce.

L'impact des IED sur le solde du commerce des marchandises d'un pays varie selon que ce pays est une économie attirant les IED ou une économie favorisant l'investissement à l'étranger. Pour les économies qui sont la destination des investissements, l'approvisionnement en facteurs de production, suite à l'investissement direct local ou étranger, dépendra de la capacité des sources locales de fournir les biens d'équipement, les produits intermédiaires, les services et les matières premières nécessaires au projet d'investissement, et aura probablement une dépendance sectorielle.

L'impact sur les exportations variera selon que l'IED est axé sur l'exportation ou vise le marché local. Si l'investissement résulte de politiques de remplacement d'importations mises en oeuvre par le pays d'accueil, les importations devraient donc être réduites. Les investissements axés sur l'exportation, sauf s'ils sont fortement subventionnés, doivent générer l'efficience requise par la concurrence sur les marchés étrangers; les exportations devraient être accrues.

Les politiques gouvernementales peuvent aussi avoir d'importants effets sur l'impact des projets d'investissement direct au plan de la balance des paiements. Les politiques qui visent à optimiser les mouvements de balance des paiements peuvent encourager une production non concurrentielle en raison des distorsions de prix introduites par l'intervention des pouvoirs publics. Une politique gouvernementale visant à permettre aux forces du marché d'établir les prix sur la base de droits de douane peu élevés et de politiques d'investissement ouvertes aurait pour avantage de mieux aligner l'investissement sur les avantages naturels relatifs du pays.

Pour ce qui concerne l'impact sur la balance des paiements du pays source, l'investissement direct à l'étranger aura notamment les effets suivants : un accroissement des exportations, alors que la production de l'installation étrangère nécessite des intrants à acquérir dans le pays source; une filiale pleinement productive desservant le marché étranger déplacera des exportations du pays source; une filiale d'exportation livrant concurrence sur le marché du pays source accroîtrait le niveau des importations de ce pays; et, au fur et à mesure que la filiale étrangère se développe, il se créerait une demande pour des produits et des services complémentaires produits par des entreprises du pays source.

Cette discussion montre que les IED influent sur les résultats commerciaux, tels qu'ils sont habituellement mesurés par la balance des paiements. On analyse des moyens de transformer l'habituelle mesure des résultats commerciaux et de la compétitivité sur la base de la balance des paiements en une mesure fondée sur la structure de la propriété. Cette autre façon de mesurer les résultats commerciaux suppose que les données sur les exportations et les importations sont traduites en données sur les «ventes à l'étranger» et sur les «achats de l'étranger». Cette autre mesure repose sur l'hypothèse voulant qu'une firme puisse alimenter un marché extérieur par l'exportation ou par la relocalisation de sa production au moyen d'investissements directs et de ventes locales. Après ajustement, les données exprimeront donc la propriété plutôt que la résidence.

Une mesure commerciale fondée sur la propriété a été élaborée pour les États-Unis et le Japon en traduisant les données sur les exportations et les importations en données sur les «ventes à l'étranger» et sur les «achats de l'étranger». Les résultats montrent que, selon la mesure traditionnelle de la balance des paiements, les États-Unis ont enregistré un déficit commercial de 144,4 milliards \$US en 1986 sur la base de la résidence, et que ce déficit se transforme en excédent de 56,7 milliards \$ US sur la base de la propriété; ils montrent aussi que le Japon a enregistré un excédent de 31,6 milliards \$US en 1983 sur la base de la résidence, et que cet excédent passe à 41,7 milliards \$US sur la base de la propriété. Cette

mesure plus large de la balance des paiements d'un pays permet aussi de mesurer la compétitivité réelle d'un pays.

La globalisation de l'économie mondiale dans les années 80 a aussi été caractérisée par l'essor des IED, leur croissance dépassant nettement celle du commerce des marchandises et de la production. Cet essor des IED a été vu comme une bonne indication du processus de globalisation croissante. Le commerce intragroupe est un autre grand élément de la mondialisation de l'activité économique. Un examen du commerce intragroupe canado-américain montre que les échanges entre les sociétés-mères américaines et leurs filiales canadiennes se font selon un ratio 1:1, et que les sociétés-mères canadiennes ont vendu cinq fois plus de produits à leurs filiales américaines qu'elles ne leur en ont acheté. Le premier ratio, fortement influencé par le commerce intégré de l'automobile que pratiquent les Trois Grands, surestime peut-être la valeur des exportations aux États-Unis par les filiales canadiennes (en raison de la forte teneur américaine des véhicules montés au Canada). Le deuxième ratio semble bien montrer que les investissements à l'étranger peuvent soutenir et favoriser les exportations depuis le pays source.

Le manque de données pertinentes requises pour une analyse quantifiable est le principal problème posé à l'examen des liens qui existent entre le commerce des marchandises, le commerce intragroupe, le commerce lié aux IED et les apports de capitaux étrangers directs. Statistique Canada fait progresser l'analyse des liens entre commerce et investissement en créant une base de données qui fournira des informations sur le commerce et l'investissement de chaque entreprise répertoriée. Cette base de données fournira un cadre pour l'analyse et la discussion de questions comme le commerce intersectoriel des produits et des services, les relations et activités d'affaires transfrontières, la ventilation - par produit et par industrie - des exportations, des importations et des investissements qui influent sur la production, sur l'emploi et sur la croissance économique, les investissements directs de chaque industrie et leur impact sur l'économie canadienne, les liens de substitution établis, au niveau de chaque industrie, entre les investissements étrangers directs et les exportations, et les liens qui existent au niveau des échanges intragroupe de marchandises et de services.

## **1. Introduction**

One of the primary characteristics that have contributed to the globalization of the world economy has been the growth in the volume of world merchandise exports that has consistently outpaced the growth in world output (see Chart 1). As well, the growth in trade in services has also outpaced world output growth. However, since 1985 foreign direct investment (FDI) outflows has significantly outpaced both exports and output (see Chart 2). The purpose of this paper is examine the relationship and linkages between trade and investment flows and provide policy considerations based on Canada's roles as a country attracting FDI, as an outward investing country, and as a trading nation in world markets.

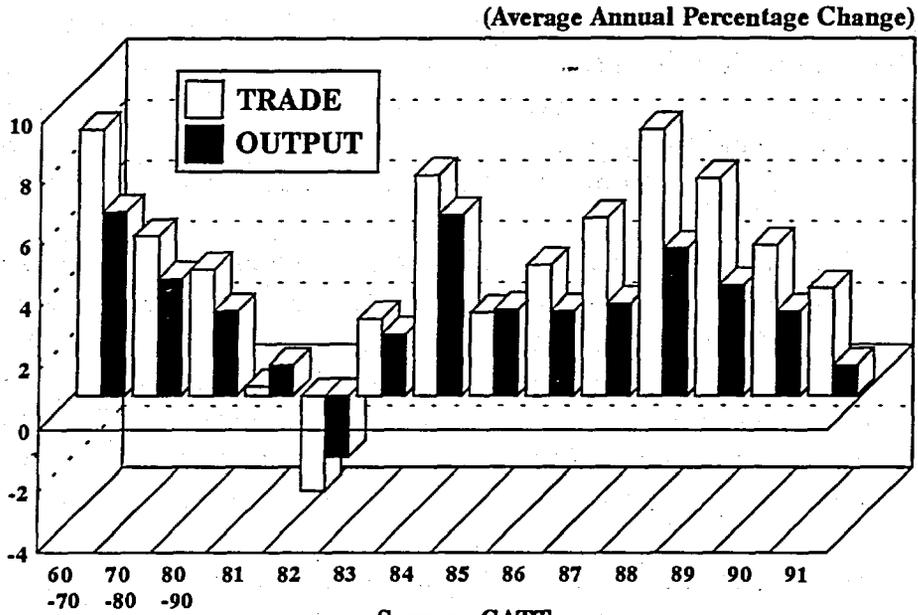
An initial discussion is provided on the importance and impact of trade on economic growth. This is followed by examining the trade and investment linkages, with particular emphasis on causality and the direct investment impacts on the balance of payments of host and investing countries. Further to the balance of payments impacts of direct investment, the analysis examines FDI-related trade and then recalculates traditional merchandise trade balances from a residence basis (trade flows based on country of origin) to an ownership basis (trade flows based on country of ownership).

An examination of the FDI boom in the late eighties and early nineties and a discussion of the major factors contributing to this strong growth is then presented. This is followed by an analysis of intra-firm trade flows, an important sub-component of global trade flows and a direct result of FDI. The analysis focuses on Canada-U.S. intra-firm trade and the factors influencing this trade.

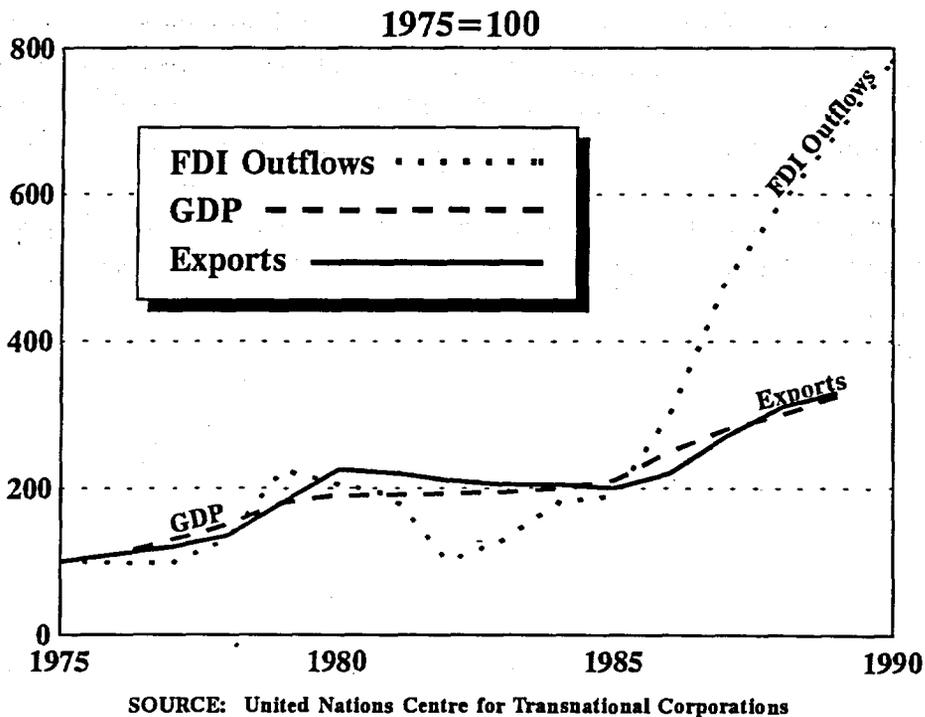
The Canadian experience as a host for FDI is discussed, examining the growth of FDI in Canada, the sources of FDI and the trend in foreign control of corporate assets in Canada. As well, the growth and evolution of Canadian direct investment abroad is provided. In addition, information is provided on a Statistics Canada project which will create an extensive database that will link corporations with trade and investment data.

The paper concludes with a discussion of policy considerations for Canada based on its roles as a host country attracting FDI, as an outward investing country, and as a trading nation in world markets.

**Chart 1**  
**Volume of World Merchandise**  
**Trade and Output**  
**1960 - 1991**



**Chart 2**  
**Index of Current Value of Exports, GDP and FDI Outflows**  
**1975-1990 (Constructed from US \$ Values)**



## 2. Trade and Economic Growth

The traditional view of the relationship between trade and economic growth suggests that trade is an important contributor to economic growth by allowing the optimal allocation of resources resulting from the specialized production of goods and services. Trade also helps increase inputs to growth such as natural resources, capital goods and technology by exchanging those goods and services that a country can produce efficiently and relatively inexpensively for goods and services which the country either cannot produce or can produce only at a relatively high cost. Thus, countries trade according to their comparative advantages.

In addition to increasing specialization, expanding the efficiency-raising benefits of improved resource allocation and providing access to critical inputs, trade and particularly exports also induces growth by offering greater opportunities for economies of scale due to an enlargement of the effective market and greater capacity utilization due to the addition of external demand. The competition faced in international markets for exports and in home markets through imports provides incentives for fostering more rapid technological change and better management in all sectors of the economy, thus raising overall productivity and growth.

Trade has played an important role in world economic growth and integration in previous decades, particularly the 1950s and 1960s, when world trade in manufactured products grew in real terms at an annual average rate of 9 per cent, while world manufactured output rose at 7 per cent. Experiences of several individual countries also underline the association between trade and growth, particularly between trade in manufactured products and growth in manufacturing output. For instance, the Asian newly industrializing economies - Hong Kong, Republic of Korea, Singapore and Taiwan - increased their shares of world trade in manufactured products between 1973 and 1988 from 4 percent to 10 percent. This matched their faster growth of manufacturing output, rising to 10 percent per annum between 1970 and 1989, in comparison with 3 percent in the United States and just 2 percent in the European Community.<sup>1</sup> The view that exports are one of the causal factors in economic growth is the result of research which has shown that developing countries with higher than average export growth have also tended to experience higher than average economic growth. In addition, further research, while broadly supporting the positive role of exports in encouraging growth, has shown that the direction of causality may run both ways, that is, exports and output growth reinforce each other.

While the growth-promoting effects of trade are often associated with exports, imports can contribute to growth by reducing domestic supply constraints on goods and services, as well as technology. For developing countries, the absence of an efficient domestic capacity to produce intermediate and capital goods as well as some producer services, results in imports often being the primary source of the machinery, equipment, services and other items essential to investment programmes and growth. A number of studies have concluded that imports are a significant factor in explaining the growth performance of developing countries. The economic

---

<sup>1</sup> *GATT, International Trade, selected editions.*

rationale behind such findings is that imports of intermediate and capital goods are crucial for domestic investment and output growth.

