Foreign Direct Investment in Atlantic Canada

A Report

By the Atlantic Provinces Economic Council (APEC)*

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Foreign Direct Investment and Atlantic Canada

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Foreign Direct Investment in Atlantic Canada

Executive Summary

Foreign direct investment (FDI) can play a positive role in Atlantic Canada by enhancing employment prospects and by contributing to economic and technological development. This Report analyses the available evidence on the extent of FDI in Atlantic Canada and reviews the literature on the determinants and impact of FDI, drawing out the policy implications for the region. Further research is needed to clarify the existing contributions of foreign firms within the region and how policies and programs can best be developed to enhance the attractiveness of the region and to maximise the benefits of foreign investment.

Extent of FDI

Worldwide stocks of foreign direct investment (FDI) have grown significantly in recent decades, boosted in recent years by a large increase in cross-border mergers and acquisitions. Canada has been no exception to this trend. The stock of FDI in Canada more than doubled in the last ten years to \$321 billion, or about 30% of GDP. However, Canada's share of the global stock of FDI has been declining.

Time series data on the regional distribution of FDI within Canada do not exist. However, an analysis of various data sources indicates that foreign investment in Canada is concentrated in Ontario, with Quebec, Alberta and British Columbia also receiving a sizeable portion. FDI in Atlantic Canada likely amounts to no more than 5% of the national total, lower than the region's share of GDP (6%), investment (6%) and population (8%), but similar to its share of R&D expenditures (4%). The U.S. is the largest source of investment in the region, followed by the U.K. and other European countries.

Foreign-controlled firms are major players in the Canadian economy. They account for about 23% of business assets, 32% of revenues, 33% of R&D expenditures, 44% of exports and 51% of imports. Foreign firms are particularly important in high value-added manufacturing (e.g. transportation equipment, chemicals and electronic equipment) and in resource-based industries (e.g., energy and metallic minerals and metal products).

The most recent data on foreign-controlled firms in Atlantic Canada relate to 1991. In that year, foreign-controlled firms accounted for 26% of business revenues in Canada. In the Atlantic provinces, foreign-controlled firms were responsible for about 21% of business revenues in Nova Scotia, 18% in Newfoundland and Labrador, 13% in New Brunswick, and 9% in Prince Edward Island. Foreign firms in the region are actively involved in resource industries, manufacturing, retail and in the services sector. Their operations range from small local offices to large plants and offshore installations.

Determinants of FDI

There is no single unified theory of foreign direct investment. However, one commonly used framework emphasizes three factors: ownership, internalization and location. First, firms must possess some ownership advantages, often firm-specific intangible assets such as technology or management expertise that enable them to compete with foreign firms. Second, it must be more beneficial for the firm to internalise these advantages, rather than sell them or lease them to other firms. Third, it must be more beneficial to use at least one factor input (e.g. labour) located abroad, otherwise the market will be supplied through exports. In choosing where to locate foreign facilities, firms consider a number of economic and non-economic factors. These may include market size, production costs, transportation costs, availability of labour, and political stability.

Much of the empirical research on the determinants of firm location decisions tends to be at the national level. The key variable that almost all studies find to be important is national GDP, which is usually taken

as a measure of market size. Labour costs and exchange rates are found to be important in many but not all studies while technological factors have become increasingly important drivers of global FDI.

A number of factors have been found to be important in explaining the location of (usually manufacturing) FDI within countries such as market size, transportation infrastructure and government promotional activities. In some studies, labour costs, unemployment, the educational attainment of the workforce, unionization, corporate taxes and coastal location are also important explanatory factors. Recent research has begun to emphasize the role of local technological activity and proximity to leading research institutions as important location determinants.

These studies suggest that the small size, low urbanization and peripheral location of the Atlantic provinces do not encourage FDI within the region. Agencies must therefore continue to emphasize the region's location within the North American market, and ensure that there is an adequate transportation infrastructure and secure border access. Low labour and operating costs may be a positive attraction factor in labour intensive industries, but unit labour costs (i.e., labour costs adjusted for labour productivity) are likely more significant. Provinces should by careful about competing for FDI solely on the basis of low costs, as this may not be a sustainable strategy given the large number of jurisdictions with similar or lower costs. For high technology industries, attraction policies and strategies need to emphasize the availability of skilled labour, local technological and research capacity, and industrial clustering.

Impact of FDI

Foreign direct investment may yield a number of benefits such as direct employment, output and productive capacity, higher output and employment in related industries (indirect benefits), higher corporation and personal income tax revenue, access to new markets and international management expertise. FDI may also lead to improvements in efficiency through increased competition forcing domestic firms to become more productive. Technology transfers are also important although the extent of such transfers may depend upon the technological level and absorptive capacity of domestic firms.

Concerns have also been raised about possible negative impacts of FDI such as a reduction in local R&D (especially following the acquisition of a local company), a decline in the market share of domestic firms, wage pressure in domestic sectors without corresponding productivity improvements, a neglect of indigenous firms by policymakers and instability from an over reliance on multinational firms.

Research on foreign (manufacturing) firms in Canada indicates that, compared to Canadian-controlled firms, foreign-controlled firms are more productive (both in terms of labour productivity and total factor productivity); are more likely to conduct R&D; are more likely to be involved in R&D collaborative projects; are just as likely to develop links with local universities and innovation consortia; are more likely to innovate (although this difference disappears if firm size and R&D activity are controlled for); are more likely to adopt advanced manufacturing technology; are more involved in international trade (both exports and imports); and have responded more to trade liberalization by increasing product specialization. However, Canadian-controlled firms that export or have overseas operations perform almost just as well as foreign-controlled firms in terms of innovation and R&D activities

Studies of FDI in other countries have found that FDI increases the geographical diffusion of technology; boosts productivity growth; improves the quality, productivity and product diversity of local suppliers; increases exports; and creates jobs. Research has also found that backward linkages to local suppliers are often very limited, with limited local R&D but some positive training impacts. Moreover, initial job announcements may overstate the final number of jobs created while there may be offsetting reductions in employment among domestic firms. There is also evidence that FDI increases wage inequality between skilled and unskilled labour, puts downward pressure on profits of domestic firms, and may influence local government expenditures and priorities. Overall, the size and significance of these positive and negative effects varies by country, industry and firm. In addition, the ability of local firms to benefit from the

presence of technologically advanced foreign firms partly depends upon their own technological capability and their ability to innovate and invest in new technologies.

These studies indicate that FDI can play a positive role in Atlantic Canada's economic development by contributing to employment, output and productivity. If the attraction of FDI is seen primarily as a means of creating jobs, then its overall effectiveness should be compared to strategies designed to boost employment among local and existing foreign firms. However, the technological and productivity benefits of such a focus are likely to be modest. On the other hand, if FDI is to be pursued more as an economic development strategy to boost the competitiveness and technological abilities of local firms, then further research is necessary to determine the size and nature of such spillover effects in the region, and to examine whether existing policies and strategies are adequate to promote such benefits.

Policies Towards FDI

Canadian government policy shifted from being generally pro-FDI in the immediate post-war period, to a more restrictive framework under the Foreign Investment Review Act (1973-1985) and back to a more welcoming approach under the Investment Canada Act (1985 onwards). The Investment Canada Act still gives the government the right to review foreign acquisitions above certain size thresholds to determine whether they are of net benefit, but new businesses established by foreign investors are not subject to review. Moreover, Investment Partnerships Canada (a joint venture of Industry Canada and DFAIT) serves to attract and promote foreign investment in Canada.

At the regional level, the Atlantic Canada Opportunities Agency (ACOA) is also involved in activities such as awareness and promotion, information intelligence management and dissemination, and providing financial assistance. All four Atlantic provinces are actively engaged in attracting FDI although the resources available for such recruitment are not large. Job creation seems to be the primary aim of provincial initiatives.

The research literature identifies a number of issues that are important for economic development agencies in Atlantic Canada to consider. There is a need to find a balance between attracting new foreign investment and supporting existing domestic and foreign firms; the latter can be an important source of new jobs and investment. Providing aftercare support to foreign firms to help embed them in the local economy can help ensure their retention and future expansion. It may be easier to attract foreign firms that have already established operations elsewhere in Canada, as these firms are more familiar with the national business climate and culture. Financial resources are not the only factor behind successful investment attraction. Coordination between different levels of government is important while having prepared sites can help win large-scale projects. Backward linkages and technological spillovers can be enhanced through measures to provide information on local suppliers and to raise local quality and capacity. Such strategies may be particularly relevant for the offshore energy industry.

Further Research

This Report documents the limited amount of information that is available on FDI in Atlantic Canada. The Report suggests a number of ways to extend the current state of knowledge regarding the extent, determinants and impact of foreign investment within the region. In particular, APEC recommends that Investment Partnerships Canada and other stakeholders continue to work with Statistics Canada to improve the availability of data on the role of foreign firms in provincial economies.

The most crucial knowledge gap relates to the impact of existing foreign firms in Atlantic Canada. This is more than just the direct employment effect, and includes issues such as indirect employment effects, local supplier linkages, technology transfer to local firms, skills and training, and R&D and local research linkages. Such research may require a combination of surveys and in-depth case studies. Combined with a review of programs in other jurisdictions, such research would help define the extent of spillover benefits in Atlantic Canada and how these might be enhanced in the future.

Given the importance of existing foreign firms as a source of job creation and as a magnet to attract other foreign investors, research to examine the experiences of foreign firms in the region, and factors that facilitate or inhibit their future expansion (e.g. regulatory barriers), would also be of value. APEC has compiled an initial list of foreign firms in each Atlantic province. With further work, this list could be developed into a sample frame for survey research.

Foreign Direct Investment in Atlantic Canada

Chapter 1: Introduction

Background

Foreign direct investment (FDI) is becoming an increasingly important part of the Canadian economy. The stock of FDI in Canada more than doubled between 1990 and 2000 to stand at an estimated \$320 billion, or about 30% of GDP. In Atlantic Canada, foreign firms are involved in the offshore energy industry, manufacturing and services (e.g., call centres).

FDI is often considered desirable because it provides or maintains jobs, especially in regions with a weak or limited industrial base. However, the impact of FDI extends beyond direct employment to include issues such as technology transfer, contributions to productivity, indirect employment and improved competitiveness or efficiency of domestic firms. Yet concerns are also raised about the degree of foreign control, a loss of local R&D and the dependency on corporate decision-making with no commitment to the local region.

Despite the substantial role that foreign firms play in the Canadian economy, and the existence of national, regional, provincial and local agencies to attract foreign investment, there are no known studies that examine the full extent of foreign investment in Atlantic Canada, the factors that determine the amount of foreign investment in the region and the impact of this investment on the regional economy. This Report is a first step in addressing these knowledge gaps.

Scope and Methodology

This study is a preliminary investigation of the extent, determinants and impact of FDI in Atlantic Canada. The Report provides an analysis of existing data and research findings and how these relate to the Atlantic region. It also indicates where further research is needed.

The Report is based on a review of the relevant literature, analysis of publicly available data and interviews with key personnel in relevant provincial and federal agencies.

Definitions

Several key but distinct terms are used throughout this Report:

Foreign direct investment (FDI) refers to foreign investment in a company such that the foreign investor has a significant voice in the management of the company. For Canadian and international definitions, this is normally taken to mean ownership of at least 10% of the voting equity. Direct investment refers to the foreign corporation's investment in the financial capital (e.g., retained earnings, equity and debt) of the domestic company. FDI is distinguished from portfolio investment, such as foreign investors purchasing equity or bonds issued by Canadian companies or governments, which are considered passive investments.

The **stock** of FDI refers to the total value of FDI, usually measured at book value, at year end. The **flow** of FDI refers to the annual amount of new FDI. **Inward** FDI refers to FDI into the host country, whereas **outward** FDI refers to FDI from the source or home country.

Foreign-controlled firms refer to firms where foreign investors control at least 50% of the voting equity.² This is a more stringent definition than that used to establish FDI. Furthermore, data on the assets, revenues and expenditures of foreign-controlled corporations refer to the whole corporation, whereas data on direct investment only represent the financial capital owned by the foreign investor.³

Finally, the term **multinational enterprise** (MNE) refers to a firm with productive assets in more than one country. MNEs are also referred to as multinational corporations (MNCs) or transnational corporations (TNCs). These terms are used interchangeably throughout this Report.

Chapter 2: Recent Trends in Foreign Direct Investment

Global Developments

The global stock of foreign direct investment (FDI) more than tripled between 1990 and 2000 to stand at over US\$6 trillion. Investment flows also tripled over this period to more than US\$1 trillion. These flows reflect the activities of more than 60,000 transnational corporations with over 800,000 affiliates abroad. Although many more countries now receive flows of FDI than in 1985, FDI remains unevenly distributed. More than 90% of FDI flows originate from developed countries and about 80% of FDI flows are destined for developed countries. Overall, the top 30 host countries account for 90% of all FDI stocks.

Within OECD countries, inward stocks of FDI reached US\$2.1 trillion in 1997, double the 1989 value. The U.S. is the dominant destination with 33% of OECD stocks, followed by the U.K. (12%), Germany (9%), France (7%), Canada (7%) and the Netherlands (6%). In terms of major source countries, the U.S was again the dominant country, responsible for 30% of outward OECD stocks of FDI, followed by the U.K. (13%), Germany (10%), Japan (9%), France (7%), Switzerland (6%) and Canada (5%).

In 2000, the ten largest sources of global FDI flows were the U.K., France, United States, Belgium and Luxembourg, Netherlands, Hong Kong, Spain, Germany, Canada and Switzerland. The ten largest FDI recipients were the United States, Germany, United Kingdom, Belgium and Luxembourg, Hong Kong, Canada, Netherlands, France, China and Spain.⁶

The importance of inward FDI to a country's economy varies widely throughout the major OECD countries. In 1997, the stock of FDI ranged from less than 1% of GDP in Japan to 34% of GDP in the Netherlands. FDI is also relatively important in Sweden (29%), Australia (29%), the U.K. (27%) and Canada (26%).

Canada's share of the global stock of inward FDI has declined over the last two decades. During the 1990s, Canadian growth of inward FDI stocks was the slowest of the larger OECD countries, averaging 4.6% per year, or about half the OECD growth rate. By comparison, some European countries such as Sweden, Spain and Finland have experienced growth rates of 15-20% per year.

In terms of industries, services have become more important in international production over the past ten years, reflecting the more recent liberalization of this sector. In 1999, services accounted from more than half the stock of inward investment in developed countries.⁸

Annual FDI flows can be very volatile, varying with global economic conditions and merger and acquisition activity. For example, inward investment fell sharply in 1991-92 following the global economic slowdown, while flows to a number of Asian countries fell during the crisis of 1997-98. The annual flows of inward FDI into Canada and OECD countries has increased substantially during the latter half of the 1990s, with annual growth of about 50% in 1998 and 1999. Global flows were expected to decline about 40% in 2001 as world economic activity slowed, but flows were still expected to be higher than in 1998.

Cross-border mergers and acquisitions (M&As) have increased in importance in recent years relative to greenfield investment, rising six-fold between 1991 and 1998, and now account for more than 85% of foreign direct investment. The size of these deals has also increased. Most of the recent cross-border M&As have been in the same or related industries (in contrast to many conglomerate M&As in the 1980s), and have occurred in mature manufacturing sectors, high technology fields and service sectors as firms restructured and strengthened their global competitiveness in core businesses. ¹¹

There has been a parallel increase in international strategic alliances, which grew more than five-fold between 1989 and 1999.¹² These alliances are on a larger scale than previously and occur in a broad range of industry sectors. A larger number of partnerships are for joint marketing and R&D rather than production, partly reflecting the increasing role of service firms in international alliances.¹³ These alliances may involve FDI, for example, if two international companies invest in a joint venture in a third country.

