Flourishing in the global competitiveness game

WORKING PAPER 11, SEPTEMBER 2008



The Institute for Competitiveness & Prosperity is an independent not-for-profit organization established in 2001 to serve as the research arm of Ontario's Task Force on Competitiveness, Productivity and Economic Progress.

Working papers published by the Institute are primarily intended to inform the work of the Task Force. In addition, they are designed to raise public awareness and stimulate debate on a range of issues related to competitiveness and prosperity.

The mandate of the Task Force, announced in the April 2001 Speech from the Throne, is to measure and monitor Ontario's competitiveness, productivity, and economic progress compared to other provinces and US states and to report to the public on a regular basis. In the 2004 Budget, the Government asked the Task Force to incorporate innovation and commercialization issues in its mandate.

It is the aspiration of the Task Force to have a significant influence in increasing Ontario's competitiveness, productivity, and capacity for innovation. The Task Force believes this will help ensure continued success in the creation of good jobs, increased prosperity, and a higher quality of life for all Ontarians. The Task Force seeks breakthrough findings from their research and proposes significant innovations in public policy to stimulate businesses, governments, and educational institutions to take action.

The Task Force publishes annual reports to the people of Ontario each November.

Comments on Working Paper 11 are welcome and should be directed to the Institute for Competitiveness & Prosperity. The Institute for Competitiveness & Prosperity is funded by the Government of Ontario through the Ministry of Economic, Development, and Trade.

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Flourishing in the global competitiveness game

WORKING PAPER 11, SEPTEMBER 2008



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Foreword and acknowledgements



"If Ontario and Canada are to achieve their full economic potential, we need inspired public policies to lower the cost of investment, reduce barriers to competition, define and support innovation more broadly, and improve our understanding of the needs of existing and aspiring global leaders."

I AM PLEASED TO PRESENT Working Paper 11 of the Institute for Competitiveness & Prosperity. In this Working Paper we focus on the impact of competition policies on our prosperity. We have advocated for more intense competitive pressure through the workings of markets to realize the benefits of more innovation and higher productivity, which in turn raise our economic performance and prosperity for this and future generations. But some argue that in today's world of increasing global competition we are seeing the "hollowing out" of our Ontario and Canadian economies. If we allow unfettered access to the purchase of our corporate icons, the argument goes, we will lose control of our economy, and we will not have available to us the high quality jobs associated with large head offices.

Last year, with the completion of some highly visible foreign takeovers of Canadian leaders like Alcan, Dofasco, Falconbridge, and Inco, the Federal Government appointed the Competition Policy Review Panel to explore the competition and investment policies related to foreign investment in Canada and investment abroad by Canadian firms. The Panel, comprising five business leaders, was headed by Lynton "Red" Wilson.

The Panel released its report, *Compete to Win*, earlier this summer with the overall theme that the best defence for Canadian companies is a good offence. It acknowledged that it is difficult for Canadian firms to win in the increasingly competitive world, but we cannot wait to begin taking on the challenge. Trying to shield ourselves from global competition will only delay the challenge and make it more difficult to face. *Compete to Win* is a valuable contribution to the debate on competition and investment policy, and we urge all stakeholders in our prosperity to consider the recommendations seriously.

In carrying out its mandate, the Panel commissioned research to explore some of the key issues in its investigations. It asked the Institute to assist by answering two questions: What is the impact of head offices, especially Canadian ones, on local economies? Should Canada pursue a public policy that deliberately creates successful Canadian companies in the world setting, or national champions. This Working Paper presents our research and findings. We conclude that the Panel is correct in arguing that the best defence is a good offence. Canadian companies, be they small niche players or large icons, are vulnerable to foreign takeover if they do not have a credible strategy and sophisticated capabilities to be internationally relevant. Management teams have to focus on global expansion of the successful business models they have developed here in Canada – or risk being taken over by more capable management teams from abroad.

Does this mean that our governments should help specific companies to become the next RIM or Magna by easing competitive intensity for them or by advancing subsidies? There is compelling experience from around the world that, without the crucible of intense domestic competition, global leaders will not emerge. Public policy needs to ensure that all firms operate in an environment that balances specialized support and competitive pressure.

But when Canadian firms are taken over and their head offices become branches, does our economy lose out in R&D location decisions, community involvement, and high quality jobs? Our research indicates that head offices are indeed important to local economies, but there is little evidence that foreign-owned head offices contribute less than their Canadian-owned counterparts. Polices to block foreign takeovers will not have a positive impact on our economic performance and our standard of living. In fact, they will do more harm than good.

If Ontario and Canada are to achieve their full economic potential, we need inspired public policies to lower the cost of investment, reduce barriers to competition, define and support innovation more broadly, and improve our understanding of the needs of existing and aspiring global leaders. That way our firms and people can compete to win in the international arena – and realize sustainable prosperity.

We gratefully acknowledge the funding support from the Ontario Ministry of Economic Development and Trade. We look forward to sharing and discussing our work and our findings, We welcome your comments and suggestions.

Roger L. Martin, Chairman

Institute for Competitiveness & Prosperity

Dean, Joseph L. Rotman School of Management, University of Toronto



Flourishing in the global competitiveness game

ANY CANADIANS ARE concerned that we are migrating to a world where Canadianowned and -led companies will not be significant players in our national economic scene. They worry about the "hollowing out" of our economy, with the sale of Canadian icons such as Inco, Hudson's Bay, Dofasco, and Shoppers Drug Mart. They fear that we will be left with foreign subsidiaries playing the major role in our economy. They argue that foreign-owned companies do not contribute as much to our cities and regions as Canadian-owned companies that create employment and make significant financial and social contributions to their local communities and to the larger economic well being of Canadians. This leads to the conclusion that Canada ought to have greater restrictions on foreign direct investment. Some believe, too, that we need a government policy to build and support "national champions" those domestically based companies that have or will become leading competitors in their global markets.

They need not worry. From our review of the research, we conclude that foreign investment and ownership are positive factors in our economy. The evidence shows that an excessive level of foreign ownership in our economy is not a problem that needs to be addressed.

We see that Canadian head offices of foreign firms are solid contributors to local economies. And our research shows that national champions policies rarely succeed.

In fact, in increasingly competitive markets, the risk is that Canadian companies focused only on the domestic economy will get swallowed up. Examples abound – in steel, mining, telecommunications, financial services – where international giants are taking over.

Based on our research, we are convinced that public policy should be directed toward building an environment where companies, no matter where they originate, can prosper in Canada. That way, Canada will be a strong player in the world economy for decades to come.

In July 2007, the Federal Government appointed the Competition Policy Review Panel to explore these issues and make policy recommendations (see Compete to Win). As part of its investigations, the Panel asked the Institute for Competitiveness & Prosperity to assist by conducting research on two questions: What is the impact of head offices, especially Canadian ones, on local economies? Should Canada pursue a public policy that deliberately creates national champions?

This Working Paper presents our research and findings. Specifically, our research shows that:

- The Canadian economy is not hollowing out; the number of Canada's global leaders has grown over the past few decades
- Head offices are important to local economies, but there is little evidence that foreign-owned head offices contribute less to their communities than their Canadianowned counterparts
- Government policies to create and support specific national champions do not necessarily create global leaders
- The challenge for our public policy is to create an environment where the right kind of support and competitive pressure enable both domestic and foreign companies to succeed in Canada.

Canada has succeeded in fostering global leaders; we need more

RATHER THAN HOLLOWING OUT, we find that the number of Canadian companies that are global leaders is greater today than twenty years ago. As of April 2008, Canada had 77 global leaders (Exhibit 1), up significantly from 33 in 1985, albeit down slightly from 83 in 2003. The Institute has identified Canada's global leaders according to the following criteria:

- Public or private Canadian controlled company on Report on Business Top 1000 or Financial Post 500 lists
- Revenues exceeding \$100 million
- One of five largest by revenue globally in a specific marked segment - in some cases where global competition is precluded (for example, rail service and CN Rail), we used North America;

in other cases revenue was not the factor used (for example, we used market capitalization for Manulife)

Researchers at the Institute for Competitiveness & Prosperity relied on public filings or interviews with Investor Relations staff to determine global leadership status.

The creation of these new globally competitive Canadian champions dwarfs the losses. They have higher productivity and greater productivity growth than non-globally competitive companies. They do more R&D and can afford to invest in greater scale operations. And Canadian companies that achieve global scale are major wealth creators for Canadians. Of the 75 richest Canadians identified by Diane Francis, an impressive 23 percent were the builders of Canada's global leaders (Exhibit 2).

Exhibit 1 Canada has 77 global leaders

AbitibiBowater Agrium Ashton-Potter (MDC) Atco **ATS**

Barrick Gold **Bombardier** CAE Cameco Canam Steel

Canfor **CCL** Industries

Celestica

CHC Helicopter

Cinram

Cirque du Soleil **CN Rail**

CGI Chemtrade Logistics

Material Technologies) Connors Bros.

Cott Couche-Tard Dalsa

Exfo Electro-Optical Engineering Finning International Fording (Elk Valley Coal) Garda World

Gildan Goldcorp Harlequin (Torstar) Husky Injection Molding

Jim Pattison Group

Linamar Maax Holdings MacDonald Dettwiler

Magna

Magnequench (Neo

Major Drilling Manulife Financial

McCain MDS Methanex Mitel Norbord

North American Fur Auctions

NOVA Chemicals Open Text Patheon

Peerless Clothing Pollard Holdings LP PotashCorp Premier Tech

Quebecor World

Research In Motion Ritchie Bros. Auctioneers Scotia Mocatta

Shawcor Sierra Wireless **SMART Technologies**

SNC-Lavalin Spectra Premium Industries

SunGro Horticulture **TD Waterhouse** Teck-Cominco Tembec

Thompson Creek Metals (Blue Pearl)

Thomson Corporation

Timminco **TLC Vision** Transat A.T. Trimac Velan

Wescast Industries Weston Foods Zarlink

Source: Institute for Competitiveness & Prosperity.

Compete to win

"Competition matters. It brings dynamism to our economy. It means good jobs for our citizens. It is not merely an economic concept. Being open to competition serves Canada's national interest."

Competition Policy Review Panel, Compete to Win, June 2008, Preface

THE COMPETITION POLICY REVIEW PANEL recommended more global offence by Canadian business, not government defence. In its report, released in June 2008, the Panel concluded that "raising Canada's overall economic performance through greater competition will provide Canadians with a higher standard of living."

To achieve this, the Panel set out its Competitiveness Agenda for Canada, aimed at raising productivity and competitive intensity throughout the economy. Success will depend on stronger domestic markets and more innovative and entrepreneurial firms that can compete internationally. The Panel recognizes that it will be difficult and take time to win in the increasingly competitive world, but that we cannot wait to begin the journey. Delay will only make the challenge harder.

Fundamentally, the Panel believes that policies and regulations must be evaluated in a global context, not just a national focus, and that Canada needs a process to enable continuous review and refinement to changing global circumstances. The Panel set out a series of recommendations to create the legal foundations that enable competition and to establish public policy priorities for action.

UPDATE THE LEGAL FOUNDATIONS TO ENCOURAGE COMPETITIVENESS

The Panel recommended updates to the Investment Canada Act, legislation covering sectoral regimes, and the Competition Act.

- Canada currently requires the review of proposed foreign investment over monetary thresholds under the Investment Canada Act. The Panel welcomes foreign investment and recommended increasing the threshold for review to \$1 billion and shifting the onus for approval from the applicant to the minister and from the criterion of "net benefit" to "contrary to Canada's national interest." It asked for updating the administration of the Act to guarantee greater clarity and transparency for application to cultural businesses, with provision for a distinct approach to reflect the economic value and broader review by the Minister of Canadian Heritage.
- Canada has foreign ownership restrictions in several sectors that can impede improvements in competitive intensity. The Panel recommended reducing these restrictions through regular, periodic reviews of these framework policies in air transport, uranium mining, telecommunications and broadcasting, and financial services. More specifically, it called for completing the Open Skies negotiations with the European Union and reciprocal arrangements with other countries; liberalizing foreign ownership in the uranium mining sector, subject to national security considerations; adopting a two-phased approach to liberalizing foreign ownership in telecom and broadcasting companies; and ending the opposition to mergers between large financial institutions.
- The Panel also concluded that, while the Competition Act is modern and flexible, some updates will improve productivity and that the Competition Bureau should continue to focus on enforcing and promoting compliance. Proposed updates include harmonizing legal requirements with the United States, reducing the time allowed for the Commissioner of

Competition to challenge a merger, amending obsolete or ineffective criminal provisions, and encouraging heightened advocacy for competition in Canada.

PURSUE PRIORITIES FOR ACTION IN THE PANEL'S COMPETITIVENESS AGENDA

The Panel is convinced that national competitiveness will be achieved when government policies ensure the right foundation for businesses to succeed in the global economy. It emphasizes that policies must continuously be adjusted along the way to enhance Canadian firms' ability to compete in the world.

- The Agenda recommends a more competitive tax regime, through lowering corporate taxes and those for lower- and middle- income Canadians, eliminating capital taxes, and harmonizing sales taxes. Governments should focus more on value-added taxes and conduct ongoing assessments to ensure our tax provisions support Canadian firms' ability to compete domestically and globally.
- Canada needs to attract and develop the best talent to have the best workforce in the world. The Panel recommends ongoing investment in education and training to the highest standards with more partnerships with business and international exchanges as well as tuning immigration policy to meet labour market needs.
- So Canada's large urban centers can continue to thrive, the Panel urges the Federal Government to support municipal investment in infrastructures, education, and immigration.
 Provincial and local governments should explore alternative funding mechanisms to secure and grow revenues.
- The Panel encourages the Federal Government to strengthen the Canadian economic union by encouraging elimination of trade barriers between the provinces and territories and better harmonizing securities regulation.
- On international trade and investment, Canada should place a high priority on reinforcing trade with the United States and set priorities for extended international trade and investment opportunities.
- The Government should encourage innovation and protect intellectual property by making sure that R&D tax regimes are supportive and that patent and copyright laws are effective.
- The Panel recommends the creation of an independent Canadian Competitiveness Council as an advocacy body for raising competitiveness. Its mandate is to drive the change in the public and private mindset to accord competitiveness and prosperity the highest priority among Canadians.

The Panel's Competitiveness Agenda is a call for Canadians to commit to a national coordinated journey to raise our competitive intensity, productivity, and prosperity in the fast-changing global economy. The goal is ambitious, the challenges are many, but we can become the best by competing to win.

But how does our conclusion on the vibrancy of global leaders square with the reality of so many takeovers of Canadian icons?

To answer this question, we dug deeper into the data on the foreign acquisition of Canadian companies. We took as our starting point the list of Canadian companies taken over by foreigners since 2002 that Mel Hurtig identified in his recent book *The Truth about Canada* and supplemented this list based on our research (*Exhibit 3*).

The companies can be classified as those that were primarily based in Canada and those that had an international presence. For most of the companies on this list, we used source of revenues as our definition. For some other firms, particularly natural resource based companies, we used assets as our criterion.

Of the 67 foreign takeovers since 2002 identified by Hurtig and supplemented by the Institute, we have financial information for 57. Of these 57, 29 - or more than half - relied on Canada for the majority of their revenues in the year before they were acquired (Exhibit 4). These companies had not really ventured outside the Canadian market and in some sense provided relatively easy prey for foreign firms that wanted to grow here. Such domestically focused companies include our major steel companies - Algoma, Dofasco, Harris, and Stelco - and some in consumer goods - E.D. Smith, Lakeport, La Senza, Sleeman, and Vincor (although nearly 50 percent of this successful wine company's sales were outside Canada when it was acquired).

The second group, comprising 28 companies, was more international in scope with sales abroad accounting for more than 50 percent of revenues. Still, 15 of these 28 were not significant players in their markets. So, while steel makers Co-Steel and Ipsco sold more than 75 percent of their output beyond Canada and were sizable companies with annual revenues greater than \$1 billion, they were still minor players in their North American and global markets. Similar situations can be found in the computer industry (Cognos and GEAC) and pharmaceuticals (Axcan). TIR Systems achieved 83 percent of its revenues outside of Canada, but this manufacturer of LED-based lighting products had achieved annual revenues of only \$15 million and was struggling financially. One of the companies, KCP Income Fund, while acquired by foreign

investment, is still headquartered in Canada and has Canadians in senior management positions.

The remaining 13 companies were international players and were global leaders – that is, they were one of the 5 largest in their markets. Of these, 3 – Four Seasons, Intrawest, and Masonite – are still largely Canadian headquartered and managed but owned by non-Canadian private equity investors. Of the other 10, 5 were large Canadian companies that had ceased to be world class innovators or simply could not capitalize on their inherent advantage – Domtar, Falconbridge, Geac, GSW, and Moore Wallace.

Only 5 Canadian-owned, globally competitive companies that were also actively engaged in innovating and

Exhibit 2 Seventeen of Canada's 75 wealthiest people were build	ders
of global leaders	

Individual or family	The global leader they built	
Jim Balsillie	Research In Motion	
The Bombardiers	Bombardier	
Charles Bronfman	Seagram	
Mike DeGroote	Laidlaw	
Norman Keevil Jr.	Teck Cominco	
Guy Laliberté	Cirque du Soleil	
Mike Lazeridis	Research In Motion	
Sir Terence Matthews	Mitel/Newbridge Networks	
Wallace McCain	McCain Foods	
Rob McEwen	Goldcorp	
Peter Munk	Barrick	
Jim Pattison	Jim Pattison Group	
Isadore Sharpe	Four Seasons	
The Southerns	ATCO	
Frank Stronach	Magna	
The Thomsons	Thomson Reuters	
The Westons	George Weston Ltd	
Source: Institute for Competitiveness & Prosperity analysis of information in Diane Francis, Who Owns Canada Now,		

Exhibit 3 Mel Hurtig and others identify 67 foreign takeovers of Canadian companies since 2002

Companies taken over since 2002	Revenue/Assets outside of Canada (%)	Companies taken over since 2002	Revenue/Assets outside of Canada (%)
AIM PowerGen	0 (assets)	Ipsco Steel	71
Air Canada Technical Services	n.a.	KCP Income Fund	76
Alcan	86	La Senza	12
Algoma Steel	33	Lakeport Brewing Income Fund	0
Alias Systems	n.a.	Leitch Technology	89
Aspreva Pharmaceuticals	n.a.	Limocar	n.a.
ATI Technologies	99	LionOre Mining	100 (assets)
Axcan Pharma	89	Masonite	>80*
BCE's Telesat Holding	31	Miramar Mining	100 (assets)
Calpine Power Income Fund	24 (assets)	Moore Wallace	93
Centurion Energy International	100 (assets)	MPD (Motion Picture Distribution)	n.a.
Cognos	93	Nelson Resources	100 (assets)
Co-Steel	70	Norcast Income Fund	55
Creo	97	Petro-Kazakhstan	100 (assets)
Deer Creek Energy	0 (assets)	Petrofund Energy Trust	0 (assets)
Dofasco	43	Prime West Energy Trust	15 (assets)
Dollarama	0	Prudential Steel	5
Domtar	77	Sleeman Breweries	14
E.D. Smith and Sons	39	Standard Aero Holdings	91
Entertainment One Income Fund	26	Steeplejack	0
Falconbridge	59 (assets)	Stelco	12
Fanny Bay Oysters	n.a.	Summit REIT	1 (assets)
Four Seasons Hotel and Resorts	>80*	Terasen	0 (assets)
Franco Nevada	63 (assets)	TIR Systems	83
Gale Force Energy	0 (assets)	UE Waterheater Income Fund	0
Gateway Casinos	0	Vancouver Wharves	0 (assets)
Geac Computer	98	Versacold	78
GSW	80	Vincor International	48
Halterm Income Fund	0 (assets)	Vitibev Farms	n.a.
Harris Steel Group	37	Western Oil Sands	n.a.
Hudson's Bay Company	0	Westwind Partners	n.a.
ID Biomedical	31	Winnipeg Commodity Exchange	n.a.
Inco	28 (assets)	Zenon Environmental	82
Intrawest	57 (assets)		

^{*} estimate

Notes: Companies added to Hurtig's list: Deer Creek Energy, Dollarama, Franco Nevada, GSW, Masonite, Moore Wallace, Petrofund Energy Trust, Summit REIT, Terasen, Zenon Environmental. Companies removed from Hurtig's list: Arcelor (not Canadian), Biochem Pharma (acquired before 2002), Great Lakes Carbon (not Canadian), MacDonald Dettwiler (acquisition blocked by Canadian Government), Newbridge (acquired before 2002), Placer Dome (acquired by Canadian company), Voxcom (acquired by Canadian company)

Source: Institute for Competitiveness & Prosperity based on Mel Hurtig, The Truth About Canada, McClelland & Stewart, 2008, p. 203.

upgrading were acquired by foreign entities. ATI, Alcan, Creo, VersaCold, and Zenon were acquired by bigger, broader players – Advanced Micro Devices, Rio Tinto, Kodak, Eimskip, and GE respectively – that turned their Canadian operations into branch offices.