Finally, participation in international trade generates various externalities which contribute to growth. Access to the world's commercial knowledge base is one of the most important benefits in this regard. Trade plays an important part in the international exchange of information, as trade in tangible commodities facilitates the exchange of intangible assets necessary for growth. A larger volume of international trade encourages international contacts leading to the exchange of technical information. Imported intermediate and capital goods enable local firms to inspect and use those goods, as well as to undertake reverse engineering, which eventually results in learning to produce some of those goods efficiently. The export of local goods may also induce improvements in domestic manufacturing processes if necessary to meet the higher standards in foreign markets. Similarly, competition in the domestic market from imports may act as an incentive for local industries to introduce technological improvements and to upgrade the quality of their products, while the implementation of such improvements is facilitated by technology imports.

While conceptually those effects are clear, empirical evidence on the impact of trade on growth promoting externalities is relatively scarce, in part because it is hard to measure such impact.

To summarize, the principal mechanisms through which trade promotes growth are as follows:

- The growth of exports permits economies of scale and a degree of specialization that allow levels of production that could not be sustained by a country's domestic demand, thus enabling higher growth in the economy as a whole.
- The growth of imports lessens potential supply shortages, especially of goods and services used in production, and leads to a slower rate of increase in the costs of goods, raw materials, capital equipment and services, thereby permitting an increase in locally-generated reinvested profits.
- Participation in international trade generates externalities that can raise the efficiency of production and stimulate aggregate economic growth.

### **3. Trade and Investment**

#### **3.1 Trade and Investment Linkages: Causality**

On a theoretical basis, it is very difficult to distinguish between direct investment, bond and equity holdings, loans, debentures and other long-term and short-term capital. In fact, no known study simultaneously analyses the relationship between any two of these capital flow types and trade flows. Rather, it is most common to analyse the relationship between a single foreign capital flow and trade and the majority of these analyses is between direct investment and trade.

This problem is related to the definitional difficulties that exist at the statistical level. In balance of payments and other statistical sources, the distinction between foreign investment which results in foreign control of firms in recipient economies and other capital movements (e.g., loans) resulting in no control is clear. However, the distinction between direct and portfolio investment is less clear, depending on the degree of ownership control or influence that is exercised by the foreign investor. Furthermore, the degree of control used to distinguish portfolio and direct investment differs among economies and for that reason direct investment figures may mean very different things in different economies.<sup>2</sup> As a general definition, however, foreign direct investment (FDI) can be viewed as any expenditure by a corporation or person which results in the ability to influence an operation abroad.

There are many reasons to distinguish among direct investment, portfolio investment, and other flows. The primary economic reason stems from differences in the effects of different types of capital flows. In particular, theory suggests that the characteristics and behaviour of multinational firms differ from other firms in a number of important ways. Thus FDI by multinationals is likely to impart different effects than investment by domestic firms or by foreign holdings of portfolio investments which do not usually result in the ability to influence firm behaviour. With respect to FDI's effects, especially those in host economies, the importance of the technology, marketing know-how, and other intangible assets the foreign firm introduces into the recipient economy is often stressed. Furthermore, the benefits of such transfers accrue, not only to recipient firms but to competitors and input suppliers who may benefit from technological spillovers. Indeed, it is sometimes asserted that the primary benefits of FDI are imparted through the transfer of intangible assets such as technology and that the transfer of financial capital, per se, is of relatively little importance.

---

<sup>2</sup> *Statistics Canada defines direct investment as the value of debt and equity of a corporation by owners who hold more than 10 percent of the outstanding voting equity of the corporation. If the ownership of voting equity is less than 10 percent then the holding is classified as portfolio investment. Control of a corporation is defined as the potential to make the strategic decisions of a corporation. In most cases, control is the result of owning more than 50 percent of the voting shares (majority voting ownership). In addition, effective control or minority control can result from ownership of the largest block of voting shares. Statistics Canada defines effective control as the ownership of a block of equity which has at least 33 percent of the voting rights and which exceeds the sum of the next two largest blocks.*

The majority of the analysis to date has focused on a traditional factor endowment model (Heckscher-Ohlin) of international trade. Early work showed that tariff barriers could induce a capital flow from the exporting country to the importing country, completely substituting for commodity trade.<sup>3</sup> Allowing for incomplete specialization, imperfect competition, as well as differences across economies in technologies and consumer preferences, can reverse the aforementioned result and generate cases where factor flows lead to greater trade volumes.<sup>4</sup> In addition, the literature has shown how FDI and other capital flows can lead to suboptimal welfare levels, and even reduce welfare below pre-flow levels, when host industries are protected by import restrictions.<sup>5</sup>

The view that trade and investment are complementary was stressed somewhat earlier among economists analysing direct investment. Trade-creating effects of direct investment in the natural resource sector was the focus of early studies, while an examination of Japanese FDI in the natural resource and manufacturing sectors demonstrated how trade-oriented FDI can generate higher levels of welfare than FDI dependent on import-substitution policies.<sup>6</sup> This result is based on the assumption that FDI in comparatively advantaged industries brings about greater technological progress than FDI in import-substitution industries, where no comparative advantage exists.

Although problems exist with integrating FDI into trade theory, the analyses do suggest two major points for public policy. First, the analyses demonstrate how FDI flows in protected industries can be welfare reducing. Thus, stimulating any investment, be it domestic or foreign, in protected sectors can lead to a misallocation of resources and a suboptimal level of welfare, a major lesson of economic theory that is exceedingly important to remember. Second, some analyses emphasize the perception that FDI's most positive impacts are generally not as related to capital transfers as they are to transfers of intangibles such as technology that can come with direct investment. This view implies that the often observed investment policy emphasis on transfers of technology and other intangibles is to be expected and clearly warranted.

---

<sup>3</sup> See Mundell (1957).

<sup>4</sup> See Purvis (1972), Markusen (1983), Svensson (1984), Markusen and Svensson (1985) and Wong (1986).

<sup>5</sup> See Bhagwati and Tironi (1980), Khan (1982), Casas (1985) and Buffie (1985).

<sup>6</sup> See Kojima (1978).

## 3.2 Direct Investment Impacts on the Balance of Payments

### 3.2.1 Host Country Impacts

The contribution and impact of direct investment to the merchandise trade account of the balance of payments of the host country is dependent on the trade flows of imports (inputs) and exports (outputs) with regard to specific investment projects.

The sourcing of inputs due to a direct investment will be related to the ability of local sources to meet the needs for capital equipment, intermediate goods, services and raw materials for the investment project and will likely be sector dependent. In developing countries, the evidence is that direct investment projects undertaken by multinationals have a high propensity to import inputs. Studies have indicated that import propensities of between 20 and 30 percent are not uncommon.<sup>7</sup>

For exports, a distinction has to be made regarding the orientation of the investment project, that is, whether the investment is export-oriented or local market-oriented.

If the investment is the result of import substitution policies by the host country then imports should be reduced. However, import substitution investment induced through trade barriers will not necessarily reduce imports if the investment results in high-cost, inefficient productive capacity. Export-oriented investment, unless heavily subsidised, has to be efficient to compete on the world markets. Indeed, the developing countries that have embraced export-oriented investment have generally had better economic performances than countries adopting import substitution policies.

The effects of direct investment on host country exports are examined by comparing the different export propensities of multinational enterprises to those of local enterprises. Many studies have shown that the market structure of a sector is an important factor. Sectors with highly competitive local market conditions generally showed a higher export propensity for domestic industries. In addition, other important factors in the studies that affected the export propensities of foreign and domestic corporations included: the relative distribution of foreign and domestic enterprises across industrial sectors; the concentration levels of local and multinational enterprises in industrial sectors which were characterized with import-substituting production; and, the export product differentiation in terms of labour-intensive production compared to capital-intensive production, that is, assembly production versus high value-added manufacturing processes (e.g., semi-conductors).<sup>8</sup>

The timing of balance of payments flows can also have an important impact. Early in a project, investment flows will be high while imports are at a minimum; but as the project becomes fully operational and at a high productive capacity, the level of inputs will often rise, although an export-oriented project will continue to generate positive balance of payments

---

<sup>7</sup> See Vaitos (1975) and Lall and Streeton (1977).

<sup>8</sup> See Cohen (1973,1975), Evers (1977), Lall and Streeton (1977) and Newfarmer and Marsh (1981)

flows. The nature of the industry sector for an investment project will also affect balance of payments flows. For example, a mining sector project in a developing country will have large import flows at the beginning of the project, but positive net export flows much later. However, a relatively labour-intensive, export-oriented project could generate much faster positive balance of payments flows much earlier than a mining project.

Government policies can also have important effects on the balance of payments impact of direct investment projects. Government policies which aim to maximize balance of payments flows may encourage non-competitive production due to price distortions created by government policy. The benefits of a government policy designed to allow for market forces to set prices through low tariffs and open investment policies would be to align investment more closely along a country's natural comparative advantages. Balance of payments data, especially for developing countries, probably tend to underestimate the positive indirect effects of direct investment on an economy's competitiveness over the long run.

### **3.2.2 Home Country Impacts**

The literature on the analysis of direct investment effects on the home country's balance of payments, growth and employment have generally been between industrialized nations and developing countries.

The following effects have been identified when examining the impact of outward direct investment on a home country's balance of payments:

- the initial capital transfer to finance an investment (assuming no financing abroad or reinvestment of earnings) will have a negative impact on the capital account. However, a movement of capital equipment or material in lieu of a transfer of funds would provide an immediate positive contribution to the current account.
- foreign plant production will generate a demand for parent or home country goods or services making a positive balance of payments effect.
- a fully established subsidiary will generate a steady stream of funds to the parent in the form of profits repatriated, dividends, etc.
- a fully productive subsidiary servicing the foreign market will displace exports from the home country, negatively affecting the balance of payments.
- an export-oriented subsidiary competing in the home country's market would increase the home country's import level, negatively affecting the balance of payments.

- as the foreign subsidiary matures and develops, demand would be created for complementary goods and services produced by the parent or home country enterprises, with a positive impact on the balance of payments.<sup>9</sup>

Generally, the analysis and studies undertaken have shown that direct investment in developing countries on a comparative advantage basis tends to raise productivity and growth in the host country and, through the trade effects, to increase productivity and growth in the home country. The impacts on the home country are generally regarded to be small in the short run, but of greater impact in the long run.<sup>10</sup>

---

<sup>9</sup> *OECD, International Investment and Multinational Enterprise: Recent Trends in International Direct Investment, 1987, p. 48.*

<sup>10</sup> *See Hufbauer and Aldler (1968), Lipsey and Weiss (1976), Bergsten et al (1978), Horst (1974), Lubitz (1971), Van Loo (1977), Frank and Freeman (1977), Hawkins (1972) and Kujawa (1979).*

---

### 3.3 Expanding the Trade and Investment Linkages

The above analysis is based on a traditional view of examining a country's external position based on the macroeconomic evidence of balance of payments flows and current and capital account balances. The explosive growth of the world stocks of direct investment abroad through the eighties from US \$517 billion to US \$1.6 trillion in 1990 has also advanced the view that the world has become more intricately linked through direct investment over this period.

#### 3.3.1 FDI-Related Trade

Generally speaking, foreign-owned firms are responsible for a greater share of their host country's exports and imports than of its sales or investments. FDI-related trade can be defined as cross-border transactions between foreign-owned firms and their home countries. FDI-related trade then differs from intra-firm trade in that it includes all trade between the foreign-owned firm and the home country, not just trade between the foreign-owned firm and the parent firm. The extent to which a country's trade is FDI-related will depend on the size and propensity to trade of its own multinational enterprises abroad and of the MNEs for which the country serves as a host.

Table 1 shows a comparison of FDI-related trade for the U.S. and Japan.

	U.S. (1986)	Japan (1983)
<b>Exports:</b>		
To Affiliates Abroad	32	38
By Foreign-Owned Firms	23	3
<b>Total FDI-Related Exports</b>	<b>55</b>	<b>41</b>
<b>Imports:</b>		
From Affiliates Abroad	18	40
To Foreign-Owned Firms	34	17
<b>Total FDI-Related Imports</b>	<b>52</b>	<b>57</b>

*Source: Julius (1990)*

Comparisons for the U.S. and Japan serve to illustrate the extent of FDI-related trade. The U.S. is characterized with a large overseas network of foreign-owned firms but a smaller exports-to-GDP share than Japan. Both the U.S. and Japan have similar imports-to-GDP shares, but the U.S. hosts many more foreign-owned firms than Japan. For the U.S., 55 percent of its exports are FDI-related arising from 32 percent of U.S. exports going to U.S.-owned firms abroad and 23 percent of U.S. exports going from foreign-owned firms in the U.S. to their home country. For Japan, 41 percent of its exports are FDI-related, due to 38 percent of Japanese exports going to Japanese-owned firms abroad and only 3 percent of Japanese exports going from foreign-owned firms in Japan to their home country. On the import side, 18 percent of U.S. imports come from U.S.-owned firms abroad and 34 percent of imports are from foreign-owned firms in the U.S. receiving goods from their home country for a FDI-related import share of 52 percent. For Japan, the percentages are 40 percent and 17 percent, respectively, totaling a 57 percent FDI-related import share. Although distinctly different as hosts of foreign-owned firms and international investors, FDI-related trade accounts for about half of total trade in both the U.S. and Japan.<sup>11</sup>

Table 2 shows the percentages of U.S. imports from selected countries and regions that originate from U.S.-owned firms in the exporting country.