Chart 1: Inward FDI Flows in the 1990s

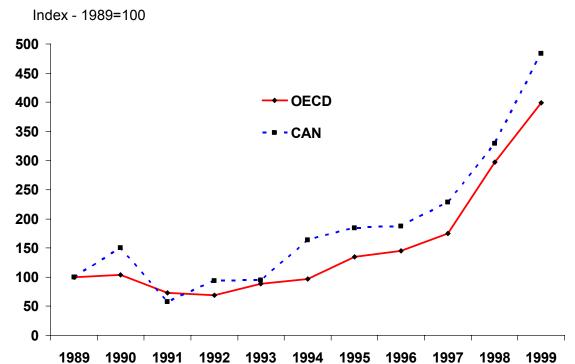


Chart 2: Canadian Share of Inward FDI

Source: OECD (2000)

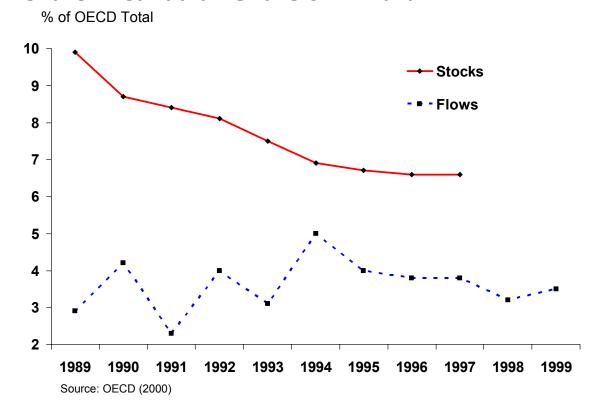


Table 1: Top Ten OECD Host Countries

Inward FDI Stocks, 1999

	US\$bn	% of GDP	Avg. Annual Growth (%) 1989-99
United States**	812	9.3	9.2
United Kingdom	395	27.1	9.4
Germany*	186	8.8	9.3
Canada	166	25.7	4.6
France*	141	10.0	11.2
Netherlands*	129	34.1	11.1
Australia	117	28.7	6.1
Spain	113	18.7	14.6
Italy	107	9.0	8.0
Sweden	70	28.9	20.5
TOTAL OECD*	2102	8.9	8.7
Source: OECD (2000)	•	*	1997 **1998

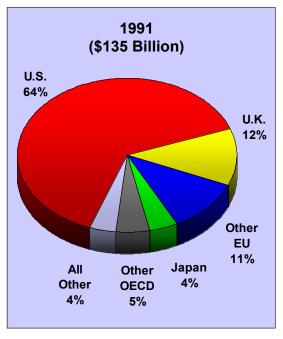
Table 2: Top Ten OECD Source Countries

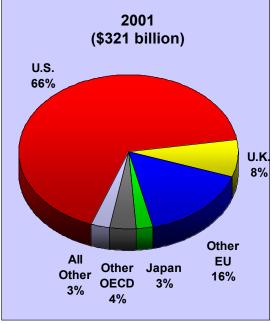
Outward FDI Stocks, 1999

	US\$bn	% of GDP	Avg. Annual Growth (%) 1989-99
United States*	981	11.2	11.0
United Kingdom	492	45.5	12.9
Germany*	281	13.3	11.8
Japan**	268	6.8	6.3
Netherlands*	210	55.8	11.4
France*	190	13.5	12.2
Italy	189	16.0	15.2
Canada	178	27.6	9.4
Sweden	108	44.7	11.0
Spain	98	16.2	24.0
TOTAL OECD*	2864	12.1	10.4

*1997 **1998 Source: OECD (2000)

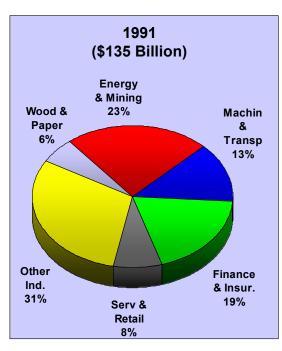
Chart 3: Geographic Composition of FDI Stock in Canada

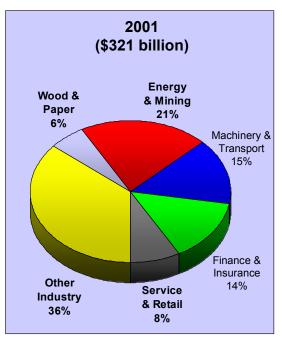




Source: Statistics Canada, Canada's International Investment Position, 2001

Chart 4: Industry Composition of FDI Stock in Canada





Source: Statistics Canada - Canada's International Investment Position, 2001

FDI in Canada

According to Statistics Canada data, the stock of FDI in Canada has more than doubled in the last ten years to an estimated \$321 billion at the end of 2001, or about 30% of GDP. ¹⁴ FDI accounts for about 29% of the total stock of foreign investment in Canada, with portfolio investment (in stocks, bonds and money market instruments) amounting to almost 50% and other investment (such as loans and deposits) accounting for the remainder. ¹⁵

The U.S. is the dominant source of FDI in Canada, responsible for about 67% of the inward stock in 2001. The U.S. share has increased somewhat during the 1990s, reversing the trend of the 1980s. The U.K. share of FDI in Canada fell from 12% in 1991 to 6% in 1999 before recovering to 8% in 2001. Meanwhile other E.U. countries increased their share of FDI over the decade from 11% to 16%.

The industry composition of the stock of FDI in Canada changed somewhat during the 1990s. The energy and mining industry accounts for about 21% of the stock of FDI in Canada, down from a share of 24% in 1990, but higher than the 17% recorded in 1999. Finance and insurance is also an important sector, with 14% of FDI (down from 19% in 1991). Machinery and transportation equipment is the third big sector, with its share increasing slightly from 13% in 1991 to 15% in 2001. The rise in the share of other industries from 30% in 1991 to 36% in 2001 indicates the greater diversity in recent foreign investments.

The flow of new investment has increased substantially in recent years, and totalled an estimated \$43 billion in 2001, up from about \$3 billion in 1991 and \$16 billion in 1997. The net flow of FDI into Canada in 2000 was even higher, at \$94 billion. Reinvested earnings accounted for the majority of inward FDI flows in Canada up to the 1990s, but have since declined in importance, and accounted for only 18% of FDI inflows between 1998 and 2001. This partly reflects the rise in the importance of mergers and acquisitions, which accounted for 60% of FDI inflows over the same period.

Foreign investment in Canada leads to an outflow of profits, interest and dividends (although part of this may be reinvested in Canada). In 2001, total payments on the stock of inward FDI amounted to \$24 billion, or about 2.3% of GDP.

Conclusion

Foreign direct investment has increased substantially over the last three decades, outstripping growth in world output and international trade. 16 Services have risen in importance and account for over half of FDI stocks in developed countries. Mergers and acquisitions have become the dominant mode of FDI, and now account for over 85% of global FDI flows.

Canada is a leading destination for inward FDI, but its share of the global stock of inward FDI has been declining. The stock of FDI in Canada amounted to more than \$320 billion in 2001, or about 30% of GDP, with an inflow of FDI in 2001 of \$43 billion. The U.S. is by far the biggest source of FDI stocks, both globally and within Canada. About half the FDI in Canada is in the financial, energy and mining, and machinery and transportation equipment sectors. Mergers and acquisitions were the dominant source of FDI in Canada during the last four years.

The lack of industrial concentration in Atlantic Canada, and the small size of many of the local firms, suggests that foreign merger and acquisition activity in the region is likely to be quite limited. Foreign investment in financial services and in high value-added manufacturing (e.g., transportation equipment, chemicals and electronic equipment) is also likely to be modest because the Atlantic provinces lack large, well-established industrial concentrations in these sectors. However, offshore oil and gas deposits have attracted the interest of major international companies in recent years.

Chapter 3: Foreign Direct Investment in Atlantic Canada

Data and Measurement Issues

Provincial data on foreign investment in Canada is extremely limited. The data on stocks and flows of foreign direct investment (FDI) in Canada, presented in Chapter 2, are only available on a national basis. This chapter uses information from three different sources to indicate the likely geographic distribution of foreign investment within Canada, focusing on Atlantic Canada.

Statistics Canada collects data on FDI at the enterprise level (rather than at the establishment or plant level). Spatial breakdowns are therefore not directly possible because of the way the data is consolidated at the enterprise level. However, Statistics Canada conducted a pilot project some years ago to examine the feasibility of using various indicators to allocate FDI by province. Although no further work has been done, the estimates provide one indicator of the likely provincial distribution of FDI in the mid-1990s.

The second source of data comes from the Corporations and Labour Unions Returns Act (CALURA), now known as the Corporations Returns Act (CRA). These data, however, measure the extent of foreign control in the economy. A company is under foreign control if at least 50% of the voting equity is owned by foreign investors. This is a more stringent condition than that used to measure FDI, where a 10% equity threshold is used. Moreover, FDI data measure only the investment by the foreign investor, whereas the CRA-CALURA data measure the total assets or revenue of the foreign-controlled corporation, including the part owned by Canadian investors.¹⁷

The third data source is data collected by the Investment Review Division of Industry Canada as part of the Investment Canada Act. All foreign acquisitions of Canadian companies or new companies established by foreign investors must be notified under the Investment Canada Act. This source provides information on the number and value of new investments or acquisitions. However, the asset value data are not comparable to the Statistics Canada's estimates of the flow of FDI because the Investment Review data do not indicate the actual source of funds. Moreover, the investments are allocated to only one province, whereas an acquired firm may have operations in several provinces.

The Stock of FDI in Atlantic Canada

In 1998, Statistics Canada reported on a project that explored the possibility of allocating FDI stocks and flows by province, using related data at Statistics Canada. Three different data sources were examined for allocating the FDI data: provincial taxable income declared by each corporation to Revenue Canada (CALURA), payroll deductions by province from Revenue Canada (LEAP) and Statistics Canada's capital expenditure survey (CAPEX).

The project involved linking the above three series to the FDI data. The quality of the resulting provincial estimates reflected three key issues: the identification of the transactors of direct investment (as the same company name in a provincial survey may represent different corporations of the same enterprise); the consolidation of subsidiaries of reporting corporations (as the level of consolidation differs between the FDI data and the provincial surveys); and the appropriateness of the provincial series for allocating FDI (as there is not necessarily a statistical relationship between direct investment and taxable income, payroll or capital expenditures). Statistics Canada concluded that the estimates were not sufficiently reliable for publication. Separate examination of each corporation to address the transactor and consolidation issues would be very time consuming and would still only provide approximate results.

The estimated provincial allocations were not considered reliable enough for statistical purposes. However, they do give some indication of the likely regional distribution of FDI in Canada. Despite the limitations discussed above, the CALURA and LEAP series, and a separate study by the Industrial Organization and Finance Division (estimating the provincial distribution of foreign-controlled assets), all show a similar distribution of FDI by province for the reference year (1994). These data show that Ontario

accounted for about 50% of total FDI in Canada, with Quebec, Alberta and British Columbia together accounting for a further 40%. The share of FDI in Atlantic Canada was about 5%. ¹⁹

Foreign-Controlled Revenue in Atlantic Canada

CALURA (now CRA) data provide information on the extent of foreign control in Canada. Provincial data on the revenue of Canadian and foreign-controlled corporations is available up to 1991. Unfortunately, due to changes in survey methodology, provincial data has not been available since then. However, it is anticipated that a new Revenue Canada survey will allow provincial data to be provided for 1999 onwards.

The provincial distribution of revenues of foreign-controlled corporations in 1991 indicates a concentration in Ontario, with 53% of the total. Again, Quebec, Alberta and British Columbia are well behind, but together account for a further 40% of foreign-controlled revenues. Atlantic Canada has a share of 3.5%, led by Nova Scotia (1.8%), New Brunswick (0.9%), Newfoundland and Labrador (0.7%) and Prince Edward Island (0.1%). The Atlantic share is notably lower than its share of revenues from private Canadian-controlled corporations (5.7%).

The U.S. was the most important country of control accounting for 58% of foreign-controlled revenues in Atlantic Canada in 1991 (compared with 62% nationally). The U.K. was the second most important source country with 17% of foreign-controlled revenues in the Atlantic region (compared with 12% nationally). Overall, the E.U. accounted for 27% of foreign revenues in Atlantic Canada (compared with 23% nationally). Within Atlantic Canada, there were significant variations. For example, U.K. firms accounted for a high portion (37%) of foreign revenues in Prince Edward Island; France was an important country for foreign revenues in Nova Scotia (11%), reflecting the presence of the three Michelin plants; while Pacific Rim countries accounted for a further 15% of foreign-controlled revenues in Nova Scotia.

Growth in foreign-controlled revenues in the Atlantic provinces was slower than the national rate over the period 1975 to 1991. Average annual growth was particularly slow in Newfoundland and Labrador (2%), Prince Edward Island (4.1%) and New Brunswick (4.3%), with only Nova Scotia (6.7%) coming close to the Canadian rate (7.3%). Overall, foreign-controlled revenues increased less quickly than Canadian-controlled revenues over this period. However, recent national data show that foreign revenues grew faster than Canadian-controlled revenues between 1991 and 1998, with foreign-controlled corporations increasing their share of revenues from 26% to 32%.

New Investments and Acquisitions in Atlantic Canada

The third source of information on foreign investment at the provincial level is from Industry Canada's Investment Review division. This division publishes data on the number of foreign acquisitions of Canadian companies and the number of new businesses established by foreign investors.²¹

The Investment Review division also collects data on the value of these investments. However, these data are not comparable to data on FDI for a number of reasons. First, they do not include investment by foreign firms already operating in Canada, such as an expansion at a Michelin plant in Nova Scotia. Second, Investment Review does not establish the actual source of the funds, which could be brought in from abroad or obtained from sources within Canada. Third, the data reflect planned investment over the first two years or the book value of the assets acquired. The actual investment and the actual purchase price may differ from these values.

Investments are recorded to the province with the largest share of employees in the business concerned, so the data do not fully reflect the provincial distribution of foreign acquisitions. Also, there is some suppression of the asset value data at the provincial level for confidentiality reasons. However, despite these caveats, the Investment Review statistics do provide some indication of the provincial distribution of foreign acquisitions of Canadian firms and new business start-ups by foreign investors. Overall, about 75% of the investments between 1985 and 2001 were acquisitions and about 25% were new businesses.

These data again show a concentration of foreign investment activity in Ontario with about 57% of the number of investments, and 43% of the value, over the period 1985 to 2001. As before, Quebec, Alberta and British Columbia are next with about 37% of investments (53% by value).

The Atlantic share of these investments is quite small. The 324 foreign investments (acquisitions or new businesses) made in the Atlantic provinces accounted for 2.5% of the national total, and about 1.6% of the asset value. In terms of the number of investments, Nova Scotia (1.5%) had the highest share, followed by New Brunswick (0.5%), Newfoundland and Labrador (0.4%) and Prince Edward Island (0.1%). In 2001, there were 28 new investments or acquisitions in Atlantic Canada, the highest number since 1988.

A large majority of this new foreign investment in Atlantic Canada has come from the U.S. with over 60% of the total projects and 50% of the total asset value.²² The U.K. has the second largest share of projects at 11%, with other E.U. countries responsible for a further 21%. Norway accounted for 16% of new investments in Newfoundland and Labrador.²³

In terms of industry sectors, the manufacturing sector in the region received the largest share of the investments at 27% and an even larger portion of the value at 53%. This was followed by business and service industries (24% of projects) and wholesale and retail trades (23%). The resource sector accounted for about 9% of investments.

Foreign Firms in Atlantic Canada

As part of its research on foreign investment in Atlantic Canada, APEC has begun compiling a list of foreign-controlled firms that are currently registered in Atlantic Canada. The primary information source for this list is Statistics Canada's Inter-Corporate Ownership (ICO) database, which tracks the ultimate ownership and control of corporations in Canada. The firms in this database are identified from schedules filed under the Corporations Returns Act, which includes all corporations that have revenues exceeding \$15 million or assets exceeding \$10 million. The main weakness in this database is that it assigns firms by province based on the location of the head office. This means that firms with plants in Atlantic Canada but with a head office in Ontario, would not be identified as located in the Atlantic provinces. APEC therefore supplemented the list with information obtained from provincial economic development departments (or provincial crown corporations involved in investment attraction) and a number of foreign consulates.