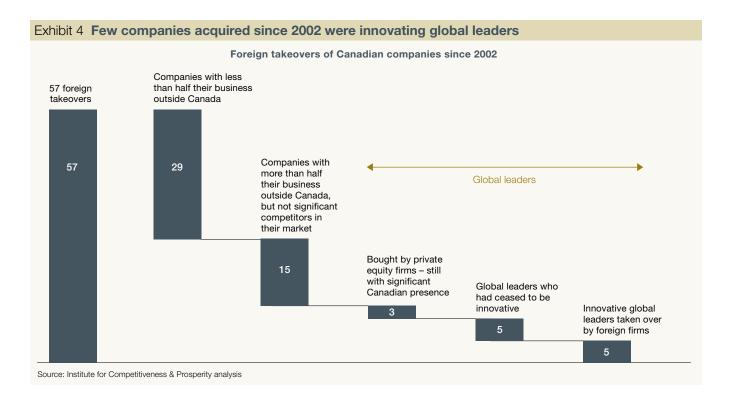
Clearly, in the global economy, successful companies that have not achieved adequate scale are candidates for takeover by larger predators. And the foreign acquisition of Canadian companies that do not compete globally or stop innovating and upgrading will continue, if not accelerate. Such acquisitions may not be smart acquisitions on the part of the foreign parent. For example, AMT has already taken two large writeoffs of the ATI assets; and Alcan may be sold after the merger of BHP and RTZ as there is no compelling synergy.

Around the world, global players are emerging in more and more industries. As they build out their global footprints, they use their scale economies, deep knowledge, and financial might to buy up both national players in various targeted markets as well as international competitors that have under invested in their global ambitions and fallen behind. In this way, the world is getting spikier not flatter, with fewer major global players in each industry rather than numerous national players spread evenly across the globe. In this respect, Canada is experiencing acquisitions that differ only a little from those in other countries.

The data confirm that many Canadian companies that have been taken over by foreign firms depended on the Canadian market for their revenue and had not ventured outside the domestic

market in a significant manner. This is in contrast to Canada's global leaders that are much more international in their scope (*Exhibit 5*).

To many Canadians it is sad when a brilliant up-and-comer like ATI, which had achieved a leading share in its industry niche of graphic computer chips, gets swallowed up by a big logic chip maker; or when a great Canadian icon like Alcan, that had grown aggressively both organically and by acquisition to be among the top aluminum producers in the world, gets taken out by one of the world's two broad-based mining behemoths. But Canadians need to remember how some Americans reacted when Canadian National acquired Illinois Central, for whom Abraham Lincoln famously acted as a lawyer, and made that iconic name disappear from the

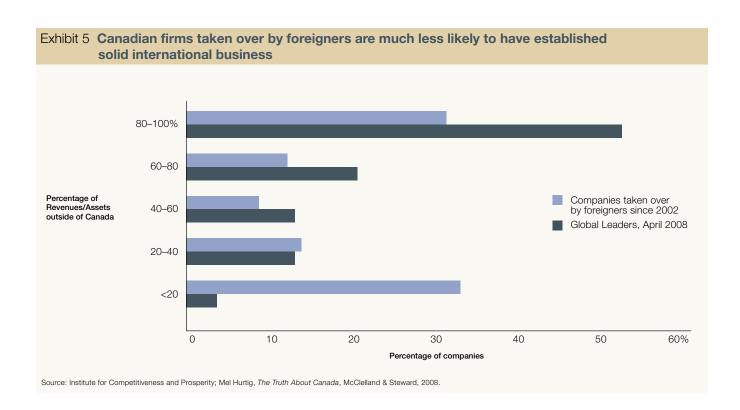


railroad business; or how the British responded when Thomson announced the acquisition of Reuters, the second ranked financial information services provider in the world, and by doing so converted it into a subsidiary of a Canadian-owned company.

Admittedly, in a globalizing world, some companies that do not apparently deserve to be taken over – like ATI, Alcan, Creo, Versacold, and Zenon – will be acquired. The question for Canada is whether more will be taken over than will be built. And on that front, the news for Canadians is overwhelmingly positive. Between 1985 and today, the period when these 5 (8 if one includes Four Seasons, Masonite, and Intrawest) Canadian-owned globally competitive innovating and upgrading companies were purchased, 43 other globally

competitive Canadian companies grew, including RIM, Magna, Manulife Financial, Thomson, and Barrick Gold.

Nevertheless, many are still concerned about the loss to our Canadian economy when foreigners take over our companies. This was one of the drivers of the Canadian Government's decision to appoint the Competition Policy Review Panel in July 2007. Among the research projects the Panel commissioned was a study on the impact of head offices on local economies and one on the impact of national champions policies. The Institute's conclusions from these two studies follow.



Both Canadian and foreign head offices contribute significantly to city regions

Some believe that there is a loss to Canada's economic potential whenever one of our firms is taken over by foreign owners. For example, even though Alcan still has a head office in Montreal, it is now a foreign-owned head office and the Montreal economy is now weaker. But hard evidence to support this view is difficult to come by. Our research points to the overall conclusion that head offices are important to the economic health of our large city regions, and that ownership makes little difference to the positive economic spin offs.

Head offices make positive contributions to their city regions

Head offices offer several advantages for their regions. They tend to pay higher salaries than other establishments and create more employment in higher value business services. Headquarters also depend on face-to-face contact with their network of outside suppliers, including investment and commercial bankers, lawyers, accountants, advertising and media companies, and consulting firms. Generally, these providers tend to cluster near each other and increase the supply of highly skilled and technical professionals in the local economy's workforce. Head offices are also major contributors to local charities, both financially and in the involvement of executives and employees. A further advantage of having large companies' headquarters is that they gather in places with the critical infrastructure that attracts others and supports the growth of smaller companies into larger ones. In a sense, success begets success.

The local impact of Canadianand foreign-owned head offices is similar

Our research shows that there is no solid evidence that in Canada head offices of foreign-owned firms create fewer benefits for the local economy. Foreign-owned head offices do pay higher wages and salaries than domestic ones and purchase local advertising and promotion services at a much higher rate. Note that this information is for sectors outside financial services where Statistics Canada data are not available. When we control for firm size, we find that both groups of head offices contribute almost equally significantly to local charities and communities.

We also conducted regression analyses to measure the correlation of head office locations and the presence of high value industry clusters in business services as defined by Michael Porter and Richard Florida's creative class of occupations. As expected, we found that head offices and high-value clusters of firms and occupations are co-located. But, after controlling for city size (larger city regions are home to more head offices and high-value business services and occupations), we found that in most cases there was no statistically significant difference for Canadian- and foreign-owned head offices. To be sure, in those relationships where there was a difference, more indicated a stronger impact by Canadian-owned firms than by foreign firms. But, overall, we found no compelling evidence that Canadian head offices of foreign firms had a less positive economic impact on local economies than Canadian-owned head offices.

Both Canadian- and foreign-owned head offices are aligning their community involvement with community needs, and the location of their operations matters a lot to where they focus their and their employees' efforts. Toronto's large banks stand out from other head offices by virtue of their size and propensity for giving. Most of their employees live and work in the city, and the banks make large donations to local charities and initiatives. It is true that Canadian-owned head offices donate more per firm through corporate- and employee-giving to the United Ways in Canada's largest business centres. But these differences are accounted for by the presence of the Canadian banks and the fact that foreign-owned companies tend to be smaller than Canadian-owned companies.

Head offices' R&D contributions to local communities are diminishing

While head office location may have been an important determinant of research facilities in the past, it is less so now. Our research and the research of others indicates that many of the world's largest R&D performers conduct R&D in their head office city region. At the same time, none of these does all its R&D in its home town or country. And most have located, or are in the process of locating, their latest R&D facility elsewhere. Leading R&D performers are choosing locations that are close to their research capability or their customers.

All head offices are important to large city and regional prosperity

Head offices in both Canada and the United States tend to be in larger cities, where high-value occupations and business services are concentrated. It is impossible to tell whether head offices drive the strength of these occupations and industries or vice versa. More than likely they support each other, providing mutual reinforcement. Clearly, public policy should not discourage foreign head offices from locating in Canada, Instead, it needs to be aimed at creating an environment where large cities flourish and Canadian firms become global leaders. In the end, we require vibrant city regions that support the growth of head offices, which in turn increases the vibrancy of Canadian cities in a virtuous circle.

The Panel was also interested in learning more about the potential benefits of a government policy that actively sought to create Canadian global leaders, or national champions. It engaged the Institute to conduct research into the benefits of such a policy.

National champions policies to create global leaders remain unproven

National champions are large corporations that are global leaders and create growth and employment in a local economy. Some argue that our governments should help firms achieve global leadership. Why shouldn't governments provide some special, focused support for the next Research In Motion to establish itself as a global leader? But, overall, creating the environment the environment that combines specialized support and competitive pressure for our industries and firms is a better bet.

Some argue for government creation of national champions

Most of the arguments for a national champions policy are economic, but some address patriotic and social concerns.

Among the economic arguments is that governments should encourage and protect potential leaders to overcome the market advantage of incumbents in other countries gained through structural or historical barriers. Another reason for government intervention is to neutralize foreign companies' power in markets where power is concentrated in the hands of a few companies. This is especially beneficial in technology sectors with high paying jobs, a skilled workforce, and healthy growth rates. Government subsidies or protection from foreign competition would lead to greater investment and employment by domestic firms and the attraction of a mobile highly skilled workforce. With this support, domestic firms could increase market share and a larger share of industry profits.

To build scale, some think that companies may need government support to develop a domestic base in large local markets, where they have their facilities in research, product design, and other key capabilities. At certain times too, proponents argue that government investments may be required to supplement the investments of large companies in plant and equipment so that they can enhance their long-term competitiveness and create or maintain domestic jobs. With the resulting higher profits, they could invest more in R&D and innovation. Some also argue that government support should be used to sustain ailing firms to prevent closures and unemployment in local regions. Without such support, the worry is that poverty and social tension could rise. in part because displaced workers lack skills and mobility to join thriving firms and industries in other areas.

Others think that government can discern broad trends and can make policy decisions and intelligent investments better than the market. Governments could also help in some cases when market forces may be detrimental to previously successful companies that could now fail without help. Financial markets may limit their ability to invest and price pressures could erode markets, profits, and companies' abilities to invest further in products and services. Some industries are important to the long-term success of an economy or are critical to its future. These often include industries related to national or energy security or to manufacturing that is critical to an advanced economy.

Non-economic arguments have their supporters too. Some hold that domestic companies should be favoured over foreign companies because it is unpatriotic not to. They also think that, since large domestic corporations create many jobs and pay significant taxes, they are the engines of well being in the economy, and government policy should ensure they survive and thrive.

Others are against national champions policies

Two simple but powerful conclusions point to the benefit of more broadly-based economic policies rather than efforts to designate and support national champions.

First, shielding companies from competition does not build national champions. Companies protected from domestic and international competitive pressure run the risk of becoming complacent and unable to succeed in the long term. Even where domestic markets are simply too small to support the scale necessary for global competitiveness, government intervention is likely not the right answer. Several of Canada's global leaders that have been acquired had access to excellent physical and human resources but did not move aggressively to expand internationally.

Second, opponents see that governments have not generally created successful national champions. There are few instances where governments have successfully intervened in the domestic market to foster industries and national champions. In fact, winners have typically emerged on their own. In Canada, we found that governments continued to support industries with poor economic prospects - shipbuilding, textiles, shoes, and furniture - and attempted to prop up heavy water plants and automotive facilities that were not competitive in their markets, but were in depressed regions.

Two fundamental reviews of Canada's economic progress in the past twentyfive years supported a more liberal approach to economic policy rather than a national champions policy. In 1985, the Macdonald Commission, recommended pursuing freer trade with the United States and strengthening the labour, capital, technology, and management inputs that focused on workers rather than firms or industries. In 1991, the report by Michael Porter and Monitor Company, Canada at the Crossroads, concluded that governments' "proper role is [to be] a catalyst ... not to forge cozy business-government 'partnerships,' relax pressure on industry, or seek to eliminate risks." Up to now Canada has not generally followed a targeted national champions policy.

Public policy should create the environment for global leaders to flourish

As Canadians worry about the hollowing out of our economy, it is important to keep a sense of perspective. Admittedly, some of Canada's corporate icons are being taken over by foreign investors. This is inextricably linked to globalization and increased spikiness in the world. Companies that are not aggressively staking out world beating strategies and leadership positions in their market niches are vulnerable to take over. More than ever the best defence is a good offence.

Fortunately, while we have been losing Canadian ownership of some corporate icons, we have also been creating new global leaders – more than we are losing. It is important that even more global leaders emerge from the Canadian economic environment. Such success creates economic spillovers, increases Canada's importance in international bodies and is a signal that we have an environment that fosters creativity and innovation.

This does not diminish the importance of significant foreign subsidiaries in Canada. Our work shows that the spill-overs from the Canadian head offices

are not appreciably different than those from Canadian firms. And the work of other researchers indicates the positive impact of foreign owned firms on Canada's productivity and standard of living. In our desire to have successful Canadian firms, government policy should neither keep out foreign firms nor favour specific national champions.

Economic policy needs to focus on creating supportive conditions for success through investments in specialized human capital, infrastructure and institutions. But it also needs to create an environment of competitive pressure domestically and internationally. Managers and owners of firms need to be challenged by rivals to innovate and improve continuously (*Exhibit 6*).

By and large, government attention ought to be evenly distributed across sectors and regions. But from time to time, targeted efforts to enhance the environment of support and pressure may be warranted. Governments should monitor our successful clusters and firms and ensure that Canada is not disadvantaged relative to other countries.



Canada should pursue inspired competitiveness policies

We see four high priority domestic initiatives for nurturing the global aspirations of Canadian companies and supporting them in continuously innovating to upgrade their competitiveness: lowering the cost of investment; reducing the barriers to competition; defining and supporting innovation broadly; and paying disproportionate attention to global competitors.

Lower the cost of investment

Investment is the lifeblood for the upgrading of competitiveness. Companies invest to upgrade and improve the sophistication with which they compete, whether they invest in training their people, engaging in R&D, advertising their brands, acquiring machinery and equipment, or building production facilities. The only way to remain globally competitive is to invest and invest and invest some more.

To encourage an investing culture, we need to improve the environment for investing, which in Canada leaves something to be desired. We still have one of the highest marginal tax burdens on business investment in the world. That is simply unacceptable when building globally competitive companies is paramount. Our tax policy needs to drive down the marginal tax burden on business investment to among the lowest in the developed world from one of the highest. One effective and targeted way to do so is to move to cash accounting for corporate income tax purposes. There is no reason why in a pro-investment environment, we should ask companies to pay for investments today and only receive the tax break on that investment over a sometimes - long period of time.

Another "tax" on capital is the cost to raise capital in the first place. Issuing public capital in Canada is made more costly by having the least efficient regulatory structure for capital markets in the industrialized world. It is an international embarrassment for Canada to have thirteen securities regulators. It is time for a single securities regulator for the country – like all other leading countries in the world.

Finally, the key motivator for making investments is to reap gains from that investment. In the current environment. those gains are eaten away by inflation - especially those gains that take a long while to materialize. Why? It is because the size of the gain is calculated as the difference between the realization in inflated dollars and the investment in nominal dollars (i.e., dollars from the past), making the taxable gain much bigger than it really is. To encourage a culture of investment, we should index capital gains for inflation so that inflation does not erode the net gain on investments.

Doing so harks back to a time when on the basis of Canadian scholarship, Canada adopted a uniquely successful tax policy related to inflation indexing. This was in 1971 when Canada followed the advice of future Nobel Laureate, Canadian Robert Mundell, and broke with convention in the United States and elsewhere by indexing tax brackets so that Canadians in the progressive income tax system would not pay higher taxes simply by having their earnings inflate them into a higher tax bracket. Canada benefited enormously in the 1970s relative to the United States, which finally realized the importance of this policy innovation and indexed its brackets in 1981.

Net, these policy changes would be aimed at providing much more encouraging environment for companies to invest aggressively to innovate and upgrade their competitiveness.

Reduce barriers to competition

If investment is the lifeblood of upgrading, competition is the driver. Companies innovate and upgrade primarily to the extent that they must compete successfully. Every time Canada protects its companies from the forces of competition, it hurts those companies' innovation and upgrading. In this respect, Canada is still feeling the hangover of the National Policy of 1878, which caused us to protect our non resource-based companies from international competition for 111 years - to protect them as "infant industries." The primary effect of that policy was to eliminate the necessity to build global scale for pursuing riskier opportunities because it was simpler to stay safely behind the tariff wall and maximize profits with a non-global business focused on the domestic market.

Governments have an important role in regulating industry for the safety of consumers. But, in many industries, governments have used this role as a Trojan horse to bring in onerous entry regulations to protect domestic producers or service providers. In the process, they underestimate the detrimental impact on competition of entry regulation. Thus, classically, in order to achieve air traffic safety, regulators historically tightly regulated who could fly and with what prices. However, it turned out that deregulated entry and pricing combined with tight regulation of safety procedures and standards raised safety performance substantially and dramatically heightened and improved the quality of competition. Canada needs

to revisit all business regulatory policy to identify and scale back regulation that dampens competition without in any way eroding the desired outcomes regarding consumer transparency, safety, and environmental standards.

The Canadian Government needs to redouble its efforts to lower interprovincial barriers to competition in Canada. It is quite unbecoming for an economy the size of Canada to remain encumbered by internal barriers to trade in food products, energy, or financial services, and by small differences in standards that exist not because of differences in policy goals but as a result of historic inertia. This is especially the case in light of the progress accomplished, for example, by the European Union in these areas in the face of much more serious obstacles.

Define and support innovation broadly

Third, if innovation is critical to upgrading competitiveness, innovation policy in Canada cannot characterize innovation as narrowly as it now does. Whether there is truly conscious consideration of the issue or not, innovation policy in Canada construes innovation to occur only in a narrow range of industries (computer hardware and software, communications hardware and software, aerospace vehicles and engines, pharmaceuticals and biotechnology, and medical devices) and is carried out by scientists and engineers working on technology. That is where the vast majority of innovation funding support of all forms goes.

But those sectors represent less than 2 percent of the jobs in Canada and only a slightly higher proportion of the wages or GDP contribution. And even though the general public and policy makers think that the numbers are

dramatically higher in the so-called "high tech oriented" United States, they are not. Those sectors represent less than 2 percent of jobs there too. If our sectors were the same size as US sectors, it would mean a mere 3,500 more jobs in these sectors in all of Canada – a rounding error.

In reality, the United States is not more innovative than Canada because it has a bigger high technology sector; it is more innovative because it values, supports, and expects innovation across the other 98 percent of the economy as well as in high technology, while we do not. In examining most government innovation strategies in Canada, one would conclude that what made Masonite. Four Seasons, Couche-Tard, Gildan, Magna, and McCain global leaders should not be counted as innovation. But these Canadian companies are true innovators and are equally important to our success as the next biotech breakthrough or nanotech development.

For example, RIM is seen as a successful global leader because it is a technology innovator. It is a technology innovator. However, as important as technology innovation is to RIM, equally important to its success has been innovation in business partnering with telecommunications service providers to accelerate distribution of the Blackberry throughout North America and the world.

Canada needs to recognize that all sorts of business innovations are needed across all sectors of the economy to have a continuously upgrading economy and globally competitive companies. If we want more innovation that makes a difference to the economy, we need to broaden our approach to innovation policy. Currently, for example, we have an elaborate support structure ranging

from special tax incentives to research support for exactly one type of innovation – scientific research. There is no evidence to support the notion that this type of innovation is more valuable to the economy than, for example, business model innovation of the sort that McCain or Four Seasons engaged in to create massive value. If tax incentives are good for scientific research and thus our innovation and competitiveness, then we should be prepared to broaden tax credits for other types of innovation projects designed to enhance global competitiveness.

If the Government of Canada can decide to provide Canadian Foundation for Innovation funding for promising scientific research projects, why not for promising business or innovation projects? If we provide support for creative and innovative talent in the cultural industries, narrowly defined, why not also for the closely related area of innovative designs that enhance the global competitiveness of Canadian products? Canadians and Canadian business leaders should be encouraged to think that all innovation is created equal.

We should also be prepared to examine whether or not innovation can be supported better by broad-based tax reductions on new business investment, as we discussed above, than through the vast array of special tax support for science-based innovation

Finally, Canada must also improve its commitment to business education. While we continue to produce more scientists and engineers than the United States, we under invest dramatically in business education. Perhaps it does not matter that we have just over half the proportion of business educated managers in Canada as in the United States, but if we believe that education

is important to human capital and prosperity, this situation seems competitively dangerous. We need great managers in order to innovate broadly across the spectrum of potential avenues.

Pay disproportionate attention to existing and aspiring global competitors

Fourth and finally, governments across Canada should pay disproportionate attention to our globally competitive companies. It is not as though it pays no attention to them, but it is not at all clear that it pays disproportionate attention to them, and it is more probable that it pays attention to the large Canadian-oriented companies that have most or even all of their operations in Canada.

Senior officials of the Canadian government should know personally the CEOs of the 40 \$1 billion+ Canadian global leaders and probably even of the 36 \$100 million to \$1 billion global leaders. They should understand what those companies are trying to accomplish globally and seek to assist them in any way that is feasible and practical for a government to do. Their needs and interests are simply much more important for Canada's prosperity than the needs and interests of the non-globally competitive companies. While government cannot and should not simply hand them cash – that has little evidence of working elsewhere it should be particularly attentive to their needs.

In addition, government should know the companies that have credible plans to make it to a position of the top five in their industry globally, because those companies represent the future of Canada. The companies that do not have such aspirations are simply not as important to Canada's future. They will eventually be owned by a foreign company if they do not aspire to be global leaders.

This is not a call for government creation of national champions. Instead, it is an opportunity for economic policy to be informed by the experiences of those companies and business leaders who are aggressively pursuing globalization, rather than those who are cowering under its threat. The kinds of policies that result from this will support innovation and upgrading across the economy. In many ways, this is the least expensive initiative in terms of tax dollars but the most time-consuming for senior government officials. However, in the globalizing economy, the time officials take to know what it takes for Canadian companies to succeed globally will probably be the most valuable time for Canada's future that they spend.