<b>Table 2</b>	
<b>U.S. IMPORTS FROM U.S.-OWNED FIRMS ABROAD</b>	
<b>(1986)</b>	
<i>(Percentage of Total U.S. Imports From Each Region)</i>	
Canada	43
Japan	9
Europe	11
Australia, New Zealand and South Africa	14
Latin America	19
Other Africa (including Middle East)	22
Other Asia and Pacific	12

*Source: U.S. Dept. of Commerce, Julius (1990)*

As shown in Table 2, Canadian exports to the U.S. from U.S.-owned firms account for over 43 percent of total U.S. imports from Canada. The main factor explaining the high percentage is the impact of the Canada-U.S. Automotive Agreement on bilateral trade flows. However, the table also illustrates the significance of FDI-related trade to U.S. imports.

<sup>11</sup> D. Julius, *Global Companies and Public Policy*, 1990, p.74.

### 3.3.2 Local Sales and Purchases by Foreign-owned Firms

As shown above, a substantial portion of exports and imports that are recorded as trade flows between countries actually represents "internal" transactions between foreign-owned firms and their country of ownership. From the viewpoint of the firm, a local sale in the host country by the foreign-owned subsidiary can be viewed as an "export" or "foreign sale" and a local purchase by the foreign subsidiary could be considered an "import" or "foreign purchase". An examination of the data indicates that local sales and purchases are significantly larger in some cases than trade flows. For the U.S., the total sales of foreign-owned firms in the U.S. were 150 percent of total U.S. imports in 1985.<sup>12</sup>

On the export side, for nearly all of its major trading partners local sales by U.S.-owned firms abroad are larger than U.S. exports to the country, as shown in Table 3. This is not surprising given that the U.S. is the largest international investor.

**Table 3**  
**LOCAL SALES BY U.S.-OWNED COMPANIES COMPARED WITH U.S. EXPORTS (1986)**

	Ratio of Local Sales To U.S. Exports
Total	1.15
Canada	1.99
Japan	1.11
Mexico	0.51
United Kingdom	6.76
Germany	4.97
Netherlands	1.75
France	4.91
Australia	3.68
Taiwan	0.26
Italy	4.85
Brazil	5.10
Singapore	0.48
Venezuela	0.80
Hong Kong	1.04

Note: Countries listed in order of size of U.S. exports

Source: Julius (1990)

<sup>12</sup> Julius, *op. cit.*, p. 76.

### 3.3.3 An Alternative Trade Performance Measure

The above analysis serves as a basis for expanding the measurement of trade performance and competitiveness beyond the traditional balance of payments measurements. The alternative measure of trade performance is based on translating export and import data into "foreign sales" and "foreign purchases" data. This alternative measure is based on the assumption that a firm can supply an external market through exports or relocating of its production through direct investment and local sales. The results will then be on an ownership basis rather than a residency basis.

Table 4 shows the results of constructing an ownership-based trade performance measure for the U.S. and Japan, rather than the traditional approach based on residency.<sup>13</sup>

	U.S. (1986)	Japan (1983)
<b>Foreign Sales</b>		
Exports (1)	224.0	145.7
Less: FDI-Related Exports to Foreign-Owned Firms Abroad	-71.7	-55.4
FDI-Related Exports by Local Foreign-Owned Firms	-51.5	-4.4
Plus: Local Sales to Local Foreign-Owned Firms	+267.0	+2.9
Local Sales by Foreign-Owned Firms Abroad	+777.0	+150.0
<b>Total Foreign Sales (2)</b>	<b>1,144.8</b>	<b>238.8</b>
<b>Foreign Purchases</b>		
Imports (3)	368.4	114.1
Less: FDI-Related Imports by Foreign-Owned Firms Abroad	-66.3	-45.6
FDI-Related Imports to Local Foreign-Owned Firms	-125.2	-19.4
Plus: Local Purchases from Local Foreign-Owned Firms	+445.0	+58.0
Local Purchases by Foreign-Owned Firms Abroad	+446.2	+90.0
<b>Total Foreign Purchases (4)</b>	<b>1,088.1</b>	<b>197.1</b>
Net Foreign Sales (2)-(4)	+56.7	+41.7
Net Exports (1)-(3)	-144.4	+31.6

*Source: Julius (1990)*

<sup>13</sup> The annex explains the concepts and calculations needed to construct a ownership-based trade measure.

The results show that a U.S. trade deficit in 1986 of U.S. \$144.4 billion on a residency basis becomes a U.S. \$56.7 billion trade surplus on an ownership basis, while for Japan a trade surplus of U.S. \$31.6 billion (residency-based) in 1983 expands to U.S. \$41.7 billion (ownership-based). This broader measure of a country's balance of payments also provides a measure of a country's real competitiveness.

## 4. Globalization and Trade-Investment

### 4.1 Foreign Direct Investment Boom

The average annual growth rate of stock of direct investment abroad increased sharply in the 1970s, fell in the early 1980s, and then returned to high rates of growth over the 1985-1990 period. A preliminary estimate for 1991 indicates that growth in the stock of direct investment has slowed to 10 percent for a total of U.S. \$1.809 trillion. The world stock of direct investment more than doubled from 1973 to 1980 and more than tripled from 1980 to 1990. The broad trend over the 1970s and 1980s has been the continuing decline in the U.S. share of world direct investment abroad from 50.4 percent in 1967 to 25.9 percent in 1990. The decline in the U.S. share has been the result of the high growth rates of Japanese, European, Canadian and Australian direct investment abroad increasing faster than U.S. direct investment abroad (see Chart 3). Over the latter half of the 1980s, U.S. direct investment abroad grew at faster rates than recorded earlier in the decade, but still below the long-term average annual rate before 1980 of 10 percent.<sup>14</sup>

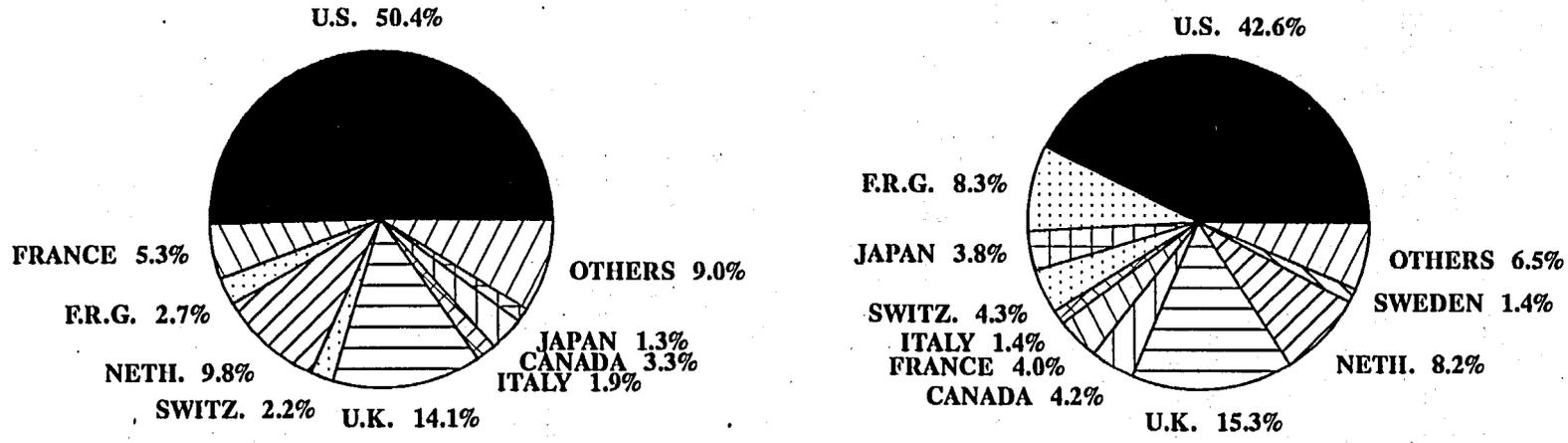
**Table 5**  
**World Stock of Direct Investment Abroad by Region or Major Country of Origin,**  
**Selected Years, 1960-90**  
*(Billions of U.S. Dollars or Percentages)*

	LEVEL					Average Annual % Change			
	1960	1967	1973	1980	1990	60-67	67-73	73-80	80-90
All Countries	67.7	112.3	211.1	516.9	1,644.2	7.5	11.1	13.6	12.3
Developed Countries	67.0	109.3	205.0	503.6	1,593.0	7.2	11.1	13.7	12.2
United States	31.9	56.6	101.3	220.2	426.5	8.5	10.2	11.7	6.8
Europe	30.6	45.1	82.4	231.6	852.6	5.7	10.6	15.9	13.9
Belgium-Luxembourg	1.3	1.3	1.8	4.7	22.6	0.0	5.6	14.7	17.0
France	4.1	6.0	8.8	20.8	114.8	5.6	6.6	13.1	18.6
Germany	0.8	3.0	11.9	43.1	155.1	20.8	25.8	20.2	13.7
Italy	1.1	2.1	3.2	7.0	60.0	9.7	7.3	11.8	24.0
Netherlands	7.0	11.0	15.8	42.4	99.2	6.7	6.2	15.1	8.9
Sweden	0.4	1.7	3.0	7.2	50.7	23.0	9.9	13.3	21.6
Switzerland	2.3	2.5	7.1	22.4	64.9	1.2	19.0	17.8	11.2
United Kingdom	12.4	15.8	27.5	79.2	244.8	3.5	9.7	16.3	11.9
Other Eur. Countries	1.2	1.7	3.3	4.8	40.5	5.1	11.7	5.5	23.8
Japan	0.5	1.5	10.3	19.6	201.4	17.0	37.9	9.6	26.2
Canada	2.5	3.7	7.8	21.6	74.7	5.8	13.2	15.7	13.2
Australia/New Zealand	0.2	0.4	1.1	5.1	30.2	10.4	18.4	24.5	19.5
South Africa	1.3	2.0	2.1	5.5	7.6	6.3	0.8	14.7	3.3
Developing Countries	0.7	3.0	6.1	13.3	51.2	23.1	12.6	11.8	14.4

Source: U.S. Department of Commerce

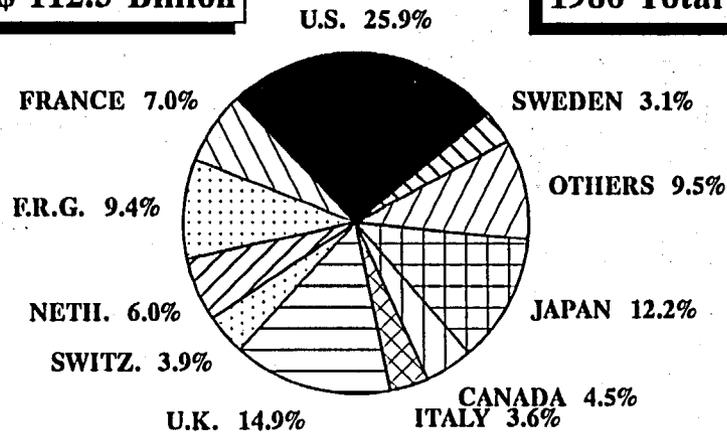
<sup>14</sup> United States Department of Commerce, *Recent Trends in International Direct Investment*, July 1991, p. 1.

### Chart 3 World's Stock of Direct Investment Abroad Distribution by Major Source Countries



**1967 Total = US\$ 112.3 Billion**

**1980 Total = US\$ 516.9 Billion**



**1990 Total = US\$ 1.6 Trillion**

Source: U.S. Department of Commerce

Over the last half of the 1980s, the world stock of direct investment grew by almost U.S. \$1 trillion, from U.S. \$678 billion in 1985 to U.S. \$1.644 trillion in 1990. The extraordinary growth should be compared with the early part of the decade, when the stock of direct investment rose from \$517 billion in 1980 to \$678 billion in 1985. However, much of the slowdown in the early 1980s and subsequent acceleration in the late 1980s reflects the conversion of investment denominated in local currencies into U.S. dollars as the common currency.<sup>15</sup> Table 6 expresses direct investment stocks in terms of a broader common currency, the Special Drawing Right (SDR)<sup>16</sup>. On a SDR basis, the contrast between foreign direct investment growth during the first versus the second half of the 1980s is not nearly as great (SDR \$0.4 trillion in 1980, SDR \$0.6 trillion in 1985, SDR \$1.2 trillion in 1990). However, even when expressed in SDRs, worldwide direct investment almost doubled from 1985-90 compared with only about a 50 percent increase from 1980-85.