In total, 563 foreign firms were identified in the first stage of analysis. Further research is necessary to confirm the validity of the identified firms and the nature of their operations in Atlantic Canada. For example, the industry classification used in the ICO database may not accurately reflect the nature of the operations in Atlantic Canada. ²⁵

However, based on this list, over 60% of these firms are owned by U.S. companies with about 10% from the U.K. and 20% from the rest of Europe. The largest number of companies are classified to the finance, insurance and real estate industry, but many of these are holding companies that may not have actual operations in the region. Manufacturing firms account for the next largest number of the foreign-controlled corporations, followed by firms in the business services and primary and construction industries.

Table 3: Estimates of the Distribution of Foreign Direct Investment in Atlantic Canada

Measure	Period	Share of national total (%)				
		ATL	NL	PE	NS	NB
FDI (allocation based on taxable income)	1994	5	1	0	2	2
FDI (allocation based on payroll)	1994	5	1	0	2	2
Foreign controlled revenue	1991	3.5	0.7	0.1	1.8	0.9
No. of new businesses & acquisitions	1985-2001	2.5	0.4	0.1	1.5	0.5
Asset value of new businesses & acquisitions	1985-2001	1.6	0.1	0.2	0.9	0.4

Note: See text for definitions and explanations.

Sources: Bender (1998), Investment Review Division, Industry Canada (2001) & Statistics Canada (1995).

Conclusion

Time series data on the provincial distribution of foreign direct investment within Canada do not exist. However, an analysis of various data sources indicates that FDI in Canada is highly concentrated in Ontario, which may account for about 50% of total foreign investment. Quebec, Alberta and British Columbia also account for a sizeable portion of FDI. Table 3 provides a summary of the estimates for Atlantic Canada. These data indicate that FDI in Atlantic Canada likely amounts to no more than about 5% of the national total, lower than the region's share of GDP (6%), investment (6%), employment (7%) and population (8%), but similar to its share of R&D expenditures (4%). It is not possible to determine whether the Atlantic share has been increasing or decreasing in recent years.

Within Atlantic Canada, Nova Scotia has the largest share of foreign investment in Canada while Prince Edward Island has the smallest share. The U.S. is the biggest investor in the region, followed by the U.K. and other European countries. While manufacturing is an important sector, service industries and retail and wholesale trades are also well represented. The resource sector is likely to have increased in importance during the last decade, reflecting the role of foreign-controlled firms in major offshore energy projects in Nova Scotia and Newfoundland and Labrador.

Chapter 4: The Role of Foreign Firms in Canada and Atlantic Canada

Foreign Control in Canada

There was a mild upward trend in foreign control in Canada during the 1990s. The share of foreign-controlled assets of enterprises in Canada increased from 20.5% in 1994 to 22.7% in 1998. The share of foreign control in operating revenue was 31.7%, up from 29.4% in 1994 and about 26% in 1989. Foreign-controlled firms account for about 51% of Canadian imports and 44% of exports. The share of foreign-controlled firms account for about 51% of Canadian imports and 44% of exports.

U.S. firms dominate the foreign sector with 13.5% of total corporate assets in Canada (or 60% of foreign-controlled assets), followed by firms from the European Union (6.5% of corporate assets in Canada and 29% of the foreign total). In terms of the share of corporate assets, foreign-controlled firms are most important in chemical products and textiles (68%), transportation equipment (53%), other financial intermediaries (44%), machinery and equipment (44%), electronic products (33%), and wood and paper (31%). Foreign-controlled firms are less important in construction (13%), deposit-accepting intermediaries (11%) and communications (9%). While foreign-controlled firms tend to be concentrated amongst the larger firms in each sector, of the 25 largest enterprises in Canada, only a half dozen were foreign-controlled in 1998.

In the manufacturing sector, foreign-controlled firms account for over 50% of operating revenues, about 42% of R&D spending, and more than one third of well-paid jobs. Foreign control increases with firm size, being about 10% for manufacturing firms with 20-100 employees but reaching about 50% for firms with over 2,000 employees. Foreign control increases with firm size, being about 10% for manufacturing firms with 20-100 employees but reaching about 50% for firms with over 2,000 employees.

Foreign Control in Atlantic Canada

The most recent data on foreign-controlled firms in Atlantic Canada relate to 1991, when foreign-controlled firms accounted for about 26% of business revenues nationally. These data indicate that foreign-controlled firms were responsible for about 21% of revenues in Nova Scotia, 18% in Newfoundland and Labrador, 13% in New Brunswick and 9% in Prince Edward Island. Foreign firms are involved in resource industries (e.g., iron ore, oil and gas), manufacturing, retail (e.g., Wal-Mart, Staples and Home Depot) and in the service sector (e.g. call centres).

In Nova Scotia, foreign firms play a dominant role in the offshore energy industry, tire manufacturing and pulp and paper. Exports from these three sectors accounted for almost 50% of Nova Scotia's merchandise exports last year. In Newfoundland and Labrador, foreign firms are major players in the offshore energy industry, iron ore extraction and newsprint. Exports of crude and refined oil and iron ore accounted for over 50% of merchandise exports in Newfoundland and Labrador in 2001. In New Brunswick, foreign firms are involved in the call centre industry, textiles and manufacturing while in Prince Edward Island foreign firms are active in agriculture, aerospace and manufacturing.

Profiles of Foreign Firms in Atlantic Canada

This section provides brief profiles for a number of foreign firms in Atlantic Canada to illustrate the diversity of their operations

Convergys Corporation (Call Centres, Nova Scotia and Newfoundland and Labrador)

Convergys opened Atlantic Canada's largest tele-service centre in Dartmouth, Nova Scotia, in late 1998. The centre has since hired and trained 1,200 Nova Scotians. Its 66,000-square-foot centre operates around the clock, seven days a week. More than 500 workstations are equipped to handle 20 million calls a year. Convergys Corporation is a customer-care and billing operation with its head office in Cincinnati. Convergys employs more than 30,000 people at its 43 call centres, data centres and other offices in the United States, Canada and Europe. Convergys also operates call centres in New Glasgow, Nova Scotia and in St. John's, Newfoundland.

Exxon Mobil (Oil and Natural Gas Production, Nova Scotia and Newfoundland and Labrador)

Exxon Mobil has become one of the region's most important companies with its leading interest in the Sable gas project off Nova Scotia (51%) and the Hibernia oil field off Newfoundland (33%), a significant interest in the Terra Nova project (22%), as well as being a major player in offshore exploration in Nova Scotia. The company directly employs over 250 people in Atlantic Canada and has spent \$4 billion in developing the region's oil and gas industry.³¹

Honeywell Aerospatiale Inc. (Aerospace Products, Prince Edward Island)

Honeywell Aerospatiale has flourished since the organization made its home in Summerside's Slemon Park in 1991. The company provides a wide range of aircraft components and accessories including avionics, flight instruments, and electrical generation and control equipment. It currently employs 46 people in Prince Edward Island, up from 22 in 1991. The PEI operation is a subsidiary of U.S. based Honeywell, a US\$24 billion diversified technology and manufacturing organization that employs approximately 120,000 people in 95 countries.

Iron Ore Company of Canada (Mining, Newfoundland and Labrador)

The Iron Ore Company of Canada (IOC) is one of Canada's leading producers of iron ore. IOC has operations in Labrador City (since 1958) and in Quebec, which together employ close to 2,000 people. Reserves at IOC are sufficient for at least 20 years at current production levels. IOC is majority owned by Rio Tinto of Australia, a global leader in the mining industry.

Kanalflakt (Ventilation Product Manufacturing, New Brunswick)

Kanalflakt established its manufacturing facility in Bouctouche, New Brunswick in 1996. The 130,000 sq. ft. plant features quality research and development expertise, testing facilities and production equipment and processes. Sales at the New Brunswick facility have quadrupled over the past five years and employment has grown from 35 to about 100. Kanalflakt is owned by Kanalflakt AB of Sweden.

Michelin North America (Canada) Inc. (Tire Manufacturing, Nova Scotia)

Michelin employs 3,500 people in its three Nova Scotia plants in Kings, Pictou and Lunenburg counties. The plants produce passenger car, light truck, truck and earth mover tires for the North American market. Michelin's Nova Scotia operations have undergone over \$300 million worth of expansions over the past few years, the most recent of which involved the investment of \$80 million to increase the production of truck tires at the company's Kings County plant. Michelin began operations in Nova Scotia in 1971 and is currently one of the province's largest employers.

Noble Denton Canada Ltd. (Energy Services, Newfoundland and Labrador)

Noble Denton offers an integrated range of consultancy services to the marine and offshore industries. Employment in the St. John's office varies between two and six people. With over 90 years of experience, U.K.-based Noble Denton forms one of the world's longest established independent offshore consultants and underwriting surveyors. It has 12 affiliated offices located in key oil and gas industry locations throughout the world.

Saeplast Ltd. (Molded Plastics Manufacturing, New Brunswick)

Saeplast employs more than 50 people at its 45,000 square-foot Saint John plant. It produces 45,000 containers annually for export. Saeplast of Iceland has been manufacturing plastic fish tubs, pallets and floats since 1984. Their expanded product line includes plastics for the food, fishing and construction industries.

Smartforce (e-Learning Software and Services, New Brunswick)

Smartforce acquired Scholars.com in 1997 to establish its presence in New Brunswick. The company's Fredericton office, which employs 250, is second only in size to the head office in Dublin, Ireland. Smartforce is the world's largest e-learning company and helps companies all over the world to certify their IT staff in the latest applications and technologies. They provide clients with online seminars, live workshops, virtual classrooms and live mentoring. The Fredericton office is Smartforce's e-Learning Service Centre.

Stora Enso Port Hawkesbury (Paper Products Manufacturing, Nova Scotia)

Stora Enso employs about 850 mill and woodlands people in the production of newsprint and super-calendered papers for customers throughout North America. In addition, more than 700 people work for wood suppliers, woodlands contractors and truckers to support the mill's operations. A \$750 million expansion in 1998, which included the opening of a super-calendered paper mill used to produce magazine quality paper, will help keep the Port Hawkesbury operation competitive in the coming years. In 1998 Swedish-owned Stora merged with Finnish-owned Enso Oyj to create the new entity. In 2001 Stora Enso's global operations had sales of EUR 13.5 billion and employed about 44,000 people in more than 40 countries.

Conclusion

Foreign-controlled firms account for a substantial amount of economic activity within Canada. Estimates indicate that they account for about 23% of assets, 32% of revenues, 33% of R&D expenditures, about 44% of exports and 51% of imports. Foreign firms are particularly important in high value-added manufacturing (e.g. transportation equipment, chemicals and electronic equipment) and resource-based industries (e.g., energy, and metallic minerals and metal products). Foreign-controlled firms tend to be concentrated among the larger firms within each industry.

Based on 1991 data, foreign-controlled firms in Atlantic Canada accounted for about 17% of business revenues (compared with 26% nationally). Foreign firms are particularly important in Atlantic Canada's offshore energy, minerals, pulp and paper and manufacturing industries and are responsible for a large share of the region's exports. Foreign firms are also active in the services sector, including call centres, elearning and consultancy. Their operations range from small local offices to large plants and offshore installations.

Chapter 5: The Determinants of Foreign Direct Investment

Theories of FDI

There is no single unified theory of foreign direct investment.³² However, one widely used framework is the so-called eclectic paradigm.³³ The eclectic approach emphasizes three conditions that must be satisfied to explain foreign production (FDI) by a firm. These three factors relate to ownership (O), internalization (I) and location (L).

First, the firm must possess some ownership advantages that enable it to compete with foreign firms in serving particular markets. These ownership advantages often take the form of firm-specific intangible assets such as technology, management expertise, marketing systems and human capital. They may also reflect better or exclusive access to natural resources, labour, finance and information.

Second, it must be more beneficial for the firm to use these advantages itself (i.e., to internalise them within the firm) rather than to sell or lease them to foreign firms. The incentive to internalize activity rather than use a market transaction may be due to several factors. These include transactions costs (e.g., the cost of writing and enforcing contracts); protection of product quality; the ability to engage in strategies such as cross-subsidization, transfer pricing and predatory pricing; control of supplies or market outlets; and to avoid or exploit government intervention (e.g., tariffs, quotas and tax differences).

Third, it must be more beneficial for the firm to use the above advantages with at least one factor input (e.g., natural resources, labour) located abroad; otherwise foreign markets will be supplied entirely through exports. The advantages of locating in the home or a foreign country will depend upon a number of factors. These location factors include:

- the availability of natural and created resources;
- the price, quality and productivity of inputs such as labour, energy, materials and semi-finished goods;
- the availability and quality of infrastructure (e.g., commercial, legal, educational, transport and communication);
- the spatial distribution of markets (including size and growth potential);
- transportation and communication costs;
- psychic distance (such as differences in language, culture and business customs);
- · economies of centralization of R&D, production and marketing;
- investment incentives and disincentives (e.g., tax rebates and performance requirements); and
- the economic system and policies of government (e.g., tax rates and government regulations).

Economists often group the location factors into economic and non-economic factors (such as political stability). Economic factors may be market related (e.g., measures of market size) or cost-related factors (e.g., wages, productivity and transportation costs). Three broad types of FDI may also be distinguished. "Market-seeking" FDI is drawn to large markets with high per capita income and strong growth potential. "Asset-seeking" FDI is attracted to areas with natural resources, raw materials, low-cost unskilled labour, skilled labour, technological assets, and physical infrastructure. "Efficiency-seeking" FDI is drawn to areas based on the productivity-adjusted cost of the above assets, transportation and communication costs, and cost efficiencies due to industry clustering.³⁴

Note that the ownership, internalization and location advantages interact with each other, vary by country, industry and firm, and may change over time. In particular, firms participate in and draw upon the inputs and outputs of national and sub-national economies to create and recreate their ownership advantages.³⁵ For example, a MNE may interact with local research institutions or suppliers to enhance its competitive advantage.

The eclectic approach may be useful in explaining the pattern of FDI in Atlantic Canada. For example, MNEs in the oil and gas industry may have developed specific management expertise and human capital resources that enable them to be successful in locating productive fields and in producing and marketing the resources from these fields. Due to their inherent nature, these advantages cannot be easily sold or specified in some contractual relationship. Size may also play a critical role in providing internal finance to support exploration and production in this capital intensive industry. However, these companies are often global MNEs with interests in many geographic areas. As such, the decision to explore and develop oil and gas fields in Atlantic Canada, as opposed to other geographic areas, will depend upon a number of location factors that affect the relative cost and profitability of such an operation. Such factors include the cost of technology required to extract the resource from a particular field, the impact of the regulatory environment, the availability, cost and quality of local support services, the costs of transporting the resource to market, and the (world) market price for the product. Similar factors may apply to firms in other natural resource and extractive industries.

For foreign companies in the retail business, the issues are very different. Access to local markets are a key reason for establishing stores in Atlantic Canada. However, these firms must also have advantages that enable them to compete with local firms. These advantages may include a recognised brand name, size advantages in marketing and purchasing and a more efficient business model.

In the manufacturing sector, a number of factors may influence the location of foreign plants in Atlantic Canada. These include access to raw materials and other supplies, availability and cost of labour, access to markets and associated transportation costs, availability of sites with adequate infrastructure, local research capacity and financial incentives.

Finally, for foreign firms in the service sector, access to markets may again be critical, especially where ongoing direct contact with clients is important. The advantages that a foreign firm possesses relative to domestic firms may again be size related such as the ability to draw upon financial, marketing, human capital and management resources from around the world.

Determinants of Host Country Location

The above framework suggests a number of factors that may influence the location decisions MNEs. Much of the empirical research on the determinants of firm location decisions tends to be at the national level. They key variable that almost all studies find to be important is national GDP, which is usually taken as a proxy for market size. However, market size in the host country is less important when foreign production is intended for export to other countries. A depreciation of the exchange rate is often, but not always, associated with an increase in inward FDI and a decrease in outward FDI. However, exchange rates changes are only one of many factors influencing FDI decisions, and may affect the timing of the decision more than the actual decision to invest overseas. Labour costs are often but not always found to be important. Wages are likely to be more important in labour intensive industries, but labour productivity will impact overall unit labour costs. The empirical evidence on the effect of political stability and GDP growth is mixed while the overall impact of incentives on FDI is considered to be marginal at best. The nationality or industrial composition of inward investment tends to reflect the R&D or technological intensity of the source country or industry.