The Competition Policy Review Panel has concluded that in today's world, Canada is best served by an environment that takes advantage of the benefits of competition. especially from the best the world has to offer. We should not shirk from global competition; instead we should welcome it for the increased choice and lower prices for consumers and for the stimulating pressure it creates for our businesses to innovate and sharpen their own operations. Many of their conclusions fit well with the Institute's own research, and we encourage Canadian governments, businesses, and the public to examine them seriously.



Assessing the economic impact of head offices in city regions

Paper prepared for the Competition Policy Review Panel by the Institute for Competitiveness & Prosperity March 2008

Panel was established by
Canada's Ministers of Finance and
Industry with two objectives:

"The Panel will review key elements of Canada's competition and investment policies to ensure that they are working effectively, allowing us to encourage even greater foreign investment and create more and better jobs for Canadians."

"Separately, the Panel will look at whether our investment policies are working effectively to encourage Canadian firms to invest abroad and become more diversified by reaching out to new investment opportunities."

> Government Press Release, July 12, 2007

The Panel has an inward and outward mandate – how to ensure that Canada is an appealing location for prosperity-enhancing foreign direct investment and that our Canadian firms are reaching out to seize international opportunities. It has determined that the impact of head offices is an important issue for it to address, with the following questions in mind:

- What is the impact of head offices on local economies?
- By extension, what is the impact on the national economy?

 Are there public policy implications emerging from the type and size of benefits?

The Panel and its research staff have found little data from existing information sources to shed light on this question. It has asked the Institute for Competitiveness & Prosperity to help answer these questions.

We conducted four sets of analysis:

- We reviewed existing academic research on the subject.
- We conducted our own research into the impact of head offices on R&D location decisions – looking primarily at where the largest global corporations were currently locating their research centres. We also analyzed differences between Canadian-owned and foreign-owned R&D performers in Canada.
- We assessed the community impact of Canadian-owned and foreign-owned head offices in Canada's four leading headquarters cities. We interviewed corporate executives responsible for community affairs in some of Canada's largest corporations, both Canadianand foreign-owned, to determine how head office location factors into corporate decisions on community involvement and charitable giving.

We conducted statistical analyses
 to measure the correlation between
 the number of head office units and
 employment at head offices and the
 quantity and quality of high-value
 occupations and business services
 in the city regions. We also commissioned a special tabulation of Statistics
 Canada data to determine the
 difference between Canadian- and
 foreign-owned head offices in salaries
 and purchase of outside services.

In summary, we conclude that head offices are important to the economic health of our large city regions, but on balance the evidence does not support the conclusion that head offices of Canadian-owned firms are more important than those of foreign-owned firms.

Head offices have positive economic impacts on their city regions. On a direct basis, head offices pay much higher salaries than other establishments. The presence of head offices correlates in varying degrees with more employment or higher wages or both in high-value business services. Head offices are significant contributors to local charities - in corporate and employee contributions and in involvement by senior managers and employees. In the area of research and development, we find that the location of a global head office is becoming less important in the establishment of new corporate R&D facilities. To be sure, legacy effects mean

that most large R&D performers globally have facilities near their head office. But current and future expansions of R&D facilities are being located to be close to customers or researchers.

The evidence does not indicate that Canadian-owned head offices have greater local economic impact than foreign-owned firms. A critical question, however, is whether or not Canadianowned head offices create significantly higher spin offs than the Canadian head offices of foreign-owned subsidiaries. Our research indicates no solid evidence that Canadian-owned firms create stronger benefits for the local economy than do foreign-controlled head offices. Where we find a statistical relationship, there is a tendency for the presence of Canadian head offices to have a stronger association than foreign head offices with high-value cluster employment and wages; but there is a slightly higher tendency for there to be no difference.

When we compare compensation at Canadian head offices and foreign head offices we find much higher averages in the latter. While Canadian-owned head offices spend slightly more than foreign-owned head offices on outside business services, foreign firms purchase outside advertising and promotion services at a much higher rate.

Head offices are also important to local charities and community involvement initiatives and Canadian firms tend to contribute more than foreign-owned firms; however, the foreign firms that are involved tend to be smaller than the Canadian firms. When we control for firm revenues in Canada, differences in corporate contributions disappear.

The strength of Canadian firms' charitable contribution is borne heavily by our five large banks headquartered in Toronto. When we exclude the five major Canadian banks from our analysis, the differences in contribution per firm are much smaller.

In the future, however, head office locations will become less important to local charities as corporate giving becomes more strategic and closely related to business needs.

Large cities are important drivers of economic activity related to head offices and high-value occupations and business services. Our research indicates that head offices in Canada and the United States tend to be in larger cities - they do not agglomerate like specialized clusters. Given Canada's smaller number of city regions with more than one million people, it is not surprising that nearly three-quarters of head office employment in Canada is located in four cities. At the same time, high-value occupations and business services are concentrated in larger cities. It is impossible to determine whether head offices drive the strength of these high-value industries and occupations or vice versa. More than likely, they support each other in a mutually reinforcing framework. Large cities are home to many people in high-value occupations and business services, and this strengthens the effectiveness of head offices in the same cities. At the same time, large cities are home to many head offices that create demand for people in high-value occupations and business services. The common factor is large cities - and it is difficult to separate out the impact of population on the presence of spillovers between head offices and these high-value occupations and business services.

From a public policy perspective, it is important that our economic environment supports the success of both Canadian-owned and foreign-owned businesses. Economic policy should be aimed at creating the environment for Canadian-owned firms to innovate, expand, and become global leaders. It is important that Canada develop its own firms that are global leaders for three reasons. First, the profitable expansion of a Canadian company to become a global leader often creates huge equity gains for its owners here in Canada with ensuing local spillovers. Second, the presence of successful Canadian global leaders helps ensure Canada's relevance on the global stage in the creation of important international economic agreements. Third, the success of Canadian-owned firms is a strong indicator that our economic environment is conducive to innovation and creativity.

At the same time, foreign-owned head offices provide similar economic benefits to their city regions in Canada, and policies aimed at blocking their investment in Canada will be counter productive to our national prosperity and the creation of a competitive environment that stimulates Canadian firms.

Our research supports the importance of an economic environment that both drives innovation and creativity by Canadian firms to propel their global expansion and makes Canada a compelling destination for investment. Our economic policies need to support the vibrant growth of our city regions and the continued development of skilled human capital. In a virtuous circle, this supports the success of head offices, which in turn enhances our human capital, thereby increasing the vibrancy of Canadian cities and the country as a whole.

Reviewing the literature on the economic impact of head offices

WE CONDUCTED A THOROUGH LITERATURE

review on the impact of head offices on the local community. Much of the academic literature is focused on the opposite question – what drives the creation and sustaining of head offices in city regions? As we shall see, this research indicates that factors such as the presence of a strong financial services industry, specialized business services, and highly qualified personnel are factors that support the creation of head offices. R&D location decisions are driven largely by the potential for advantage for the deciding firm - and in many cases this is not affected by head office location. Finally, available Statistics Canada research indicates that local spillovers are greater for multinational firms than for Canadianowned firms. However, this research is focused on manufacturing firms and, in fact, does not relate specifically to head offices: nevertheless, we can discern some relevant findings from it.

While we found no academic research on the specific question of the spillovers of head offices, there is some work of relevance.

Jane Katz, a Federal Reserve Bank of Boston economist, summarizes the spillover benefits that large corporate headquarters bring to a local economy – although she provides little specific quantification of the impacts in her research. Katz finds that people who work in headquarters tend to be highly educated and highly compensated. For example, in 2001, the average annual salary of those employed at US headquarters establishment was nearly double the average salary across the

total economy. Although the pay is relatively high at headquarters, they account for only 0.5 percent of employment at all US establishments. Thus when headquarters leave a metro area, the direct job loss is also relatively small.

Katz also notes that headquarters depend on face-to-face contact with their network of outside suppliers – investment and commercial bankers, lawyers, accountants, advertising and media companies, and consulting firms. The result is that headquarters and their specialized business providers tend to cluster near each other and further increase the supply of highly skilled and technical professionals in the local economy's workforce.

Katz notes too that for headquarters, charitable giving today is far more likely to be business-driven. This is due to most large companies having written policies that govern both the reasons for and recipients of their giving – by and large explicitly aimed at improving relations with customers or employees. Due to this rise in strategic giving, Katz observes that the impact of headquarters on philanthropy and community involvement appears to have declined but headquarters locations still play a role. For public policy implications, Katz concludes that "while headquarters may still bring additional jobs or philanthropy, there are fewer guarantees than in the past. And the benefits that actually flow to the region will likely depend on the firm and industry involved."1

Chicago Federal Reserve economists Thomas Klier and William Testa, document changes in the spatial distribution of corporate headquarters of large (defined as having more than 2,500 worldwide employees) US-domiciled corporations during the 1990s. Klier and Testa conclude that when it comes to growing, attracting, and retaining headquarters, the most densely populated metro areas still have the advantage. In other words, large company headquarters remain far more geographically concentrated than the US population at large. According to their results, the 50 largest US metropolitan areas had 87 percent of headquarters in 2000 exactly the same percentage as in 1990.2

They find a significant link between financial services and headquarters locations. Their multiple regression analysis indicates that metropolitan areas containing high concentrations of financial services and specialized business services activity saw the greatest headquarters gains over the 1990s.3

Furthermore, Klier and Testa cite the important physical and human capital advantages of large cities: critical infrastructure such as major airports, major highways and telecommunications and high concentration of professionals and highly skilled personal.4

One source of this continued concentration of headquarters in larger metropolitan areas is the growth of smaller local firms into larger firms, especially in younger industries relying heavily on specialized inputs like R&D e.g., Silicon Vallev in Northern California and Route 128 in the Boston area.

In a sense, success begets success among metropolitan areas with many headquarters.

The research of Saskia Sassen, a professor at Columbia University and the London School of Economics, supports this finding of success begetting success. She concludes that global cities are virtual monopoly centres for financial, legal, and accounting innovations. And since they have the most complex segments of the knowledge economy - attracting an inflow of highly educated 20 to 35-year olds - they stand to gain the most as global headquarters change locations. Additionally, corporations are buying more services. She also notes that between 1999 to 2003 output in the United States grew at a 4.1 percent rate, whereas output for finance, insurance, and real estate (FIRE) grew 7.6 percent overall, while FIRE sector sales to corporations grew 11.8 percent, and FIRE sales to firms in securities and linked trading grew 34.0 percent. Head offices rely on sophisticated services provided locally. As Sassen observes, "Deals like the recent acquisition by NASDAQ of a share of the London Stock Exchange, or the offer by the New York Stock Exchange for Euronext, don't get done in Birmingham."5

Economists James Davis of the US Census Bureau and Vernon Henderson at Brown University find conclusions similar to Klier and Testa regarding the importance of financial and business services and head offices. They focus on headquarters' births and concentrate on the contribution of headquarters and the diversity of business services provided locally in The Agglomeration of Headquarters. The authors use micro data on auxiliary establishments from 1977 to 1997 for US firms (County Business Patterns) in a set of various complex economic equations to derive variable estimates

and input these into various regression models. Their results indicate that a 10 percent increase in the number of local specialized business or financial service providers in a county increases the expected births of headquarters in a US county by 3.6 percent. Davis and Henderson conclude that the relative availability and diversity of financial and business services are significant and have positive effects on the decision of headquarters' locations across all specifications.6

But some research indicates that important business services of functions like advertising and R&D are driven by factors other than head offices.

In their 2006 paper, Networking on Madison Avenue, Brown University economists Mohammad Arzaghi and Vernon Henderson look at the effect on productivity of locating advertising agencies near other advertising agencies. The researchers use US census tract data over the 1990s for Manhattan to provide highly specific firm location information, in fact allowing them to distinguish sites at 250 meter increments. Their findings indicate that having a high density of similar advertising agencies is important for enhancing their own productivity. Productivity increases result from localized networking in the industry which specifically enhances creativity; agencies share information, ideas, and materials where repeated faceto-face contact is critical, whether formal or informal. They conclude that Manhattan advertising agencies trade off the higher rent costs from being nearer to enhanced opportunities for networking, against the lower rent costs of operating on the periphery away from the clusters. These results exist even

² Thomas Klier & William Testa, "Location trends of large company headquarters during the 1990s," Economic Perspectives, Federal Reserve Bank of Chicago, Issue Q II, pp. 12-26, 2002.

Saskia Sassen, "How Population Lies: True, big cities no longer draw big numbers. But that doesn't mean their power is slipping too." Newsweek International, July 10 2006.

⁶ J Vernon Henderson & James Davis, The Agglomeration of Headquarters, Working Papers 04-02, Center for Economic Studies, US Census Bureau, 2004.

though the majority of their end buyers are outside Manhattan. In a follow-up paper, Arzaghi finds that across the US, agencies also locate themselves in high wage and rent areas in order to sift out low quality agencies and guarantee their network quality.7

With respect to R&D location decisions, Susan Feinberg's paper, The International R&D Location Choices of US Multinationals (2000), notes that traditional theories are that multinational corporations (MNCs) generally exhibit two patterns of behaviour that influence R&D location: agglomeration and heterogeneity.

- Agglomeration⁸ is the propensity of firms in the same industries to cluster their R&D activities because of network benefits (similar to the findings related to advertising agencies above). Prior decisions by other firms in the same industry to locate R&D in a specific location cause other firms in the same industry to locate its own R&D in the same place. There are benefits or cost reductions resulting from the clustering of activities.
- Heterogeneity means that MNCs have different preferences for R&D locations for their own specific reasons. They may be seeking access to specific research universities, a highly qualified labour force, local factor endowments, or first class infrastructure. They also may consider government subsidies or tax breaks, trade, regulatory, education, healthcare, immigration, and labour market policies when making their decisions.

It should be noted that Feinberg did not specifically assess the importance of head office location in her research; but her findings are instructive to the questions we are examining. Using disaggregated panel data for US MNCs, Feinberg concludes that, in general, heterogeneity appears to be a more important driver of MNC R&D location choice than agglomeration. She does note two exceptions - in the electronics and chemical industries, agglomeration effects do seem to drive R&D location choice

A subsequent paper by Feinberg and Anil Gupta (2004) indicates that multinationals recognize the specific benefits of locating R&D facilities away from their head offices and in foreign subsidiaries. Their research looks at whether MNCs' decisions to assign new R&D responsibilities to existing foreign subsidiaries are significantly influenced by the potential to capture and utilize knowledge spillovers from competitors' R&D activities in the host country. These spillover effects would lead to the MNCs' local and global capacity to utilize knowledge accumulated by their foreign subsidiaries. Feinberg and Gupta use disaggregated panel data that capture 361 US MNC headquarters and their 989 affiliates over the 1989-96 period and include Canadian subsidiaries of US MNCs. Their multiregression analysis confirms that the spillover of external knowledge is an unintended by-product of assigning R&D duties to a subsidiary; rather, such spillovers appear to be anticipated and factored in by MNC executives making R&D location decisions.

Their research indicates that MNCs view the assignment of R&D responsibilities to a subsidiary as an investment in the subsidiary's capacity not only to create new technical knowledge through internal efforts but also to absorb

spillovers of external knowledge from competitors' R&D activities.

We found no published research that specifically addresses the importance of Canadian owned head offices. But we can draw inferences from some relevant research that foreign-owned headquarters do not necessarily create fewer spillovers to the local economy than Canadian-owned headquarters. Foreign-owned firms in Canada are more productive than Canadian-owned firms with higher wages being one of the outcomes. Foreign-owned firms also confer positive impacts for their domestic-owned neighbours through greater competitive intensity and technology diffusion.

It is important to note that the research points to the multinational aspect of these firms, not that they are foreign. Canadian-owned and foreign-owned MNCs have developed capabilities and advantages that allow them to expand internationally and so they are to be expected to be superior in performance to their competitors who are domestically focused. The specific research findings are as follows:

• Economists Steven Globerman, John Ries, and Ilan Vertinsky analyzed the productivity and wage performance of foreign-owned and Canadian-owned enterprises using manufacturing data for 1986. Their results showed that worker productivity is substantially higher in foreign-owned firms, primarily because they tend to be capital intensive and large. These findings have been observed in earlier studies and have been sustained over time.

⁷ Mohammad Arzagahi, 2005. Quality Sorting and Networking: Evidence from the Advertising Agency Industry, Working Papers 05-16, Center for Economic Studies, US Census Bureau.

Feinberg also uses the term "state dependence" to describe this phenomenon.

- Globerman, Reis, and Vertinsky also found that foreign-owned firms tend to pay higher wages to their employees, partly due to their higher productivity. The study rejects the hypothesis that the benefits to the host country are sensitive to the foreign affiliate's home country. They conclude that, "whatever the source of this sustained disparity in productivity levels, the suggestion would be that foreign direct investment continues to provide potential long-run economic benefits to the host economy."
- · More recently, Statistics Canada economists, John Baldwin and Wulong Gu conducted a firm-level manufacturing study of how foreign-controlled businesses operating in Canada stack up to their domestic competitors.9 Corroborating the findings of Globerman et al.. Baldwin and Gu find that foreign-owned firms are more productive. In addition, they also show that foreign plants operating in Canadian manufacturing industries confer positive spillovers on locally owned manufacturing plants. These spillovers derive from increases in competitive intensity and technology adoption. The authors conclude that the performance-enhancing benefits of these foreign-controlled plants exist because of the organizational or technological advantages of being located within multinational enterprises. not because their parent firm is located abroad. These firms make greater use of advanced technology, which requires higher skilled employees, which increases the benefits of advanced technology, and so on in a virtuous circle. They conclude that performance differentials between foreign and domestic firms stem from a multinational advantage more so than an ownership advantage.

In summary, the academic literature on the spillovers of head offices to local communities is sparse. It is probably strongest in the area of R&D spillovers, and the indication here is that globally competitive firms are choosing R&D locations to be near a company-specific base of customers, suppliers, or researchers or to be near other R&D establishments.

Research does indicate that the location of high-value business services is correlated with head offices. Statistics Canada research points to the conclusion that foreignowned manufacturing firms provide positive spillovers to the local economy because they are global; but this is not conclusive on the issue of the differing impacts of head offices based on ownership.

⁹ For a complete synthesis of Statistics Canada research on MNEs in Canada see John Baldwin and Guy Gellatly. "Global Links: Multinationals in Canada: An overview of Research at Statistics Canada." Statistics Canada, catalogue no. 11-622-MIE, no. 014, 2007.

Determining head office impact on R&D location decisions

MANY ECONOMISTS POINT TO THE

importance of R&D through its impact on innovation and productivity. In one econometric study, the OECD concluded that Business Expenditure on Research and Development (BERD) as a percentage of a country's GDP is an extremely important determinant of its growth in prosperity. It estimates that a one percentage point increase in BERD as a percentage of GDP increases real output per capita by a remarkable 12 percent. 10 Economist Richard Harris cautions that this estimate may be misleading because many of the positive effects of R&D are not limited to the region or country where it is conducted. He cites a study by economist Wolfgang Keller which indicates that on average a dollar of R&D spent in the United States is 78 percent as valuable to Canada's economy as a dollar spent in Canada. 11 But, even if international spillovers of R&D make the impact of local R&D less critical to prosperity, Harris acknowledges that domestic R&D capabilities may be important to realize effective crossborder benefits here in Canada.

While the true impact of local R&D may still be in question, one of the reasons often cited for the importance of head offices is that strategic decisions such as where to conduct R&D will be skewed towards the local economy. Our work indicates that this may have been true in earlier years. However, leading R&D spenders globally are tending not to locate their recent or next R&D facility near their global head-quarters. Instead, they are selecting locations closer to their markets or to specific research strengths.

Head office location may have been an important determinant of research facilities in the past, but it is less so now. We determined the current location of the research facilities of the 25 largest R&D performers in the world. Unsurprisingly, most of these firms conducted R&D in the same city as their head office. In fact, each one of the 25 firms has an R&D facility in its home town. Several of these specify that their global R&D headquarters is in the same city as their head office. At the same time, however, not one of these companies does all of its R&D in its home town - or even its home country. None of Canada's five largest R&D performers has its R&D solely in its head-office city (Exhibit 1).

Of more relevance to the head office debate are the decisions on the latest or next R&D facility, rather than legacy decisions. Only four of the 25 located, or are in the process of locating, their latest R&D facility in their head-office city – Samsung in Seoul, BMW in Munich, GSK in London, and Roche in Basel. The vast share of global R&D leaders choose emerging markets or research locations like China and India or established locations like the US or Europe. This pattern is similar for Canadian R&D heavyweights.

This is consistent with the previously cited research conducted by Susan Feinberg – R&D investment decisions are based on criteria related to the capabilities and resources of relevance to the research function. Survey research conducted by others confirms our findings. Economists, Jerry Thursby of Emory University and Marie Thursby of the Georgia Institute of Technology and NBER, conducted a survey of 235 large global R&D performers. Among the 105 US firms

¹⁰ FOECD, The Sources of Economic Growth in OECD Countries. Paris, 2003.

¹¹ Wolfgang Keller, The Geography and Channels of Diffusion at the World's Technology Frontier. NBER, Working Paper No. 8150, 2001. Cited in Richard Harris, "Canada's R&D Deficit — And How To Fix It", CD Howe Commentary, No. 211, May 2005.