**Table 6**  
**World Stock of Direct Investment Abroad by Region or Major Country of Origin,**  
**Selected Years, 1960-90**  
*(Billions of SDRs or Percentages)*

	LEVEL					Average Annual % Change			
	1960	1967	1973	1980	1990	60-67	67-73	73-80	80-90
All Countries	67.7	112.3	175.0	405.3	1,155.7	7.5	7.7	12.7	11.0
Developed Countries	67.0	109.3	169.9	394.9	1,119.7	7.2	7.6	12.8	11.0
United States	31.9	56.6	84.0	172.7	299.8	8.5	6.8	10.8	5.7
Europe	30.6	45.1	68.3	181.6	599.3	5.7	7.2	15.0	12.7
Belgium-Luxembourg	1.3	1.3	1.5	3.7	15.9	0.0	2.4	13.8	15.7
France	4.1	6.0	7.3	16.3	80.7	5.6	3.3	12.2	17.3
Germany	0.8	3.0	9.9	33.8	109.0	20.8	22.0	19.2	12.4
Italy	1.1	2.1	2.7	5.5	42.2	9.7	4.3	10.7	22.6
Netherlands	7.0	11.0	13.1	33.2	69.7	6.7	3.0	14.2	7.7
Sweden	0.4	1.7	2.5	5.6	35.6	23.0	6.6	12.2	20.3
Switzerland	2.3	2.5	5.9	17.6	45.6	1.2	15.4	16.9	10.0
United Kingdom	12.4	15.8	22.8	62.1	172.1	3.5	6.3	15.4	10.7
Other Eur. Countries	1.2	1.7	2.7	3.8	28.5	5.1	8.0	5.0	22.3
Japan	0.5	1.5	8.5	15.4	141.6	17.0	33.5	8.9	24.8
Canada	2.5	3.7	6.5	16.9	52.5	5.8	9.8	14.6	12.0
Australia/New Zealand	0.2	0.4	0.9	4.0	21.2	10.4	14.5	23.8	18.1
South Africa	1.3	2.0	1.7	4.3	5.3	6.3	-2.7	14.2	2.1
Developing Countries	0.7	3.0	5.1	10.4	36.0	23.1	9.2	10.7	13.2

Source: U.S. Department of Commerce

<sup>15</sup> United States Department of Commerce, *op. cit.*, p. 2.

<sup>16</sup> The SDR is a composite currency unit designed by the International Monetary Fund that comprises the currencies of France, Germany, Japan and the United States according to each country's relative proportion of exports of goods and services. Prior to December 1971, the SDR was valued at the par value of the U.S. dollar.

The major factors behind this rapid growth of direct investment in the late 1980s include the following:

- generally faster world economic growth after 1985 (3.1 percent annually for 1985-90) following slow economic growth or recession in the early 1980s (2.4 percent annually for 1980-85);
- anticipation of greater economic integration within and possible enlargement of the European Community (EC) beginning in 1992, which encouraged expansion and rationalization by foreign investors to increase market share, achieve economies of scale, and improve productivity in order to meet heightened competition;
- more active macroeconomic policy coordination among the G-7 industrial nations after 1985, which, among other things, fostered rapid dollar depreciation making U.S. assets and production costs less expensive compared with assets and production costs in other major industrial countries, thus attracting foreign investors to the United States;
- continued liberalization of FDI regulations in both developed and developing countries, especially in the services sectors, and the deregulation of financial capital markets;
- unprecedented growth of outward Japanese direct investment, reflecting a shift of productive capacity abroad in order to offset higher domestic production costs due to yen appreciation and higher labor costs, to circumvent perceived trade restrictions, and to exploit the relatively lower cost of capital in Japan which made financing overseas investments easier;
- faster growth of U.S. direct investment abroad after 1985, in part reflecting the effects of dollar depreciation which raised the value of foreign affiliate earnings and assets in terms of dollars, and, in part, due to an increase in new investment in the EC, Canada, Latin America and East Asia; and
- a greater emphasis on global planning, including cross-border mergers and acquisitions among many of the world's large and medium-sized corporations in their efforts to meet increased competition.<sup>17</sup>

During the 1980s, the stock of direct investment increased at an average annual rate of 12.2 percent, while world trade increased at an average annual rate of 5.4 percent and world

---

<sup>17</sup> *United States Department of Commerce, Recent Trends in International Direct Investment, August 1992, pp. 2-3.*

output at an average annual rate of 2.8 percent.<sup>18</sup> The view has been expressed that the faster growth rate of direct investment during the 1980s suggests that not only are multinational corporations increasing their share of world trade and output, but that the interaction between foreign direct investment, international trade, technology transfer and financial flows is more intense, with important implications for the competitiveness of both home and host countries. Economic, regulatory, and tax policies which hinder the operations of multinational corporations may constrain the economic growth of both home and host country economies by restraining technology transfer, capital investment, profits, employment and trade.

---

<sup>18</sup> *United States Central Intelligence Agency, Directorate of Intelligence, Handbook of Economic Statistics, 1991, p. 26.*

## 5. Intra-Firm Trade

Intra-firm trade, defined as the exchange of goods and services between affiliated international firms within a multinational enterprise, can be directly related to foreign direct investment flows. Intra-firm trade is a significant and integral component of the globalization of economic activities and the foreign direct investment boom in the 1980s was seen as a strong indication of the increasing globalization process.

Intra-firm trade data, a subset of international trade statistics, are not captured by traditional customs documentation and, generally, can only be tabulated through surveys at the firm level. However, this information is still difficult to obtain given the natural reluctance of firms to reveal this type of off-market internal transactions, especially the release of transfer price data. Detailed data then is understandably scarce and limited to a few countries including the U.S., Japan and the United Kingdom.<sup>19</sup>

The available intra-firm data for the U.S. indicates that over one-third of U.S. exports and 40 percent of U.S. imports is accounted for by intra-firm trade. Between 1977 and 1989, the share of U.S. exports and imports accounted for by intra-firm trade has remained relatively unchanged. On an industry basis, intra-firm trade is concentrated in the machinery, electric/electronic equipment and transportation equipment sectors.<sup>20</sup>

For Japan and the United Kingdom, the intra-firm export share of total exports is comparable to U.S. shares.<sup>21</sup> Japanese intra-firm exports are concentrated in the electrical machinery and transportation equipment sectors. In the transportation equipment sector, intra-firm trade is characterized by exports of motor vehicle parts and components to foreign affiliate assembly operations, a direct result of foreign direct investment by Japanese automakers.<sup>22</sup>

An examination into Canadian intra-firm trade reveals the impact of the significant bilateral trade flows with the United States. As shown in Table 7, U.S. exports to Canadian affiliates accounted for 37.4 percent of total U.S. intra-firm exports in 1989, up from 34.9 percent in 1982 but down from 42.9 percent in 1977. In 1989, U.S. intra-firm exports to Canada of 37.4 percent constituted the largest intra-firm export share. Europe was second with 31.5 percent of U.S. intra-firm exports while Japan and Mexico accounted for 7 percent each. The fall in Canada's intra-firm export share since 1977 has been reflected in increased shares for both Japan and Mexico, up from 2.4 and 2.5 percent, respectively, in 1977. A product breakdown of U.S. intra-firm exports to Canada reveals that of the overall 37.4 percent Canadian share, a 22.4 percent share is attributable to motor vehicle intra-firm exports and a further 7.6 percent share to machinery and equipment intra-firm exports.

---

<sup>19</sup> For a more detailed discussion on the problems and limitations of intra-firm trade data, the reader is directed to OECD, *Intra-Firm Trade Study*, TC/TC/WP(92)68/REV1, December 1992, pp. 9-10.

<sup>20</sup> OECD, *Intra-Firm Study*, op. cit., pp. 10-11.

<sup>21</sup> OECD, *The Activities of Multinational Enterprises and Their Effects on International Trade*, TD/TC/WP(91)43, July 1991, p. 19.

<sup>22</sup> OECD, *Intra-Firm Study*, op. cit., p. 16.

Table 7

**U.S. Merchandise Trade of U.S. Parents and Majority Owned Foreign Affiliates  
by Country of Affiliate**  
(1977, 1982, 1989 - Billions of U.S. Dollars, Percentages)

Year	Canada	Europe	Mexico	Japan	Rest of World	Total
(U.S. Exports - Billions of U.S. Dollars )						
1977	12.6	9.5	0.7	0.7	5.8	29.3
1982	15.5	15.2	2.1	1.5	10.1	44.3
1989	32.1	27.0	6.0	6.0	14.6	85.6
(U.S. Exports - Percentages )						
1977	42.9	32.3	2.5	2.4	19.9	100.0
1982	34.9	34.2	4.7	3.3	22.8	100.0
1989	37.4	31.5	7.0	7.1	17.0	100.0
(U.S. Imports - Billions of U.S. Dollars )						
1977	11.0	3.3	0.4	0.3	15.8	30.9
1982	16.6	3.9	1.6	0.8	15.7	38.5
1989	32.5	13.0	6.4	2.0	18.5	72.4
(U.S. Imports - Percentages )						
1977	35.5	10.8	1.3	1.1	51.2	100.0
1982	43.0	10.2	4.0	2.0	40.8	100.0
1989	44.9	18.0	8.9	2.7	25.6	100.0

Source: OECD, *Intra-firm Trade Study*, 1992, pp. 33-34.

On the import side, U.S. intra-firm imports from Canada accounted for 44.9 percent of total U.S. intra-firm imports, of which motor vehicle intra-firm imports accounted for a 29.8 percent share. Europe was a distant second at 18.0 percent of U.S. intra-firm imports, with Mexico at 8.9 percent and Japan at 2.7 percent. The growth of Canada's imports share from 35.5 percent in 1977 to 43.0 percent in 1982 was also mirrored by Mexico (1.3 percent in 1977, 4.0 in 1982) and to a lesser extent Japan (1.1 percent in 1977, 2.0 percent in 1982). Since 1977, Canada, Europe, Mexico and Japan increased their U.S. intra-firm import share by over 25 percentage points.

Canada, as shown, occupies a very unique position in the U.S. intra-firm trade picture, accounting for the largest levels of U.S. intra-firm exports and imports. Furthermore, an analysis of the intra-firm trade flows between parents and affiliates in Canada and the U.S. reveals a significant difference in the intra-firm trade ratios of sales of parents to affiliates compared to sales of affiliates to parents. The ratio of U.S. parents' exports to Canadian

affiliates compared to U.S. parents' imports from Canadian affiliates was 1:1 (U.S. \$32.1 billion/U.S. \$32.5 billion). Conversely, the ratio of Canadian parents' exports to U.S. affiliates compared to Canadian parents' imports from U.S. affiliates was 5:1 (U.S. \$7.2 billion/U.S. \$1.4 billion).<sup>23</sup> As shown earlier, a large portion of the Canada-U.S. intra-firm trade flows can be attributed to the impact of the Canada-U.S. Automotive Pact. Canadian studies have also shown the importance of intra-firm trade to Canadian exporters and importers. For the manufacturing sector, an Investment Canada study estimates that, in 1988, about 15 percent of the imports of Canadian-controlled manufacturing industries is accounted for by intra-firm trade, while 63 percent of the imports of foreign-controlled manufacturing firms are intra-firm trade.<sup>24</sup>

A study by the Conference Board of Canada revealed some of the motivating factors driving Canada-U.S. intra-firm trade. The analysis was based on a recent Conference Board of Canada survey of over 1,000 firms in Canada on intra-firm trade, including both Canadian parent corporations with U.S.-based subsidiaries (250 firms) and Canadian-based subsidiaries of U.S.-based parent corporations (750 firms).

The main motivating factors driving Canada-U.S. intra-firm trade cited by respondents included:

- corporate strategy:
  - the overall production strategy of the corporation to locate plants in different North American locations allows flexibility in production runs and production switching depending on product demand patterns;
  - strategic rationalization by the firm, eliminating duplication of production in Canadian operations, mainly due to the multinational enterprise's worldwide production strategy; and,
  - product mandates replacing geographic mandates with particular proprietary knowledge at the firm level in Canada, resulting in Canadian operations fulfilling a specific product mandate for the entire corporation.
- cost advantages:
  - the use of intra-firm trade reduces transaction costs for the corporation and product rationalization results in economies of scale through reduced costs.

---

<sup>23</sup> OECD, *Intra-Firm Study*, op. cit., p. 14. The first ratio is heavily influenced by integrated automotive trade by the Big 3 and may overstate the value of Canadian affiliate exports to the U.S. (due to high U.S. content in vehicles assembled in Canada). The second ratio seems to provide good evidence that direct investment abroad can sustain healthy export flows from the home country.

<sup>24</sup> R. Corvari and R. Wisner, *Foreign Multinationals and Canada's International Competitiveness*, August 1992, p. 62.

---

- internal supply lines:
  - intra-firm trade means internal supply lines for corporations, resulting in better control over quality and specifications, reliability of supply and the efficient integration of the affiliate into the corporation's distribution network.<sup>25</sup>

An informal survey by the author of a number of Canadian corporations with operations in the U.S. and offshore revealed no general pattern to the sourcing of inputs or capital equipment, locally or offshore (Canada or elsewhere), when affiliate operations were established. The relative costs of sourcing of inputs or capital equipment were evaluated by the parent on a project-by-project basis and generally reflected the major factors influencing the investment. For example, if reducing labour costs was a major factor influencing the location of an offshore affiliate, then the sourcing of inputs and capital equipment would be based on availability either locally or offshore. However, if reducing labour costs was the most important factor in the location decision, then offshore sourcing was generally the normal practice. Other factors that were identified as influencing the sourcing decision were the establishment of operations to be closer to suppliers because of significant transportation costs or specific supplier expertise, and locating intermediate goods production closer to the production site of the final good.

---

<sup>25</sup> S. Krajewski, *Intrafirm Trade the New North American Business Dynamic*, 1992, pp. 2-3.