Developments in the global economy and in international business are changing the key drivers of FDI:³⁶ "While the main traditional factors driving FDI location – large markets, the possession of natural resources and access to low-cost unskilled or semi-skilled labour – remain relevant, they are diminishing in importance, particularly for the most dynamic industries and functions. As trade barriers come down and regional links grow, the significant of many *national* markets also diminishes. Primary industries account for a shrinking share of industrial activity, and natural resources per se play a smaller role in attracting FDI for many countries. The role of cheap 'raw' labour is similar: even labour-intensive activities often need to be combined with new technologies and advanced skills. The location of TNC activity instead increasingly reflects three developments: policy liberalization, technical progress and evolving corporate strategies."³⁷

The liberalization of trade and investment allows MNEs to specialize more and to search for competitive locations. In 2000, almost 70 countries made 150 regulatory changes of which 98% were more favourable to FDI.³⁸ From an investment attraction perspective, Canada needs to ensure that it maintains an open and competitive regulatory environment for foreign investors.

Improved information and communication technologies allow firms to manage widely dispersed international operations more efficiently. However, foreign investment in high technology industries (such as biotechnology and semiconductors) tends to be more geographically concentrated than in low-technology industries. Innovation-intensive industries are increasingly transnational and MNEs have to be more innovative to maintain their competitiveness. The increased technology intensity of products raises the importance of skill-intensive activities in FDI. Host countries and regions must be able to provide the complementary skills, infrastructure, suppliers and institutions to operate technologies effectively.

MNEs are placing a greater emphasis on core competencies, with flatter hierarchies and stronger emphasis on networking and external links (e.g., strategic alliances and supplier relationships). This draws FDI towards locations with advanced factors and institutions, particularly for high value functions like R&D or regional headquarters. Distinct industrial clusters can attract "efficiency-seeking" FDI to take advantage of demanding buyers, specialized suppliers, sophisticated human resources, finance and well-developed support institutions. They also attract "asset-seeking" FDI to take advantage of "created assets" such as technology and skilled labour.³⁹

These shifts in location factors pose a challenge for less developed countries and regions, as they risk becoming increasingly marginalized from international production because they cannot meet new requirements for attracting high quality FDI. Possible policy responses are discussed in more detail in Chapter 7.

Determinants of Sub-National Location

Several studies have examined the factors that explain the geographic distribution of FDI within countries. For reasons of data availability, the majority of these studies examine manufacturing FDI. These results may not apply to the same extent to resource-based industries or to the service sector (e.g., the call centre industry). Similarly, most studies do not distinguish between new greenfield investments and acquisitions, yet motives and location factors may vary depending on the type of investment.⁴⁰ Also, care must be taken in extrapolating results from other countries.

A number of factors have been found to be important in explaining the location of (manufacturing) FDI within countries such as market size, transportation infrastructure and government promotional activities. Variables such as labour costs, unemployment, unionization, corporate taxes are found to be important (statistically significant) in some studies, but not others, although wages seem more important when adjusted for productivity. Variables such as coastal location and educational attainment of the workforce have also been identified as important factors in some studies, while recent research has begun to emphasize the role of local technological activity and proximity to leading research institutions. While many of these factors may also affect the location decisions of domestic firms, some studies have found that foreign firms differ from domestic firms in their location decisions.

Canada

Only a limited number of studies have empirically examined the pattern of FDI within Canada.⁴¹ This partly reflects the limited regional data discussed in Chapter 3. Many of these studies note the concentration of investment in Canada, with Toronto leading the way and Montreal, Vancouver and Calgary also being key destinations.⁴²

One recent study examined U.S. FDI in Canada during the period 1985 to 1998.⁴³ Four provinces (Ontario, Quebec, British Columbia and Alberta) accounted for 94% of all investments, with Ontario alone receiving for 57% of investments. By contrast, the Atlantic provinces comprised 2.2% of U.S. investments,

with Nova Scotia receiving more than half the regional share. U.S. investment also came from a small number of states with the top five states (New York, California, Texas, Illinois and Michigan) responsible for 46% of Canadian investments, and the top ten states (including Ohio, Pennsylvania, Massachusetts, New Jersey and Connecticut) accounting for 68% of investments. In terms of industry sectors, wholesale, business services, oil and gas extraction and computer-related activities were most prominent.

Empirically, the researchers found that much of the FDI was determined by the "established economic position" of the home and host region, particularly the host province, as measured by the number of business establishments. Province-state trade links were also important factors. The authors suggest that incentives to attract U.S. investors away from established areas may have to be very large to be effective.⁴⁵

Descriptive data also suggests that proximity may also play a role. For example, analysis of U.S. investments in Canada between 1985 and 1989, found that 35% of investments in the Atlantic provinces were from New England states, with a further 23% from Mid-Atlantic states. 46

A study of Japanese direct investment in Canada found that although subsidiary survival rates between 1986 and 1994 varied by region, being highest in Ontario and lowest in the Atlantic provinces, these differences were not statistically significant once other factors were controlled for.⁴⁷ However, indicators of parent commitment to the subsidiary were important to the overall survival of the subsidiary.

Canadian research also indicates that investments by foreign-controlled corporations already operating in Canada are more diffuse than those of new foreign investors. For example, over 40% of U.S. and U.K investments between 1985 and 1988 were in Toronto, compared with only 25% for Canadian-based foreign-controlled firms. Foreign investors may be attracted to economic core regions because of market access and the availability of specialist services. They may also reduce the risks of new investment by following industry leaders and replicating the existing pattern of industry in the host country. However, established foreign-controlled corporations have greater opportunity to gather information about the host country and to establish adequate linkages with service and other suppliers. The implication is that it may be easier to attract an existing Canadian-based foreign company to establish operations in a peripheral region rather than a new foreign company. Moreover, existing foreign companies in a region may be equally important sources of new investment.

United States

Studies on FDI within the U.S. are particularly interesting because the U.S. forms part of the NAFTA zone. U.S. states, along with other Canadian provinces, may be the closest competitors for Atlantic Canada in attracting non-U.S. investment. ⁵⁰

Researchers have suggested that there is some consensus regarding the effects of several factors including market size, transportation infrastructure and state promotional activities. However, there is disagreement regarding variables such as unemployment rates, unionization and taxes.⁵¹

Defining the appropriate market is not straightforward. Measures of local market size imply that serving the local market is a prime consideration in location decisions. While this may be relevant for wholesale activities or suppliers for large companies or industrial clusters, it may be less relevant for firms seeking a base to serve the whole North American market. In addition, there is some evidence favouring urban over rural locations. ⁵²

The importance of transportation infrastructure (usually highway systems) seems to be a consistent theme in the literature, although researchers measure this in different ways. Several studies have also found that coastal locations tend to be favoured.⁵³

A paper published in the early 1990s concluded that there was a consensus regarding the impact of manufacturing wage rates, with higher wages have a negative impact on foreign investment.⁵⁴ However, results since then suggest a more mixed picture, with studies finding no significant relationship or even a positive relationship.⁵⁵ What may be more important is unit labour costs, that is wages adjusted for labour

productivity. However, only a few studies have included productivity variables.⁵⁶ Skills and educational attainment may also be important aspects of labour supply.⁵⁷

High unemployment rates may indicate available labour supply and this variable is positive and significant in some studies; yet it may also suggest skills deterioration and less-competitive industrial conditions. While some European firms, for example, may favour U.S. markets with weak unions, greater managerial control and a more flexible labour force, some studies have found a positive impact of unionization. Having a greater voice in the company direction may increase worker productivity thus offsetting higher wages, and with higher job security increasing employee commitment and flexibility.

Many, if not all, provinces and states try to attract foreign direct investment as part of their economic development strategies. These activities include promotional campaigns, advertising, trade missions, and overseas offices along with financial incentives such as tax breaks and other forms of financial assistance. In the U.S., "statistical evidence on the effectiveness of these promotional efforts is scare; however, most researchers have found a positive association between promotional budgets and foreign direct investment activity." Yet the evidence is mixed regarding specific promotional activities, such as state promotional offices abroad.

High corporate and property taxes may deter investment and many studies find such an effect. However, higher taxes may also finance transportation, infrastructure and worker training which will be of benefit to firms. One study found that high state expenditures relative to corporate taxes were a positive influence on investment. The same study found that having pro-business governors, legislatures and policies were also positive factors.

In terms of other variables, distance from the corporate headquarters had a negative effect on Canadian FDI in the U.S, particularly for smaller investments. Also, Japanese investors prefer to locate plants in areas of previous Japanese investments in the same industry. While this agglomeration effect suggests possible scope to use incentives to attract an initial investment, simulation results indicate that the benefits will be quite small for states that are perceived as relatively unattractive.

While many location factors may be important for U.S. and foreign firms, there is evidence to suggest that foreign firms have different priorities. For example, one study found that foreign firms favour coastal locations and states with low unionization, low wages rates and right to work laws. ⁶⁴ It was suggested that foreign-owned establishments were more import-dependent and that coastal states may be more cost effective to receive imports. Foreign firms may also invest in firm-specific training such that local human capital is less important than wage costs. Additionally, organized labour may constitute an additional barrier that foreign firms prefer to avoid. Foreign and U.S. firms were equally attracted by the level of economic activity, corporate taxes, per capita income and state budgets on international activities (including investment attraction and export promotion).

Recent theoretical developments have also emphasized the importance of technological variables in addition to traditional site selection factors. Research has often focused on production advantages and manufacturing location, neglecting the generation of new products and technologies. One recent study found that the scale of technical activity performed by firms and universities in a region was an important driver of foreign investment in R&D and that proximity to leading research universities was an important determinant for new greenfield investment.⁶⁵

Europe

Several studies have examined the distribution of FDI within the U.K. and other European countries. ⁶⁶ Some care must be taking in extrapolating results from other countries. For example, factors that were important in explaining FDI within the U.K. were less helpful in explaining FDI within France. ⁶⁷ However, in general, many of the same results are found with transportation infrastructure and regional assistance having positive effects, while high unit labour costs deter investment. One U.K. study found market size to be important at the country level but not at the sub-national level. ⁶⁸ However, population density was important. This may indicate local markets, labour supply, infrastructure and the availability of business services.

It is interesting to note that within the U.K., although core regions (i.e., the South East) dominate in terms of foreign investment, there has been a growing preference for peripheral regions (e.g., Wales and Scotland) during the 1980s, reflecting grant aid, labour availability and cost and infrastructure linkages to UK and European markets. However, in Italy it seems that peripheral areas are losing out to traditionally stronger more advanced regions. It is also noteworthy that E.U. investors in Italy were more sensitive to the sectoral specialization and comparative advantage of the regions than non-EU investors. European investors may perceive Canada differently from U.S. investors.

Conclusion

MNEs seek locations to take advantage of national and regional markets, local assets (such as natural resources, labour and technological assets) and cost efficiencies (e.g., production and transportation costs). MNEs are placing increasing emphasis on the technological capacity of locations and their ability to support higher value functions, including competitive suppliers, skilled labour, infrastructure and institutions. Industrial clusters are also important in some sectors.

The small size, low urbanization and peripheral location of the Atlantic provinces do not encourage FDI within the region. Provinces need to continue to emphasize access to the North American market. This places a premium on both an efficient transportation infrastructure and secure border access to the U.S. The quality and cost of transportation and communication is a key location factor for FDI in general and provinces need to ensure that road, rail, air and sea infrastructures are maintained and upgraded.

Low labour costs should be a positive factor in attracting labour-intensive industries, but unit labour costs (i.e., labour costs adjusted for labour productivity) are likely to be more important. While high unemployment may be a sign of labour availability, the skill and productivity level of the unemployed workforce is also critical. Provinces may need to be careful about focusing too much on attracting low wage, low technology operations. This may not be a viable long-term strategy (given the potential for low cost competition from other jurisdictions) and may have limited benefit from an economic development perspective. For example, even though cities in Atlantic Canada scored very well in the recent KPMG comparison of international business costs, there are a large number of other cities in Canada and Europe that had average costs within ±5% of the Atlantic cities.⁷¹ Market size and access could easily outweigh such minor cost advantages, while there are many developing countries that may offer much lower labour costs.

The availability of skilled labour and the technological and research capacity of local firms and institutions are becoming more important factors in the location decisions of MNEs, particularly in high technology industries. The development of centres of excellence and clusters of industrial and research activity may attract higher value FDI. Research from Europe indicates that the extent and nature of innovation performed by MNEs in regional centres depends upon where a regional centre is located in the firm's hierarchy. Some MNEs are attracted because of the general local technological capacity of a region, while others invest to exploit specialist expertise.

While promotional activities or budgets seem to have a positive effect in attracting investment, most studies have not evaluated the cost-benefit of such policies. Nor does the research literature offer much guidance on the most effective type of promotional activity. There is some evidence that foreign investors may follow earlier patterns of foreign investment. Indeed, most provinces seem to target countries where they have already been successful. In terms of the U.S., proximity may be an important factor for targeting investment (e.g., New England and other Atlantic states). Foreign investors already operating in Canada may be more likely to invest in peripheral regions than new foreign investors. Provinces are well aware of the need to be sensitive to the different motives for FDI, and differences between investors from different countries and industrial sectors.

Regulatory issues are not usually included in empirical studies of FDI at the sub-national level. However, variables measuring pro-business stance were found to be important. Provincial regulatory structures and policies and attitudes to business and foreign investors may be critical for new investment and expansions.

Chapter 6: The Impact of Foreign Direct Investment

Benefits and Costs of FDI

There are numerous potential benefits of foreign direct investment. These include:

- direct creation and preservation of jobs;
- technology transfer (e.g., through investment in machinery and equipment, training and exchange of technical personnel);
- international management expertise;
- access to new markets, particularly export markets;
- indirect employment (e.g., for suppliers and business services);
- improved productivity and efficiency of local firms (e.g., through increased competition, technology spillovers); and
- higher tax revenue.

However, concerns have also been raised regarding several issues⁷³:

- potential jobs do not materialise or only last a short time;
- many jobs are low pay, low skill jobs;
- wage pressure in domestic sectors with low or slow productivity growth;
- · decline in market share of local firms;
- limited local sourcing and linkages with the local economy;
- reduction in local R&D activity and capability;
- instability from overreliance on MNCs;
- net cost of financial incentives; and
- a policy neglect of indigenous firms.

This chapter reviews the Canadian and international evidence on the benefits and costs of FDI and the implications of these findings for Atlantic Canada.

Canadian Evidence on Host Country Benefits

There are two differing views of the innovation and R&D activities conducted by foreign firms (MNCs) in Canada. The first view regards Canadian subsidiaries as little more than branch plants, exploiting the knowledge assets of the parent company, but with little capability to develop assets that would be transferred and exploited worldwide by the parent company. The second and more recent perspective, suggests that MNCs decentralize R&D activities abroad to take advantage of local competencies. Local subsidiaries compete for worldwide product mandates within the MNC. The foreign subsidiary conducts R&D not only to exploit the parent company's capabilities in the foreign market, but also to contribute to the MNC's knowledge base through its R&D activities and interaction with local firms and educational institutions.

A recent study examined the Canadian evidence on these perspectives using data on manufacturing establishments from the 1993 Survey of Innovation and Advanced Technology. The authors concluded that:

"far from being passively dependent on R&D from their parents, foreign-owned firms in Canada are more active in R&D than the population of Canadian-owned firms. They are also more often involved in R&D collaboration projects both abroad and in Canada. As expected, foreign subsidiaries enjoy the advantage of accessing technology from their parent and sister companies. While multinationals are more closely tied into a network of related firms for innovative ideas than are domestically owned firms, their local R&D unit is a more important source of information for innovation than are these inter-firm links. Surprisingly, foreign subsidiaries also more frequently report that they are using technology from unrelated firms. Moreover, the multinational is just as likely to develop links into a local university and other local

innovation consortia as are domestically owned firms. This evidence indicates that multinationals in Canada are not, on the whole, operating subsidiaries whose scientific development capabilities are truncated—at least not in comparison to domestically owned firms."

