



The Daily

Statistics Canada

Tuesday, June 27, 2000

For release at 8:30 a.m.

MAJOR RELEASES

- **Multinational firms and the innovation process** 2
Foreign-owned firms in Canada pursue research and development and innovation strategies more actively than Canadian-owned firms do, far from depending passively on their parent companies for results. But domestic-owned firms that are export-oriented are just as innovative. It is primarily the international orientation of a firm, rather than its nationality, that affects whether a firm is innovative.

OTHER RELEASES

Justice factfinder, 1998 4

PUBLICATIONS RELEASED 5



MAJOR RELEASES

Multinational firms and the innovation process

Foreign-owned firms in Canada pursue research and development and innovation strategies more actively than Canadian-owned firms do, far from depending passively on their parent companies for results.

But these differences with domestic firms are greatest for small, purely domestically oriented firms, those with neither production facilities abroad nor with exports. There was little difference in the research and development orientation of foreign and domestic multinationals.

This study challenges past conventional wisdom that has sometimes taken a jaundiced view of multinationals' role in Canada. While foreign-owned firms operating in Canada have generally been seen as providing a conduit for introducing new technologies into Canada, some have seen multinationals as fostering a branch-plant mentality with an underdeveloped or truncated research and development capacity in Canada.

This study supports more recent views that multinationals decentralize activities from their home country to subsidiaries in Canada to exploit local competencies. It found that even though foreign subsidiaries have a privileged access to their parent company's research and development and technology, they perform research and development in Canada more often than do Canadian-owned firms that serve the local economy.

These differences are especially great in the "old" economy, that is, consumer goods industries such as food and beverages, wood and textiles. Multinational firms are also more often involved in collaboration projects for research and development both abroad and in Canada.

Not all Canadian-controlled firms lag multinationals operating in Canada. This study also compared foreign subsidiaries with Canadian corporations that have an international orientation, that is, those with production or research and development facilities abroad or which export part of their production. The analysis showed that the two groups are in fact quite similar — both are about equally likely to conduct some form of research and development and to introduce innovations.

Consequently, it is as much the degree of a company's international orientation, or globalization, rather than the nationality of its ownership, that affects the level of innovation in the firm.

In Canada, multinational corporations control plants that produce more than half of manufacturing

Note to readers

This release is based on the new study, Multinationals and the Canadian innovation process, released today. Based on the 1993 Survey of Innovation and Advanced Technology, this study investigates the nature of the innovation system at work in multinational firms and compares it with that of domestic firms.

Multinationals and the Canadian innovation process compares domestic and multinational firms with respect to the extent to which they develop Canadian research and development facilities, the type of research and development activity they do, and the importance to the firm of research and development relative to other sources of ideas for innovation.

The study also examines whether multinationals are closely tied into Canadian innovation networks such as universities, whether innovations have been introduced, and the use that is made of intellectual property rights. The paper describes the innovation regime of multinational firms in Canada by examining the differences between foreign- and domestically-owned firms in each of the above areas.

output. Their performance is critical to the overall health of the manufacturing sector, since it greatly affects the productivity, the degree of innovation and the international competitiveness of Canadian manufacturing as a whole.

Research and development differences most notable among largest firms

The study results show that foreign-owned firms are more likely to pursue a research and development strategy than domestically owned firms as a whole. Far from being passively dependent on research and development and technology from their parent companies, foreign-owned firms are more likely to perform research and development in Canada, especially compared with purely domestic firms (those without operations in foreign markets). Some 89% of foreign-owned firms reported doing some research and development in Canada, while only 67% of purely domestic oriented firms performed research and development.

Because Canadian-controlled firms are generally smaller than their foreign-owned counterparts, it is possible that the less-intensive involvement of domestic firms in research and development is the result of their smaller size. However, after correcting for size and industry differences, there is still a significant difference between purely domestic firms and foreign-owned ones.

There are, however, much smaller differences between foreign-owned and domestic firms that are internationally oriented, that is, those that have

production or research and development facilities abroad or that export. Some 86% of domestically owned firms that are internationally oriented reported doing some research and development, compared with 89% of foreign-controlled firms. This difference is not statistically significant.

Foreign firms more likely to introduce innovations

Foreign firms exploited their superior innovation potential, and were more likely to introduce innovations than their domestic counterparts. The study found that 52% of foreign companies innovated, compared with just 27% of domestic firms with no foreign orientation, and 47% of domestic firms with a strong foreign orientation. This relationship among the three groups is found broadly across different size and industry classes.

Foreign firms innovated in all sectors more frequently than did their Canadian counterparts. This was true across most size categories. Foreign firms especially surpassed domestically owned firms in consumer goods industries that were recipients of innovations, such as chemicals, machinery and equipment, or electronics. In these consumer-goods industries, foreign-owned firms also performed research more frequently than did domestically owned firms.

In keeping with their more frequent involvement in research and development, foreign-owned firms

surpassed Canadian firms in introducing the more original, world-first innovations. Domestically owned firms were more likely to introduce more imitative innovations, that is, those that were new to the firm but were neither new to the industry nor to Canada.

Foreign subsidiaries had the advantage of accessing technology from their parent and sister companies, and they were more closely tied into a network of related firms for innovative ideas than were domestically owned firms. Nevertheless, their local research and development unit was used more often as a source of information for innovation by multinationals than were these inter-firm links.