Exhibit 1 Most leading R&D companies are building their next R&D facilities in locations away from their head office			
Company	Corporate Headquarters	Newest R&D Location	Current R&D Operations
Global R&D leaders			
Pfizer	New York	San Francisco & Shanghai	New London, CT (R&D HQ) 20 other centres, 5 in USA plus Toronto, Sandwich (UK), Amboise (Fr) & Nagoya (Jp) 3 USA Facilities being closed
Ford	Dearborn, MI	Germany & Oakville	Dearborn, MI (majority of work) 6 other facilities in Europe
Johnson & Johnson	New Brunswick, NJ	La Jolla, CA	Major R&D facilities in USA and 12 other countries in all continents but Africa
Microsoft	Redmond, WA	India	Redmond (primary location); three other in USA, three in UK, China, and India
Daimler Chrysler	Stuttgart	China, Japan	4 major R&D centres in Germany; 4 in the USA, 1 in India and Japan
Toyota	Toyota City	Germany, Thailand	Seven of 12 R&D centres outside Japan (2 USA; 2 Europe; 1 Australia; 1 Japan)
GlaxoSmithKline	London	London	7 of 17 major R&D facilities in the UK; USA (4), Japan (2), Croatia, France, Italy, and Spain
Siemens	Munich	China, India, & Russia	Siemens operates 150 development centres in 30 countries; 25 are in Germany
General Motors	Detroit	Germany, Sweden, & Oshawa	GM has 11 design centres. Including centres in the USA, Canada, Brazil, Mexico, China, Korea, and Australia
Samsung Electronics	Seoul	Seoul	6 R&D centres in Korea; 16 others in 8 countries, including USA, UK and Russia
IBM	Armonk, NY	Eastern Europe & India	61 R&D labs in 15 countries, including 10 research centres. USA (4), India (2), China, Japan, Switzerland, and Israel
Intel	Santa Clara, CA	Shanghai & Vietnam	Operates more than 100 R&D offices Majority of R&D conducted at 5 labs in the USA
Sanofi-Aventis	Paris	Goa, India & Tucson	More than 25 R&D Centres on 3 continents; 13 in France
Volkswagen	Wolfsburg	Shanghai	Group R&D HQ in Wolfsburg Global presence with major R&D bases in China, Japan and USA
Roche	Basel	Basel & Shanghai	15 R&D centres around the world; USA (6), Switzerland (3), Germany (3), 1 in Austria, China and Japan
Novartis	Basel	Shanghai & Cambridge, MA	R&D HQ is in Cambridge, MA Operates 3 major R&D centres in the USA; 1 in Austria, Switzerland, UK, Japan and Singapore

Exhibit 1 Most leading R&D companies are building their next R&D facilities in locations away from their head office			
Company	Corporate Headquarters	Newest R&D Location	Current R&D Operations
Global R&D leaders			
Nokia	Espoo, Finland	Palo Alto, San Diego & Cambridge, MA	R&D locations include Finland, Sweden, Germany, Hungary, Japan, China & USA
Merck	Whitehouse Station, NJ	Ireland	Principal R&D sites in Rahway, NJ and West Point, PA Sites in Japan (4), USA (4), England, France, Spain, Italy & Canada
Robert Bosch	Stuttgart	China, India, & Eastern Europe	Has 10 research centres 5 in Germany, USA(2), Switzerland, Japan & China
Sony	Tokyo	Chennai, India	R&D centres comprise sites in China, Japan, Sweden, the Netherlands, UK & USA
Honda Motor Co.	Tokyo	Guangzhou, China & Tochigi, Japan	Major R&D facilities in Japan, Germany and USA
BMW	Munich	Munich	R&D Network consists of 10 locations in 5 countries; Germany, Austria, China and USA
Motorola	Schaumberg, IL	China & India	Labs in France, Germany and USA Software locations in Israel, Italy, Poland and Russia 20 development centres across Europe
Matsushita Electric	Osaka	China & Vietnam	Their 589 consolidated companies have R&D centres that include 10 sites in the USA Other centres in Japan, Canada, Malaysia, Germany and China
Cisco Systems	San Jose	Ireland, China & India	R&D HQ is in San Jose Global presence includes Canada, China, Japan, Netherlands & USA
Canadian R&D leader	rs		
Nortel Networks	Toronto	Bangalore & Beijing	R&D HQ is in Ottawa Major R&D locations are USA (4), Canada (3), Ireland, France, UK and China
BCE Inc.	Montréal	Montréal	R&D HQ is in Montréal 98% of R&D conducted in Canada
Magna International	Aurora	Changzhou	R&D HQ is in Aurora 62 engineering and R&D centres in 23 countries on five continents; 8 engineering and R&D centres in Canada
Bombardier	Montréal	Sherbrooke, QC & Ireland	Global R&D network includes sites in Canada, India, Sweden, Switzerland, Brazil and China
Research In Motion	Waterloo	Mississauga	R&D HQ is in Waterloo Other locations in Ontario and Germany
Source: Institute for Competitiveness & Prosperity analysis based on data from Research Money Infosource, UK Department of Trade and Industry, and company public filings.			

surveyed, 34, or less than a third, were locating, or had located, their latest R&D facility in the United States with more than two thirds locating outside the country. Among the 119 Western European-based R&D leaders, 51 or 43 percent are locating their next facility in their home country; and 68, or 57 percent are going to other countries. Among the 11 surveyed R&D spenders outside of the United States and Western Europe, 7 are staying in their home country and four are investing abroad. The survey was focused on country of location, not city. So, while 34 US firms are locating their next facility in the US (a similar finding to our research among the US-based global R&D leaders), it is quite possible that only a few are locating that facility in their home town.

To be sure, home countries attract a large share of current R&D funding – largely as a legacy result. In the same survey, Thursby and Thursby found that half of the respondents performed 75 percent or more of their R&D in their home country. We found similar results among R&D performers in Canada. Foreign subsidiaries spend, on average, 1.6 percent of their global R&D budgets in Canada, while Canada accounts for 2.5 percent of global sales (Exhibit 2).

Policy makers are concerned that Canadian firms are not investing adequately in R&D. But the problem is not a "hollowed out economy." Canadian-owned firms performing R&D are significantly smaller than Canadian operations of foreign-owned firms in Canada who perform R&D. Among firms conducting any R&D, the average Canadian firm has revenues

of \$27 million; the average foreignowned firm in Canada has revenue of \$547 million in Canada. Company size matters when it comes to R&D budgets. The much smaller average Canadian R&D performer invests \$700 thousand annually on R&D; foreign-owned firms spend an average of \$8.8 million. This holds true across all industries.

In summary, head office locations have been important in the past in determining R&D locations for globally significant firms. But current location decisions are being driven by the logic of R&D – where are the customers and R&D performers? Policies to improve Canada's R&D capabilities and performance should be aimed at ensuring that Canada is a desirable location for performing R&D.

Exhibit 2 Canadian firms do much less R&D in Canada than foreign-owned firms in Canada

R&D by industry and by country of control, 2003 Industry Average Revenue (\$mm) R&D % of Revenue R&D \$ per company (\$mm) Canada Total Canada Total Canada Total Foreign Foreign Foreign \$32.1 \$636.6 2.6% Manufacturing \$63.6 1.4% 1.9% \$0.8 \$8.9 \$1.3 322.2 100.3 12.7 9.5 10.3 30.6 Pharmaceutical and medicine 30.8 3.9 10.3 233.6 40.4 6.3 Communications equipment 28.3 49.7 24.3 11.5 14.7 11.8 218.6 2.9 3.2 0.6 8.0 Services 19.6 23.9 4.1 9.0 Information and cultural industries 41.5 1.8 13.1 2.2 4.4 Х Х Х Х Computer system design and related services 1.1 28.2 1.5 41.6 24.4 15.9 0.5 6.9 0.6 2.9 22.9 36.7 42.0 38.1 1.1 9.6 Scientific research and development 3.6 1.4 Agriculture, forestry, fishing and hunting 8.5 59.3 9.0 1.7 8.7 2.3 0.1 5.2 0.2 Mining and oil and gas extraction 283.0 1,225.1 407.4 0.7 0.5 0.5 2.0 6.1 2.5 All industries 27.0 547.1 45.2 2.5 1.6 2.1 0.7 8.8 1.0

Source: Statistics Canada, Industrial Research and Development: Intentions 2006, Catalogue no. 88-202-XIE.

x - Data suppressed by Statistics Canada to preserve confidentiality.

Assessing head offices and their community involvement

HEAD OFFICES OF LARGE COMPANIES, IT IS widely assumed, are important contributors to their local communities, especially charities. We set out to examine the impact of head offices on charitable donations and community involvement and whether or not the Canadian ownership of the head office was a critical determinant in its community involvement. We assessed the community involvement of head offices in four ways:

- Determining the involvement of business executives in leading charities in the four Canadian cities that account for most of our head offices and exploring differences between global head offices and subsidiary head offices
- Comparing average donations by firms with local head offices and other firms to United Ways/Centraides in the same four cities
- Interviewing senior managers at large companies in Canada to understand the strategy behind community involvement and the importance of the head office to the city's allocations
- Determining if there is a statistically significant relationship between head offices and donations to local United Ways/Centraides.

In summary, we find that head offices of large Canadian companies are important, but not emphatically so, to local charities. Their executives serve as volunteers and they are large contributors to local United Ways/Centraides. In addition, employees at head offices contribute their time and money, typically through payroll deductions. On average, head offices of foreign subsidiaries contribute less than head offices

of Canadian-owned companies. But, when we exclude Canada's five largest banks, all of whom are headquartered in Toronto, from the analysis, Canadianand foreign-owned differences disappear. In any event, we can expect the impact of head office location on local corporate contributions to decline over time. Increasingly, large firms in Canada, domestic- or foreign-owned, are becoming more strategic in their donations and community involvement. Locations of operations, employees, and customers are becoming more important than the location of the head office. This distinction is somewhat academic. however, since large city regions are where employees, customers, operations, and head offices agglomerate.

Head office executives and local community involvement

We analyzed the involvement of executives at leading charities in Canada's four key headquarters cities – Montreal, Toronto, Calgary, and Vancouver. 12 Based on Canada Revenue Agency information, we identified large charities in each of the four cities. For each of the 19 charities, we identified members of their board and annual campaigns. In all, we identified 450 people - about 24 per board. We then determined how many of these individuals were based in the private sector and how many in the public or not-for-profit sector. For members in each sector we determined the location of their head office - locally or some other city.

Among the 292 private sector members, 161, or 55 percent, came from companies whose head office was in the same city; 72, or 25 percent, were from companies whose head office was in another country; the remaining 59, or 20

¹² These four cities account for 73 percent of head offices in Canada – Desmond Backstead and W. Mark Brown, "Head Office Employment in Canada, 1999 to 2005," Statistics Canada, catalogue no. 11624MIE – no. 014, July 2006.

percent, were from companies whose head office was in another Canadian city. From one perspective therefore, only 55 percent of these individuals were from local headquarters where the ownership was Canadian while 45 percent were at head offices where the global headquarters was elsewhere. This ratio ranges from 45 versus 55 percent in Vancouver to 62 versus 38 percent in Montreal.

Sorting the results a different way shows that 75 percent of people involved with our sample of local charities are from Canadian-owned companies while 25 percent are from foreign-owned companies. According to Statistics Canada, 78 percent of head office establishments are Canadian-owned and 66 percent of head office employees are in Canadian-owned firms. The nationality of ownership of a head office does not appear to matter in the propensity for its executives to volunteer on the boards of local large charities.

Head office corporate and employee donations to United Ways and Centraides

Local United Ways and Centraides depend heavily on corporate contributions. We gathered corporate donations data from the Web sites of the four United Ways/Centraides in the same cities. Except for Calgary, each publishes a corporate honour roll of donors giving more than \$50,000 in the latest year. Drawing on this information we see that companies whose global head office is in the same city are important donors to local United Ways.

Across the three cities the average large corporate donor contributed \$194,000 to its local United Way¹³ in 2007

(Exhibit 3). Comparisons of averages are complicated by the fact that the United Way of Greater Toronto reports only that each of the five banks in Toronto gave more than \$1 million. For our estimates we counted each as having donated \$1.5 million, based on information from one bank's website. Toronto had the largest average – at \$220,000 per large corporate donor; Montreal's average was \$200,000, and Vancouver's was \$116,000. Across the three cities, the average Canadian company donated \$249,000¹⁴ while the average foreignowned company donated less than half of that amount - \$115,000. Canada's five largest banks contribute to local United Ways/Centraides at a significantly higher rate than other companies and when they are excluded the Canadian average falls to \$166,000. Even after excluding the banks, large Canadianowned firms contribute more per firm than do foreign-owned firms. Besides the impact of Canadian banks, a reason for the fact that foreign-owned firms on United Way honour rolls contribute less per firm is that they are on average smaller than Canadian-owned firms. On a contribution per million dollars of revenue basis, foreign-owned firms are actually slightly higher than Canadianowned firms.

It is not simply the scale of Canada's banks that matters to their corporate donations; it is their propensity to donate. According to Statistics Canada, firms in the finance and insurance sector accounted for 24.0 percent of pre-tax profits in Canada in 2003 and for 32.1 percent of charitable donations. ¹⁵ The next largest source of pre-tax profits, manufacturing, accounted for 19.1 percent of pre-tax profits and 19.4 percent of donations. Mining, oil and gas extraction, the third largest in

profits, accounted for 13.9 percent of pre-tax profits and 4.4 percent of donations. In the United States this relationship is reversed. Finance and insurance accounted for 19.4 percent of pre-tax profits in 2002 and 10.6 percent of donations; manufacturing accounted for 32.4 percent of profits and 47.0 percent of donations. Clearly, any analysis of head offices and local charitable donations has to differentiate between Toronto's banks and other head offices.

Employees at Canadian banks are significantly higher donors through their payroll contributions. Payroll deductions to the local United Way/Centraide averaged \$446,000 per Canadianowned head office in Toronto when the five banks are included – compared to \$217,000 from foreign-owned head offices in Toronto. But when the banks are excluded, the Canadian company average in Toronto falls to \$184,000 – within the range of findings from the other three cities - and less than foreign-owned head offices in Toronto. Across the four cities, Canada's banks drive Canadian-owned companies' payroll deductions above the performance of foreign-owned firms. Excluding the five banks there is virtually no difference.

Community involvement strategies of Canada's largest firms

To gain a deeper understanding of the impact of head offices on local community involvement and charitable giving, we interviewed senior managers and executives in the function (in two cases we spoke with the CEO) at 18 of Canada's largest corporations; 12 of these were Canadian-owned and 6 were foreign-owned. We asked the interviewees to describe their community

¹³ Companies with multiple locations donated to more than one United Way; we treat each donation as a stand alone for our analysis

¹⁴ The weighted average of donations by Canadian firms in their headquarters cities (\$268,000) and by Canadian firms in cities that are not their headquarters (\$204,000) as seen in Exhibit 3.

¹⁵ M. Easwaramoorthy, Cathy Barr, Glerin Gumulka, and Lisa Hartford, "Business Support for Charities and Nonprofits, Research Bulletin: Vol.13(2). Toronto: Imagine Canada, 2006, p.2

Exhibit 3 Head offices are import	ant sourc	es of corpo	rate and er	mployee dor	nations to	United Way	/s/Centrai	des
	Corporate Donations (\$50,000+), 2006 Head office ownership				Employee Donations (\$50,000+), 2006 Head office ownership			
	Local	Other Canadian*	Foreign	Total	Local	Other Canadian*	Foreign	Total
Montreal Total (\$000) Number of firms Average per firm (\$000) Average per \$ mm of revenue	\$4,775	\$2,525	\$2,700	\$10,000	\$7,625	\$2,550	\$4,975	\$15,150
	19	10	21	50	32	22	41	95
	\$ 251	\$ 252	\$ 129	\$ 200	\$ 238	\$ 116	\$ 121	\$ 159
	\$ 32	\$ 12	\$ 19	\$ 20	\$ 34	\$ 6	\$ 32	\$ 21
Toronto, including Banks Total (\$000) Number of firms Average per firm (\$000) Average per \$ mm of revenue	11,275	1,850	4,000	17,125	31,650	2,400	11,525	45,575
	34	8	36	78	71	10	53	134
	332	231	111	220	446	240	217	340
	21	19	22	20	41	22	67	47
Toronto, excluding Banks** Total (\$000) Number of firms Average per firm (\$000) Average per \$ mm of revenue	3,775	1,850	4,000	9,625	12,150	2,400	11,525	26,075
	29	8	36	73	66	10	53	129
	130	231	111	132	184	240	217	202
	14	19	22	17	25	22	67	35
Calgary Total (\$000) Number of firms Average per firm (\$000) Average per \$ mm of revenue		not	available		19,350 74 261 72	3,250 21 155 11	8,700 34 256 62	31,300 129 243 44
Vancouver Total Number of firms Average per firm (\$000) Average per \$ mm of revenue	1,400	1,325	750	3,475	2,825	2,925	3,625	9,375
	12	10	8	30	23	14	17	54
	117	133	94	116	123	209	213	174
	41	7	23	13	47	14	99	26
3-city, 4-city average including Banks Total (\$000) Number of firms Average per firm (\$000) Average per \$ mm of revenue	17,450	5,700	7,450	30,600	61,450	11,125	28,825	101,400
	65	28	65	158	200	67	145	412
	268	204	115	194	307	166	199	246
	26	12	20	19	50	11	57	37
3-city, 4-city average excluding Banks** Total (\$000) Number of firms Average per firm (\$000) Average per \$ mm of revenue	9,950	2,900	7,450	20,300	41,950	6,725	28,825	77,500
	60	18	65	143	195	52	145	392
	166	161	115	142	215	129	199	198
	22	11	20	19	42	13	57	38

Notes: Includes all private sector firms with contributions over \$50,000. Corporate donations for Calgary not available. 3-city average refers to corporate donations, and 4-city average refers to employee donations.

* Canadian-owned firm, but with headquarters in another Canadian city, eg. Enbridge (Calgary head office) donation in Toronto.

* "Toronto excluding Banks" and "3-city, 4-city average excluding Banks" exclude the five largest Canadian banks – BMO Financial Group, CIBC, RBC Financial Group, TD Canada Trust, and Scotiabank.

* Source: Institute for Competitiveness & Prosperity based on data from web sites of United World Manufacel United World Context Toronto Libited World Con

Source: Institute for Competitiveness & Prosperity based on data from web sites of United Way of Montreal, United Way of Greater Toronto, United Way of Calgary & Area, United Way of Lower Mainland.

involvement strategy and processes for determining how much is spent where. For Canadian-owned companies, we asked how their subsidiaries developed and implemented their strategies; for foreign-owned firms, we asked about the relationship with their global head office.

In summary, the location of head offices does matter for the amount of contributions and sponsorships that are made in the local community. But the critical driver is the size of the head office as defined by employee count. The perspectives of the CEO and executive team do matter - but less so than head count and it appears that this factor is becoming less important. Foreignowned firms have less independence than their Canadian-owned counterparts – but their strategies appear to be driven by the characteristics of the Canadian setting. However, the key relevant trend is that more and more firms are aligning their community involvement with their business needs and with the localities where they operate.

Community involvement aligns with business needs. Nearly all interviewees indicated that their company's community involvement strategy is driven by business needs. For several, this is a recent change in their approach with complete overhauls of their strategy and practices being implemented in the last few years. As one executive put it, "We identified the top challenges across our business units and three themes emerged – the need for community consent for us to operate, the impact of education and skills shortages on our business, and the importance of environmental considerations, especially with respect to water." In another firm, their strategy was driven by customer

research – "our customers are families and so it's no surprise that they value charities related to children's needs." Another respondent indicated, "opera and other arts, not local hockey teams, fit our desired brand image."

In a sense, charitable giving and community involvement have caught up with the need to streamline or re-engineer business functions. Many interviewees agreed with this sentiment: "We're no longer doing charity like it used to be done – we're investing in partnerships that provide leverage for our businesses."

A key implication of this trend is that CEOs and other senior executives are less likely to intervene in community involvement decisions, once the strategy is set. As one interviewee put it, "Our CEO may get hit up to contribute to a local capital campaign. But, if it's off strategy he will say 'no.' Remember our community involvement strategy was approved by the board and he really can't wander too far from that." Several indicated that this was a welcome development for senior executives – "They now have a principled and well-reasoned rationale when they say 'no'."

Location of operations matters a lot.

As community involvement and charitable giving have become more aligned with business interests, the location of company operations has increased in importance. Most interviewees indicated that the geographic dispersion of their contributions and community investments track their operations' locations. The location of significant operations, like exploration and processing facilities or regional offices, implies an interest in the local community and its many employees. As one manager put it, "In

the communities we operate, we're a significant part of the local economy and people there look to us for leadership in community involvement." Several interviewees indicated that employee location was a driving force – in one firm there was a conscious strategy to equalize donations per employee across the country.

Geographic dispersion of corporate community involvement dollars is undergoing change and is much more strategic. As one interviewee described it, "We used to spend everywhere across Canada. Now, because we don't have operations in PEI or Saskatchewan, we simply don't spend there."

Clearly, head offices for most companies employ a significant number of people. It is difficult to differentiate the relative importance of a head office as a central decision making unit versus being the location for many employees. Toronto's banks are extreme examples of this. Not only is Toronto home to the head offices for Canada's largest banks, it is also home to a disproportionate share of their employees. In contrast, Calgary's oil companies have significant operations at production facilities like the oil sands and refineries across Canada. For retailers, their head offices have proportionately few employees relative to their stores across the country. Business requirements mean that much of the giving is store-based and implemented by store managers who are in the community. Any quantitative analysis of the impact of head offices would need to factor in the impact of how operations are disbursed.