The authors note further that in regard to innovation:

"A comparison of the extent and impact of innovation activity of domestically and foreign-owned firms shows that foreign-owned firms innovate in all sectors more frequently than Canadian-owned companies in almost all size categories. They are also more likely to introduce world-first rather than more imitative innovations."

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However, the study also found that domestic firms with an international orientation (such as export activities or investments abroad) are quite similar to foreign firms in Canada, with regard to the likelihood that they conduct R&D and introduce innovations. This suggests that international orientation may be more critical then the nationality of ownership. Furthermore, it is smaller firms and those in less-technologically intensive industries that are more likely to be 'dependent foreign affiliates' relying more on ideas from their parent company than their own R&D.

This study is based upon the likelihood of R&D occurring, not on the actual extent of R&D (e.g., R&D expenditures). Although there seems to be some conflicting evidence, overall, studies seem to suggest that foreign firms have a higher R&D intensity (R&D expenditures as a proportion of sales). For example, one study found that, after controlling for size and industry, the largest Canadian-owned firms have a lower R&D intensity than foreign-owned firms.⁷⁷

Foreign firms are more likely to adopt advanced manufacturing technologies than Canadian-owned manufacturing plants.⁷⁸ This gap has persisted between throughout the 1990s although much of the difference reflects poor performance in small and medium-sized plants.

Foreign-controlled manufacturing plants are larger, more capital intensive and have higher labour productivity. However, labour productivity in foreign-controlled plants is higher even after controlling for plant size and industry, and has been increasingly more rapidly than in the domestic sector. Another study found that foreign-controlled manufacturing firms have higher multi-factor productivity, although the gap narrowed from about 25% in the late 1980s to about 16% in the early 1990s. This gap was not due to differences in firm size, industry, unionization or labour quality.

There is some evidence that foreign acquisitions of Canadian companies leads to improvements in productivity and higher R&D spending but lower short-term profitability.⁸¹

Canadian evidence on the spillover benefits of FDI is somewhat mixed with one study finding that labour productivity was positively related to the share of foreign ownership in an industry. However, other studies have found no evidence or even a negative relationship. A recent examination of FDI in Canada found that FDI lowers the cost of production and increases productivity in most Canadian industries by reducing the demand for labour, capital and intermediate good inputs for a given level of output. PDI contributed an average of 0.5 per cent per year to total factor productivity growth over the period 1973-92. International R&D embodied in imported goods also contributes to lower costs, higher productivity and lower demand for factor inputs, but increases the demand for domestic R&D.

In terms of employment, foreign-controlled manufacturing firms create and eliminate fewer jobs in response to output changes than Canadian counterparts so that employment is much less volatile in the foreign-controlled sector. 85

In terms of trade, foreign-controlled firms in Canada have a much higher international orientation, with export/sales ratios of about 20%, more than double that for Canadian-controlled firms. Similarly, the import/sales ratio is about 22%, almost three times greater than for Canadian-controlled firms. Foreign-controlled firms tend to be net importers while Canadian controlled firms are net exporters. Much trade is with affiliated companies, although the extent varies by country of control and by sector. A recent study

also found that foreign-owned manufacturing plants responded more to trade liberalization than domestic-owned plants, with a greater increase in product specialization.⁸⁷

International Evidence on Host Country Benefits

A number of studies have found a positive impact of FDI on the geographical diffusion of technology, total factor productivity and export propensity of domestic firms, and the quality, productivity and product diversity of local suppliers. There is evidence of positive spillover effects from FDI on domestic firms, particularly within the same industry, but limited evidence on the exact nature of such spillovers. Moreover, such spillovers vary between countries and industries and seem to increase with the level of local capability and competition. However, the overall impact of FDI on state-level economic growth is not clear. The state of the state

One study found that FDI had a significant effect on technical progress in Germany and the U.K. However, while 30% of the productivity growth in the U.K. manufacturing sector since 1985 was attributable to FDI, there was no significant effect on productivity growth in the U.K. services sector, even though this sector accounted for two-thirds of inward investment in the U.K. Moreover, another study found while inward investment stimulates domestic productivity growth in manufacturing industries, this could not be attributed to R&D or investment spillovers; rather it seemed to reflect increased competition stimulating a degree of productivity catch up among domestic firms. Another study found that FDI is positively related to industry comparative advantage, but that FDI (and regional agglomeration) further promotes industry comparative advantage.

FDI may contribute to increased exports if the investment is intended to serve international rather than domestic markets, or if the investment leads to increases in productive capacity or productivity. A study of U.S. state export performance suggests that FDI may provide a small boost to exports, although the size of the impact differs by industry. ⁹⁴

Job creation is often a high priority for regional development agencies but the direct impact of FDI on U.S. regional employment is described as minimal. Analysis in the U.K. also suggests that only about two thirds of the initially predicted number of jobs were actually created. There have also been concerns regarding the number of jobs created and the cost per job created in Northern Ireland. The contribution of existing and well-established foreign investors may be just as important as new FDI in terms of job creation. A U.S. study also found evidence that foreign investment raises local real wages much more than equivalent domestic investment, although the exact source of this increase is not identified.

Ireland has witnessed a substantial inflow of export-orientated FDI in manufacturing, stimulated in part by a low corporate profits tax on exports, attractive investment grants and a dismantling of tariff barriers. Foreign manufacturing firms tend to be large with high productivity profitability, wages and skill levels. Foreign firms import a substantial proportion of their inputs but still generate more indirect employment (per employee) than the domestic sector.

Local Linkages, Embeddedness and FDI at the Sub-National Level

There are many different types of linkages between a MNE and local firms and institutions: 101

- backward linkages, in terms of local purchases of materials and services:
- forward linkages, in terms of local sales to customers;
- training and skill formation;
- research and development linkages; and
- the extent of local decision making

These linkages are seen as increasingly important because "the contribution of inward investment to regional economic development depends on the extent and quality of its linkages with regional and local production, innovation and learning systems." Moreover, transnational corporations (TNCs) are "no

longer regard as totally placeless but to a greater or less extent as socio-spatially embedded organizations." Hence, "promoting the embeddedness of TNCs has thus been widely acknowledged to be vital for the development of an initial inward investment into a sustainable one." 103

A study of German-owned manufacturing in the U.K. found that forward and backward linkages are rather small with very few companies actively developing sophisticated supply chains within the region. ¹⁰⁴ Limited backward linkages reflect close procurement arrangements with the parent company, highly specialized materials with only a few suppliers worldwide, and the lack of available materials at an appropriate price and quality. Limited forward linkages reflect the supply of customers beyond the region or the lack of major customers within the region.

In terms of training, the study did find some benefit with firms providing shop-floor training, sending employees to local colleges or universities, supporting the training of apprentices, encouraging employees to complete relevant qualifications and sending employees to Germany for training in the parent company (with these employees then being used to train others in the U.K.). Whereas customer/supplier linkages will terminate among disinvestment, the benefits of this type of skill-formation will likely remain.

In terms of R&D, very little is conducted in the U.K. either because the companies operate in mature markets with well established products and technologies that do not require intensive R&D and innovation or such R&D is largely carried out by the parent company.

None of the plants in the U.K. had complete independence in decision-making. Some companies have a top-down hierarchical structure with local control within prescribed limits. Smaller companies tend to have more autonomy and participate in strategic and capital-spending decisions in the parent company.

Other studies have also indicated the relatively poor degree of backward linkages in the U.K. and Ireland. A study in the U.K. found that the foreign-owned manufacturing sector purchased less locally than domestic firms, and hence supported less output and employment. However, higher labour productivity meant higher indirect employment per direct job in foreign sector.

Local supply capability is an important determinant of the extent or nature of local linkages. Local supply capacity will depend on factors such as the size of the region and industrial base, the availability of skills and infrastructure, the competitiveness of local firms and their ability to increase productivity and respond to new opportunities.¹⁰⁷

Costs and Concerns

FDI can be volatile. For example, Siemens opened a semiconductor plant in the U.K in 1997 but its closure was announced in July 1999. The failure of this flagship investment was attributed to global market conditions (e.g., an oversupply of microchips and a collapse in prices) and the relative ease of closing facilities and making people redundant in the U.K.¹⁰⁸ FDI may also be viewed as short-term because it often involves branch plants for products near end of product life cycle. These plants require few corporate functions such as R&D. For example, a study of foreign plant closures in Northern Ireland in the 1980s found that many were selected for closure based on their role within the parent organization. Many were small production-only units with no on-site product development capacity. ¹⁰⁹ Atlantic Canada also experienced short-lived foreign investment during the peak of regional development expenditures in the late 1960s to early 1980s.

Foreign direct investment, by more productive and technology advanced foreign firms, is likely to increase the demand for skilled labour and increase wage inequality. This occurs through the direct employment of skilled labour by foreign firms, and by technology spillovers that increase the relative demand for skilled workers by domestic firms.

Moreover, if MNEs hire most of their skilled workers from other firms (rather than training workers), while many technical posts are filled initially at least by ex-patriots, then this does little to help the unskilled or unemployed. While there may be new vacancies for skilled workers in domestic firms, this only helps previously unemployed workers if they have or can obtain the skills required.

FDI may also lead to higher wages among domestic firms, leading to a fall in employment while the size of the overall domestic sector may shrink due to increased competition and smaller scale economies. These effects will offset the overall employment gain from the foreign investment. One study found that FDI led to a reduction in employment in domestic firms equivalent to 20% of the jobs created in the foreign manufacturing sector. The sector of the sector of

Foreign entry may reduce the profits of domestic firms. For example, competitive pressures from foreign producers may lower price-cost margins (a positive spillover in terms of efficiency) and the market share of domestic firms. Wage pressure from foreign firms (that pay higher wages but have higher productivity and lower unit labour costs), with no corresponding productivity gain in the domestic sector, will also lead to lower profitability. Moreover, lower domestic profitability may simply reflect domestic firms with monopoly power being replaced by foreign monopolies (with their ownership advantages and possible location attraction subsidies). There is evidence that FDI has put downward pressure on profits of UK manufacturing firms, although the exact mechanism for such an effect was not established.¹¹⁴

One aspect of the above labour market and profitability effects is the extent to which domestic firms have the resources to absorb the new technology of foreign firms, which may require them to investment in new machinery and equipment, or in training. If the technology and productivity gap between foreign and domestic producers is too large, then domestic firms may not be able to assimilate the technology and benefit from any spillovers. In this case, wages and skill differentials will still increase, but without any accompanying productivity gain.¹¹⁵

FDI may impact regional government budgets and priorities. Tax revenues may increase, although tax rebates will limit the size of this effect. Similarly, expenditures may increase due to promotional activities, financial incentives and spending on training or infrastructure. A study of foreign investment in South Carolina found evidence that FDI is associated with lower per-capita local government expenditures, and a shift in expenditures away from public schools towards transportation and public safety. 116

With regard to foreign takeovers of local firms, although there may be productivity and other benefits, there is some evidence of negative effects from a regional perspective. For example, business service linkages (such as financial and legal support services) are severed, senior managers are removed, and R&D and marketing functions are lost.

Conclusion

Foreign direct investment can have both positive and negative effects upon a host country or region.

In Canada, there is evidence that foreign-controlled manufacturing firms are more productive and innovative than Canadian-controlled plants, and that these foreign operations do engage in a significant amount of local R&D activities. There is evidence of positive spillovers from FDI to domestic firms, although the most important mechanisms for such technology transfers have not been established. However, increased competition from foreign firms seems to be a key factor.

While the creation of new jobs is often a prime concern for economic development agencies, the number of new jobs actually created, the quality of these jobs, and their permanence may be lower than expected at the time of a new investment.

There is also evidence of some negative effects of FDI. Domestic firms may find themselves unable to compete or respond to the productivity and technological advantages of foreign firms, leading to a

reduction in market share, profits and employment. FDI may increase inequality between skilled and unskilled workers and do little to reduce long-term structural unemployment.

In terms of regional effects, numerous studies have found very limited linkages between MNEs and local firms and institutions. This suggests that potentially beneficial effects of FDI on suppliers, customers, the local workforce and research institutions may be quite modest.

Investment attraction agencies promote FDI for two basic reasons: for jobs and as an economic development strategy. Employment seems to be the main motivation in the Atlantic provinces (and in other jurisdictions). Yet a dominant focus on job creation is unlikely to create the conditions for FDI to have a developmental impact on the regional economy. 118

If FDI in Atlantic Canada is primarily a job creation strategy, then economic development agencies should carefully compare the costs per job created via new foreign investment, to the costs of job-creation programs targeted at domestic or existing foreign investors. Such an analysis must take account of any reduction in employment among local firms caused by increased foreign competition, and the potential differential effects on skilled and unskilled labour.

Alternatively, if FDI in Atlantic Canada is to be pursued as a vehicle to stimulate local economic development through technology transfer, improved productivity and product quality among domestic suppliers and competitors, and training and skill upgrading, then further research is needed to examine the extent of such linkages and benefits in the region. Studies from Europe suggest that such local linkages and the associated benefits are often quite limited. This issue is of particular relevance for the energy industry in the region where the issues surrounding the local benefits and spillovers from offshore developments are paramount. However, some jurisdictions have pursued specific policies to enhance local linkages and the developmental potential of FDI. These policies are discussed in the next chapter.

Chapter 7: Government Policies Towards Foreign Direct Investment

National Legislation and Policy

Three main phases can be distinguished in Canadian policies towards foreign investment since the Second World War: the post-war period to the 1960s, the early 1970s to early 1980s and the post-1985 period. Some industries, such as the automobile sector, financial services and energy, have been or remain subject to industry specific regulations and ownership restrictions. Policies affecting FDI in specific sectors are not discussed in detail in this Report.

In the post-war period, "the government attitude toward inward FDI was generally to encourage maximum inflows of foreign capital." Beginning in the late 1950s, a number of regulations were introduced affecting foreign ownership in financial services and cultural industries.

However, in 1973, the Foreign Investment Review Act established the Foreign Investment Review Agency (FIRA) to screen foreign investment proposals above a certain size, whether acquisitions of Canadian companies or the establishment of new businesses in Canada. Expansions of existing businesses were not subject to review. Approval required foreign investors to demonstrate to the government that the investment would be of significant benefit to Canada. Applications "had to contain detailed undertakings that were negotiated as part of the review process and which contributed to the realization of significant benefits." Over the period 1975-84, about 7% of proposals were disallowed while about 25% of new business proposals and a higher proportion of acquisitions were approved only after modifications to the original submission. 124

The National Energy Program (NEP), designed to increase Canadian ownership and control in primary oil and gas industries, was also in effect during this period. The NEP was announced in October 1980 and remained in force until 1985-6 when many of the provisions regarding foreign investors were abolished.

In 1985 the Investment Canada Act replaced FIRA with Investment Canada. The Act is viewed by researchers as signalling a "major shift" in policy towards a more "pro-investment" stance for inward FDI in Canada. The test of "significant benefit" was lowered to one of "net benefit," the establishment of new businesses were no longer subject to review, and indirect acquisitions of Canadian businesses with assets under \$50 million were also no longer subject to review. The 1989 Canada-U.S. Free Trade Agreement (FTA) further liberalized investment by limiting review of U.S. direct acquisitions to those valued at more than CAN\$150 million. The 1994 North American Free Trade Agreement (NAFTA) went even further by extending national treatment for U.S. and Mexican investors. Since the establishment of the WTO in 1995, the thresholds for NAFTA members have been extended to all WTO investors. The energy sector was also further liberalized in 1992 treating the oil and gas industry like any other industry under the Investment Canada review process.