## 6. The Canadian Experience

### 6.1 Foreign Direct Investment in Canada

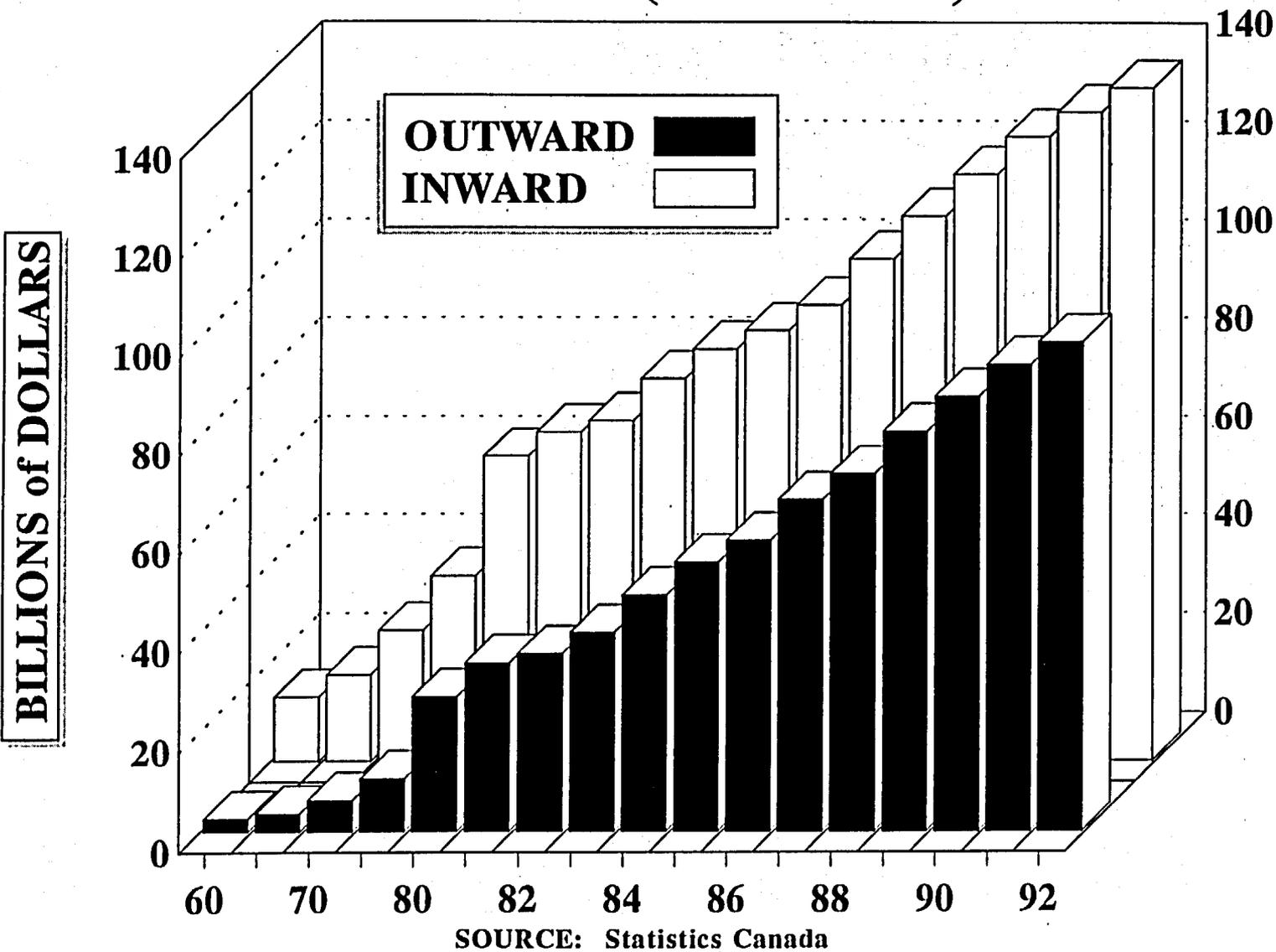
In 1992, the stock of Foreign Direct Investment<sup>26</sup> in Canada was \$136.6 billion, a 3.8 percent increase over 1991 levels (see Chart 4). As shown below in Table 8, the rate of growth in FDI in Canada has slowed since 1987 when it peaked at 10.2 percent. Over the eighties, the average annual growth in FDI in Canada was 7.6 percent, as compared to 8.5 percent in the seventies, 7.3 percent in the sixties and 12.9 percent in fifties.

Year	Foreign Direct Investment In Canada (\$ Billions)	Annual Percentage Change (%)
1930	2.4	—
1945	2.8	—
1950	4.1	10.8
1960	13.6	8.8
1970	27.4	8.7
1980	64.7	13.9
1981	70.3	8.7
1982	72.8	3.4
1983	77.4	6.3
1984	83.4	7.8
1985	87.2	4.6
1986	92.4	6.0
1987	101.8	10.2
1988	110.5	8.5
1989	119.0	7.7
1990	126.6	6.4
1991	131.6	3.9
1992	136.6	3.8

*Source: Statistics Canada*

<sup>26</sup> Direct investment, as defined by Statistics Canada, represents the investment which allows an investor to influence or to have a voice in the management of an enterprise. For operational purposes, a direct investor usually has an ownership of at least 10 percent of the equity in an enterprise; all long-term claims of the enterprise with the direct investor are classified as direct investment. Direct investment reflects the values measured from the books of the issuing companies.

### Chart 4 Canada's Direct Investment Position Selected Years (1960 - 1991)



The change in the annual stock of FDI in Canada results from the two main factors, net capital flows of direct investment and the net change in reinvested earnings and other factors<sup>27</sup>. Over the 1983-1989 period, Investment Canada estimated that net capital flows of direct investment were not the most important factor contributing to the stock of FDI in Canada, accounting for 26 percent of the growth in stock. Reinvested earnings and other factors (mainly the revaluation of the book value of foreign direct investment after an ownership change) accounted for 74 percent of the growth in the stock of FDI in Canada. However, over the 1986-1989 period, the relative importance of net capital flows of direct investment increased significantly, accounting for 44 percent of the growth in the FDI stock in Canada.<sup>28</sup>

Since 1990, there has been a dramatic decline in the value of the net change in the retained earnings and other factors. Over the 1986-1989 period, the average annual contribution to the stock of FDI in Canada by retained earnings and other factors was \$4.7 billion, while the average annual contribution to FDI stock by net capital flows of direct investment was \$3.2 billion. For the 1990-1992 period, the average annual contribution of retained earnings and other factors fell dramatically to under \$100 million. Over the same period, the average annual contribution of net capital flows of direct investment increased significantly to \$5.8 billion and accounted for almost 100 percent of the increase in the stock of FDI in Canada.<sup>29</sup>

The U.S. continues to be the major source of FDI in Canada. In 1992, FDI from the U.S. rose to \$87.3 billion, a 4.2 percent increase, and accounted for 63.9 percent of all FDI in Canada. However, as shown in Table 9, the U.S. share of FDI in Canada has declined since 1984 from 76 percent to just under 64 percent in 1990. Over the last three years, the U.S. share has remained constant with an approximate 64 percent share. While the U.S. share fell during the eighties, the country share of most other major FDI sources in Canada has risen. For example, the U.K. share grew from 9.8 percent to 14.2 percent in 1990 (although more recently declining to 12.5 percent). Germany and France have increased their shares by approximately 1.5 percentage points over the 1984-1991 period, while the share of other European countries have grown by 2.3 percentage points. Over the same period, Japan and Hong Kong have also increased their shares by 1.8 and 1.5 percentage points respectively.

---

<sup>27</sup> *Statistics Canada defines other factors to include revaluations, reclassification of investment to and from direct investment, differences between book and market values, exchange rate variations and any other differences in capital flows between those measured in the balance of payments statistics and those reflected in the international investment position statistics.*

<sup>28</sup> *Investment Canada, International Investment: Canadian Developments in a Global Context, 1991, Chart 22.*

<sup>29</sup> *Statistics Canada, Canada's International Investment Position, 1992, Table 46, p. 131.*

**Table 9**  
**Foreign Direct Investment in Canada by Selected Countries**

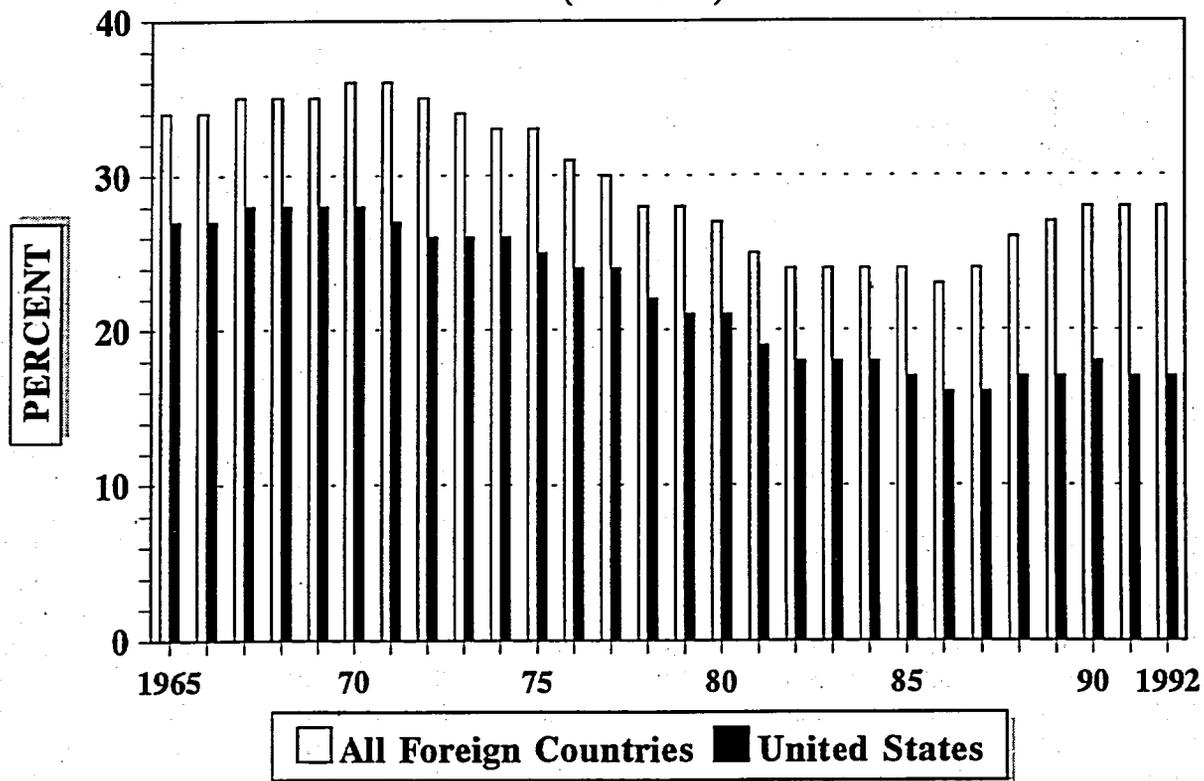
Year	United States	United Kingdom	Germany	France	Other Europe	Japan	Hong Kong	Other Countries	Total
(\$ Billions)									
1960	11.2	1.6	0.1	0.1	0.5	—	—	0.1	13.6
1970	22.1	2.6	0.4	0.5	1.4	0.1	—	0.3	27.4
1980	50.4	5.8	1.8	1.3	3.5	0.6	0.1	1.2	64.7
1981	53.8	6.6	2.0	1.3	4.2	1.0	0.1	1.3	70.3
1982	54.5	7.1	2.0	1.4	4.9	1.3	0.1	1.5	72.8
1983	58.4	7.8	1.9	1.3	4.1	1.6	0.1	2.2	77.4
1984	63.4	8.2	2.1	1.3	4.6	1.8	0.2	1.8	83.4
1985	66.0	8.5	2.2	1.5	5.0	1.9	0.2	1.9	87.2
1986	67.0	11.2	2.5	1.7	4.8	2.3	0.4	2.5	92.4
1987	71.8	12.7	3.1	1.8	5.5	2.5	0.6	3.8	101.8
1988	73.7	16.1	3.4	2.2	6.9	3.1	1.0	4.1	110.5
1989	78.2	16.4	3.6	3.5	8.3	4.1	1.1	3.8	119.0
1990	80.9	18.0	4.9	3.9	9.3	4.1	1.3	4.2	126.6
1991	83.8	17.1	5.2	3.9	10.3	5.3	2.3	3.7	131.6
1992	87.3	17.1	N/A	N/A	N/A	5.6	N/A	N/A	136.6
(% of Total)									
1960	82.3	11.7	0.7	0.7	3.9	—	—	0.7	100.0
1970	80.7	9.5	1.5	1.8	5.1	0.4	—	1.0	100.0
1980	77.9	9.0	2.8	2.0	5.4	0.9	0.2	1.8	100.0
1981	76.5	9.4	2.8	1.8	6.0	1.4	0.1	2.0	100.0
1982	74.9	9.8	2.7	1.9	6.7	1.8	0.1	2.1	100.0
1983	75.5	10.1	2.5	1.7	5.3	2.1	0.1	2.8	100.0
1984	76.0	9.8	2.5	1.6	5.5	2.2	0.2	2.2	100.0
1985	75.7	9.7	2.5	1.7	5.7	2.2	0.2	2.2	100.0
1986	73.1	12.1	2.7	1.8	5.2	2.5	0.4	2.7	100.0
1987	70.5	12.5	3.0	1.8	5.4	2.5	0.6	3.7	100.0
1988	66.7	14.6	3.1	2.0	6.2	2.8	0.9	3.7	100.0
1989	65.7	13.8	3.0	2.9	7.0	3.4	0.9	3.2	100.0
1990	63.9	14.2	3.9	3.1	7.3	3.2	1.0	3.3	100.0
1991	63.7	13.0	4.0	3.0	7.8	4.0	1.7	2.8	100.0
1992	63.9	12.5	N/A	N/A	N/A	4.1	N/A	N/A	100.0

N/A - Not Available

Source: Statistics Canada

An examination of foreign control of corporate assets in Canada<sup>30</sup> reveals that the percentage of corporate assets of non-financial industries controlled by foreign interests declined significantly over the 1971-1986 period, but has risen modestly over the recent past. As shown in Chart 5, the percentage of foreign-controlled corporate assets peaked in 1971 at 36 percent and fell steadily to 23 percent in 1986. Since 1986, the percentage of foreign-controlled assets rose to 28 percent in 1990 and has remained steady at that level for the past three years. The decline in foreign control was due to a decline in the U.S. control of Canadian corporate assets. From a peak of 28 percent in 1971, the U.S. control of corporate assets fell to 16 percent in 1986. The U.S. share has remained constant at 17 percent for the last 5 years. The recent increase in foreign control is the result of the other countries' share almost doubling from 6 percent in 1986 to 11 percent in 1992. This is consistent with the increase in the share of FDI from non-U.S. countries over the latter half of the eighties and the first three years of the nineties.