Employee involvement. Employees are key determinants of the charities and community involvement strategies of large companies in Canada. Most of the interviewees indicated employees were involved in their strategies. In some cases, employee surveys were used to determine which areas the company would place its focus. In others, there are formalized programs to support employees in their chosen charities. For example, some companies will contribute \$250 to \$500 to a charity in which the employee has volunteered 40 or 50 hours of personal time. Others allow employees paid time off to work in local community organizations. Many have dollar-matching programs, with limits. In addition, in selecting their priority community involvement areas, some firms favour the ones where there is an opportunity for employee involvement. This transcends nationality of company ownership. Foreign-owned firms appear to be as focused on employee involvement as Canadian firms.

Executive involvement. Nearly all interviewees indicated that their managers and senior executives were involved in their local community. In most, there was not a formal requirement. Instead, the corporate culture encouraged and supported such initiatives - "it's just part of our corporate DNA." In some cases an executive's business success is determined by community involvement -so it's not surprising that they are involved. Only in a few of the interviews, was community involvement part of the formal evaluation. One interviewee indicated that senior executives are typically "assigned" to the boards of organizations that the company is supporting. Another company is

working at developing a classification of how involvement with specific types of charities will develop necessary business skills – e.g., serving on a board increases financial accountability acumen or helping in fundraising improves marketing skills.

Do foreign companies differ? For these large corporations, there is a global approach to community involvement and charitable giving. That is to say, global parents will insist that their Canadian subsidiaries develop a strategy for community involvement and that this strategy should be driven by local needs. As one interviewee put it, "our parent tells us our social performance in Canada is important to how we are evaluated." Another said, "our parent tells us we have to find out what's important to Canadian customers in developing our strategy." As one interviewee put it, "here in Canada, Aboriginal needs figure more prominently in our donations. That's less of an issue for our US parent and what they spend there." Only one indicated that the Canadian strategy itself was largely directed by global headquarters.

To be sure, spending by Canadian subsidiaries is reviewed by global parents, but typically as part of the regular budget process – "we set our community involvement budget here, but the numbers go up the line to global headquarters for approval like any other expenditure."

But in the end, head offices do matter. Yet, despite the ongoing "professionalization" of community involvement and charitable giving, the location of decision making authority will skew the geographic dispersion of spending. As one CEO expressed it, "I'm part of the local network and I'll say

yes to local requests because I make similar requests myself." Another said, "my gut feel is that we spend more in our head-office city – but I really can't quantify what that would be worth."

Still, it is difficult to disentangle other key factors. Head offices typically have a disproportionate number of employees, which we have seen is an important driver of strategies. Similarly, head offices are in cities where many charities are located, especially Toronto. And it appears that industry matters. Toronto's financial services also employ a high percentage of people in the region and are highly profitable. Other industries are more decentralized and are less economically robust.

Regression analysis

Finally, we assessed the impact of the number of head offices on the success of the local United Way/Centraide campaign in each of Canada's 27 city regions or CMAs. While each community is different, local United Ways/Centraides are similar in that they mount local fundraising campaigns among the general population and for corporate and employee donations. The funds are typically used to support local social services. The local units are affiliated and share best practices thus achieving some level of homogeneity across city regions.

We measured the relationship between the number of head offices in each of Canada's CMAs and the dollar value of United Way contributions in 2004. We tested the relationship between the number of head offices from the 107 largest Canadian companies on the *Financial Post's FP500* list for 2004 and donations to the local United

Way/Centraide. Once the city size is controlled for, we found no statistical relationship. In its report on head offices, 16 Statistics Canada does not report results publicly for the number of head offices across all of Canada's CMAs. However, they did carry out regressions on our behalf to measure the statistical relationship between United Way/Centraide charitable donations in a CMA and both the number of head office units and the employment in these units. They found no statistical relationship. The conclusion is directional, and not definitive. But it appears that the presence of head offices in a city region does not drive total charitable donations higher after controlling for employment level in the city region. However, the analysis we discussed earlier indicates that head offices are important to corporate and employee donations.

Head offices of large companies play an important role in their local communities. The corporations and their employees are important contributors to local United Ways/ Centraides. The average head office of a large Canadian-owned corporation is a more significant corporate and employee donor than a head office of a foreign-owned firm. But excluding the five major Canadian banks from our analysis significantly

reduces the gap in corporate donations to United Ways/Centraides between Canadian-owned and foreign-owned firms. Toronto's large banks stand out from other head offices by virtue of their size and their propensity for charitable donations. And controlling for firm size, defined by revenues in Canada, donation gaps disappear. We expect, however, that the location of head offices will matter less in the future as corporations are trending more towards strategic giving that is consistent with their business needs and ties closely to the location of their customers, employees, and operations. To be sure, head office cities will still garner a large share of donations - but for broader reasons than the fact that head offices are located there.

Measuring the correlation between head offices and high-value clusters and creative occupations

MANY OBSERVERS ASSERT THAT HEAD

offices create important spillovers to the local economy as they engage outside high-value services. Those typically mentioned include financial, legal, marketing and advertising, and accounting services. In their paper for the Chicago Federal Reserve, Klier and Testa summarize the rationale for the close connection between high-value business services and headquarters. Headquarters must control far-flung operations, have ready communications access to subsidiaries, and acquire the information they need to help the company stay abreast of global trends and develop innovative strategies.¹⁷ Headquarters have always relied on outside providers of these sophisticated services to some extent.

But can we measure the impact of the presence of head offices on local employment and salaries of these business services and creative occupations? Does the impact vary between Canadian- and foreign-owned head offices? And do results vary between Canada and the United States.

We conducted two sets of analysis in this area. First, we identified correlations between the number of head offices in a city region and the size of employment in Richard Florida's creative class and the employment size and wage level in Michael Porter's business services clusters. Second, we drew on Statistics Canada's survey of head offices to identify differences between Canadianowned and foreign-owned head offices in compensation and purchases of business services.

In the first set of analysis, we found that there is indeed a correlation between the number of head offices and the vibrancy of some high-value business services. In Canada, correlations exist for information technology, financial services, business services, and advertising services. However, we did not find a correlation between the creative class and head offices. It is important to note that these results do not show causation but, in general, we can see that in a city with many head offices, high-value business services and a more educated and creative labour force are likely to exist. In most of the relationships we did find, there was no statistically significant difference for Canadian- and foreign-owned head offices. Where there was a difference, they tended to indicate a stronger impact by Canadian-owned head offices.

In the second set of analysis, we found that foreign-owned firms pay higher compensation at their Canadian head offices than do Canadian firms. It should be noted that these results, while they are based on a survey covering most industries in the private sector, exclude banking. The survey results also indicate that foreign-owned head offices in Canadian-owned head offices on advertising and promotion while Canadian firms spend slightly more on outside business services.

Head offices and high-value occupations and business services

We found some correlation in both Canada and the United States between the number of head offices in a city region and the presence of high-value occupations and business services. But we did not find major differences in this relationship when we examined Canadian-owned head offices separately from foreign-owned head offices.

Defining head offices. In order to understand the impact of head offices, we drew on government statistics in the category known as NAICS 55 – the Management of Companies and Enterprises. NAICS is the North American Industrial Classification System. It is a system for classifying each business establishment by the industry in which it operates. Establishments defined as NAICS 55 are non-governmental offices that "administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision making role of the company or enterprise." This is a broad definition of head offices - encompassing subsidiary offices which carry out many head office functions. We identified the head office's Metropolitan Statistical Area (MSA) for each of the US firms and its Census Metropolitan Area (CMA) for the Canadian firms. The source of the US data is the County Business Patterns for 2005, the latest year available. It identifies the number of NAICS 55 establishments and the employees at those establishments for each MSA. Statistics Canada is the source of similar data for Canada. 19 However, data sorted by CMA is not publicly available because numbers get relatively small after the five or ten largest CMAs. Statistics Canada did help us to draw on this information for our analysis.

Different types of spillovers. In order to assess the impact of head offices we looked at spillovers in areas like high-value business services, financial services, and the creative class. We started by looking at key business services. We conducted this analysis by

using cluster data from the Institute for Strategy and Competitiveness which is headed by Harvard professor, Michael Porter. Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region. Clusters of firms in the same industry arise because they increase the productivity and innovativeness with which companies can compete. The development and upgrading of clusters is an important agenda for governments, companies, and other institutions.²⁰

Porter classifies all industries into three groups: traded, local, and natural endowment dependent clusters. The location of natural endowment industries is based on the location of resources. such as forests or mineral reserves. All other industries are either "traded" or "local" based on the degree of industry dispersion across geographic areas. Local industries sell most of their output locally and are thus present in most, if not all, geographic areas and are evenly distributed across cities and regions on the basis of population. Traded industries are those that are concentrated or clustered in specific geographic areas and sell their output to other regions and nations. Most local industries are services, such as local health care, retailing, and most construction activity. Local goods manufacturers include bottling facilities, newspapers, and concrete products. Examples of traded industries are automobile parts and assembly, steel-making, and biopharmaceuticals. Porter's research has identified 41 different clusters of traded industries in the Unites States.

Most of the research on the importance of head offices points to their positive impact on business services and financial services. Thus the traded clusters, as identified by Porter, which are of interest in our study are:

- "traded business services" and its sub-clusters management consulting, marketing related services (consisting of public relations services, commercial art and graphic design, and direct mail advertising services) and engineering services.
- "traded financial services"
- "traded information technology".

We also looked at two local sub-clusters within what Porter identifies as "local commercial services":

- "local professional services" consisting of accounting, auditing, and bookkeeping, legal services, business services (not elsewhere classified), personnel services, and secretarial and court reporting
- "advertising" consisting of advertising agencies, outdoor advertising services and advertising (not elsewhere classified). Note that this is a different sub-cluster than marketing related services sub-cluster of business services described above.²¹

Porter has drawn on government statistics to measure employment and average wages in each cluster, across each of the MSAs in the United States. The Institute for Competitiveness & Prosperity under license from Harvard has created the same information base

¹⁸ US Census Bureau, 2002 NAICS Definitions, 55 Management of Companies and Enterprises. Available online: http://www.census.gov/epcd/naics02/def/NDEF55.HTM. Statistics Canada's definition is virtually the same.

¹⁹ Its report, "Head Office Employment in Canada, 1999 to 2005", which reviews trends in foreign-owned and Canadian-owned head offices, is based largely on this information.

²⁰ For more information on clusters see Institute for Competitiveness & Prosperity's Working Paper 5, Strengthening structures: Upgrading specialized support and competitive pressure, pp. 17-29, July 2004 and Michael Porter's website: http://www.isc.hbs.edu/econ-clusters.htm

²¹ Perhaps counter intuitively, Porter's research indicates that advertising services tend to locate fairly evenly across regions in the US. So while most are aware of the concentration of global leading agencies on New York's Madison Avenue, Porter's research indicates that employment in this industry is spread fairly evenly across the country (based on each city's or region's employment base).

for Canada's clusters, defined the same way as Porter has done in the United States.

Taking this information and analyzing it against the location of head offices, we are able to determine if there is a relationship between the number of head offices or the employment in head offices in a city region and the quantity (employment size) or quality (relative wage levels) of high-value business services.

So far, we have discussed spillovers to industries. It is also possible to examine spillovers to occupations. For this, we draw on Richard Florida's research into the "creative class." Using National Occupation Classification for Canada and Standard Occupational Classification for United States, 22 he divides workers into four main classes. These are the creative class, the service class, the working class, and farming/ fishing/forestry. The creative class includes workers in occupations such as natural and applied sciences, art, culture, recreation and sport, professional occupations in business and finance, health, nurse supervisors, senior management occupations, teachers, professors and wholesale, technical, insurance, real estate sales specialists. Florida's research indicates that cities and regions that are successful in attracting and retaining the creative class prosper and so we focus our analysis on this class.²³

We analyze how head offices relate to both the quantity, as measured by employment²⁴ and quality, measured by wages, of Porter's industry clusters and Florida's creative class occupations.

Before turning to the results, two caveats are in order.

First, it is important to note that these regressions do not necessarily show causation but simply show the correlation between the variables. This is a standard caution for regression analysis. But, in this case, it is a really important one. As we have shown, there is academic research which shows the importance of high quality financial services and business services for attracting head offices. So a case can be made that the links we show prove that business services and financial services attract head offices, not the other way around. Our statistical analysis cannot show the direction of causality. Nonetheless, absence of correlation probably implies no causal links.

Second, the number of head offices is a tiny fraction of establishments or employment in any city region. We estimate that employees of head office establishments account for 1.1 percent of all employees in Canada and 2.5 percent in the United States. The number of NAICS 55 establishments account for 0.6 percent of all establishments in the United States – Canadian data are not available. Regardless of their sphere of influence, head offices can only go so far in explaining the economic performance of a city region.

Summarizing the linkages. With respect to the relationships between head offices and industry clusters, the strongest linkage we found between employment in head offices and the size of and salaries paid in the information technology cluster in Canada, although

we saw no such relationship in US city regions (Exhibit 4). The next most important linkage in Canada is with advertising services where employment in head offices is significantly correlated with the size of and salaries paid in the cluster; this is also an important linkage in the US. Head office employment is also correlated significantly with wages in Canadian local professional services, such as accounting and legal services. We found no relationship between head offices and the creative class, after controlling for the size of the city region.

Where we did find a relationship between head offices and industry clusters we tested whether there were statistically significant differences in the relationship between Canadian-owned head offices and industry clusters and foreign-owned head offices and industry clusters. In total, we found twelve statistically significant relationships in Canada. In six of these there was no statistically significant difference²⁵ between Canadian-owned and foreignowned head offices. In five we found that Canadian head offices had a statistically more significant relationship than did foreign-owned head offices. In one relationship, we found a statistically stronger relationship for foreign-owned head offices.

In Canada, the presence of headquarters in a city region is strongly correlated with employment levels in its **information technology** industry cluster. We ran several regressions to assess the quantity and quality of the relationship. First, we found that there is a highly significant correlation between the employment in head offices and

The data that Florida draws on are from similar sources as the industry classifications we discuss above; but now employees are classified by the work they do as individuals. So a lawyer working for an auto manufacturer will be classified as being in the automotive industry cluster and as a lawyer in occupational classification.

²² Richard Florida, "The Rise of the Creative Class: Why cities without gays and rock bands are losing the economic development race," Washington Monthly, May 2002.

²⁴ We also assessed Location Quotients as a measure of the local importance of each cluster. The location quotient is a ratio measure of concentration of a cluster in a particular location relative to the North American average. A location quotient of exactly one means employment is represented in the city exactly in proportion to the industry's representation in the North American economy. A location quotient greater than one means employment is higher than would be expected and this indicates importance or concentration of that industry in a city. Our results for location quotients vary little from what we found with employment data once we control for city size.

 $^{^{\}rm 25}$ At the 10 percent level of significance using the F-test.

Exhibit 4 Head offices are correlated with some high value business clusters

Canadian CMAs (controlling for total employment in region)

Regression results: Impact of 1% increase in Head Office employment and establishments on employment and wages of selected industry clusters and creative class in Canadian city regions

Number of NAICS 55 Establishments Head office definition **NAICS 55 Employment Employment** Wages **Employment** Wages **Business Services** 0.26^{\dagger} (domestic is statistically larger) (domestic is statistically larger) Management Consulting (sub-cluster) Marketing Related Services (sub-cluster) Engineering Services (sub-cluster) 0.45^{\dagger} (no difference) **Financial Services** 0.26** 0.44* (no difference) (no difference) Information Technology 0.46* 0.11* 0.99* (domestic is statistically larger) (domestic is statistically larger) (no difference) **Local Commerical Services** Local Professional Services (sub-cluster) 0.04^{\dagger} (no difference) Advertising services (sub-cluster) 0.21^{\dagger} 0.52*0.10*(domestic is statistically larger) (foreign is statistically larger) (no difference) **Creative Class** N/A N/A

US MSAs (controlling for total employment in region)

Regression results: Impact of 1% increase in Head Office employment and establishments on employment and wages of selected industry clusters and creative class in US city regions

Head office definition NAICS 55 Employment Number of NAICS 55 Establishments

	Employment	Wages	Employment	Wages		
Business Services		0.05**				
Management Consulting (sub-cluster)		0.05**				
Marketing Related Services (sub-cluster)	0.14**		0.26*			
Engineering Services (sub-cluster)						
Financial Services	0.05 [†]		0.13 [†]			
Information Technology						
Local Commerical Services						
Local Professional Services (sub-cluster)			0.15**			
Advertising services (sub-cluster)	0.18**	0.09**	0.35**			
Creative Class						

^{*} significant at 5%; ** significant at 1%; † significant at 10%

[†] A narrower definition of head offices (NAICS 551114 - Corporate, Subsidiary, and Regional Managing Offices) is used in the US results for the financial services cluster as some subdivisions of NAICS 55 fall into the financial services cluster definition. In 2005 for US, NAICS 551114 accounted for 80% of establishments and 93% of employment in NAICS 55.

Note: Difference between domestic versus foreign head offices in parentheses. Creative class wage data is not available for Carada. Blank cells mean that coefficients are not significant. Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; Martin Prosperity Institute, U.S. Census Bureau, County Business Patterns; Institute for Strategy and Competitiveness (Harvard Business School).

the number of people employed in the information technology cluster. Our regressions indicate that:

- a 10 percent²⁶ increase in head office employment is associated with a 4.6 percent increase in employment in information technology.²⁷ The statistical analysis indicates that there is less than a 5 percent chance that these two relationships are in fact zero or non-existent. There is a statistically significant difference between the impacts of Canadian- and foreignowned head offices; that is, domestic head offices are more important for employment in this cluster compared to foreign head offices.
- a 10 percent increase in head office employment is also associated with a 1.1 percent average wage increase in the information technology cluster. Statistically, there is less than a 5 percent chance that this relationship is non-existent. Canadian-owned head offices are no more important statistically than foreign-owned head offices in the correlation with wages in a city region's information technology cluster.
- a 10 percent increase in the number of head office units is associated with a 9.9 percent increase in information technology employment.
 Statistically, there is less than a
 5 percent chance that this relationship is non existent. Moreover, Canadianowned head offices are more important then foreign-owned for employment in the city region's information technology cluster.

In contrast, we saw no impact of head offices on the strength of the information technology cluster in the United

States. It would appear that city areas of strength in information technology are driven much more in Canada by the presence of head offices than in the United States, where other factors dominate.

The relationships in Exhibit 4 are shown after controlling for employment. Since we found that larger cities tend to have more head offices and more people working in industry clusters, we need to ensure that we are not being misled in concluding that there is a relationship between the number of head offices and the size of a cluster when we are really observing that larger cities have both. All the regressions are therefore controlled for employment totals in the city region. (See sidebar Head offices and high-value clusters are both found in larger cities).

Next we looked at the impact of head offices on employment and wages paid in the advertising services cluster. Here we found statistically significant correlation with head offices and both employment and wages in the cluster. Every 10 percent increase in head office employment is correlated with a 2.1 percent increase in advertising services employment in the city region (with a probability of less than 10 percent than the true relationship is non-existent) and a 1.0 percent increase in wages (confidence level of less than 5 percent). Employment in Canadian-owned head offices has a stronger correlation with advertising services employment in the city region than employment at foreign-owned head offices. In contrast, foreign-owned head offices have a stronger impact on wages in advertising services.

When we defined head offices by the number of NAICS 55 units in a city region, we found that a 10 percent increase is slightly correlated with a 5.2 percent increase in advertising services employment in the city region – the statistical difference between the impact of Canadian-owned and foreignowned head offices is negligible. The number of head office units is not correlated with wages in advertising services.

We observed similar relationships between head offices and advertising services in the United States. We also saw a relationship between head offices in the United States and the employment strength of **marketing services** clusters in the United States; but we do not see this relationship in Canada.

In Canada, head office employment in a city region (defined either by NAICS 55 employment or NAICS 55 units) is correlated with employment in **financial services**. Statistically, the impact of Canadian-owned head offices is not different than the impact of foreignowned offices. We saw no relationship between head offices and wages in financial services in Canada. In the United States, we saw similar results.²⁸

In Canada, employment in head offices is correlated with employment in the **business services** cluster – a 10 percent increase in the former is associated with a 1.6 percent increase in the latter. Domestic head offices have a stronger impact than foreign-owned head offices. Similarly, the number of head office units is associated with business services employment. Across specific business services, we saw only a relationship with **engineering services**.

²⁶ We explain the results here using a 10 percent change in the independent variables. This is different from the approach used in Exhibit 4, where a 1 percent change is used to be consistent with standard terminology among academic researchers.

²⁷ Economists refer to this as elasticity.

²⁸ A narrower definition of head offices (NAICS 551114 – Corporate, Subsidiary, and Regional Managing Offices) is used in the US results for the financial services cluster as some subdivisions of NAICS 55 fall into the financial services cluster definition. In 2005, NAICS 551114 accounts for 80% of establishments and 93% of employment in NAICS 55 for the US. We are unable to split out this part of NAICS 55 in Canada – our financial services cluster results should be treated with caution.

Finally, in Canada employment in head offices has a modest impact on wages in **local professional services**, which includes accounting and legal services. There is no statistically significant difference between the impact of Canadian-owned and foreign-owned head offices.

We are unable to find a relationship between the number of head offices and the quantity or quality of employment in management consulting and marketing related services in Canada. To be sure there is a strong relationship between the number of head offices and the quantity and quality of these two clusters; but the relationship vanishes when we control for the employment size of the city region.

Turning to relationships between head offices and the creative class, we are unable to discern a statistical relationship – other than the fact that both are more likely to be found in larger cites.