To summarize the existing notification and review process under the Investment Canada Act, any Canadian business established or acquired by foreign investors must be notified to Investment Canada. 127 However, the establishment of new businesses is not subject to review unless it involves Canada's cultural heritage or national identity. Acquisitions by WTO members are subject to review if the asset value of the Canadian business exceeds \$218 million (in 2002). For non-WTO members, investments exceeding \$5 million for a direct acquisition or \$50 million for an indirect acquisition are subject to review. 128 These lower thresholds also apply for any Canadian business that is involved in uranium production, provides any financial service, provides any transportation service or is a cultural business (such as publishing, film production or radio and television broadcasting). 129 Administration of the Act is the responsibility of Industry Canada except for investments involving Canada's cultural heritage or national identity, which are the responsibility of Canadian Heritage.

Several factors are considered in the review process to determine whether or not an acquisition is of "net benefit." These include: the effect on employment, resource processing, exports and the general level of economic activity in Canada; the effect of the investment on productivity, industrial efficiency,

technological development, product innovation and product variety in Canada; the contribution of Canada's ability to compete in world markets; the effect on competition within any industry in Canada; the compatibility of the investment with national industrial, economic and cultural policies; and the extent of Canadian participation in the Canadian business or industry. The weight given to these factors may vary with each investment, but investors are expected to address each of these factors in their application and provide supporting documentation. If the investment is not considered of "net benefit" to Canada, the investor may make additional representations and undertakings to demonstrate the "net benefit" of the investment. There are provisions within the Investment Canada Act for monitoring and enforcing these undertakings.

Empirical examination of the above policies towards FDI have found only limited negative effects of the FIRA on FDI, a modest stimulus from the FTA and NAFTA, and a negative impact of the NEP on FDI in both energy and manufacturing. Canadian researchers have concluded that while the economic arguments for restricting inward FDI are weak and it is difficult for both conceptual and practical reasons for host governments to extract greater benefits from inward FDI through screening, the imposition of undertakings or other policies, the overall investment environment seems to be a substantially more important influence on FDI patterns then direct policies to restrict or regulate flows of FDI.

Federal Policies and Strategies

Federal involvement in foreign investment activities rests with Investment Partnerships Canada at the national level and with the Atlantic Canada Opportunities Agency at the regional level. This section provides a brief description of their strategies and activities but does not evaluate their effectiveness. 133

Investment Partnerships Canada

Investment Partnerships Canada (IPC) was formed in 1996 as a joint venture of Industry Canada and the Department of Foreign Affairs and International Trade (DFAIT), and reports to ministers of both departments. IPC has prime responsibility for inward investment attraction and promotion in Canada. Its activities relate to the investment climate, branding, campaigns and marketing, and partnerships with federal, provincial and municipal governments.

IPC is the focal point for direct investment support in Canada, with direct contacts to investment counsellors in Canadian embassies and consulates around the world and to investment consultants at national, provincial and municipal levels within Canada. IPC provides a number of free and confidential services including economic data for site selection, personal assistance for exploratory visits, introductions to government sources, suppliers and academic and business consultants, and guidance on available incentives, regulations, transportation and taxation.

Within the federal government's investment strategy there are eight priority sectors including IT, biotechnology and life sciences, agriculture, automobiles and aerospace, and energy. Target countries are the U.S., Japan and Europe (e.g., the U.K., France, Germany, Italy, Sweden and Netherlands).

From the Federal government perspective, FDI in Canada is seen as in important source of jobs (especially high skilled jobs), R&D, technology transfer, management expertise and capital and as a general driver of economic growth, productivity and standard of living. The benefits of FDI spillover to domestic firms and boost international trade. Canada is seen as an attractive location because of its close economic ties to the U.S., low business costs, availability of a skilled labour force (with low turnover) and strong competitive industrial sectors. Other advantages include natural resources, efficient transportation infrastructure, information and communication infrastructure, low corporate tax burden and generous R&D tax regimes and fiscal and macroeconomic stability. The main challenge is viewed as the lack of awareness and accurate knowledge of Canada.

Atlantic Canada Opportunities Agency

FDI has taken on a higher priority with the Atlantic Canada Opportunities Agency (ACOA) in recent years. This reflects a number of developments such as the increasing importance of new technology in the

economy and the development of knowledge-based industrial clusters within the region, NAFTA and the opportunity to use Canada as a base to serve the North American market, and the opportunities to use the Atlantic Innovation Fund to attract FDI in R&D initiatives.

ACOA's activities include investment research; information intelligence, management and dissemination; awareness and promotion; investment partnering, and financial assistance. Financial support is currently provided through regional ACOA offices although support for provincial FDI activities has also been been provided through ACOA-provincial economic cooperation agreements.

ACOA targets FDI in several sectors: information and communication technologies (including e-business and call-centre activity), life sciences, ocean technologies and environmental technologies, light manufacturing, plastics and energy. The U.S. and Europe (e.g., the U.K., France, Germany, Norway, Sweden and Finland) are target source countries.

FDI is seen as contributing to economic growth through new technology, good quality and stable jobs and improved competitiveness and productivity. The advantages of the Atlantic region are perceived as the availability of labour (low cost, low turnover and well educated), low business costs, plentiful, reliable and competitive energy, transportation and communication infrastructure, location within the NAFTA zone, and nascent clusters in knowledge-based sectors.

Provincial Policies and Strategies in Atlantic Canada

All four provincial governments are actively involved in attracting foreign firms to the region. This section describes their strategies and activities, but again does not provide any detailed evaluation of their effectiveness. 135

Newfoundland and Labrador

Prime responsibility for FDI rests with the Trade and Investment-Jobs and Growth Branch of the Department of Industry, Trade and Rural Development. In addition, NETWORK Newfoundland and Labrador, a public-private partnership, focuses on call centre attraction. Attracting foreign investment forms part of the province's renewal strategy for jobs and growth. The following summary is based on the province's existing promotional activities and strategies. However, the government has recently announced its intention to outline a new and refocused investment prospecting strategy. The intention of the Department of the Depar

As with other provinces in the region, promotional activities include advertising in selected publications, researching and targeting specific companies and site selectors, maintaining an online presence and promotional materials and responding to investment enquiries.

The province has several target sectors for foreign investment such as marine technology, IT, manufacturing, environmental and biotechnology industries. These sectors have been targeted as growth areas for the province as a whole. The main focus of attraction activity is the U.S., as well as Europe and China.

The province has an Economic Diversification and Growth Enterprises (EDGE) program, which provides tax rebates for companies meeting the program criteria. Tax rebates are available for (provincial and federal) corporate income tax, post-secondary education and health (payroll) tax, and municipal property/business taxes. The program is available for new or expanding business and applies equally to Canadian or foreign-owned businesses.

The benefits of FDI are seen as new jobs and wealth. The location advantages of the province for foreign investors are considered to be competitive wages, stable labour force (i.e., low turnover rates), skills (i.e. large university and graduate population), competitive corporate income and small business tax, R&D facilities (e.g., the marine simulator), university-corporate links and a high quality of life. The main challenge or barrier to FDI is access to the province (e.g., in terms of cost and frequency of flights).

Prince Edward Island

Investment policy in Prince Edward Island is the responsibility of the Immigration, Investment and Trade Policy division within the department of Development and Technology. However, PEI Business Development Inc., a provincial Crown corporation, has the lead role for business attraction and development activities for the province with Technology PEI Inc., another provincial Crown corporation, taking the lead role in the IT sector.

Investment attraction focuses on five areas: IT, aerospace repair and overhaul, life sciences, food development and diversified manufacturing. The province does not have specific target countries for investment. Active attraction activities include targeted approaches with some investment promotion. Financial incentives are available but are tailor made.

The primary benefits of foreign investment are seen as employment and wealth creation. The selling points of the province are seen as including its close location to U.S. and central Canada, low business costs (including labour costs and taxes), a loyal workforce and low unionization, and infrastructure. The perceived challenges to investment in the province include its small size (and hence limited local market and capacity for large manufacturing plants), lack of awareness and competition from other jurisdictions.

Nova Scotia

Attracting foreign investment was highlighted as part of Nova Scotia's new economic growth strategy. The province recently released its Investment Framework. The seven components of this framework include: creating an attractive business climate (including tax and regulatory issues); aggressive marketing (particularly to attract anchor companies and develop industry clusters); partnering with business, community and other government agencies; provision of competitive incentives (such as the payroll rebate program) and financial tools (e.g., business loans and venture capital); development of the labour force; competitive intelligence (such as the Global Information System database) for potential investors; and development of quality infrastructure (including transportation and IT). It is noteworthy, given the earlier noted importance of after-care service, that the investment strategy highlights business retention and expansion for existing foreign investors as well as new business attraction.

Nova Scotia Economic Development is the government department/agency with the overall responsibility for foreign investment, particularly with regard to public policy areas. However, Nova Scotia Business Inc., a provincial Crown corporation with a private-sector board, is the main contact point for potential investors and is responsible for marketing, intelligence and financial incentives. It plans to operate a more proactive and focused approach than in the past.

The province has identified key economic sectors as part of its growth strategy. These include so-called foundation industries such as ocean resources (e.g., fish and fish products), land resources (e.g. forestry and minerals), agriculture and tourism and culture as well as growth industries such as oil and gas, information and communications technology, life sciences, learning and advanced manufacturing.

The province is viewed as attractive for several reasons, including an available and affordable high quality labour force, business infrastructure (e.g. transportation and communications), low business costs, and access to the U.S. market. The main benefits of foreign investment are seen as jobs and tax revenue. Lack of awareness of the province and the inability to compete with financial incentives offered by other jurisdictions hinder the attraction of new investment.

New Brunswick

Seeking new investment from outside the province forms part of New Brunswick's strategy of diversifying its economy, as identified in its ten-year prosperity plan. Responsibility for foreign investment rests with Business New Brunswick.

Fortune 500 companies are targeted within two broad sectors: knowledge-based industries (including call centres and IT) and manufacturing (such as plastics, metal, high end textile and value-added resources). The U.S. and Europe (e.g., the U.K., Germany and northern Italy) are the focus of attraction efforts.

Active recruitment activities include advertising, direct mail, trade shows, receptions, use of lead generators and partnerships with site selectors. Financial packages are designed to meet the needs of specific firms and may include loans, loans guarantees and assistance with training costs.

The advantages of the province as an investment location are cited as geographic location (i.e. close access to the U.S. market and its strategic position between the NAFTA and EU zone), low operating costs, low tax and regulatory burden, skilled and bilingual workforce, and infrastructure. The benefits to the province are seen as job creation, diversification and opening up export markets. The challenges facing investment attraction to the province relate to its small population size and being relatively unknown.

Policy Issues for Atlantic Canada

There are several lessons and issues raised in the research literature that are pertinent for foreign investment policies and programs in Atlantic Canada.

Many, if not all, provinces and states try to attract foreign direct investment as part of their economic development strategies. These activities include promotional campaigns, advertising, trade missions, and overseas offices along with financial incentives such as tax breaks and other forms of financial assistance. Research on investment decisions indicates that financial assistance is a relatively minor factor. However, when competing locations equally satisfy key criteria such as market access and labour supply, then financial incentives could play a pivotal role. In general, empirical studies from the U.S. and Europe do find a positive relationship between promotional budgets/financial incentives and foreign investment. However, while these studies provide some justification for provincial promotional activities, research on the relative effectiveness of different types of promotional activity and financial assistance would be useful.

Research from the U.K. indicates that what matters is not just the size of financial resources or incentives that different jurisdictions can offer. The structure or governance mechanisms for providing incentives also affect the speed and efficiency with which offers can be made to companies. The coordination and collaboration between different agencies and levels of government can also be significant. Being able to provide a professional, 'one-stop-shop' inward investment agency with numerous services such as prepared sites, infrastructure, training, technology transfer and aftercare can give some regions an advantage in attracting investment. But again, variations in institutional capacity may be less important than issues such as market access, labour skills and costs.

Closer cooperation between provincial and regional activities and those of the Federal government such as IPC may be a vital issue for small provinces that are not well known on the international scene. Effective use of overseas posts and involvement in national campaigns and trade-investment missions may be important given the limited resources available in Atlantic Canada for inward investment.¹⁵¹

While inward investment agencies are often primarily geared to attracting new greenfield investment, the importance of acquisitions, joint ventures and alliances has increased in recent years, as noted in Chapter Two. Strategies to help local firms form joint ventures and alliances with MNCs may be just as significant. Such activities may involve fostering business networking, online business-matching services, providing access to strategic information, training and support programs and financial assistance to help SMEs exploit the benefits of information and communication technologies. ¹⁵²

Provinces also need to be sensitive to the differences between potential investors, in terms of their sector, nationality and motivation for FDI. For example, investors from the E.U. may have different motivations or perspectives than U.S. investors. Research indicates that foreign and domestic firms differ in their investment location decisions. For example, one U.S. study found that foreign manufacturing firms favoured coastal locations and low wage-low unionized states. If similar results hold for Canada, it suggests that some provinces may find it easier to attract foreign rather than Canadian investment. They

may want to focus their attraction efforts accordingly. In addition, the key location factors for manufacturing FDI may be different for service industries.

However, Canadian evidence also indicates that new foreign firms invest in the economic core regions (of Toronto and Ontario) more so than domestic or Canadian based foreign-controlled firms. This suggests that it may be easier for the Atlantic provinces to attract foreign firms that have already established operations in Canada. These firms are more familiar with the Canadian business environment and have already established financial, service and material linkages.

Numerous researchers have emphasized the need to promote aftercare of foreign investors. In terms of employment and investment, expansion of existing firms can be just as important as new greenfield investments. ¹⁵⁶ Increased competition makes it more difficult to attract new foreign investment with sixty provinces and states competing for foreign investment in Canada and the U.S. alone.

In the 1990s, the Welsh Development Agency (WDA) began to pay much more attention to the needs of existing firms and foreign-owned plants. This requires different procedures, skills and services than those necessary to secure for new investments (where an incentive package may be critical): "To secure reinvestment, local managers need to convince themselves and their HQs that the region offers sustainable attractions." 157

While some of these programs may have been developed to promote reinvestment, they are also important in a wider sense of increasing the "embeddedness" of foreign firms and enhancing the local benefits of foreign investment. For example, the *Source Wales* programme is primarily a supplier development programme. The WDA works on behalf of the large foreign firm to secure interest of local SMEs in supplier development services. The WDA seeks to promote long-term partnerships between major buyers and local suppliers. Supplier Associations are created as forums in which new skills and techniques are exchanged between buyers and key suppliers and the large customer acts as a tutor to less talented SMEs.

The WDA also operates a technology support programme to enhance the capacity for product, process and organizational innovation in the SME sector. Activities include provision of on-site technology audits and promotion of a network of university-based technical centres of excellence to provide specialized assistance to firms. The WDA has also become involved in skills development, encouraging colleges to work in partnership with large branch plants to develop customized training packages, and helping to set up sector forums to determine the demand for collaborative training schemes.

Yet researchers also raise concerns about the possibility of institutional capture. Policy initiatives may be designed to embed or tie down a foreign company by assisting with training and staff retention or developing a supplier network. However, local resources and institutions may become so geared to servicing the specialized needs of a large foreign company that the costs outweigh the benefits and the needs of other firms or the region as a whole are neglected. "Capture of institutional capacity is likely in the absence of a coherent overall strategy and transparent strategy-making mechanism against which to assess the subsidy costs and potential contribution of any given investment against the interests of other parties."

Provinces are already aware of the basic factors that are important in foreign investment location decisions. Many of these are important for economic development more generally, such as maintaining and developing effective transportation and communications infrastructure. Research also seems to put increasing emphasis on the importance of local R&D capacity and technological activity. Efforts to promote innovation, business-university research collaboration, centres of excellence, and high-tech clusters may be significant in attracting new investment in knowledge-based sectors.

Intense competition for foreign investment may limit the extent to which provinces can pick and choose the type of new investment that they would like. However, provinces should be wary of focusing too much on attracting low cost, low technology, manufacturing branch plants that are very sensitive to production costs and may be quick to leave for more competitive locations. Attracting firms because of existing and

developing technological capacity or other local sources of ownership advantage is likely to be more effective in terms of retention rates. 161 Targeting firms with greater potential to become embedded in the local economy may also help increase retention and widen the net benefits of FDI. 162

Provinces often have a desire to spread the benefits of new investment throughout the province. Some foreign investments may be less sensitive to locating near large urban or industrial centres. However, to the extent that industry competitive advantage depends on spatial agglomeration (or clustering), attempts to push foreign investment away from existing agglomerations or developing clusters, may have significant costs. 163

Experience in the U.K. shows that local democratic processes and environmental interests can be overlooked or subordinated in the interests of regional economic development, especially in urgent mega projects. Regions have advantages if investment sites are already identified, prepared and regulatory approval issues are resolved.