**Chart 5**  
**Ratio of Foreign Control of Non-Financial Industries in Canada**  
 (1965-1992)



SOURCE: Statistics Canada (Cat. 67-202)

<sup>30</sup> As noted earlier, Statistics Canada defines an enterprise as being foreign-controlled if 50 percent or more of its voting rights are held outside of Canada. In addition, effective control or minority control can result from ownership of the largest block of voting shares. Statistics Canada defines effective control as the ownership of a block of equity which has at least 33 percent of the voting rights and which exceeds the sum of the next two largest blocks.

## 6.2 Canadian Direct Investment Abroad

The stock of direct investment abroad by Canadians increased by 4.9 percent to \$99 billion in 1992. As shown in Table 11, the growth in Canadian direct investment abroad slowed considerably in 1992, registering the lowest rate of increase since 1982. Over the eighties, the average annual growth in Canadian direct investment abroad averaged 14.7 percent. For the first three years in the nineties, average annual growth has declined dramatically to 7 percent. Compared with earlier decades, the growth in the eighties was consistent with the average annual growth in Canadian direct investment abroad in the seventies of 14.7 percent and outpaced growth in the sixties and fifties of 8.5 and 9.8 percent respectively.

**Table 10**  
**Canadian Direct Investment Abroad,**  
**Selected Years**

Year	Canadian Direct Investment Abroad (\$ Billions)	Annual Percentage Change (%)
1930	0.4	—
1945	0.7	—
1950	1.0	11.1
1960	2.5	8.7
1970	6.2	19.2
1980	27.0	31.7
1981	33.8	25.2
1982	35.6	5.3
1983	39.9	12.1
1984	47.4	18.8
1985	54.1	14.1
1986	58.5	8.1
1987	66.8	14.1
1988	72.1	7.9
1989	80.8	12.1
1990	87.9	8.8
1991	94.4	7.4
1992	99.0	4.9

*Source: Statistics Canada*

As discussed earlier for FDI in Canada, the net change in the book value of Canadian direct investment abroad results from the two main factors, net capital flows of direct investment and the net change in reinvested earnings and other factors. Over the eighties, the net capital flows of direct investment abroad were the most important factor contributing to the net change in the book value of Canadian direct investment abroad, accounting for 79.9 percent of the growth in stock. Reinvested earnings and other factors accounted for 20.1 percent of the growth in the stock of Canadian direct investment abroad. However, over the first three years of the nineties, the relative importance of net capital flows of direct investment has fallen, accounting for 70.5 percent of the growth.

Since 1990, there has been a significant increase in the average annual contribution of the net change in the retained earnings and other factors to the net change in the book value of Canadian direct investment abroad. For the 1990-1992 period, the average annual contribution to the stock of Canadian direct investment abroad of reinvested earnings and other factors was \$1.8 billion (\$0.6 billion or 50 percent higher than in the eighties). Over the same period, the average annual contribution of net capital flows of direct investment abroad was \$4.3 billion (\$0.5 billion or 10.4 percent below the average for the eighties).<sup>31</sup>

Consistent with FDI in Canada, the U.S. is the major country for Canadian direct investment abroad. The U.S. share has been declining. In 1992, the U.S. accounted for \$57.8 billion or 58.4 percent of all direct investment abroad, down from 68.6 percent in 1985. The U.K. share of Canadian direct investment abroad has increased significantly from 7.2 percent in 1984 to 13 percent in 1991, before falling back somewhat to 11 percent in 1992. France's share has also increased dramatically from 0.2 percent in 1984 to 1.8 percent in 1991. Japan's 1991 share was also 1.8 percent, up from 0.3 percent in 1984.

---

<sup>31</sup> *Statistics Canada, op. cit., Table 23, p. 93.*

Table 11

Canadian Direct Investment Abroad by Selected Countries

Year	United States	United Kingdom	Germany	France	Other Europe	Japan	Australia	Other Countries	Total
(\$ Billions)									
1960	1.6	0.3	—	—	—	—	0.1	0.4	2.4
1970	3.3	0.6	0.1	0.1	0.3	—	0.2	1.6	6.2
1980	16.8	2.9	0.3	0.3	1.3	0.1	0.7	4.6	27.0
1981	22.4	3.0	0.3	0.3	1.7	0.1	1.0	5.0	33.8
1982	23.8	2.8	0.3	0.2	1.9	0.1	1.0	5.5	35.6
1983	26.6	3.0	0.3	0.2	2.1	0.2	1.0	6.5	39.9
1984	32.2	3.4	0.4	0.1	2.5	0.2	1.0	7.6	47.4
1985	37.1	4.0	0.5	0.2	3.1	0.2	1.0	8.0	54.1
1986	39.4	4.6	0.6	0.4	3.1	0.2	1.1	9.1	58.5
1987	43.4	6.2	0.7	0.6	3.7	0.2	1.3	10.7	66.8
1988	46.5	7.1	0.7	1.5	3.2	0.4	1.8	10.9	72.1
1989	50.3	9.3	0.8	1.7	4.5	0.4	2.1	11.7	80.8
1990	52.8	11.3	0.8	1.7	5.6	0.8	2.3	12.6	87.9
1991	54.6	12.3	0.9	1.7	6.4	1.7	2.1	14.7	94.4
1992	57.8	10.9	N/A	N/A	N/A	1.8	N/A	N/A	99.0
(% of Total)									
1960	66.7	12.5	—	—	—	—	4.2	16.6	100.0
1970	53.2	9.7	1.6	1.6	4.8	—	3.2	25.9	100.0
1980	62.2	10.7	1.1	1.1	4.8	0.4	2.6	17.1	100.0
1981	66.3	8.9	0.9	0.9	5.0	0.3	3.0	14.7	100.0
1982	66.9	7.9	0.8	0.6	5.3	0.3	2.8	15.4	100.0
1983	66.7	7.5	0.8	0.5	5.2	0.5	2.5	16.3	100.0
1984	67.9	7.2	0.8	0.2	5.2	0.4	2.1	16.2	100.0
1985	68.6	7.4	0.9	0.4	5.7	0.4	1.8	14.8	100.0
1986	67.3	7.9	1.0	0.7	5.3	0.3	1.9	15.6	100.0
1987	65.0	9.3	1.0	0.9	5.5	0.3	1.9	16.1	100.0
1988	64.4	9.8	1.1	2.0	4.4	0.6	2.5	15.2	100.0
1989	62.2	11.5	1.0	2.1	5.6	0.5	2.6	14.5	100.0
1990	60.1	12.9	1.0	1.9	6.4	0.9	2.6	14.2	100.0
1991	57.8	13.0	1.0	1.8	6.8	1.8	2.2	15.6	100.0
1992	58.4	11.0	N/A	N/A	N/A	1.8	N/A	N/A	100.0

N/A - Not Available

Source: Statistics Canada

## **6.3 Research Activities**

### **6.3.1 Globalization Information in Statistics Canada**

The Industrial Organization and Finance Division, the International Trade Division and the Balance of Payments Division of Statistics Canada are advancing the analysis on trade and investment linkages by creating a database that will link companies with trade and investment data.

More specifically, Statistics Canada is proposing a record linkage exercise that will provide business-based micro-data on the main external aspects of Canada's economy: trade in goods, trade in services, foreign ownership and control in the Canadian economy and Canadian direct investment abroad. Completing the database will be activity and performance micro-data: income statements, balance sheets and financial ratios.

The information that will be linked to each business includes the following:

- Goods Trade:** Exports by country and commodity.  
Imports by country and commodity.
- Services Trade:** Exports by country and category of services.  
Imports by country and category of services.
- Parent-Subsidiary Relationship:** Canadian direct investment abroad.  
(stock and flow and geographical destination)  
Country of control.  
Ratio of foreign ownership and control of long-term capital abroad.
- Parent-Subsidiary Activity:** Affiliation of trading businesses for services exports and imports.  
(Assessment of data quality on affiliation of trading businesses for goods exports will be carried out.)
- Industry:** Industry code of business (SIC-C).
- Geographical Location:** Geographical area of trade for goods and services exports and imports.  
Provincial designation of the business within Canada.  
(head office and/or operations within each province)
- Activity and Performance Data:** Income Statement and Balance Sheet, financial ratios.

### **6.3.2 Related Analysis and Policy Issues**

The creation of an extensive database providing detailed linkages between businesses and trade and investment performances allows for the analysis and policy considerations of a variety of issues. Statistics Canada has identified the following issues that could be addressed with this data:

- What is the performance (growth, profitability, capitalization, etc.) and characteristics (size, industry/commodity, province) of firms?
  - which are importers? exporters?
  - which have a foreign dimension of ownership and control?
  - which trade internationally?
  - which have no external links?
- Is there a relationship between goods and services trade? Does merchandise trade generate services trade and/or vice-versa? Does this relationship reflect vertical integration of firms? horizontal diversification?
- Is there a strong link between country of control and the country with which a transaction is made? Is there a difference for goods and services trade?
- Do Canadian-controlled businesses invest in the same industry abroad and vice-versa? What are the linkages between trade and foreign investment? Are they alternate forms of delivery of output to a market (perhaps characteristic of an industry) or is the relationship a function of size and age of firms?
- Is there any indication of a substitution between foreign direct investment and exports on an industry basis? For services trade, do parent-subsidiary links encourage imports?
- Is there a substitution between domestic investment on plant and equipment and direct investment abroad? What are the specific factors (input costs, resource availability, market proximity) which influence a corporation's decision on the location of investment in the domestic or foreign market? Is "industry" the key factor in answering these questions?
- What are the implications of the commodity and industry profile of exports, imports and foreign investment to the Canadian economy in terms of income generated, employment, etc.?
- Is there a concentration of any of these foreign activities in a relatively small number of firms?
- What are the geographical dimensions (international and provincial) of foreign direct investment (sources and destination), exports and imports?

## **7. Policy Considerations**

Some broad policy considerations can be addressed given the linkages between foreign direct investment and trade discussed above. In general terms, three broad categories can be identified for government policy. These include: Canada as a host country attracting foreign direct investment; Canada as an outward investing country; and Canada as a trading nation in world markets.

### **7.1 Canada as a Host Country Attracting FDI**

Presently, the literature and current analysis have shown that FDI confers considerable benefits to host economies. FDI makes goods and services available at lower prices and/or larger amounts than was possible before the investment. It functions as a conduit for the flow of skills, information, technology and other know-how. FDI intensifies competition and accelerates the rate of innovation in local markets. Although all of the above benefits may not be present in each and every case of FDI, their absence does not mean the FDI should not be allowed.

With regard to host economies and trade policies, a number of factors become important when discussing potential trade policy options. First, the trade impact of FDI on the host economy cannot be predetermined, because FDI interacts with the host economy environment. The interaction of the FDI and the host economy will determine what will be the trade impacts. Although the characteristics of the host economy and the firms are important, they will not solely responsible for determining the trade impacts.

Second, the trade policy environment of the host economy can influence the export performance of multinationals investing and operating in the host economy. Trade orientation is low in economies which promote import substitution such that exports are penalized, either directly or indirectly. Conversely, studies have shown that open economies tend to attract trade-oriented FDI. As noted earlier, the potential exists for FDI into tariff-protected sectors of the host economy to result in a misallocation of resources and suboptimal welfare levels. Thus, the benefits of an open trading environment cannot be overemphasized, especially when one is considering the impacts of FDI on host economies.

Third, government domestic policies have an important role in attracting FDI. The domestic policy environment should be one of neutrality or non-discrimination. More specifically, the neutrality condition implies the equal treatment of foreign and domestic firms, prohibiting such practices as special reporting requirements for foreign owned firms and local content requirements. In addition, there should be neutrality between trade and investment policies. Trade and investment policies should be evaluated on the basis of the potential introduction of distortions which would affect investment or trade.

Fourth, the domestic policies of the host government can complement the promotion of an open trading environment through the provision of public goods such as infrastructure, information, and education. The evidence shows that multinationals prefer to operate in economic environments where the production of these goods is a high priority for the domestic authorities. Indeed, the transfer of intangible assets (knowledge, skills, management and production techniques, etc.), a primary benefit of FDI, would appear to be much more easily realized in such environments. In short, the provision of adequate levels of public goods in conjunction with a policy approach emphasizing open and unrestrictive domestic markets would be the best incentive to attract FDI.

Fifth, as noted in an earlier section, the transfer of intangible assets is viewed in some analyses as providing more positive impacts on a host's economy than capital transfers. Thus, an investment policy environment emphasizing the transfer of technology and other intangibles can also be promoted. However, the design of the policy incentives should take into consideration the neutrality condition for trade and investment policies and be complementary to the policies focused on providing public goods.

For Canada, the government should continue to promote trade liberalizing policies, evaluate trade and investment policies on a neutrality or non-discrimination basis, and maintain a high priority for infrastructure development and maintenance, the efficient exchange of information and education and training.