Moreover, multinationals were just as likely to develop links with local Canadian universities and other local innovation consortiums as were domestic firms. This indicates that foreign firms contributed significantly to technological progress in Canadian industry, and were not just truncated branch plants.

Multinationals and the Canadian innovation process (11F0019MPE; 11F0019MIE, no. 151) is now available. To obtain a copy, contact Louise Laurin (613-951-4676), or visit Statistics Canada's Web site (www.statcan.ca); see *Downloadable publications (free)*.

For more information, or to enquire about the concepts, methods or data quality of this release, contact John Baldwin (613-951-8588), Micro Economic Analysis Division. ■

OTHER RELEASES

Justice factfinder 1998

The 1998 edition of *Juristat: The justice factfinder*, released today, highlights findings from recent surveys and publications produced by the Canadian Centre for Justice Statistics. Most of the data cover the period up to the end of 1998.

The information, presented in a question-and-answer format, is designed to respond in detail to questions frequently asked by the justice community, the media and the public concerning crime and the justice system.

Some examples: What kinds of offences do youths commit? In general, youth crime tends to be property-oriented; however, the proportion of violent crime has increased from 10 years ago.

Should we be concerned about the presence of firearms? Data from a sample of police departments

indicates that the presence of firearms in violent crimes has decreased from 6.5% in 1994 to 4.8% in 1998.

How many people are under correctional supervision? In 1998/99, an average of 150,986 adult offenders were under the supervision of the correctional system. This represents a decrease of 3% in the average adult correctional population from the previous year.

This short report also contains detailed information on police-reported crime, offences committed by youth, victimization of children, issues for Canadian courts and the overall cost of justice services.

Juristat: The justice factfinder 1998 (85-002-XPE, \$10/\$93; 85-002-XIE, \$8/\$70) is now available. See *How to order publications*.

For more information, or to enquire about the concepts, methods or data quality of this release, contact Information and Client Services (1-800-387-2231; 613-951-9023), Canadian Centre for Justice Statistics. ■

PUBLICATIONS RELEASED

Sawmills and planing mills, April 2000
Catalogue number **35-003-XIB** (\$9/\$86).

Imports by commodity, April 2000
Catalogue number **65-007-XMB** (\$37/\$361).

Imports by commodity, April 2000
Catalogue number **65-007-XPB** (\$78/\$773).

Canada's international transactions in securities,
March 2000
Catalogue number **67-002-XPB** (\$18/\$176).

Juristat: The justice factfinder 1998, vol. 20, no. 4
Catalogue number **85-002-XIE** (\$8/\$70).

Juristat: The justice factfinder 1998, vol. 20, no. 4
Catalogue number **85-002-XPE** (\$10/\$93).

All prices are in Canadian dollars and exclude sales tax. Additional shipping charges apply for delivery outside Canada.

Catalogue numbers with an -XIB or an -XIE extension are Internet versions; those with -XMB or -XME are microfiche; and -XPB or -XPE denote a paper version.

How to order publications

Order publications by phone:

Please refer to the • Title • Catalogue number • Volume number • Issue number • Your VISA or MasterCard number.

In Canada and the United States call:

1-800-267-6677

From other countries call:

1-613-951-7277

To fax your order:

1-877-287-4369

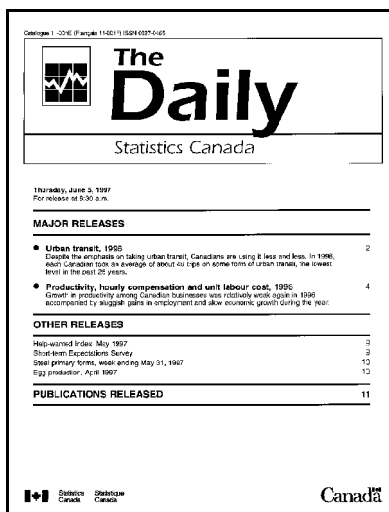
Address changes or account inquiries:

1-800-700-1033

To order a publication by mail write: Statistics Canada, Circulation Management, Dissemination Division, Ottawa, K1A 0T6.
Include a cheque or money order payable to **Receiver General of Canada/Publications**. Canadian customers add 7% GST and applicable PST.

To order by Internet: write to order@statcan.ca or download an electronic version by accessing Statistics Canada's Web site (www.statcan.ca), under the headings *Products and services*, *Downloadable publications*.

Authorized agents and bookstores also carry Statistics Canada's catalogued publications.



Statistics Canada's official release bulletin

Catalogue 11-001E.

Published each working day by the Communications Division, Statistics Canada, 10-H, R.H. Coats Bldg., Tunney's Pasture, Ottawa, Ontario K1A 0T6.

To access *The Daily* on the Internet, visit our site at <http://www.statcan.ca>. To receive *The Daily* each morning by E-mail, send an E-mail message to listproc@statcan.ca. Leave the subject line blank. In the body of the message, type "subscribe daily firstname lastname".

Editor: Tom Vradenburg (613-951-1103, vradtom@statcan.ca)

Head of Official Release: Madeleine Simard (613-951-1088), simamad@statcan.ca

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 2000. Citation in newsprint, magazine, radio, and television reporting is permitted subject to the requirement that Statistics Canada is acknowledged as the source. Any other reproduction is permitted subject to the requirement that Statistics Canada is acknowledged as the source on all copies as follows: Statistics Canada, *The Daily*, catalogue 11-001E, along with date and page references.