Comparing compensation at and outside purchases by Canadian-owned and foreignowned head offices

Statistics Canada carried out a special analysis of head office statistics for the Panel under the direction of the Institute for Competitiveness & Prosperity.

The source of this information is *The Survey of Head Office and Other Business Support Units*. This survey is used to supplement information in Statistics Canada's industry-specific questionnaires to calculate estimates of economic activity for the industries surveyed through its Unified Enterprise Survey (UES) Program. Since it is aimed at head offices, the survey is a useful source of information about head

office employment, average wages and benefits paid, purchases of research and development, advertising, business services, and employment services. Consequently, it provides direction on the differential spillovers of Canadian and foreign-owned head offices in Canada.

It should be noted, however, that The Survey of Head Office and Other Business Support Units is not administered to all head offices. It does include manufacturing, wholesale and retail industries, real estate, and repairs and maintenance. It excludes public sector industries and most natural resources industries, utilities, construction, transportation, information and cultural industries (but includes publishers), finance and insurance, and professional technical services. In total it covers industries that account for 71 percent of private sector employment.

We estimate this survey captures about half of head office employment in Canada and a quarter of head office establishments. ²⁹ As with much of the other data related to head offices, then, these results should be considered directional.

The Survey breaks out head offices by domestic and foreign ownership. It breaks this further by differentiating between "centralized administrative offices," defined in the questionnaire as "corporate, general, or central office" and "other administrative offices," defined as "divisional, branch or district office." In 2005, 593 of the establishments were Canadian-owned and 387 were foreign-owned. Whether Canadianor foreign-owned, more than 90 percent of the head offices were centralized administrative offices.

Size of head offices. Over the six-year period for which we have data (2000–2005), the average Canadianowned head offices covered by this survey had 81 employees and the average foreign-owned head office was 82. Other Canadian head offices had average employment of 70 while foreignowned other head offices averaged 72 employees. The average size of foreignowned head offices is close to the results of Beckstead and Brown (about 79 employees per head office) but much bigger for their average Canadian head office (about 33).

Salaries, wages, and benefits. One of the key strengths of head offices is that they pay above average compensation. In 2005 in Canada, average salaries at head offices were C\$74,900 versus an overall average of C\$37,800. In the United States, average salaries at head offices were U\$\$85,200 versus an overall average of U\$\$3,500.

Employees at foreign-owned firms receive higher salaries, wages, and benefits than their counterparts at Canadian-owned firms. Considering salaries and wages alone, employees at foreign-owned head offices earned an average of \$77,000 in 2005 while employees at Canadian-owned head offices earned \$73,700 or 4.3 percent less. Over the six-year period the gap in average salaries and wages was 7.6 percent. The compensation advantage for employees at foreign-owned head offices was even larger when employer-paid benefits are considered. In 2005, the average foreign headoffice employee received \$98,100 in pay and benefits, while the average Canadian head-office employee received \$89,100 or 9.2 percent less. The average gap over the 2000-2005

²⁹ Total employment in The Survey of Head Office and Other Business Support Units was 83.9 thousand in 2005 or 48 percent of the 174.9 thousand head office employees counted by Beckstead and Brown in their more complete survey. The Survey accounts for 980 establishments 26 percent of the 3,784 establishments counted by Beckstead and Brown.

³⁰ Canadian results are based on data from Survey of Employment, Payrolls and Hours (SEPH) and Unified Enterprise Survey. US results are based on data from County Business Patterns.

period was 11.9 percent (Exhibit 5). At the "other" head offices, employees of both Canadian- and foreign-owned head offices received lower compensation than at "centralized" offices and Canadian offices paid higher compensation than foreign offices; but at the "centralized" head offices where compensation was higher, foreign firms paid higher compensation than Canadian firms.

Canadian head offices purchase more outside business services.

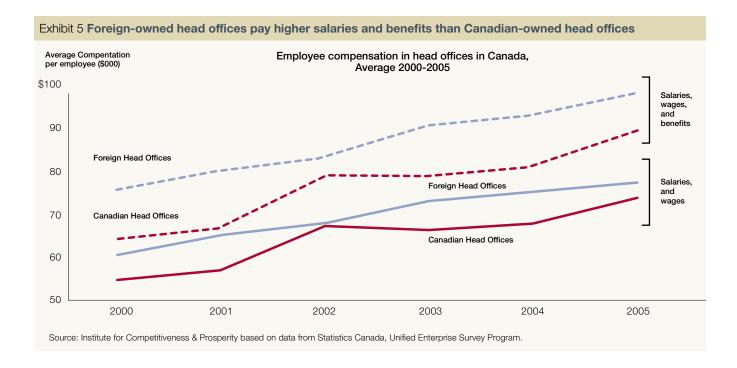
Head offices of Canadian-owned firms spend more in purchasing outside business services – legal, accounting, etc, – than do the Canadian head offices of foreign firms. On average between 2000 and 2005, the average Canadian head office spent \$1.2 million on purchased business services or 14 percent more than the \$1.1 million spent by foreignowned head offices (*Exhibit 6*). Two factors may be driving this difference.

First, a foreign-owned firm may require less expensive business services since its global head office is responsible for global corporate auditing and higher value legal services. Second, foreignowned head offices may be choosing to contract out fewer business services, which would be consistent with the higher than average compensation they are paying.

Foreign-owned head offices spend more on advertising and promotion. In dollars spent on outsiders on advertising and promotion, foreign-owned head offices spend significantly more than Canadian-owned head offices. Over the 2000–2005 period, the average foreign-owned head office spent \$2.6 million annually on advertising and promotion with outside agencies while the Canadian-owned head office spent \$800 thousand. Per employee, Canadian firms spent an average of \$9,700 over the 2000–2005

period while foreign-owned head offices spent more than three times as much, \$32,300. This gap may reflect a difference in industry mix between foreign-owned and Canadian-owned head offices – foreign-owned head offices may simply be concentrated in industries with greater advertising expenditures. Or it may be accounted for the greater likelihood of foreign-owned head offices to have global brand franchises which they support with advertising and promotion in their Canadian operations.

Foreign-owned head offices spend more with outside employment agencies. The average foreign-owned firm spent \$364,800 annually with outside employment agencies over the 2000-2005 period versus \$121,800 spent by Canadian-owned firms. Beyond the possible reasons for the differences, which we identified above, foreignowned firms may require outside

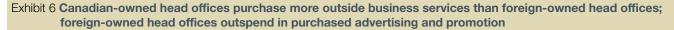


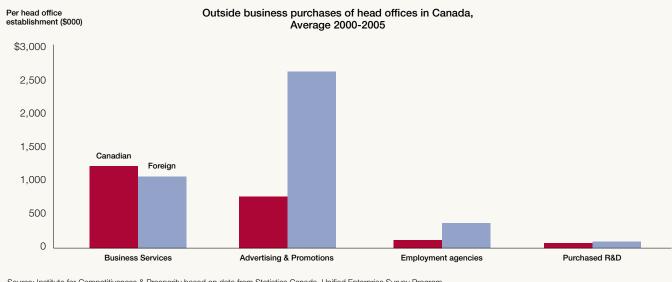
assistance in finding employees as they are less familiar with local sources of qualified candidates.

While foreign-owned head offices purchase more outside R&D, levels are low. In the final category of outside purchases for which we have information, the average foreign-owned head office contracted out for \$80,500 in R&D services annually over the 2000-2005 period while the average Canadian-owned firm contracted out for \$53,300 or 34 percent less. On a per employee basis, the five-year averages were \$1,000 and \$700 respectively. As with advertising and promotion, we cannot determine whether industry mix or fundamental business model differences account for this gap.

In summary, the data from *The Survey* of Head Office and Other Business Support Units indicate that foreignowned and Canadian-owned head offices do not differ dramatically in their size, as defined by number of employees - in the industries where the Survey captures the information. However, foreign-owned firms pay significantly higher wages and benefits and have higher expenditures for outside purchases of advertising and promotion, R&D, and employment services. Canadian firms spend more in purchasing outside legal, accounting, and other business services. These results are not definitive as they exclude large portions of the Canadian economy, such as banking, where Canadian firms dominate the landscape. Nevertheless, in the 71 percent of the private economy for which they are relevant, results do not indicate that foreign-owned head offices have less spillover to the local economy that do Canadian-owned head offices.

Large city regions are home both to head offices and to high-value occupations and business services. While it is a statistical challenge to separate out the influence of city size to assess this relationship, the data do indicate that, for a given city size, a greater incidence of head offices does correlate with some high-value business services. In Canada, the data also indicate that this positive relationship exists as much for foreign-owned as for Canadianowned head offices. Head offices. irrespective of their ownership, are directly and indirectly related to highvalue economic activity.





Source: Institute for Competitiveness & Prosperity based on data from Statistics Canada, Unified Enterprise Survey Program.

Creating the environment for Canadian and foreign-owned head offices to flourish

MUCH OF THE HOLLOWING-OUT DEBATE

that is taking place in Canada is centered around the economic importance of head offices on the local and national economies. Most observers believe intuitively that head offices are important sources of economic value. Some believe that the impact of Canadian-owned head offices is much more significant than foreign-owned head offices. Thus, there is a loss to Canada's economic potential whenever one of our firms is taken over by foreign owners.

But hard evidence to support these intuitions is hard to come by. In this paper, we have attempted to assemble existing data and develop new information to shed light on the questions related to the economic impact of head offices.

Our research points to an overall conclusion - head offices likely have positive economic spin offs to a city region irrespective of the nationality of company ownership. But the results need to be interpreted with caution. We found evidence of correlation between the presence of head offices and highvalue economic activities - but we cannot be conclusive on the direction of the causality. And for much of our analysis, we must attach some statistical caveats. Nevertheless, we are confident in concluding that, from a public policy perspective, it is important for firms in Canada to flourish so that they generate spillovers to our city regions.

Economic policy should be aimed at creating the environment for Canadian companies to innovate and expand in Canada and beyond. Foreign-owned head offices also provide economic benefits, and policies aimed at blocking their investment in Canada will be counter productive to the creation of an environment to stimulate Canadian firms. In the end, we require vibrant city regions and skilled human capital, which support the growth of head offices, which in turn increases the vibrancy of Canadian cities in a virtuous circle.

Head offices and high-value clusters are both found in larger cities

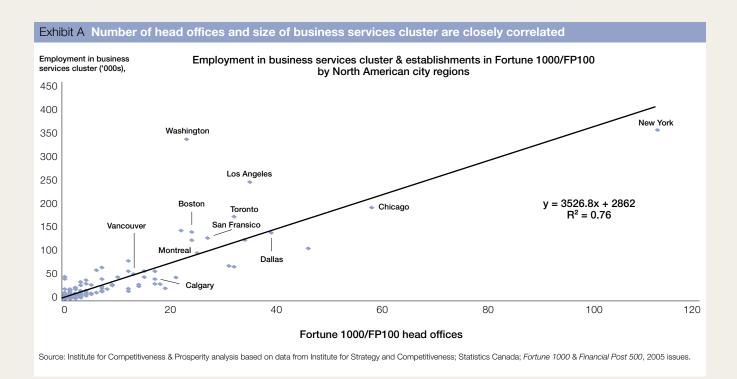
A MAJOR statistical challenge in measuring the relationship between head offices^a and high-value business services and occupations is that both tend to locate in large metropolitan areas. If we measure the simple statistical relationship between the number of head offices and the employment in business services cluster, we see a very tight linkage (Exhibit A).

But before we conclude that more head offices mean more people in the business services cluster, we should note that the larger the city, the more people in the business services cluster (Exhibit B) and the larger the city the more head offices there are (Exhibit C). We see the same interrelationships when we look at employment in other clusters and Richard Florida's creative class. We also see the same relationship when we assess salaries.

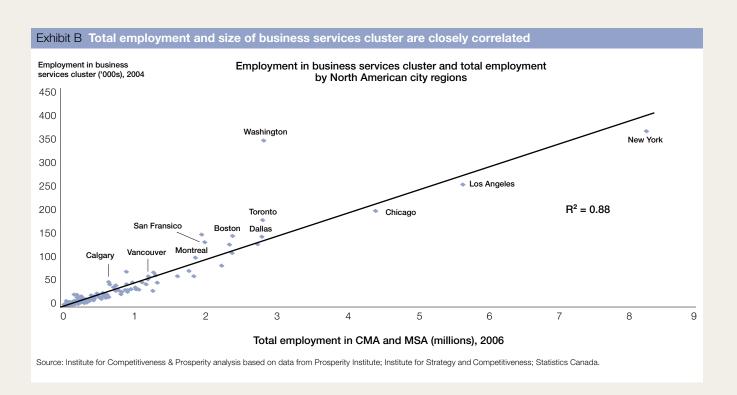
It is quite possible that bigger cities simultaneously bring both more head offices and more people and higher salaries in high-value services and occupations – and that the specific impact of the number of head offices is non-existent.

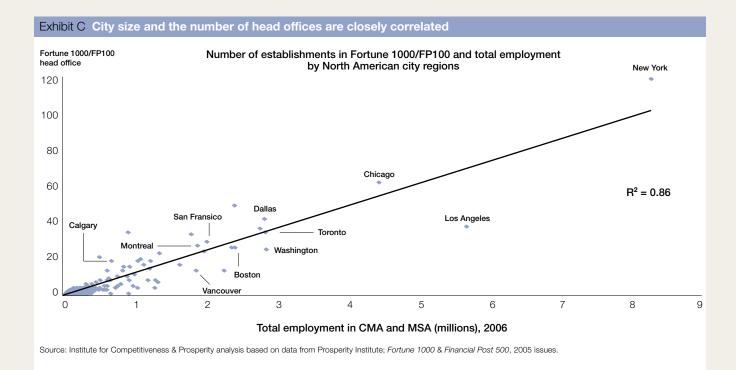
There are statistical techniques which allow us to control for the size of the city when we assess the relationship between the number of head offices and the employment in the business services cluster. Thus we can differentiate between the impact of city size and the number of headquarters on the cluster or occupation of interest.

What we observe is that the size of the city is much more important than the number of head offices. But in some cases the number of head offices does explain more of the variance between city regions on clusters and occupations. In this report we show all our correlation results after controlling for city size.



^a Our head office definition for this sidebar is the companies on 2005 Fortune 1000 and the largest 107 Canadian-owned companies on FP500. These 107 firms have revenue that would rank them higher than the smallest company on the Fortune 1000. We use Fortune 1000 and FP500 lists for head offices because Statistics Canada does not disclose data for NAICS 55 for all the Canadian CMAs.





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Assessing the potential impact of a national champions policy on Canada's competitiveness

Paper prepared for the Competition Policy Review Panel by Roger L. Martin and James B. Milway March 2008

> S PART OF ITS RESEARCH AGENDA, the Competition Review Panel has determined that it is important to deepen its understanding of the potential role of national champions in economic development. A national champion is a large corporation that is globally competitive and creates growth and employment in the local economy. Proponents of the importance of national champions argue that because national champions create such extraordinary spinoffs in the local economy, governments should have policies supporting the success of specific champions. Such support is typically in areas such as exemption from competition laws, special subsidies or tax breaks, and preferred government procurement. Support can also be in the form of precluding takeovers by foreign firms.

The purpose of this paper is to examine the arguments for and against government support for national champions and to recommend public policy implications for Canada's global competitiveness based on the assessment of these arguments and relevant research.

In summary, we conclude that the research indicates that the costs to the overall competitiveness of the economy outweigh the benefits that might accrue to the targeted industry or firm, and thus government support for specific national champions is unlikely to assist Canada in achieving its prosperity potential. Over time, many arguments have been put forward in favour of governments helping to establish advantages for firms to achieve global leadership. Most of these are economic arguments - helping infant industries, overcoming market failures, spurring agglomeration of clusters; but some address patriotic and social concerns.

Yet on the other side of the debate, there are two compelling conclusions from the empirical research. First, companies achieve global leadership from competing intensely in domestic and world markets, not by being shielded from competition. Companies' managers and owners benefit from the pressure of sophisticated rivals - as much as they do from a supportive environment providing excellent human and physical resources. Second, governments have not had a distinguished record in out performing private investors and operators in discerning market trends and implementing successful business strategies.

Some European countries like France, Italy, and Spain continue to pursue a national champions strategy despite ongoing challenges from the European Commission. Elsewhere, the policy is not being embraced. Japan and Korea have moved away from a national champions policy. China continues to address economic contradictions between opening markets and state ownership and intervention in leading companies. Some argue that Australia has achieved its current economic success pursuing economic policies that expand competition and remove barriers.

In Canada, competition policy is decidedly tilted away from the creation of national champions. While industrial policy does not formally embrace the concept, three of our key industries operate in ownership frameworks consistent with a national champion approach. In all three, telecommunications services, airlines, and banking, the evidence indicates that such ownership restrictions have not helped Canada's competitiveness – nor have they created national champions who are true global leaders.

This research and the research of others indicate that the way forward for Canada's competitiveness and prosperity is to create the environment that combines specialized support and competitive pressure for our industries and firms. An environment that fosters innovation in all industries is the most likely to produce Canadian global leaders who are true national champions. These national champions arise out of competitive industry clusters where there is a balance of support and pressure. Government plays an important role in creating this balance providing support through investments in research, infrastructures, and education and providing pressure through open borders and effective competition policy. Governments need to ensure that clusters, especially ones that are developing well, have the right kind of support and pressure and in the right balance. Where the evidence indicates that similar clusters in other countries are in a more conducive environment of support and pressure, governments should move to eliminate those disadvantages.

In this paper we define the national champion concept, summarize the arguments and research in support of and against government creation of national champions, review Canada's experience, and summarize the status of relevant public policy in Canada and other leading economies.

Assessing the case for public support of national champions

A NATIONAL CHAMPION IS A DOMESTICALLY-based company that has become a leading competitor in its global market. National champions can be supported by general economic policy or with targeted government intervention.

According to European Commission economists Emmanuelle Maincent and Lluis Navarro, the debate on European champions confronts the possibility that champions can be fostered by standard pro-market policies, such as removing obstacles to the creation of a large domestic market, expanding trade, and ensuring intense competition in the domestic market thereby allowing domestic firms to exploit economies of scale, increase efficiency, and innovate.²

Nevertheless, most of the debate on champions is on the issue of government created and supported companies – to what extent can focused public policy foster specific national champions? In this case, national champions are typically not owned by government – rather they are aided by government intervention to assist in their development. Among the policies and practices of governments to support national champions, the following are cited most often by researchers and observers:^{3, 4, 5}

- targeted subsidies or public support for large-scale R&D to create an internationally significant industry or firm
- preferential government procurement to provide a base level of volume and experience
- export promotion to encourage a global presence

- trade barriers to keep out foreign competition that will stand in the way of the champion's development
- prohibition of foreign takeovers to ensure the champion remains "national"
- protection from domestic and foreign competition to allow the champion to develop its global capabilities.

Arguments for government creation of national champions

Many economic and non-economic arguments have been developed in favour of government involvement in the creation and fostering of national champions.

Supporting infant industries and firms. In most industries, especially newer ones, incumbent firms have an advantage over new firms. This advantage comes from accumulated experience which enhances specialized knowledge and generates volume for development of scale advantage. Latecomers to the industry must absorb potentially significant start-up costs to overcome the incumbent's experience advantage and level the playing field. Consequently, consumers may not benefit from the full force of competition as incumbents are not challenged sufficiently by newcomers. In effect, economic welfare from the development of a successful domestic firm and greater choice for consumers is not being maximized because of some structural or historical barriers. Government support is required to create a potential national champion thereby correcting a market failure.6

¹ As European Commissioner in charge of Competition Policy describes it - "[companies] who can go out and win on global markets" See Neelie Kroes, "Cross-border Mergers and Energy Markets" Remarks at Villa d'Este Forum on "Intelligence 2006 on World, Europe, and Italy," September 2006, p.2.

² Emmanuelle Maincent and Lluis Navarro, "A policy for Industrial Champions: From picking winners to fostering excellence and the growth of firms," *Industrial Policy and Economic Reforms Papers No.* 2, April 2006, p.8.

³ Ibid.

Michael E. Porter, *The Competitive Advantage of Nations*, The Free Press (1990) p.4.

⁵ Deborah Platt Majoras, "National Champions: I Don't Even Think It Sounds Good" Remarks at EU Competition Day 2007, March 2007.

⁶ Maincent and Navarro, pp. 11-14.

Neutralizing foreign companies' behaviour in global oligopolies. In markets where a small number of companies are competing, governments may take action to ensure that the domestic competitor is advantaged at the expense of foreign competitors. This is particularly beneficial in technology sectors with well paying jobs, a highly skilled workforce, and healthy growth rates. Government support in the form of subsidies leads to greater investment and employment by the domestic firms. Foreign competitors are deterred from competing aggressively against the domestic champion who, as a result, increases market share and captures a larger share of industry profits which stay in the country. This argument is robust with investments that expand the market. reduce costs, or introduce inter-firm spillovers. Like the infant industry argument it strikes against market failures to enhance consumer choice and lower prices. In knowledge intensive industries, the research indicates that R&D subsidies can attract mobile scientists and engineers from competing countries.⁷

Anchoring clusters and creating spillovers. Urban geographers and economists have identified the economic benefits of industry clusters. They have observed that concentrations of customers, producers, and suppliers in specific industries can create spillovers that help participants become ever more innovative and competitive. Sophisticated customers push local firms in the cluster to be more innovative; excellent suppliers help them to become even better; and so on. In some cases local clusters become

world leaders. Examples that are often cited include the automotive industries in the Great Lakes states and Ontario and in Japan, the French wine cluster, Hollywood entertainment, and Italian leather goods. Research by Michael Porter's Harvard-based Institute for Strategy and Competitiveness and Ontario's Institute for Competitiveness & Prosperity indicates that clusters of traded industries pay higher wages and produce more patents. They also generate higher wages generally across their local regions.⁸ Because of these benefits, regional economic policies typically include clusters in their analysis and strategies.