Conclusion

Economic development agencies must maintain a balance between attraction of new foreign investment, aftercare policies for foreign investors and developing indigenous firms. Development agencies need to "develop a strong complementarity and forge a better marriage between hosting FDI and promoting indigenous industrial capabilities." ¹⁶⁵

Many of the spillover benefits of FDI seem to depend upon the extent of local linkages and the competitiveness and technological capacity of local firms and suppliers. Attempts to achieve such local linkages through local sourcing requirements may no longer be effective. Attention now tends to be focused on measures to improve supplier networks, cluster development, and research and innovation capacity. If the spillower is the spillower benefits of FDI seem to depend upon the extent of local linkages and the competitiveness and technological capacity of local firms and suppliers. Attempts to achieve such local linkages and the competitiveness and technological capacity of local firms and suppliers. Attempts to achieve such local linkages through local sourcing requirements may no longer be effective.

For Atlantic Canada, this issue seems particularly important with regard to the offshore energy industry. Concerns about the extent to which local firms and employees do and will benefit from offshore projects are paramount. Would measures to improve local supplier capacity and employee skill levels be more effective than local content or employment rules? Moreover, will royalties be the main benefit to the region, or will offshore energy developments have large and long-lasting spillover effects on local productive capacity, productivity and skill levels? Could offshore royalties be used to promote the developmental potential of this investment?

The regulatory environment can be an important determinant of FDI. Federal and provincial governments need to consider the perceived openness of their respective jurisdictions to foreign investment and to business operations more generally. These regulations may include everything from foreign ownership restrictions in certain sectors and to interprovincial trade barriers.

Chapter 8: Further Research

This Report has presented the very limited information that is available on foreign direct investment and foreign-controlled firms in Atlantic Canada. Further research in this field would help guide the development of policies and programs towards foreign investors in the region. This chapter highlights some of the more important areas for future investigation.

The Extent of FDI in Atlantic Canada

While there is limited scope to provide provincial data on stocks and flows of FDI, there are other potential data sources that might be of value in providing further insight to the extent of foreign investment in Atlantic Canada. However, these data will likely have to focus on the activities of foreign-controlled firms, rather than the value of FDI itself.

The most recent available data on foreign-controlled business revenue by province are for 1991. However, Statistics Canada expects to be able to provide these data from 1999 onwards, using a new survey. These data may be available later this year.

Investment Partnerships Canada is working with Statistics Canada to provide data from the public and private investment survey broken down into Canadian and foreign-controlled firms, by province. These data are likely to be available this summer, and will indicate the relative importance of foreign-controlled firms in capital expenditures (construction and new machinery and equipment) in each province.

In the same way, it may also be possible to allocate provincial data on employment, hours and earnings by Canadian and foreign-controlled firms. For the manufacturing sector, the annual Survey of Manufacturing may allow a provincial (or regional) breakdown of shipments and employment between Canadian controlled and foreign-controlled plants. APEC recommends that Investment Partnerships Canada and other interested stakeholders work with Statistics Canada to explore the feasibility of providing these data.

Taken together, these three sources would provide annual provincial data on the importance of foreign-controlled firms in business revenues, capital expenditures, employment and earnings. This would be a vast improvement on the current state of knowledge regarding the extent and role of foreign firms, and would benefit economic development agencies and other stakeholders across Canada.

APEC has also begun compiling a list of foreign-controlled firms within the four Atlantic provinces. The primary purpose of this list is to develop a sample frame that could be used for future survey-based research on foreign investment in Atlantic Canada. This list requires further development before it can be used for this purpose. This work includes verifying the validity and current operations of the firms, identifying the industry sector and firm size, and gathering primary contact information.

However, once established, this listing could be developed into a foreign establishment database to monitor developments in the region. This would enable foreign acquisitions and divestments, expansions and contractions, new businesses and closures to be tracked over time. Four such databases are known to be maintained within the U.K., although they focus exclusively on the manufacturing sector. These databases include information such as location, data established (and closed, if relevant), ownership/nationality details, product(s) and employment. A database for the Atlantic provinces would complement published Statistics Canada data, and provide one source to assess the success of foreign investment attraction, retention and expansion policies within the region.

The Determinants of FDI in Atlantic Canada

A number of empirical analyses have been done, particularly in the U.S. and Europe to examine the key factors affecting location (usually of manufacturing plants) at the sub-national level. Similar research in

Canada is constrained by the lack of adequate provincial data on foreign investment. It may be possible to use Statistics Canada data on the manufacturing sector for some analysis, but this would exclude the service sector, which is of increasing importance.

An alternative approach is to survey firms directly. Questions regarding location decisions have been used in surveys in the U.K.¹⁷¹ While such an approach may identify they key factors drawing firms to the region, of equal importance is the reason why other firms either did not consider the region, or decided to locate elsewhere. Moreover, it is important to consider the key factors that are likely to facilitate or hinder the continued presence and expansion of existing foreign firms.

Existing research has also highlighted tendencies for foreign investment to follow the location of earlier foreign investors. Survey work to examine the experiences of existing foreign firms, and, if possible, those that have chosen to leave the region, may highlight some critical factors that will attract or deter future investment. One specific area to investigate is the importance of regulatory barriers at the provincial, interprovincial and national levels.

Many provinces have existing or developing clusters of firms in particular sectors. More detailed investigation may identify the need for and likelihood of attracting foreign firms to help develop and sustain these clusters.

In Europe, there seems to be conflicting trends with peripheral regions in some countries (e.g., the U.K.) gaining a disproportionate amount of recent foreign investment, whereas the core regions continue to dominate in other countries (e.g., Italy). Research to determine the reasons for such trends, and whether or not investment in Canada (and North America) is likely to exhibit similar patterns, would provide a helpful context for provincial and federal investment policies. Similarly, a more detailed examination of sectoral trends in FDI in OECD countries would highlight global factors that might influence the likelihood of foreign investment within Atlantic Canada.

The data on U.S. foreign investment in Canada and Canadian foreign investment in the U.S. suggest that geographic proximity is a factor in explaining the location of FDI. More detailed investigation of the foreign investment linkages between Atlantic Canada and the New England (and other Atlantic) states would provide a basis for more targeted promotional efforts in the U.S.

The Impact of FDI in Atlantic Canada

Statistics Canada and database information on the employment, investment and output/revenue of foreign-controlled firms will give some indication of the importance of foreign investment in each province. However, such data do not provide any insight into the extent of foreign firm linkages within a province. Surveys have been done in other countries to examine issues such as:

- the extent of backward linkages (e.g., the proportion of local sourcing, the nature of supplier relationships, the factors limiting the use of local inputs);
- the extent of forward linkages (e.g., the identification of the primary markets);
- skills and training (e.g., the amount of training, linkages with local educational institutions); and
- R&D (e.g., amount of R&D expenditures, nature of research activities, linkages with local firms and research institutions).

Similar survey work for the Atlantic provinces would indicate the extent to which foreign firms are embedded within the region, the nature and size of possible benefits of FDI, and the potential for policies or programs designed to enhance the local benefits of FDI. Studies for other regions have often indicated the very limited extent of backward linkages.

Policies Towards FDI in Atlantic Canada

Attitudes towards foreign investors can shape the policies that are developed and the willingness of firms to locate in the region. It may be of value to use surveys and focus groups to gauge the openness of Atlantic Canadians and Atlantic firms towards greater foreign investment in the region.

Many provincial, state and regional development agencies are involved in foreign investment attraction. However, there seems to be very little comparative analysis either on the overall effectiveness of these activities, or on relative effectiveness of different types of activity (e.g., advertising, foreign missions, overseas offices). In particular, given the likely limited resources for such activity in the Atlantic provinces, this research would most usefully focus on the success of other small investment attraction agencies.

This Report has noted the existence of policies in other jurisdictions to promote the benefits of FDI (e.g., supplier development and technology transfer programs). A more detailed review of such policies in other countries and regions would provide useful guidance for the development of such policies in Atlantic Canada.

Conclusion

Despite the limited information currently available on foreign investment within Atlantic Canada, there are a number of ways to improve the existing state of knowledge. These include improvements and extensions to existing Statistics Canada data, surveys and other empirical analyses. In particular, APEC recommends that Investment Partnerships Canada and other stakeholders continue to work with Statistics Canada to improve the availability of data on the role of foreign firms in provincial economies.

The most crucial knowledge gap relates to the impact of existing foreign firms in the region. This is more than just the direct employment effect, and includes issues such as indirect employment effects, local supplier linkages, technology transfer to local firms, skills and training, and R&D and local research linkages. Such research may require a combination of surveys and in-depth case studies. Combined with a review of programs in other jurisdictions, such research would help define the extent of spillover benefits in Atlantic Canada and how these might be enhanced in the future.

Given the importance of existing foreign firms as a source of job creation and as a magnet to attract other foreign investors, research to examine the experiences of foreign firms, the factors that attracted them to the region, and factors that facilitate or inhibit their future expansion (e.g. regulatory barriers), would also be of value. In-depth research or case studies on specific industries may also be useful (e.g. call centres, energy and manufacturing).

APEC has compiled an initial list of foreign firms in each Atlantic province. With further work, this list could be developed into a sample frame for survey-based research. A major challenge for such research, apart from general response issues, relates to the fact that there are a few very large foreign firms in certain industries in the region. This makes is difficult to make meaningful comparisons with domestic producers.

Chapter 9: Conclusion

Foreign direct investment (FDI) can provide benefits to host countries and regions through new jobs and the possibility for technology transfer and productivity improvements in domestic firms. However, these benefits may not always be realized, and there may be offsetting costs in terms of reduced employment and market share among domestic firms.

Small, peripheral jurisdictions such as the Atlantic provinces face significant challenges in attracting foreign investment. The local market is extremely limited, there are relatively few foreign investors already the region, and industry clusters tend to be small or only in the development stage. While an ideal scenario might involve foreign investment helping to raise skill levels, improve the competitiveness of local firms, raise export intensity, increase local technological and innovative capacity, establish a critical mass in several industries, and generally promote a more self-sustaining and self-generating economic development trajectory, it is actually weaknesses in some of these areas that limits the inflow of FDI to start with.

Economic development agencies need to maintain a balance between policies and programs to attract new foreign investment and those designed to promote the development and expansion of domestic firms and foreign firms already within the region. The latter can be an important source of new investment and employment growth. High quality transportation and communications infrastructure, a supply of skilled labour, an environment conducive to R&D and innovation, a regulatory environment that facilitates business development, and other measures to promote the competitiveness of local firms, will benefit firms already in the region and help to attract new investment. Specific policies to help improve local linkages and local supplier capacity may also be beneficial.

Officials involved in investment promotion would profit from further research to measure the extent and current impact of FDI within Atlantic Canada and the types of policies and programs that are most effective in attracting foreign investment and maximising its benefit, particularly from an economic development perspective. Such research is of paramount importance for the current debate over the local benefits of offshore energy development.

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Recent Publications of the Atlantic Provinces Economic Council

Atlantic Report (Lead Article)

The Foundations of an Innovating Society: Atlantic Canada's Capacity for Research and Development, Winter 2002.

Outlook 2002: Finding New Opportunities in an Uncertain Global Economy, Fall 2001.

Immigration and Economic Development in Atlantic Canada, Summer 2001.

Atlantic Canada's Major Projects Inventory 2001: Looking to the Horizon, Spring 2001.

The Impact of Equalization on Atlantic Canada, Winter 2001.

Report Card

Tourism in Atlantic Canada, February 2002.

Household Internet Use in Atlantic Canada, November 2001.

Adult Education in Atlantic Canada, July 2001.

Investment Spending in Atlantic Canada, April 2001.

A Profile of Atlantic Canada's Exporters, January 2001

Atlantic Canada in the 21st Century Series

Atlantic Canada's International Trade in the Post-FTA Era, 2001.

IT and the Knowledge Economy in Atlantic Canada, 1999.

Other Reports and Publications

The Contribution of the Atlantic Veterinary College to the Economy of Atlantic Canada, October 2000.

The Socio-Economic Impact of Veterans Affairs' Charlottetown Head Office on PEI and Atlantic Canada, June 2000.

The Economic Impact of the Forest Industry on the Nova Scotia Economy, March 2000.

Our University Students: The Key to Atlantic Canada's Future, January 2000.

Notes

¹ Book value refers to the value recorded on the balance sheet of the enterprise.

² Control could be achieved with less than 50% ownership depending upon the remaining shareholders.

³ For example, consider a Canadian corporation where 51% of the equity was owned by a foreign company. All the equity, other assets and revenue of the corporation would be considered as under foreign control. However, only 51% of the equity would be measured as a direct investment.

⁴ The world data in this chapter comes from UNCTAD (2001a).

⁵ The OECD data in this chapter comes from OECD (2000).

⁶ UNCTAD (2001c).

⁷ Barrett (2002), World and OECD totals are all measured in U.S. dollars. The value of FDI in Canada in U.S. dollars may therefore vary simply due to movements in the Canada-U.S. exchange rate.

⁸ UNCTAD (2001a). This follows an earlier shift from natural resource-based sectors to manufacturing (Collis and Noon, 1994).

⁹ UNCTAD (2001b).

¹⁰ Kang and Johansson (2000). However, greenfield investment is more important in developing countries.

¹¹ A number of factors may influence the choice between a greenfield investment and an acquisition (see Kang and Johansson, 2000 for a discussion and references).

¹² Kang and Sakai (2000).

¹³ Strategic alliances may be motivated by a number of factors such as economizing on production and research costs, strengthening market presence and accessing intangible assets such as managerial skills and knowledge of markets. See Kang and Sakai (2000) for a detailed discussion and analysis of the different types, motivations and effects of strategic alliances. Strategic alliances may or may not involve FDI.

¹⁴ Canadian direct investment abroad (CDIA) has also grown even quicker and has exceeded the inward stock since 1997: CDIA was worth \$301 billion in 2000.

¹⁵ The numbers are not directly comparable since FDI is measured at book value, while portfolio investments are measured at market value.

¹⁶ Dezso Horvath, presentation to the Conference Board of Canada symposium "The Race for Foreign Investment: Will Canada Compete or Get Left Behind?", Toronto, March 7, 2002.

¹⁷ The distinction may be less significant in practice because about two-thirds of FDI in Canada is in wholly-owned subsidiaries (Lajule, 2001).

¹⁸ Bender (1998). Statistics Canada rejected a direct survey because of the increased burden on respondents and concerns about the likely reliability of the provincial data, particularly for FDI stocks. For example, FDI in one province could be used to invest in operations in another province, while investment in a head office may benefit not only the province where the head office is located, but also subsidiaries in other provinces.

¹⁹ Data from the CAPEX series suggested an Atlantic share of about 10%, but the linkage rates for this series were much lower than for the CALURA and LEAP series.

²⁰ Statistics Canada (1995).

²¹ It is possible that investors decide not to proceed with a new business or acquisition. Although the Investment Review division has procedures to confirm whether or not approved investments actually take place, it is possible that some notified investments do not take place.

²² Nationally, the U.S. accounts for about 62% of investments, with the UK at 9%, and other EC at 12%.

²³ This most likely relates to the offshore energy industry.

²⁴ Nationally, manufacturing accounts for about 29% of investments, followed by wholesale and retail (26%), and business and service industries (25%), with resource industries at 7%.

The current ICO classification is based on the 1980 Canadian Standard Industrial Classification for Companies and Enterprises (SICC), which tends to group activities based on vertical integration (e.g. farming, food processing and food wholesaling) rather than the more traditional Standard Industrial Classification. APEC imputed a classification for certain firms where this information was not available. Statistics Canada plans to adopt the NAICS (North American Industry Classification System) classification for the ICO database later this year. ²⁶ Taylor (2001).