## **7.2 Canada as an Outward Investing Country**

As shown earlier, Canada has not only been successful at attracting FDI, but has also become a source for outward FDI. Outward FDI is often the result of changing locational comparative advantage patterns. As such, the investing economy may develop problems related to structural adjustments. The primary problems include: the immediate loss of jobs that may occur as a result of production transferred offshore; the possible loss of export markets abroad; and the loss of domestic market share to increased imports from foreign affiliates abroad. Yet, the evidence for the United States shows that outward FDI has not led to loss of export markets abroad and that increased multinational trade has not appreciably worsened the United States trade balance.<sup>32</sup> Indeed, an examination of intra-firm trade between Canada and the U.S. showed that Canadian parent corporations exported 5 times the amount of goods to U.S. affiliates as compared to the imports by Canadian parents from their U.S. affiliates. Therefore, the problem is not so much loss of economic opportunity, but rather restructuring or adjustment to that opportunity.

Thus, an important policy response for the investing economy would be to adopt policies which facilitate smooth adjustment, especially in the labour market. Structural adjustment is inevitable and attempts to insulate and protect the investing economies will

---

<sup>32</sup> See *United States Department of Commerce, Bureau of Economic Analysis (1983, 1985) and Ramstetter (1987)*.

reduce the options available to deal with adjustment. It follows that restrictions on outward FDI should also be avoided for the same reason.

### **7.3 Canada as a Trading Nation in World Markets**

The existence of an increasingly open international trading environment is an important reason why Canada and industrialized nations in general and, more recently, the newly industrializing economies have been able to simultaneously benefit from trade and FDI in the post-Second World War era. If trade protectionism increases, then the benefits arising from the exploitation of locational advantages by multinationals and the international transmission of these benefits through trade could be severely curtailed.

On the investment side, Canada has participated in and benefited from FDI flows, both as a host and as an investing economy. To continue to participate in and benefit from FDI flows, Canadian policy makers need improved access and information on international investment policies to construct effective policy frameworks which will attract investment, promote efficient production in Canada and assist Canadian investors abroad. To achieve a more open environment for FDI, it is desirable to increase the transparency of international FDI policies. International transparency exists for trade, as contracting parties of the GATT are required to submit their trade policies for review on a regular basis. Although a number of international agencies and organizations are collecting information on investment, there is no one organization that collects information for all countries on FDI policies. The GATT Uruguay Round negotiations has included negotiations on investment measures, but only those that have an immediate trade effect.

The United Nations Centre on Transnational Corporations has recommended a FDI policy review mechanism similar to the GATT Trade Policy Review. The benefits of such a review would be to increase the transparency in international FDI policies, which would provide a more open environment for FDI, provide host countries with better bargaining positions vis-à-vis foreign investors, reduce competition among host countries for investment projects, allow host countries to estimate the costs and benefits of direct investments better and increase the stability of FDI policies. The policy review could cover all aspects of FDI including: FDI policy statements, laws, regulations, administrative guidelines, bilateral investment treaties, double taxation treaties, technology transfer and the repatriation of earnings. Additional policies that could be included which would also have an impact on direct investment decisions are: employment laws and regulations, the environment and intellectual property rights.<sup>33</sup> Although the OECD does have agreements which provide some discipline with respect to the treatment of foreign investors, they are not agreements about FDI liberalisation, nor are they backed up by GATT's dispute settlement procedures. However, the OECD has recently begun a new programme of periodic examinations of each member's FDI laws, regulations and policies, and corporate rules and practices. These examinations will also

---

<sup>33</sup> *United Nations Centre on Transnational Corporations, World Investment Report 1992. Transnational Corporations as Engines of Growth. 1992, pp. 292-294.*

lead to the development of recommendations to members and provide for monitoring implementation. Canada, Mexico and the U.S., for their part, have agreed in the NAFTA to a comprehensive and transparent investment framework (Chapter 11) that should help to ensure that North America remains an attractive site for international investment.

Against a background of increasing pressure to open up domestic markets to trade and competition for direct investment, Canada should continue to support and promote multilateral trade liberalization policies and increased transparency in international FDI policies. The establishment of an FDI policy review mechanism similar to the GATT Trade Policy Review would focus attention on international FDI policies with the objective of increasing transparency.

## **ANNEX: An Ownership-Based Trade Measure**

An ownership-based trade measure expands the measurement of trade performance and competitiveness beyond the traditional balance of payments measurements. The alternative measure of trade performance is based on translating export and import data into "foreign sales" and "foreign purchases" data. This alternative measure is based on the assumption that a firm can supply an external market through exports or by relocating of its production through direct investment and local sales. The results will then be on an ownership basis rather than a residency basis.

The construction of an ownership-based measure of the economic transactions between countries has to include the way a country's firms, domestic or off-shore, penetrate foreign markets, that is, through exports/imports and through the local sales/purchases of foreign-owned firms. Problems arise when FDI-related trade which could be present in both measures is double-counted. For example, a foreign-owned firm operating in Canada imports components from the investor country, assembles the components into product in Canada and sells them domestically. These components could be double-counted since they are included both in the investing countries' exports to Canada and in the local sales of the foreign-owned firms in Canada.

The organizing principle is to convert traditional import and export figures into measures of "foreign purchases" and "foreign sales" which assign transactions according to nationality of ownership rather than residency. The intent is to create a measure that reflects the fact that a firm can choose to supply a foreign market either by exporting to it or by investing in it and selling locally. Such ownership-based measures should be insensitive to shifts in foreign strategy by individual firms.

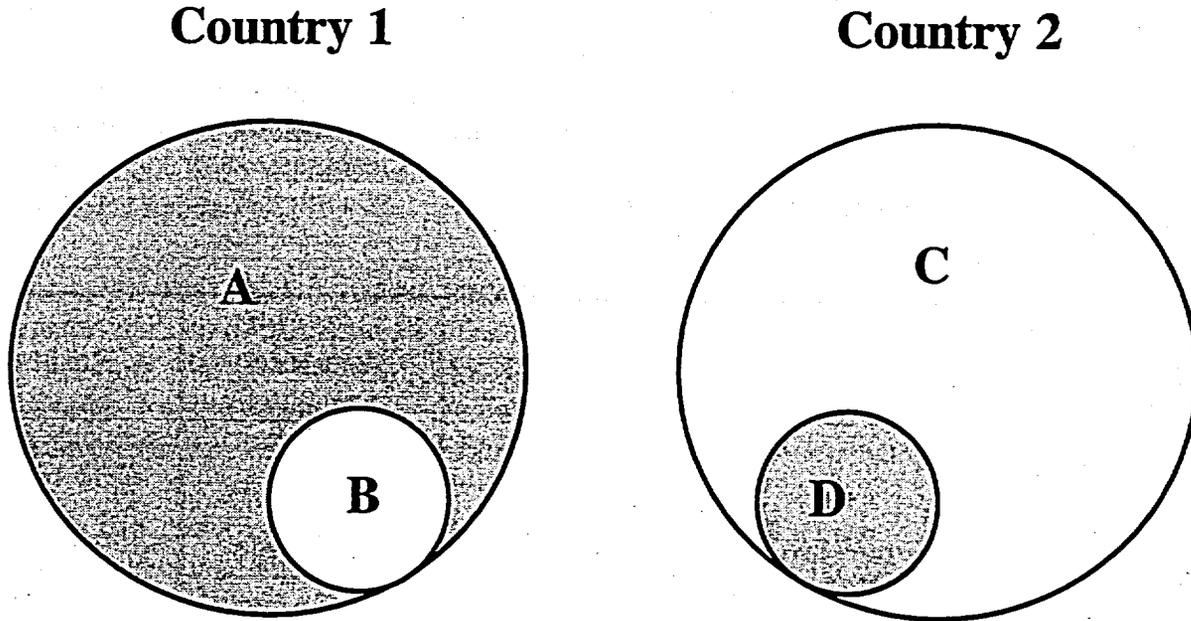
The basic procedure is to subtract FDI-related trade from the traditional trade measures to avoid double-counting and to add the local sales/purchases of foreign-owned firms. Figure 1 illustrates a world with only 2 countries and domestic and foreign-owned firms. In this two-country world, the foreign-owned firms operating in Country 1 are owned by domestic investors in Country 2 and vice versa. From Figure 1, the exports of Country 1 on the traditional residency basis can be written as:

EXPORTS = (Country 1, Residence)	Shipments from domestically-owned firms and consumers (A) to Domestically-owned firms and consumers in Country 2 (C) plus	AC +
	Shipments from domestically-owned firms and consumers (A) to Foreign-owned firms in Country 2 (D) plus	AD +
	Shipments from Foreign-owned firms (B) to Domestically-owned firms and consumers in Country 2 (C) plus	BC +

Shipments from Foreign-owned firms (B) to  
Foreign-owned firms in Country 2 (D).

BD

Figure 1: A Two-Country World With Foreign-Owned Firms



where A = Country 1: Domestically-owned firms and consumers  
 B = Country 1: Foreign-owned firms  
 C = Country 2: Domestically-owned firms and consumers  
 D = Country 2: Foreign-owned firms

Source: Julius (1990)

The exports for Country 1 on an ownership basis would include all foreign sales by A and D, thus:

EXPORTS = (Country 1, Ownership)	Shipments from domestically-owned firms and consumers (A) to Domestically-owned firms and consumers in Country 2 (C) plus	AC +
	Shipments from domestically-owned firms and consumers (A) to Foreign-owned firms in Country 1 (B) plus	AB +
	Shipments from Foreign-owned firms in Country 2 (D) to Domestically-owned firms and consumers in Country 2 (C) plus	DC +

Shipments from Foreign-owned firms (D) to  
Foreign-owned firms in Country 2 (B).

DB

Figure 2: Summary Matrix of Residence- And Ownership-Based Trade Measures

		TO			
		A	B	C	D
FROM		Domestically-owned firms and consumers (Country 1)	Foreign-owned firms (Country 1)	Domestically-owned firms and consumers (Country 2)	Foreign-owned firms (Country 2)
		A	Domestically-owned firms and consumers (Country 1)	—	Ownership
B	Foreign-owned firms (Country 1)	Ownership	—	Residence	Residence Ownership
C	Domestically-owned firms and consumers (Country 2)	Residence Ownership	Residence	—	Ownership
D	Foreign-owned firms (Country 2)	Residence	Residence Ownership	Ownership	—

Source: Julius (1990)

Imports on a residence- and ownership-basis are defined in a similar way:

IMPORTS (Country 1, Residence) = (CA + DA) + (CB + DB) and

IMPORTS (Country 2, Ownership) = (CA + BA) + (CD + BD).

The relationship between residence-based measures and ownership-based measures is summarized in Figure 2. The "Residence" cells indicates that transactions between the coordinates of that cell are included in the residence-based measure. "Residence, Ownership"

cells indicate inclusion in both measures. "Ownership" cells are included in the ownership-based measure.

In two of the cells, BD (Sales of foreign-owned firms in Country 1 to foreign-owned firms in Country 2) and DB (Sales of foreign-owned firms in Country 2 to foreign-owned firms in Country 1), the transaction is included in both residence- and ownership-based trade measures, but in one case the sale is considered an export, while in the other it is an import. This is the most counterintuitive element of the ownership-based measures; i.e., when a good crossing the border into a country is considered an export of that country. What is important on an ownership basis is the change of country of ultimate ownership of the good, not its change of location. Although these two cells highlight the difference in the two measures more starkly than the others, in practice both BD and DB are probably insignificant, as mentioned above.<sup>34</sup>

The traditional residence-based trade measures, exports and imports, can be transformed into ownership-based trade measures, foreign sales and foreign purchases. The definition of foreign is the key to the difference in the two trade measures. For residence-based measures, foreign means across the border, regardless of ownership. For ownership-based measures, foreign refers to the dominant ownership of the firm making the sale.

The ownership-based measure of foreign sales for Country 1 (EXPORTS, Country 1, Ownership) can be expressed in terms of its residence-based measure (EXPORTS, Country 1, Residence) as follows:

$$\begin{aligned}
 \text{EXPORTS (Country 1, Ownership)} = & \text{EXPORTS (Country 1, Residence) minus} \\
 & \text{Shipments from domestically-owned firms and consumers (A) to} \\
 & \text{Foreign-owned firms in Country 2 (D) plus} \quad \text{(AD +} \\
 & \text{Shipments from Foreign-owned firms (B) to} \\
 & \text{Domestically-owned firms and consumers in Country 2 (C) plus} \quad \text{BC) +} \\
 & \text{Shipments from domestically-owned firms and consumers (A) to} \\
 & \text{Foreign-owned firms in Country 1 (B) plus} \quad \text{(AB +} \\
 & \text{Shipments from Foreign-owned firms in Country 2 (D) to} \\
 & \text{Domestically-owned firms and consumers in Country 2 (C) minus} \quad \text{DC) -}
 \end{aligned}$$

<sup>34</sup> Julius, *op. cit.*, p. 79.