Large champions are at the centre of some world-class clusters. In Germany, the chip factories of Infineon and AMD anchor the Dresden cluster comprising semiconductor producers and supporting industries such as material producers and clean room technologies. Semiconductor giant STMicroelectronics, along with Philips and Motorola, are critical to the success of the nanotechnology cluster in Rhone-Alpes. Philips is important to the technology cluster in Eindhoven, Netherlands. One of the best known cases of a national champion anchoring a cluster is Nokia in Finland's ICT cluster.9

Research points to the importance of large R&D intensive firms to absorb local university-based research and stimulate local industrial R&D.¹⁰
A study of Canadian clusters and their formation by the Innovation Systems Research Network showed

that anchor organizations were pivotal in the emergence of six out of seven case studies. Technological spinoffs and spillovers from the anchor firms are also an important step leading up to cluster formation. ¹¹

Overcoming the disadvantage of small domestic markets. Many of the world's leading companies developed a domestic base in large local markets - hence the presence of so many US, Japanese, French, German, and British companies in lists of globally dominant companies. In fact, two-thirds of the Fortune Global 500 are in these five populous countries. By serving large domestic markets, companies in these countries developed scale in their facilities, research and development. product design, and other key capabilities. Smaller countries do not have this solid base on which to build globally competitive economies, unless governments help single firms – their national champions - achieve critical mass to compete globally. 12

Supporting job creation and maintenance in large firms. At certain times, government investments are required to supplement large companies' investments in plant and equipment thereby enhancing their productivity and long-term competitiveness and creating or maintaining domestic jobs. These public subsidies typically have conditions attached to them – otherwise they must be repaid. Research indicates that larger globally competitive firms are more productive, perform more R&D, and pay higher wages. Consequently, governments need to help along in

⁷ Ibid. pp. 14-15.

See Michael E. Porter, "The Economic Performance of Regions," Regional Studies, Vol. 37.6&7, August/October 2003, pp.549-578, and The Institute for Competitiveness and Prosperity,

Working Paper 5, Strengthening structures: upgrading specialized support and competitive pressure, July 2004, pp. 18-22. Maincent and Navarro, pp. 17-19.

¹⁰ Ajay Agrawal and lain Cockburn, "University Research, Industrial R&D and the Anchor Tenant Hypothesis," NBER Working Paper No. 9212, 2002.

¹¹ David A. Wolfe, Matthew Lucas, and Anita Sands, "Regional Clusters in a Global Industry: ICT Clusters in Canada" Program on Globalization and Regional Innovation Systems, University of Toronto, November 2007. Available online: http://www.utoronto.ca/onris/research_review/Presentations/Presentations05/Wolfe05_ICTClusters.ppt.

¹² Paul A. Geroski, "Competition Policy and National Champions," Speech published by the UK Competition Commission, March 2005. Available online: http://www.mmc.gov.uk/our_peop/members/chair speeches/pdf/qeroski wifo vienna 080305.pdf

¹³ Jim Stanford, "CAW Bargaining Reflected Principled Approach," 2007. Available Online: http://labornotes.org/node/959

¹⁴ John R. Baldwin and Guy Gellatty, "Global Links: Multinationals in Canada: An Overview of Research at Statistics Canada," Research paper for Statistics Canada and "The Canadian Economy in Transition Series." November 2007.

the creation of such large, globally competitive firms. Famed economist Joseph Schumpeter theorized that monopolies are favourable to innovation because they have an incentive to innovate thereby keeping new entrants out of the market and protecting their above-market profits. At the same time these higher profits support greater investments in R&D and innovation. ¹⁵

Helping firms in sunset industries.

National champion arguments are also put forward to support ailing firms in sunset industries. In these cases the argument is made that, without government support, the closure of large firms can lead to higher regional unemployment which in turn increases poverty and social tension. Displaced workers lack the skills and the mobility to take on other opportunities in thriving firms and industries. ¹⁶

Assisting national champions in sectors that are strategic. Some industries are important to the longterm success of an economy or are judged to be critical to its future. These types of industries relate to national security (the US defence industry given as the usual example); energy and its security of supply (European energy as the usual example); and future economic vitality (technology industries in most countries). In many cases, strategic industries require significant upfront capital investment. In achieving energy independence or diversification, it is argued that a national heavyweight is required. Mergers to achieve dominance or a monopoly leading to high prices and super-normal profits may be required to justify necessary up-front investments. To Others argue that manufacturing, because of its tradability and its greater propensity versus services to drive R&D, is critical to an advanced economy and a more interventionist industrial policy is necessary to ensure that it stay vibrant. Additionally, if some sectors are allowed to wither, important capabilities will be lost, perhaps forever.

Correcting market failures that are affecting national champions. In some cases, results from market forces may be detrimental to previously successful companies and without public intervention they may fail or not realize their full global potential. Examples include debt and equity markets not being patient with companies currently undergoing financial difficulty. In such cases government support, through loan guarantees or direct investment, may be necessary.²⁰ Markets may not "correctly" price certain products or services in the short term and, without intervention, the required development investment will not be made and the products and services, so necessary for the long term, will not be produced. Examples include non-traditional energy sources necessary for tackling climate change or national energy independence. Some argue that the government can discern broad trends and can therefore make intelligent investments and policy decisions - better than the market. This is an assumption behind the Beffa

report in France, which recommends the creation or support of a series of national champions to co-ordinate national programs.²¹

Some non-economic arguments have been made in favour of national champions.

Reinforcing patriotism. National champion proponents argue explicitly or implicitly that domestic companies should be favoured over foreign companies because it is unpatriotic to do otherwise. In order to protect domestic firms, the government should lend them support. In 2006, France's national railway operator, SNCF, chose Canada's Bombardier to produce some of its train motors, rather than the French national champion, Alstom. Despite the fact that Bombardier had the best offer in SNCF's analysis and would result in better outcomes for itself and customers in France, some political leaders saw this as unpatriotic. Many commentators called for government intervention to over-rule the decision.²² In 2007, the Italian government rallied Italian companies to form a consortium to acquire Telecom Italia to keep it under Italian control rather than allow it to be sold to North American companies AT&T and America Movil who were said to be interested in it. Some of these Italian rescuers had no strategic interest in telecommunications - but were persuaded by the government that their investment was necessary to maintain the "Italian-ness" of Telecom Italia. 23

¹⁵ Anne Perrot, "Does the Attitude of France Towards National Champions Have Anything to Do with Economics?" Le Cercle des Economistes, June 2007, p.3.

¹⁶ Maincent and Lluis, p. 10.

¹⁷ A good example is the merger of German energy companies E.ON and Ruhrgas. This merger was initially frowned upon by the Federal Cartel Office which felt the merger would negatively enhance E.ON's already dominant position, but was allowed to go through once it was apparent that the merger would lead to greater security of Germany's energy supply. See Oliver Falck and Stephen Heblich, "Do We Need National Champions? If So, Do We Need a Champions-related Industrial Policy? An Evolutionary Perspective." Jena Economic Research Papers, April 2007, pp.10-11. Available online: http://xs.thulb.uni-jena.de/receive/jportal_iparticle_00082398.

¹⁸ Trades Union Congress, "An Industrial Strategy for the United Kingdom," December 2005, p.6. Available online: http://www.tuc.org.uk/extras/industrial.pdf.

¹⁹ *Ibid.*, p. 24. ²⁰ *Ibid.*, p.39.

²¹ Perrot, p.4.

²² Ibid., p.1.

²³ Andrew Scott, "'National Champions' Ride Again?" Column on MediaPal@LSE (London School of Economics). April 2007. Available online: http://lsemediapal.blogspot.com/2007/04/national-champions-ride-again.html

Maintaining social well-being. Given that large domestic corporations create a disproportionate number of jobs and pay a significant amount of taxes, it has been argued that since their presence reduces poverty, increases the health and wellness of the population, and provides the government with capital to spend on welfare, government policy ought to ensure that they survive and thrive.²⁴

Arguments against national champions policies

While there are many potentially valid arguments in favour of government support to create national champions, the research indicates two simple, but powerful conclusions point to the benefits of more broadly-based economic polices. First, economic evidence points to the benefit of vigorous domestic competition in creating globally competitive firms and shows that shielding domestic firms from competition does not build national champions. Second, governments do not have a good track record in choosing candidates for national championship status and abandoning unsuccessful strategies in a timely manner.

Shielding companies from competition does not build national champions. Companies that are protected from domestic and international competitive pressure run the risk of becoming complacent and unable to succeed in the long term. Research by William Lewis and Michael Porter concludes that competition in the

domestic market regardless of its origin begets efficient, productive firms that are better able to compete on global markets.

Lewis's twelve years of research with the McKinsey Global Institute International concluded that government policies to protect businesses lead to stagnation by making those businesses complacent. Based on macro- and micro-economic studies (which included detailed studies of individual businesses ranging from state-of-the-art auto plants to market street vendors) across thirteen countries. Lewis found that, without competition, hand-picked companies are not forced to evolve for the better.²⁵ He states, "economic progress depends on increasing productivity, which depends on undistorted competition. When government policies limit competition... more efficient companies can't replace less efficient ones. Economic growth slows and nations remain poor".26

Michael Porter in his groundbreaking book, The Competitive Advantage of Nations, concluded from his research that, "creating a dominant domestic competitor rarely results in international competitive advantage. Firms that do not have to compete at home rarely succeed abroad."²⁷ As he concluded, "The real determinants to productivity are not subsidy, collaboration and government protection, but incentive, effort and competition. The government's role should be to push and challenge industry, not protect and nurture it."28

Lawrence Summers, when US Secretary of the Treasury, summarized this point well when he said in a speech in 2001,

"If you ask why the American economy has managed to experience relatively low inflation and unemployment for so long, the competitiveness of the American industry, the drive for efficiency that that has created, the contribution in particular that imports have made to that competitiveness is enormously important, and so the general proposition that competitive markets, rather than national champion firms, and competitive global markets are desirable should be a very strong principle and one that should be upheld."29

The European Commissioner in charge of competition policy, Neelie Kroes, argues against governments' protecting national champions from international takeover since cross-border mergers tend to increase competition which in turn drives economic growth and productivity.³⁰ Domestic monopoly does not help firms become successful internationally.31

But what about the benefits of governments creating national champions where domestic markets are simply too small to support the scale necessary for global competitiveness, like Canada? It is clearly advantageous for a globally competitive company to emerge from a large domestic economy. But, as Paul Geroski argues, "it is one thing to have the ability to compete and another to have an incentive to do so."32 Monopolies often pursue the less risky strategy of raising prices and maximizing

²⁴ Trades Union Congress, p.6.
²⁵ William Lewis, *The Power of Productivity: Wealth, Poverty, and the Threat to Global Stability*, The University of Chicago Press (2004) p. 107.

²⁷ Michael E. Porter, *The Competitive Advantage of Nations*, The Free Press (1990) p. 662.

²⁸ *Ibid.*, p.30.

²⁹ Lawrence Summers, "Competition Policy in the New Economy," 63 Antitrust L.J. 2003, pp. 353-357.

Neelie Kroes, "Competition Law and Its Surroundings- Links and New Trends" Opening Remarks at EU Competition Day 2006.
Thilip Lowe, Director General, DG Competition, European Commission, "Preserving and Promoting Competition: a European Response," St. Gallen Competition Law Forum, May 2006, p.5. Available

online: http://ec.europa.eu/comm/competition/speeches/text/sp2006_018_en.pdf.

³² Geroski, p. 4.

profits rather than pursue aggressive strategies based on innovation and risk. Several of Canada's global leaders that have been acquired by foreign firms had access to excellent physical and human resources, but did not feel the need to move aggressively in expanding internationally. Examples include Domtar, Falconbridge, and Inco. In the end. incentives matter. To improve Canadian firms' success at becoming global leaders – and true national champions - government policy needs to maximize available market size through expanding access to other markets and ensuring the beneficial impact of global-scale competitive intensity.

Governments have rarely succeeded in creating successful national champions. There are few instances where governments have successfully intervened in the domestic market to foster industries and national champions. In many cases, winners emerge where the government has not stepped in.

Michael Porter and William Lewis assessed the impact of Japan's Ministry of International Trade and Industry (MITI) on its country's economic miracle of the 1970s and 1980s through interventionist industrial polices, including building of national champions. They concluded that MITI's impact was less than generally perceived by other observers.

Porter found that while the Japanese government chose to support the aircraft and software industries in the 1970s, neither of these became internationally important. On the contrary, Japanese companies succeeded in facsimile machines, copiers, robotics,

and advanced materials –without special government attention.³³

Lewis describes how Japanese industries that faced intense domestic and international competition - automobiles, electronics, and steel - achieved productivity rates about 30 percent higher than their US competitors. In Japan's automotive industry, six domestic producers fought intensely over market share before they achieved global success. MITI in fact attempted to reduce competition by persuading one or two domestic producers to withdraw from the market, but these producers refused to do so. Where MITI was able to distort the local economy through its intervention, its economic success is much less lustrous. Notably, Japan's large retail sector is well protected from competition, but achieves productivity rates of 50 percent of the US retail sector.34

Economist Ali M. El-Agraa finds similar results in comparing growth rates of Japanese industries over the 1955-1990 period against the relative receipt of government loans, subsidies, tariff protection, and tax relief. He concludes that "some of the sectors with the lowest growth rates were often among the biggest recipients of resource diversion... Similarly the fastest growing industries do not appear to be very consistent recipients."35 He goes on to cite work of others which found a negative correlation between the three types of government support and growth rates.³⁶ He then cites further research which regressed industry net exports against capital subsidies, R&D subsidies, and the industry effective

protection. This analysis showed no evidence that "Japanese policy-makers were able to pick winners." Other examples indicate the fallibility of governments in selecting industries and firms for support.

German Chancellor Shroeder's 1999 attempted to rescue one of Germany's largest construction companies, Philipp Holzmann AG which was succumbing to a large accumulated debt. Chancellor Shroeder offered debt guarantees from the state to the faltering company and was cheered in Frankfurt shortly after coming to the rescue. Unfortunately, this state intervention only put the demise of the firm on hold. It went bankrupt in 2002, when Shroeder and his government made a decision not to bail it out again.³⁸

France's state owned Credit Lyonnais began to falter in the early 1990s; the French government determined that it was too big to fail and would not allow it to die. Ultimately the bank had to be split up and its remaining portion was privatized – but only after great expense to the French taxpayer.

The Swedish government anticipated the coming growth in demand for wind turbines in the 1970s and supported wind energy R&D. However, most of the financial support was for large wind turbines. As it turned out, the market developed much more in the area of smaller turbines. Other countries, such as Germany, in which the government had not supported wind energy R&D as much as Sweden, had gained in experience in making many sizes of turbines.⁴⁰

³³ Michael E. Porter, The Competitive Advantage of Nations, p.4.

³⁴ Lewis, pp. 23-49.

³⁵ Ali M. El-Agraa, "UK Competitiveness Policy vs. Japanese Industrial Policy," The Economic Journal, Vol. 107, No. 444 (Sept. 1997), p. 1511

³⁶ R. Beason and D.E. Weinstein, "Growth Economies of Scale and Targeting in Japan (19550199)" The Review of Economics and Statistics, Vol. 78, No. 2, May 1996 pp. 286-295, as cited in El-Agraa, pp. 1511-1512.

³⁷ Marcus Noland, "The Impact of Industrial Policy on Japan's Trade Specialization." The Review of Economics and Statistics, Vol. 75, No. 2., May 1993, as cited in El-Agraa, pp. 1512-1513.

³⁸ Falck and Heblich, p. 8.

⁹ Ibid., p. 10.

⁴⁰ A. Johnson and S. Jacobsson, "The Emergence of a Growth Industry: A Comparative Analysis of German, Dutch and Swedish Wind Turbine Industries," paper presented at DRUID conference, 2002, as cited in Falck and Heblich, pp. 5-6.

In an evaluation of the Swedish Industrial Policy for the textile industry between 1970 and 1990, economists Sverker Alange and Staffan Jacobson showed that in only a minority of cases did government interventionist policy alleviate market imperfections and change firm investment behaviour in a way that would be beneficial to the firm's competitiveness. This policy included many subsidies geared towards making the industry more competitive. These subsidies amounted to 11 to 15 percent of the industries' value by the end of the 1970s and early 1980s. Furthermore, until 1986, the subsidies given were larger than both profits and fixed investments (even when combined in some years) of the textile and clothing industries.41

The Swedish textile example illustrates another problem when the government chooses to support specific industries, especially those with a bleak future. Governments often keep supporting such firms or industries long after it is clear that success is not achievable. Canada's Macdonald Commission and Michael Porter's Canada at the Crossroads report, which we discuss below, both cited examples of Canadian governments continuing to support firms and industries with poor economic prospects - shipbuilding, textiles, shoes, and furniture, as well as ongoing attempts to support heavy water plants and automotive facilities in depressed regions which were not competitive in those markets.

Maincent and Navarro conclude that keeping failing companies afloat in sectors that have lost competitive advantage or have failed to restructure has no economic justification. The social costs of allowing these failures can be

significant; but the real solution is to address skills requirements and transition costs for the affected workers. Keeping uneconomic companies in existence wastes national resources and adds deadweight to the economy – in effect bringing down its healthy parts with them.⁴²

One argument cited earlier for government support of emerging industries, particularly high tech, is that because these industries are oligopolistic, governments can foster an artificially dominant position for its national champion. This support deters investment by foreign companies and ultimately the national champion "steals" a position of global leadership. But, as with trade wars, this beggar-thy-neighbour policy invites retaliation and leads to ever greater subsidies and support by all governments. When one country starts to subsidize and protect within a certain industry, other countries may follow. This can lead to a subsidization race or reciprocal barriers. 43 Each country supporting its own national champion firm or industry may be spending more in subsidies or support than what is being lost in competitiveness across the rest of the economy. And yet each of these countries is concerned that dropping this special support, while other countries continue their support, will mean loss of its national champion. For economist and former Chairman of the UK's Competition Commission, Paul Geroski, this is an example of the classic dilemma where "nothing is altered between the champions in the market ... but tax payers the world over have been made worse off."44

Another argument for government support to create national champions is

the observation cited earlier that many successful clusters are anchored by globally competitive companies. Given the economic benefits of clusters, it seems logical for governments to get behind the potential anchor. But the research indicates that such support isn't the best way to strengthen clusters. First, as Michael Porter has observed, clusters develop in an ideal combination of sophisticated customers, excellent factor conditions, solid supporting industries - and intense competition. 45 His research points to a set of prescriptions that are aimed at creating a positive economic environment in which clusters can thrive, rather than trying to build clusters. Other researchers have reached the same conclusion. In the case of Finland's Nokia, probably the best example of a cluster anchor, several researchers have concluded that public policy aimed at developing national capabilities through education, technology programs, and support for industry R&D played an important role in the development of the cluster. A Harvard Business School Case on Nokia's success concluded that public policy aimed at enhancing domestic competition was an important contributor to Nokia's and the cluster's development.46

If it is argued that national champions are important to economic development and that targeted public policies should play a role in developing specific champions, one must be persuaded that governments are capable of determining which champions can succeed and that protecting these champions from competition will be beneficial. The evidence is not persuasive.

⁴¹ Sverker Alänge and Staffan Jacobsson, "Evaluation of Industrial Policy- The Case of the Swedish Textile and Clothing Industry" (1991) Based on a larger study made for the Swedish Industrial Development Board

⁴² Maincent and Navarro, p.10.

⁴³ Patricia Wruuck, "Economic Patriotism- Blind Alley In a Globalised World?" Globalisation Institute, 2006, Available online: http://www.globalisation.eu/articles/trade/economic-patriotism-%11-blind-allev-in-a-globalised-world?-20061111882/

⁴⁴ Geroski, pp. 5-6.

⁴⁵ Porter, *The Competitive Advantage of Nations*, pp. 69-130.

⁴⁶ Michael E. Porter and Orjan Solvell, "Finland and Nokia: Creating the World's Most Competitive Economy," Harvard Business School Case, January 2002.

Reviewing national champions policies in Canada

CANADA HAS NOT HAD A FORMAL POLICY

of creating and supporting national champions, although like most other countries it has had periods of significant government direction of the economy. Two fundamental reviews of Canada's economic progress in the past 25 years were instrumental in moving Canada to a more liberal approach to economic policy. Both reviews concluded that the best industrial policy by government was not one of targeted intervention, which includes creation of national champions. Instead, both concluded that government policy should aim to create an environment for the development of critical inputs, such as capital, skills, and management capabilities and to rely on the beneficial impacts of international and domestic competitive pressure.

Like other competition authorities around the world, Canada's Competition Bureau has rejected a national champions approach to its merger review. And while governments have supported specific sectors and firms over the years, much of this support has been focused at regional development rather than traditional industrial policy. Nevertheless, the rationale for foreign ownership restrictions in three Canadian industries – telecommunications carriers, airlines, and banking – has drawn on traditional national champions arguments.

The Macdonald Commission. In 1985, the Royal Commission on the Economic Union and Development Prospects for Canada, the Macdonald Commission, released its final report after several years of research and study. Its most famous and highest impact recommendation was to pursue free trade with the

United States. The Commission covered a broad range of economic issues and weighed in on the question of whether it was a worthwhile policy for governments to implement a targeted industrial policy – that is achieving growth, productivity and competitiveness through polices focused on assisting specific industries and firms.