²⁷ Cameron (1998).

²⁸ Tang and Rao (2001).

²⁹ Baldwin and Hanel (2000).

³⁰ Statistics Canada (1995).

For a discussion of the various theories and empirical evidence, see Agarwal (1980), Lizondo (1991) and UNCTC

- (1992). Lim (2001) reviews more recent studies.

 The eclectic paradigm was first put forward by John H. Dunning in 1976. This section draws upon Dunning (1988). ³⁴ UNTAD (1998).
- ³⁵ Phelps (2000).
- ³⁶ This section draws heavily upon UNCTAD (2001).
- ³⁷ UNCTAD (2001).
- ³⁸ UNCTAD (2001).
- ³⁹ "Market-seeking" FDI is drawn to large markets with high per capita income and strong growth potential. "Resource/asset-seeking" FDI is drawn to areas with raw materials, low-cost unskilled labour, skilled labour,
- technological assets, and physical infrastructure. "Efficiency-seeking" FDI is drawn to areas based on the productivity adjusted cost of the above assets and transportation and communication costs (UNCTAD, 1998).

 40 O Huallachain and Reid (1997), Kirchner (2000) and O'Hagan and Anderson (2000).

 41 Green, Meyer and McNaughton (2000) provide a review of relevant Canadian studies.

- ⁴² This applies to foreign acquisitions as well as new investments (Green and McNaughton, 1989).
- ⁴³ Green. Mever and McNaughton (2000).
- ⁴⁴ The New England states accounted for almost 10% of U.S. investments. McNaughton (1992b) using data for 1985-89 finds that two-thirds of New England investment was destined for Ontario and only 6% to the Atlantic provinces. However, while New England accounted for 9% of total U.S. investment, it accounted for 35% of U.S. investment in the Atlantic provinces.
- ⁴⁵ It should be noted that the empirical analysis focused only on binary state-province relationships. It did not consider the number or value of investments between states and provinces. Also, the distance variable used was simply a U.S.-Canada border measure, and did not take into account the actual distance between states and provinces. Also, it is not clearly exactly what the number of establishments is measuring – it may reflect a combination of market size, supplier or agglomeration effects.
- ⁴⁶ McNaughton (1992b). There seems to be a similar pattern regarding Canadian FDI into the U.S. (O'Hagan and Anderson, 2000)
- ⁴⁷ Delios and Ensign (2000).
- ⁴⁸ McNaughton (1992a).
- ⁴⁹ Research on acquisitions by foreign investors in Italy regards informational costs (and asymmetries between domestic and foreign investors) as a key factor in explaining patterns of subnational investment, such as a preference for regions closest to the country core and/or the country of the investor, and for regions with a history of long-lived foreign subsidiaries (Mariotti and Piscitello, 1995).
- ⁵⁰ This review of location factors is based on empirical studies. Surveys such as the annual corporate survey conducted by Area Development are not considered in detail. The latter is primarily focused on U.S. firms locating within the U.S. Factors that have remained very important over the last 10-15 years include highway accessibility. labour costs, occupancy or construction costs, availability of skilled labour and financial incentives and tax exemptions (Area Development, 2000).
- ⁵¹ Friedman, Gerlowski and Silberman (1992).
- ⁵² Coughlin and Segev (2000).
- 53 Shaver (1998), Couglin and Segev (2000) and O'Hagan and Anderson (2000).
- ⁵⁴ Friedman, Gerlowski and Silberman (1992).
- ⁵⁵ See Coughlin and Segev (2000) and studies cited therein. Of course, it could be that labour cost factors were more prominent up to the 1980s, with other factors becoming more important in the 1990s.
- ⁵⁶ Labour productivity was not significant in the study by Coughlin and Segev (2000) although it was a significant positive factor in two earlier studies reviewed by the authors.
- Such a variable was significant in the Coughlin and Segev (2000) and in an earlier study.
- ⁵⁸ Dewhurst (2000) discusses the motivation and welfare issues of regional competition for FDI in the context of a theoretical model.
- ⁵⁹ Coughlin and Segev (2000).
- ⁶⁰ For example, Coughlin and Segev (2000) did not find that state promotional offices abroad were significant, in contrast to two earlier studies. It may also be difficult to separate out state promotional budgets into export

³¹ The actual amount of employment supported by Exxon Mobil exceeds this number because of the company's financial interest in the ongoing offshore projects.

promotion which is targeted at local firms and investment attraction which is targeted at both national and international firms (Shaver, 1998). Wilkinson and Brothers (2000) suggest that states that are relatively attractive to FDI should emphasize trade missions to attract additional FDI. However, the estimated impact of such policies is modest.

- ⁶¹ Fox and Lee (1996).
- ⁶² O'Hagan and Anderson (2000).
- ⁶³ Head, Ries and Swenson (1995).
- ⁶⁴ Shaver (1998).
- ⁶⁵ Frost and Zhou (2000).
- ⁶⁶ See, for example Hill and Munday (1995), Billington (1999), Kirchner (2000), Iammariono and Santangelo (2000).
- ⁶⁷ Hill and Munday (1995).
- ⁶⁸ Billington (1999).
- ⁶⁹ Hill and Munday (1992, 1995) and Gripaios, Gripaios and Munday (1997). However, foreign-owned research activities in the U.K. are still more highly concentrated than among domestic firms (Cantwell and Iammarino, 2000). ⁷⁰ Iammarino and Santangelo (2000).
- ⁷¹ KPMG (2002).
- ⁷² Cantwell and Iammarino (2000) and Iammarino and Santangelo (2000).
- ⁷³ See NIEC (1992) and Barry and Bradley (1997) for further discussion.
- ⁷⁴ This discussion is based on Baldwin and Hanel (2000).
- ⁷⁵ Baldwin and Hanel (2000).
- ⁷⁶ Foreign-controlled manufacturing firms are more likely to innovate and conduct R&D. However, foreign firms are no more likely to innovate than their Canadian-controlled counterparts, once size and R&D propensity are controlled for (Baldwin, Hanel and Sabourin, 2000).
- ⁷⁷ Holbrook and Squires (1996). A study prepared for Investment Canada (1991) also found higher R&D intensity among foreign manufacturing firms, and that R&D intensity increased following an acquisition. By contrast, Tang and Rao (2001) report Statistics Canada data showing that, in aggregate, foreign-controlled manufacturing firms spend less on R&D (as a proportion of sales). In their own analysis, the authors find that this relationship holds true even after controlling for firm size, export orientation and sector. However, these findings are based on a sample of less than 60 companies.
- ⁷⁸ Baldwin, Rama and Sabourian (1999) and Baldwin and Diverty (1995). However, Baldwin and Rafiquzzaman (1998) find that Canadian-owned manufacturing plants adopted advanced technologies faster than foreign-controlled firms
- ⁷⁹ Baldwin and Dhaliwal (2000). Globerman, Ries and Vertinsky (1995) also found that foreign-owned plants had higher labour productivity, but found these differences were due to size and a proxy for capital intensity.
- ⁸⁰ Rao and Tang (2000).
- ⁸¹ See McDougall (1995) and studies reviewed therein. Regional Data Corporation (1992) found similar results in a study for Investment Canada.
- 82 Globerman (1979).
- 83 See studies reviewed in Gera, Gu and Lee (1999).
- ⁸⁴ Gera, Gu and Lee (1999).
- 85 Baldwin and Dhaliwal (2000).
- ⁸⁶ Cameron (1998) and Mersereau (1992). Hejazi and Safarian (1999) examine the link between FDI and trade at an aggregate level using data for 1970-96. They find that inward FDI has a small, positive impact on imports. However, the authors do not examine the relationship between trade and FDI simultaneously.
- ⁸⁷ Baldwin, Beckstead and Caves (2001).
- 88 See review in NIEC (1999).
- ⁸⁹ Blomstrom (1991).
- ⁹⁰ Fox and Lee (1996).
- 91 Barrell and Pain (1997).
- ⁹² Driffield (2001).
- 93 Driffield and Munday (2000).
- ⁹⁴ Leichenko and Erickson (1997)
- 95 Glickman and Woodward (1989), cited in Leichenko and Erickson (1997).
- ⁹⁶ Kirchner (2000).

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97 NIEC (1992).
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- 104 Kirchner (2000). Some researchers, however, are more critical about the empirical and theoretical basis for such arguments about the role of MNEs in the regional economy (e.g., Lovering, 1999).
- NIEC (1999) provides results for Northern Ireland. Turok (1993) examines linkages in Scottish electronics industry and finds evidence of modest local sourcing and linkages that have limited developmental potential (see the further debate in McCann, 1997 and Turok, 1997). See Brand, Hill and Munday (2000) for additional references. ¹⁰⁶ Brand, Hill and Munday (2000).
- ¹⁰⁷ NIEC (1999).
- ¹⁰⁸ Kirchner (2000).
- ¹⁰⁹ Cited in NIEC (1999).
- ¹¹⁰ Driffield and Taylor (2000).
- ¹¹¹ Driffield and Taylor (2000).
- ¹¹² Driffield and Taylor (2000).
- ¹¹³ Driffield (1999).
- ¹¹⁴ Driffield and Munday (1998).
- ¹¹⁵ Driffield and Taylor (2000).
- ¹¹⁶ Figlio and Blonigen (2000).
- ¹¹⁷ See McNaughton (1992b) for a more detailed discussion and literature review.
- 118 Young, Hood and Peters (1994).
- This section draws upon Globerman and Shapiro (1998, 1999) and Shapiro and Globerman (2000).
- ¹²⁰ See Globerman (1999) and Shapiro and Globerman (2000) for discussion and empirical analysis.
- ¹²¹ Globerman and Shapiro (1998).
- The regulations relating to acquisitions took effect in April 1974 while the regulations dealing with new business took effect in October 1975.
- 123 Shapiro and Globerman (2000), p. 2.
- ¹²⁴ Quoted in Globerman and Shapiro (1999).
- ¹²⁵ See Shapiro and Globerman (2000) and McNaughton (1992b).
- ¹²⁶ Indirect acquisitions occur when one foreign company acquires another foreign company that has a Canadian subsidiary.
- ¹²⁷ For further details of the Investment Canada Act see http://icnet.ic.gc.ca/investcan/en_fag.htm.
- ¹²⁸ See note 126.
- ¹²⁹ A cultural business is defined as a business carrying on any of the following activities: the publication, distribution or sale of books, magazines, periodicals or newspapers; the production, distribution, sale or exhibition of film or video recordings; the production, distribution, sale or exhibition of audio or video music recordings; the publication, distribution or sale of music in print; or radio, television, cable and satellite broadcasting services. For precise definitions see the Investment Canada Act.

 130 With the exception of the impact of the investment on Canada's ability to compete in world markets, these same
- factors were used under the FIRA to determine whether the investment was of "significant benefit" to Canada (Globerman and Shapiro, 1999).

 131 Globerman and Shapiro (1999) and Shapiro and Globerman (2000, forthcoming).
- ¹³² Globerman and Shapiro (1998).
- ¹³³ A detailed evaluation of the actual operations and effectiveness of Federal FDI policies and programs is beyond the scope of this Report.
- ¹³⁴ See www.intinvest.ic.gc.ca.
- Further details for each province are available on their respective websites. A number of sub-provincial agencies. such as municipalities and regional development agencies, are also involved in investment attraction. Their activities are not considered in this Report.
- 136 Government of Newfoundland and Labrador (2001).
- ¹³⁷ Speech from the Throne, March 19 2002.

⁹⁸ See Stone and Peck (1996) and Gripaios, Gripaios and Munday (1997).

⁹⁹ Figlio and Blonigen (2000).

¹⁰⁰ Barry and Bradley (1997).

¹⁰¹ Based on Kirchner (2000).

¹⁰² Kirchner (2000).

¹⁰³ Kirchner (2000).

- ¹³⁸ Details of the EDGE program are available at www.success.nfld.net/business/programs.html.
- ¹³⁹ Government of Nova Scotia (2000).
- ¹⁴⁰ Government of Nova Scotia (2001).
- ¹⁴¹ Government of New Brunswick (2002).
- ¹⁴² Mudambi (1998) provides a taxonomy of inward investment agency functions.
- ¹⁴³ Raines (2000).
- ¹⁴⁴ See Chapter Five.
- ¹⁴⁵ Mudambi (1998) makes the same point. The research discussed in Chapter Five, for example, found mixed evidence regarding the effectiveness of state promotional offices abroad.
- Dicken and Tickell (1992) argue that an adequate operating budget is a necessary, if not a sufficient, factor.
- ¹⁴⁷ Raines (2000).
- ¹⁴⁸ Tewdwr-Jones and Phelps (2000) and Phelps (2000).
- ¹⁴⁹ Brooksbank, Connolly and Morgan (1999).
- ¹⁵⁰ Phelps (2000).
- ¹⁵¹ Savoie (1997) has suggested special briefings on Atlantic Canada for overseas commercial officers, and other ways that the federal government could help.
- ¹⁵² Sakai (2002).
- ¹⁵³ Collis and Noon (1994).
- ¹⁵⁴ Shaver (1998).
- ¹⁵⁵ McNaughton (1992a).
- ¹⁵⁶ For example, in the seven years to 1991, new investments accounted for 38% of all FDI projects in Wales, while expansions at existing sites accounted for 46% of projects (Morgan, 1997). Mudambi (1998) finds that firms with a longer tenure of operations are more likely to invest in any given period. He also notes the balance required between attracting MNEs in the first place, and then focusing on companies that are more likely to continue to invest in and develop their subsidiaries, for example, by awarding the subsidiary a world product mandate.
- ¹⁵⁷ Morgan (1997), p. 499.
- 158 See Morgan (1997) for further details of these programs. Ireland has also operated a National Linkages Program (NIEC, 2000). The World Investment Report 2001 (UNCTAD, 2001) is devoted to policies for promoting linkages.
- ¹⁵⁹ Phelps (2000).
- ¹⁶⁰ Phelps (2000), p. 175.
- ¹⁶¹ Phelps (2000).
- ¹⁶² Brand, Hill and Munday (2000), NIEC (1999).
- ¹⁶³ Driffield and Munday (2000). This argument can be applied with respect to disadvantaged peripheral regions both at the national and provincial level.
- ¹⁶⁴ Tewdwr and Jones (2000).
- ¹⁶⁵ Kirchner (2000). In the context of German investment in the north-east of England, Kirchner considers that the ideal development would allow "a north-east institutional thickness biased towards inward investment [to] gradually be rendered superfluous by the development of an industrial thickness which is already self-sustaining in Germany and enables strong but not necessarily high-tech Mittlestand-companies to internationalize."
- ¹⁶⁶ Blomstrom (1991), UNCTAD (2001) and OECD (2002). However, Lim (2001) argues that "despite the persuasive case study evidence, there does not appear yet to be direct systematic evidence that spillovers form wholly owned subsidiaries free of restrictions are greater than those under domestic content requirements."
- ¹⁶⁷ The 2001 World Investment Report (UNCTAD, 2001) discusses various policies for promoting linkages.
- ¹⁶⁸ The main issue here relates to confidentiality. For manufacturing innovation and R&D activities, broken down by Canadian-controlled and foreign-controlled plants, the data is not likely to be available at the provincial level, given the design of the surveys. Some analysis may be possible at the Atlantic level, for example, from the 1998 Survey of Advanced Technology in Canadian Manufacturing. However, differences between the Atlantic region and national results, may reflect differences in industrial mix as much as any substantive difference. Moreover, given the limited number of firms in particular sectors (e.g., tire manufacturing), comparisons between domestic and foreign-controlled plants may not be meaningful.
- ¹⁶⁹ See Stone and Peck (1996) and NIEC (1992) for details.
- ¹⁷⁰ For example, the Statistics Canada data would only indicate trends in employment, revenue and investment. It would not show whether these trends reflect acquisitions, new businesses or expansions. More detailed database information would be required for such an analysis.
- ¹⁷¹ See, for example, Hood and Taggart (1997), Gripaios, Gripaios and Munday (1997) and Kirchner (2000).