Shipments from Foreign-owned firms (B) to Foreign-owned firms in Country 2 (D). (BD +

Shipments from Foreign-owned firms (D) to Foreign-owned firms in Country 1 (B). DB)

or

**EXPORTS** = **EXPORTS** minus (AD + BC) plus (AB + DC) minus (BD - DB).  
(Country 1, (Country 1,  
Ownership) Residence)

The first set of parentheses is the FDI-related trade included in the exports of Country 1 on a residence basis. The second set includes the local sales by Country 1's firms and workers to foreign-owned firms in Country 1 (AB) and the local sales of its own firms in their host economies (DC). The final set of parentheses represents transactions between foreign-owned firms abroad and those in their home countries, which is assumed to be zero both for imports and for exports. Data on it are not available, but this assumption is unlikely to introduce a significant or systematic distortion to the estimates developed below.<sup>35</sup>

Ownership-based foreign purchases can also be expressed in terms of their residence-based imports as:

**IMPORTS** = **IMPORTS** minus (DA + CB) plus (BA + CD) minus (DB - BD).  
(Country 1, (Country 2,  
Ownership) Residence)

Table A.1 shows the estimates of ownership-based trade measures for the U.S. and Japan. For the United States, foreign sales (exports, ownership-based) are more than five times as large as exports (exports, residence-based), while foreign purchases (imports, ownership-based) are almost three times as large as imports (imports, residence-based). Thus the ownership-based measures show a much greater degree of integration of the U.S. economy with the rest of the world than do traditional trade measures. For Japan, foreign sales are 1.7 times exports and foreign purchases are 1.7 times imports. Despite its large trade presence, the smaller degree of integration of the Japanese economy, relative to the U.S., comes through in its ownership-based measures. Foreign sales represented 27% of U.S. gross national product in 1986, compared with 21% for Japan in 1983. In the same years, U.S. exports were 5.3% of GNP while Japanese exports were 12% of its GNP.<sup>36</sup>

---

<sup>35</sup> Julius, *op. cit.*, p. 80.

<sup>36</sup> Julius, *op. cit.*, pp. 80-81.

Table A.1

**OWNERSHIP-BASED TRADE MEASURES FOR THE U.S. AND JAPAN**  
*(Billions of U.S. Dollars)*

	U.S. (1986)	Japan (1983)
<b>Foreign Sales (Exports, Ownership-Based)</b>		
Exports (Exports, Residence-Based) (1)	224.0	145.7
Less: FDI-Related Exports to Foreign-Owned Firms Abroad (AD)	-71.7	-55.4
FDI-Related Exports by Local Foreign-Owned Firms (BC)	-51.5	-4.4
Plus: Local Sales to Local Foreign-Owned Firms (AB)	+267.0	+2.9
Local Sales by Foreign-Owned Firms Abroad (DC)	+777.0	+150.0
<b>Total Foreign Sales (2)</b>	<b>1,144.8</b>	<b>238.8</b>
<b>Foreign Purchases (Imports, Ownership-Based)</b>		
Imports (Imports, Residence-Based) (3)	368.4	114.1
Less: FDI-Related Imports by Foreign-Owned Firms Abroad (DA)	-66.3	-45.6
FDI-Related Imports to Local Foreign-Owned Firms (CB)	-125.2	-19.4
Plus: Local Purchases from Local Foreign-Owned Firms (BA)	+445.0	+58.0
Local Purchases by Foreign-Owned Firms Abroad (CD)	+446.2	+90.0
<b>Total Foreign Purchases (4)</b>	<b>1,088.1</b>	<b>197.1</b>
Net Foreign Sales (2)-(4)	+56.7	+41.7
Net Exports (1)-(3)	-144.4	+31.6

Source: Julius (1990)

## 8. Bibliography

- Bhagwati, J. N., and Tironi E., "*Tariff Change, Foreign Capital and Immisization: A Theoretical Analysis*," *Journal of Development Economics*, vol. 7, No. 1 (March, 1980), pp. 71-83.
- Buffie, E., "*Quantitative Restrictions and the Welfare Effects of Capital Inflows*," *Journal of International Economics*, vol. 19, No. 3-4 (November, 1985), pp. 291-303.
- Cases, F. R., "*Tariff Protection and Taxation of Foreign Capital: The Welfare Implications for a Small Country*," *Journal of International Economics*, vol. 19, No. 1/2 (August, 1985), pp. 181-188.
- Caves, R. E., *Multinational Enterprise and Economic Analysis* (Cambridge: Cambridge University Press, 1982).
- Caves, R. E. and Jones, R. W., *World Trade and Payments: An Introduction* (Boston: Little, Brown and Company, 1985).
- Cohen, B. I., "*Comparative Behaviour of Foreign and Domestic Export Firms in a Developing Economy*," *Review of Economics and Statistics*, vol. 55 (1973), pp. 190-197.
- Cohen, B. I., *Multinational Firms and Asian Exports* (New Haven: Yale University Press, 1975).
- Corvari, R. and Wisner, R., *Foreign Multinationals and Canada's International Competitiveness*, (Ottawa: Investment Canada mimeo, August 1992).
- Evers, B. et al, *Hong Kong: Development and Prospects of a Clothing Colony* (Netherlands Development Research Institute, 1977).
- Feenstra, R. C. ed., *Trade Policies for International Competitiveness* (Chicago: University of Chicago Press, 1989).
- Frank, R. H. and Freeman, R. T., *Distributional Consequences of Direct Investment* (New York: Academic Press, 1978).
- Grossman, G. M. and E. Helpman, *Innovation and Growth in the Global Economy* (Cambridge, Massachusetts: The MIT Press, 1992).
- Hawkins, R. G., *Job Displacement and the Multinational Firm* (Washington, D.C.: Center for Multinational Studies Occasional Paper No. J, 1972).

- Hufbauer, G. C. and Adler, F. M., *Overseas Manufacturing Investment and the Balance of Payments*, (Washington: United States Treasury Department; Tax Policy Research Study No. 1, 1968).
- Investment Canada, *The Business Implications of Globalization* (Ottawa: Investment Canada, 1990).
- Investment Canada, *International Investment and Competitiveness* (Ottawa: Investment Canada, 1991).
- Investment Canada, *International Investment: Canadian Developments In A Global Context* (Ottawa: Investment Canada, 1991).
- Julius, D., *Global Companies and Public Policy* (London: Royal Institute of International Affairs, 1990).
- Khan, M. A., "Tariffs, Foreign Capital and Immiserizing Growth with Urban Unemployment and Specific Factors of Production," *Journal of Development Economics*, vol. 10, No. 2 (April, 1982), pp. 245-256.
- Kojima, K., *Direct Foreign Investment; A Japanese Model of Multinational Business Operations* (London: Croom Helm; New York: Praeger; Tokyo: Tuttle, 1978).
- Krajewski S., *Intrafirm Trade the New North American Business Dynamic*, (Ottawa, Conference Board of Canada, Report 88-92, 1992).
- Kujawa, D., *Employment Effects of Multinational Enterprises: The Case of the United States* (Geneva: International Labour Office Working Paper No. 12, 1979).
- Lall, S. and Streeton, P., *Foreign Investment, Transnationals and Developing Countries* (London: MacMillan, 1977)
- Lipsey, R. E. and Weiss, M. Y., *Exports and Foreign Investment in Manufacturing Industries* (New York: NBER Working Paper 362, 1974).
- Lipsey, R. E. and Weiss, M. Y., "Foreign Production and Exports in Manufacturing Industries", *Review of Economics and Statistics*, vol. 163, (1981), pp. 288-294.
- Lubitz, R., "Direct Investment and Capital Formation" in R.E. Caves and G.L. Reuber, *Capital Transfers and Economic Policy: Canada 1951-62* (Cambridge, Massachusetts: Harvard University Press, 1971).
- Markusen, J. R., "Factor Movements and Commodity Trade as Complements," *Journal of International Economics*, vol. 14, No. 3/4 (May, 1983), pp. 341-355.

- Markusen, J. R., and Svensson L. E. O., "Trade in Goods and Factors with International Differences in Technology," *International Economic Review*, vol. 26, No. 1 (February, 1985), pp. 175-192.
- McFetridge, D. G. ed., *Foreign Investment Technology and Economic Growth* (Calgary: University of Calgary Press, 1991).
- Mundell, R. A., "International Trade and Factor Mobility," *American Economic Review*, vol. 47, No. 3 (June, 1957), pp. 321-335.
- Newfarmer, R. and Marsh, L., *International Interdependence and Development* (Washington D.C.: United States Department of Labor mimeo, 1981).
- Organization For Economic Co-operation and Development, *International Investment and Multinational Enterprises: Recent Trends in International Direct Investment* (Paris: OECD, 1987).
- Organization For Economic Co-operation and Development, *Trade, Investment and Technology In The 1990s* (Paris: OECD, 1991).
- Organization For Economic Co-operation and Development, *International Direct Investment: Policies and Trends in the 1980s* (Paris: OECD, 1992).
- Purvis, D. D., "Technology, Trade, and Factor Mobility," *The Economic Journal*, vol. 82, No. 327 (September, 1972), pp. 991-999.
- Ramstetter, E. D., "The Impacts of Direct Foreign Investment on Host Country Trade and Output: A Study of Japanese and U.S. Direct Foreign Investment in Korea, Taiwan, and Thailand", in S. Naya et al. (eds.), *Direct Foreign Investment and Export Promotion: Policies and Experiences in Asia* (Honolulu and Kuala Lumpur: East-West Center and The South-East Asian Central Banks Research and Training Centre, 1987).
- Rugman, Alan M., *Multinationals and Canada-United States Free Trade* (Columbia, South Carolina: University of South Carolina Press, 1990).
- Slater, D., J. Knubley et al., *The Contribution of Investment and Savings to Productivity and Economic Growth in Canada* (Ottawa: Investment Canada, 1992)..
- Statistics Canada, *Canada's International Investment Position* (Ottawa: Statistics Canada: 67-202, 1993).
- Stern, R. M. ed., *Trade and Investment Relations Among the United States, Canada, and Japan* (Chicago: University of Chicago Press, 1989).

United Nations Centre on Transnational Corporations, *Trends and Issues in Foreign Direct Investment and Related Flows* (New York: United Nations Sales No. E.85.II.A.15).

United Nations Centre on Transnational Corporations, *Regional Economic Integration and Transnational Corporations in the 1990s: Europe 1992, North America, and Developing Countries* (New York: United Nations Sales No. E.90.II.A.14).

United Nations Centre on Transnational Corporations, *The Impact of Trade-Related Investment Measures on Trade and Development* (New York: United Nations Sales No. E.91.II.A.19).

United Nations Centre on Transnational Corporations, *The Determinants of Foreign Direct Investment: A Survey of the Evidence* (New York: United Nations Sales No. E.92.II.A.2).

United Nations Centre on Transnational Corporations, *World Investment Report 1992, The Triad in Foreign Direct Investment* (New York: United Nations Sales No. E.92.II.A.11).

United Nations Centre on Transnational Corporations, *World Investment Report 1992, Transnational Corporations as Engines of Growth* (New York: United Nations Sales No. E.92.II.A.19).

United States Department of Commerce, *U.S. Multinational Companies: U.S. Merchandise Trade, Worldwide Sales, and Technology-Related Activities in 1977* (Washington: U.S. Department of Commerce, 1983).

United States Department of Commerce, *U.S. Direct Investment Abroad: Operations of U.S. Parents Companies and Their Foreign Affiliates* (Washington: U.S. Department of Commerce, 1985).

United States Department of Commerce, *Recent Trends in International Direct Investment* (Washington: U.S. Department of Commerce Staff Paper No. 91-5, July 1991).

United States Department of Commerce, *Recent Trends in International Direct Investment* (Washington: U.S. Department of Commerce Staff Paper, August 1992).

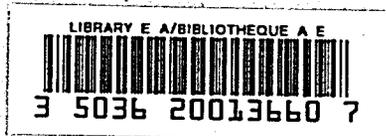
Vaitsos, C. V., "The Process of Commercialisation of Technology in the Andean Pact, 1971", in H. Radice (ed.), *International Firms and Modern Imperialism* (Harmondsworth: Penguin, 1975).

van Loo, F., "The Effect of Foreign Direct Investment on Investment in Canada" *Review of Economics and Statistics*, vol. 59 (1977), pp. 474-481.

Wong, K. Y., "Are International Trade and Factor Mobility Substitutes?" *Journal of International Economics*, vol. 21, No. 1/2 (August, 1986), pp. 25-43.

DATE DUE		DATE DE RETOUR	
<del>██████████</del>	<del>██████████</del>	DEC 12	1994
<del>MAY 23</del>	<del>1997</del>		
	FEB 06		1998

DOCS  
 CA1 EA533 93P07 ENG  
 Seebach, Dennis  
 Globalization : the impact on the  
 trade and investment dynamic  
 43266578



## DOCUMENTS DU GROUPE DE LA PLANIFICATION DES POLITIQUES/ POLICY PLANNING STAFF PAPERS

Récents documents sur des questions économiques et de politique commerciale:  
Recent Papers on Economic and Trade Policy Issues:

1. From a Trading Nation to a Nation of Traders: Towards a Second Century of Trade Development, by Andrew Griffith. 92/5 (March 1992)
2. World Population Growth and Population Movements: Policy Implications for Canada, by Michael Shenstone. 92/7 (April 1992)
3. Trade and the Environment: Dialogue of the Deaf or Scope for Cooperation?, by Michael Hart and Sushma Gera. 92/11 (June 1992)
4. Globalization and Public Policy in Canada: In Search of a Paradigm, by Keith H. Christie. 93/1 (January 1993) (aussi disponible en français)
5. Pour des sanctions efficaces et appropriées, par Jean Prévost. 93/4 (mars 1993) (also available in English)
6. Black Gold: Developments in the World Oil Market and the Implications for Canada, by Sushma Gera. 93/5 (February 1993) (aussi disponible en français)
7. Exports and Job Creation, by Morley Martin. 93/6 (June 1993)
8. Globalization: The Impact on the Trade and Investment Dynamic, by Dennis Seebach. 93/7 (June 1993)
9. Different Strokes: Regionalism and Canada's Economic Diplomacy, by Keith H. Christie. 93/8 (May 1993) (aussi disponible en français)