While the Commission did not take up the case of national champions head on, it did review the results of targeted industrial policy in countries they perceived as its leading practitioners.

In Britain, the key problem was the provision of subsidies for industries with a bleak future. "The support of ailing industries and firms absorbs the lion's share of Britain's industrial assistance budget, creating a serious drag on the economy and severely impeding the adjustment process that must eventually take place in response to changing economic circumstances... [G]overnmentled rescues of the motor vehicle and shipbuilding industries in the late 1970s ...merely frustrated the inevitable plant closures and worker lay offs."

In France, the Commission found the added problem of how government chose which industries and firms to support – "...some analysts conclude that French firm-specific assistance has only been moderately successful, owing to a choice of targets for prestige rather than economic reasons, an unwillingness to abandon failures, and the use of assistance to forestall adjustment." 48

Japan differed from Britain and France in that its government showed no hesitation in abandoning or seriously curtailing

⁴⁷ Royal Commission on the Economic Union and Development Prospects for Canada, Volume 2, Minister of Supply and Services, 1985, p. 174.

¹⁸ *Ibid*., p. 174

its support activity if it realized it had made a mistake or that the situation had changed. 49

Its review of Canadian history indicated problems in government intervention that were similar to those in Britain and France. A disproportionate share of federal assistance to manufacturing during the 1960s and 1970s went to declining sectors, slow-growth provinces, and big business.⁵⁰ More specifically the Commission identified distressed firms in the shipbuilding, textiles, shoe, and furniture industries as receiving the lion's share of assistance and protection. Nevertheless, the Commission did identify CAE, Spar, and Pratt and Whitney as success stories of Canadian government assistance. But on balance it concluded that, "there is little evidence in Canada or abroad that a targeted industrial policy is more effective than a market-oriented policy."51

Its key recommendations in the area of industrial policy were the adoption of free trade, a focus on strengthening the labour, capital, technology, and management inputs to the economy, and adjustment processes that focused on workers rather than firms or industries.

Canada at the Crossroads. In 1991, Michael Porter and Monitor Company released their report, Canada at the Crossroads, the result of a twelvemonth effort on behalf of the Business Council on National Issues and the Government of Canada. The study team applied the theoretical framework from Porter's The Competitive Advantage of Nations to Canada's economy. As a general rule, the report concluded that

"Government's policies [to strengthen an economy's competitiveness] that succeed are those that create an environment in which companies can gain competitive advantage rather than those that involve government directly. Government's proper role is as a catalyst and challenge. It is to encourage, or even push, companies to raise their aspirations and to move to higher levels of competitive performance... not to forge cozy business-government 'partnerships,' relax pressure on industry, or seek to eliminate risks." 52

Where the report did discuss national champions, it was to refer to Porter's previous research which "demonstrated that this 'national champion' approach ultimately proved counterproductive. It rests on a static conception of competition and fails to take into account the crucial role that local rivalry plays in stimulating firms to upgrade their capabilities and sharpen their competitive instincts. There are, of course, some industries in which only a handful of global players exist, such as aircraft manufacture, aluminum, flight simulators and central office switches, but these are examples where scale considerations have compelled firms to compete globally. Even in such industries, the nation with competitive advantage is often the one that has managed to support the most direct or indirect rivalry - the US in aircraft and Canada in switching equipment, for example."53

The study did cite the positive influence of domestic competition in creating a successful telecommunications switching equipment industry. Unlike most other countries in the world,

Canada enhanced domestic rivalry through policies which created several private telecommunications service providers increasing pressure to innovate from the demand side. ⁵⁴

While not specifically referring to a Canadian government policy of creating national champions, the study identified several interventions that were driven by political and regional development considerations, e.g., heavy subsidies for foreign investments in tire production in Nova Scotia, encouragement of foreign automotive parts firms to shift their planned investment form Ontario to Montreal or Halifax, and the support of Bricklin in New Brunswick. 55

In its summary of the strengths and weaknesses of the Canadian economy, the study concluded that Canada's clusters were not benefiting from vigorous rivalry and that firms suffered from a lack of both external pressure and domestic rivals. ⁵⁶

Consistent with the findings of these two studies, the Institute for Competitiveness & Prosperity has found little evidence that government support in Canada has been instrumental in creating the country's global leaders - large Canadian-owned firms that are in the top five of their market segment globally. According to the Institute, "Only a handful of Canada's [72] global leaders are the result of deliberate policy of government support. Some companies, such as Bombardier, CAE, CHC, and Nortel have benefited from government involvement... but nearly all our global leaders have achieved this status through their own efforts."57

⁴⁹ *Ibid.*, p. 174.

⁵⁰ Ibid., pp. 146-147.

⁵¹ *Ibid.*, Summary of Conclusions and Recommendations, p. 16.

⁵² Michael Porter and The Monitor Company, *Canada at the Crossroads*, October 1991, p. 63.

⁵³ *Ibid.*, pp. 300-1.

⁵⁴ *Ibid*., p. 144.

⁵⁵ *Ibid.* pp. 279-288. ⁵⁶ *Ibid.* pp. 300-312.

⁵⁷ Working Paper 5, Strengthening structures: Upgrading specialized support and competitive pressure, p. 37.

Current competition policy in Canada

accords no special place to national champions. In fact, former Commissioner of Competition Konrad von Finckenstein identified "retain[ing] competitive markets in Canada and resist[ing] the call for creating 'national champions'" as one of the most pressing issues facing competition in Canada.58

According to Canadian competition lawyers at Stikeman Elliott LLP, Susan Hutton and Kevin Rushton, Canada's merger review regime affords no special treatment to the creation of national champions.⁵⁹ In their view, the *Competition Act* requires the Commissioner of Competition to take a dynamic view of competition and to permit transactions which are truly efficiency enhancing to proceed. The Commissioner may challenge mergers that prevent or lessen competition substantially. One exception is in the Act however. The "efficiencies defence" can lead to a merger being approved if the gains in efficiency exceed the effects of lessened competition. However, this defence has been used successfully only once in the Superior Propane case and this was not proposed as creating a national champion.

According to the previous federal government, Canada's "competition policy focus needs to be on maintaining the competitive process rather than ensuring a privileged position for incumbents or dividing the market among a fixed number of players."60 The current federal government has shown no indication of changing this policy.

Legislation and regulation restrict foreign ownership in three Canadian industries. While not formally embracing the public creation of national champions, longstanding federal policies in telecommunications carriers, airlines, and banking are consistent with that approach. In each of these industries, restrictions are in place to limit foreign ownership. And in each, the policies have been seen to reduce Canada's competitiveness, innovation, and productivity - while creating few, if any globally competitive champions.

In the telecommunications sector, an expert panel appointed by the federal government concluded that reducing its ownership restrictions and expanding domestic competition would improve competitiveness and productivity. 61

In airlines, legislation limits foreign ownership and control over a Canadian airline. As in many other countries, only a Canadian-owned airline can operate between Canadian cities. These restrictions meant that Air Canada was the only potential acquirer of Canadian Airlines Limited in 1999. While Air Canada faces competition domestically. it is arguable that Canadian consumers - and Air Canada itself - would benefit from true competition from global carriers.

Canada's largest banks are effectively required to be owned by Canadians. As the Institute for Competitiveness & Prosperity has concluded, Canada's banks compete aggressively with each

other, but primarily through matching best practices. 62 The banks' global position erodes slightly every year as other banks expand globally. Our policy may have created national champions, but they have not taken on global leadership. The current federal government has indicated that addressing bank ownership and merger policy is not a priority at this time.

Canada has not generally followed a targeted national champions policy and its formal competition policy stands against helping create them. There is little evidence that providing targeted support and easing competition rules would be beneficial.

⁵⁸ Statement by Konrad von Finckenstein, former Commissioner of Competition, Competition Bureau, "Role of the Commissioner of Competition – University of Toronto Round Table", December 13, 2002.
⁵⁹ Susan M. Hutton and Kevin Rushton, "Canadian Competition and Industrial Policy" Paper prepared for 2007 Law &Policy Forum, Northwind Professional Institute, Langdon Hall, Cambridge, Canada, February 2007, p. 17.

February 2007, p. 17.

© Communication from Canada, World Trade Organization, Working Group on the Interaction between trade and Competition Policy, April 19, 2002, p. 3.

The Institute for Competitiveness and Prosperity, Agenda for Canada's Prosperity: Report on Canada 2007, March 2007, p. 45.

⁶² James Milway, Sana Nisar, Claurelle Poole and Ying Wang "Assessing Toronto's financial services cluster" Institute for Competitiveness & Prosperity, June 2007.

Reviewing national champions policies in other countries

NATIONAL CHAMPIONS POLICIES ARE PART

of government economic strategies in France, Italy, and Spain. China's approach to national champions is still evolving as it tries to reconcile contradictions in its economic policies. Otherwise, national champions do not figure prominently in public policy around the world.

Across Europe, support for a national champions policy varies.

According to Maincent and Navarro, the ongoing economic debate in Europe of relevance to the issue of European champions has focused on three policy alternatives:

- a pro-market approach which assumes that a larger size internal European market, provided there are no obstacles, will allow European firms to compete on an equal footing globally
- public support for individual companies or sectors that are considered strategic for international competitiveness
- targeted public intervention to support large ailing companies thereby avoiding the social consequences of their failure.

The EU Commission appears to be pursuing the first policy alternative. According to the OECD, the Commission has heavily penalized some cartels and has taken a hard line on member states trying to protect "their" companies within national borders. The Commission is also looking for private individuals to challenge anti-competitive behaviour. 64

As we have seen, France has a tradition of activist government involvement in their markets and in favouring national champions. The most cited example is the Airbus joint venture founded in 1970 with the UK and Germany. Spain joined the project a year later. In the past decade France has continued its public policy of encouraging national champions. In 2005, France established the "Agency for Innovation" with a plan of allocating 1 billion euros annually to a limited number of big innovation projects as an attempt to create the "Airbus or Ariane programs of tomorrow." The Agency for Innovation is now under the authority of the French Ministries of Finance and Industry, Economics and Higher Education and Research. 65, 66

In 2006, the French government orchestrated the merger of two French utility giants, SUEZ and Gaz de France, in order to quell the advances of Italian company Enel. The European Commission allowed the merger to go through under certain stipulations put forth to protect competitiveness within the industry "to ensure that there is effective competition in the newly liberalized energy markets to the benefit of consumers and business." 67

In 2005, the Beffa report recommended the creation or support of a series of national champions to co-ordinate national programs⁶⁸ and this was accepted by the incoming Sarkozy government. In June 2007, he spoke out against "free and undistorted competition."⁶⁹

⁶³ Maincent and Navarro, p.8.

⁶⁴ Economic Survery of the European Union 2007, OECD. Available online: http://www.oecd.org/document/59/0,3343,en_2649_201185_38981307_1_1_1_1_0.html

⁶⁵ Maincent and Navarro, p.7.

⁶⁶ Oseo website. Available online: http://www.oseo.fr/

⁶⁷ Anna Jenkinson and Matthew Newman, "EU approves merger of Gaz de France and Suez, with conditions" International Herald Tribune

⁽November 14th, 2006). Available online: http://www.iht.com/articles/2006/11/14/business/web.1114suez.php?page=1.

⁶⁹ John Thornill, "Rhetoric belies France's rethink on the virtues of competition", Financial Times Limited, November 19 2007.

Yet France's policy approach to national champions may be changing. At the recent World Economic Forum conference in Davos, French Prime Minister François Fillion stated,

"We're reforming to free up entrepreneurs and inject competition everywhere necessary to stimulate creativity and bring down prices, to the benefit of consumers.

We are preparing a complete overhaul of our fiscal system, and particularly business taxes, to make it both less complicated and less burdensome. A commission chaired by Jacques Attali on which sat several foreign experts like Mario Monti, has just made 316 proposals to remove the brakes on our growth, and in the next few months, most of them will be implemented."⁷⁰

As we discussed earlier, **Italy** has taken steps to maintain domestic ownership of the country's national champion in telecommunications.

The national champions debate has occurred in **Spain** with the government's attempts to merge Spanish utilities Gas Natural with Endesa to keep German company E.ON from acquiring the latter. In the face of objections from the EU and litigation in Spain, Gas Natural withdrew its bid.

The current government appears open to supporting national champions. According to the BBC, Spain's government has a policy of promoting industry consolidation to create "national champions."⁷¹

In a paper written by Joan Trullen, Spain's Secretary General for Industry stated that:

"The Spanish Ministry of Industry, Tourism and Trade (MITYC), in order to tackle the issues associated with a more globalised economy, has chosen in recent years to advocate support for SMEs through horizontal measures in order to create an environment conducive to entrepreneurialism and innovation."

In addition to these horizontal measures MITYC has also implemented sectorial policies which focus on areas of the economy that face a large amount of international competition (e.g. the automobile sector, the aerospace and aeronautical sector. and the textile sector). Each chosen sector will be supported in different ways by MITYC which range from helping companies in the sector create a sustainable development plan to provide direct financial support for projects "as the long period of maturity for the investments required makes it vital to rely on state financing" especially during the development period."73

Germany does not appear to be actively promoting a national champions policy. According to the German Monopolies Commission, nations do not necessarily require national champions to prosper. What really matters is that the country effectively manages and uses its own resources, "increases its productivity through innovation and supplies goods which are geared towards its strengths in the quid pro quo of international exchange of goods and services."⁷⁴

Germany's current economic policies strive to strengthen competition and transparency in order to increase domestic and foreign investment.

Additionally, Germany will work nationally and throughout Europe to open up markets and increase equal opportunities for competition. Policies towards making the domestic market more favourable to SMEs continue to be a high priority.

The principal economic federal ministry, the Ministry of Economics and Technology, states on its Web site that "Entrepreneurial initiative, contractual freedom between business partners, competition and a functioning price system are the central pillars of a market economy. They must not be put out of action by state intervention." However, it goes on to say that "there are situations in which state activity is necessary and useful," citing the rebuilding of Eastern Germany as an example of when government support for industry was necessary for increasing competition and innovation. Government support for industry as a means of helping to increase competition is advocated. The Ministry has put in place permanent coordinators "between the worlds of industry and politics" for "important and strategic sectors of industry such as the aerospace and maritime industries". 75

According to the Trades Union
Congress, **United Kingdom** Chancellor
Gordon Brown, now Prime Minister,
supported a passive industrial strategy
that relies on 'horizontal' measures to
support business.⁷⁶ The relevant cabinet
department under Prime Minister Brown,
the Department for Business Enterprise

⁷⁰ Excerpts available at http://www.ambafrance-us.org/news/statmnts/2008/davos_forum_speech_fillon012308.asp

⁷¹ http://news.bbc.co.uk/1/hi/business/4677696.stm
⁷² Joan Trullen, "The new Spanish industrial policy: innovation, external economies and productivity," September 2006, pp. 11-13. Available online: http://www.mityc.es/NR/rdonlyres/64DCA4C4-3107-4DE3-A06F-3A40595CAFEA/0/30politindesping.pdf.

⁷³ *Ibid*. pp. 14-16.

⁷⁴ Hutton and Rushton, p.2.

⁷⁵ Federal Ministry of Economics and Technology Website. Available online: http://www.bmwi.de/English/Navigation/Economy/economic-policy,did=211552.html

⁷⁶ Trades Union Congress, p. 6.

and Regulatory Reform, states that its role is "to help UK business succeed in an increasingly competitive world. It promotes business growth and a strong enterprise economy, leads the better regulation agenda and champions free and fair markets."77

Outside of Europe the national champions concept does not appear to be gaining converts in leading economies.

As we have seen, **Japan** is often cited as the best example of having a national champions or industrial policy. However, as Porter and others have noted, there is less here than meets the eye. Japan's success in the 1980s and 1990s is related more to the benefits of intense domestic competition and luck.

Japan's current industrial policy according to the Ministry of Economy, Trade and Industry (METI) is geared towards improving innovation and productivity through increased internal competition and fostering the spirit of Asian dynamism. Japan is seeking to improve business environments across Asia and to use this to strengthen its own economy. Also, because of its aging population and rapidly declining workforce much of its policy is geared towards increasing productivity per worker. To be sure, government continues to play a significant role in economic strategy. A major element of Japan's industrial policy is the production of an "Innovation Superhighway Concept" in which coordination between industry, academia, public organizations and the government will prioritize R&D of strategic areas.78

In Korea the best known case of promoting national champions is in its automobile industry which was protected by the government from its very conception starting with the Automotive Industry Promotion Law of 1962. Originally, there was an apparent success in fostering an internationally competitive industry, but the Asian financial crisis of 1997-98 was disastrous for Korea's automotive companies. The crisis brought to light the weaknesses of the already floundering industry. Government indecision and policy reversals, as well as mismanagement of funds within the protected companies, were already hurting these companies before the financial crisis struck. The Korean government was forced to make a decision to bail out these companies. orchestrate takeovers by other domestic firms, or open their automotive industry up internationally. They chose the third option and now only one of the major automotive companies (Hyundai) is still domestically owned, and even this company has international partners.⁷⁹

Through the 1990s, Australia embraced market oriented polices, such as tariff reductions and greater competition in sectors such as banking. Its economic expansion has out performed most other countries. And it has produced many new globally competitive companies in sectors not associated with its traditional agriculture and resource sectors. In the finance industry, Australian companies such as QBE Insurance, Macquarie Bank and Babcock & Brown, have become significant players on the international stage. Several Australian manufacturers, such as Ansell, Cochlear, formerly

government owned CSL and others, are now among Australia's global leaders. Services firms like Healthcare. ABC Learning, and Flight Centre are generating more than a quarter of their revenues abroad. As Peter Hartcher the international editor of the Sydney Morning Herald observed, "some standout success stories - Westfield. CSL, Billabong – demonstrate that it is impossible for traditional industry policy approaches to 'pick winners'. Which industry bureaucrat in Canberra would have put shopping centres or surfwear or serums on the list of Australia's international commercial priorities."80

China's main challenge in the area of national champions is to absorb laid off employees from its chronically under performing state owned enterprises. However, as Wendy Dobson of the Rotman School of Management and Anil Kashyap of the University of Chicago conclude, China's banks - many of whom are still state owned - continue to face pressure to finance these state owned enterprises. This contradiction will not be resolved until an economic slowdown forces some hard choices by the government.81

^{77 &}quot;Ministerial Responsibilities at the Department for Business, Enterprise and Regulatory Reform," article on Wired-gov.net, January 2008. Available online: http://www.wired-gov.net/wg/wg-news-1. nsf/0/AE39E1FD9064AED4802573E000563118.

⁷⁸ Key Points FY 2007 Economic and Industrial Policy. Japanese Ministry of Economy, Trade and Industry Website. Available online: http://www.meti.go.jp/english/ (2006)
79 John Ravenhill, "From National Champions to Global Partnerships: The Korean Auto Industry, Financial Crisis and Globalization." MIT Japan Program, Working Paper Series 01.04. Available online: mit. edu/mit-japan/outreach/working-papers/WP0104.pdf

⁸⁰ Peter Hartcher, "Global 100 National Champions," The Diplomat, April 2007. Available online: http://www.the-diplomat.com/article.aspx?aeid=2714

⁸¹ Wendy Dobson and Anil K Kashyap, "The contradiction in China's gradualist banking reforms", October 2006. Available at http://faculty.chicagogsb.edu/anil.kashyap/research/ chinabanksoctfullpaper.pdf

Creating an environment that fosters Canadian global leaders

AS CANADIANS WORRY ABOUT THE

hollowing out of Canada's economy with the loss of some of our corporate icons, the policy of fostering national champions has some appeal. Indeed, there are some compelling reasons put forward for governments to help establish targeted firms or firms in targeted industries to achieve global leadership for the benefit of Canadians. The logic presented is that by shielding potential global leaders from harmful competition and by providing targeted public assistance, Canada will have many more global leaders for the benefit of all Canadians. Yet the evidence indicates that successful firms achieve success through the pressure of competition. And it also indicates that governments have not established a good track record of choosing the "right" firms or industries and of knowing when to admit defeat. This experience is not restricted to Canada – but is found wherever and whenever countries try to pursue interventionist strategies.

It is important that global leaders emerge from the Canadian economic environment. Such success creates economic spillovers from equity growth, for example; having globally relevant companies in Canada helps us to play an important role in international bodies and processes, like the G8. Finally, the existence of successful Canadian firms is a signal that we have an environment that fosters creativity and innovation.

Our work at the Institute and two reports based on significant analyses of Canada's economic prospects indicate that government's key role is as a catalyst effecting sustaining positive change in our economy. Economic policy needs to focus on creating supportive conditions for success through investments in specialized human capital, infrastructure, and institutions. Economic policy also needs to create an environment of competitive pressure domestically and internationally. Managers and owners of firms need to be challenged by rivals to innovate and improve continuously.

By and large, government attention ought to be evenly distributed across sectors and regions. But from time to time, targeted efforts to enhance the environment of support and pressure may be warranted. Governments should monitor our successful clusters and firms and ensure that Canada's environment is not disadvantaged relative to other countries. It would be dangerous not to pay attention to the environment of support and pressure, for example, in our life insurance industry, one of our most successful clusters.

The argument that Canada's future global leaders should be allowed to "bulk up" before facing global competition is illusory. Successful economic policies are long-term in nature and can only bear fruit if pursued persistently over time. There are no shortcuts, like a national champions policy, to the continuing success of Canada's global leaders and our economic prosperity.

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