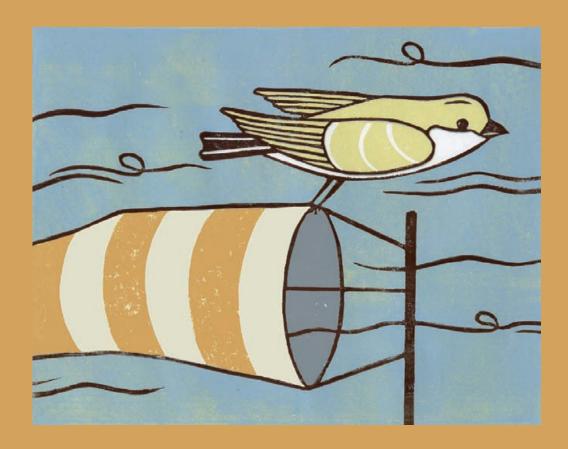
Leaning into the wind

Task Force on Competitiveness, Productivity and Economic Progress SEVENTH ANNUAL REPORT, NOVEMBER 2008



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The Task Force on Competitiveness, Productivity and Economic Progress was announced in the April 2001 Speech from the Throne. Its mandate is to measure and monitor Ontario's competitiveness, productivity, and economic progress compared to other provinces and US states. In the 2004 Budget, the Government asked the Task Force to incorporate innovation and commercialization issues in its mandate. The Task Force reports directly to the public.

It is the aspiration of the Task Force to have a significant influence in increasing Ontario's competitiveness, productivity, and capacity for innovation. This, we believe, will help ensure continued success in the creation of good jobs, increased prosperity, and a high quality of life for all Ontarians.

The Institute for Competitiveness & Prosperity is an independent not-for-profit organization established in 2001 to serve as the research arm of the Task Force. The Working Papers published by the Institute are primarily intended to inform the work of the Task Force. In addition, they are designed to deepen public understanding of macro and microeconomic factors behind Ontario's economic progress and stimulate debate on a range of issues related to competitiveness and prosperity.

Comments on this Seventh Annual Report are encouraged and should be directed to the Institute for Competitiveness & Prosperity. The Task Force and the Institute are funded by the Government of Ontario through the Ministry of Economic Development.

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Foreword and acknowledgements



"While we must lean into the winds of economic turbulence, we also need to stay on the path to our long-term prosperity."

ON BEHALF OF ONTARIO'S Task Force on Competitiveness, Productivity and Economic Progress, I am pleased to present our Seventh Annual Report to the Ontario public.

This Report comes at a time of unprecedented economic volatility and uncertainty in Ontario and around the world. The combination of the financial crises in many countries and an economic slowdown is resulting in reduced public confidence, wild swings in stock markets, and the return of government deficits to the Canadian scene. As participants in Ontario's economy, members of the Task Force are not immune to these heavy headwinds. Yet, like all Ontarians, we must lean into the winds of economic turbulence and seek ways to calm the storm.

This year's Report continues the themes from our recent annual reports, where we set out a long-term Prosperity Agenda for Ontario to achieve its prosperity potential by 2020. As dramatic as the changes in our economic environment are, we continue to recommend policies that lead to attitudes of determination to realize our long-term economic potential, drive greater investment in human and physical capital, motivate innovation through a smarter tax system, and improve our market structures to place a premium on creativity and innovation rather than the status quo.

Stakeholders in Ontario's prosperity – individuals, businesses, and governments – need to address our current challenges through belt tightening and retreating from initiatives that are not working. Clearly, we need to keep a balance between our short-term concerns and our long-term prosperity potential. This is not the time for attitudes that encourage insularity and the preservation of what we have.

Investing in our future prosperity continues to be a key theme of our work. We have turned a corner in our investment in post secondary education – but much more needs to be done if we are to compete in the global knowledge economy. Our business leaders need to step up investments in R&D and in innovation enhancing technology.

Our recommendations for making our tax system smarter would have beneficial effects for both our short-term and long-term prosperity. A major weakness of our tax system is that it does not motivate business investment, and we urge the Ontario Government to address this weakness through reductions in corporate income tax. It should also move to replace our provincial sales tax with a goods and services tax harmonized with the federal GST. And it should evaluate the benefits of a tax on carbon emissions. We acknowledge that the results of the recent federal election

dealt a serious blow to the prospects for a carbon tax. But it holds out the best hope for reducing Green House Gas emissions, and its potential to raise government revenue could allow reductions in other prosperity harming taxes.

Earlier this year, the federal Competition Policy Review Panel released its report, *Compete to Win*, with the overall theme that in the globalizing economy the best defence for our companies is a good offence. We welcome the report and urge Ontarians to consider its recommendations seriously.

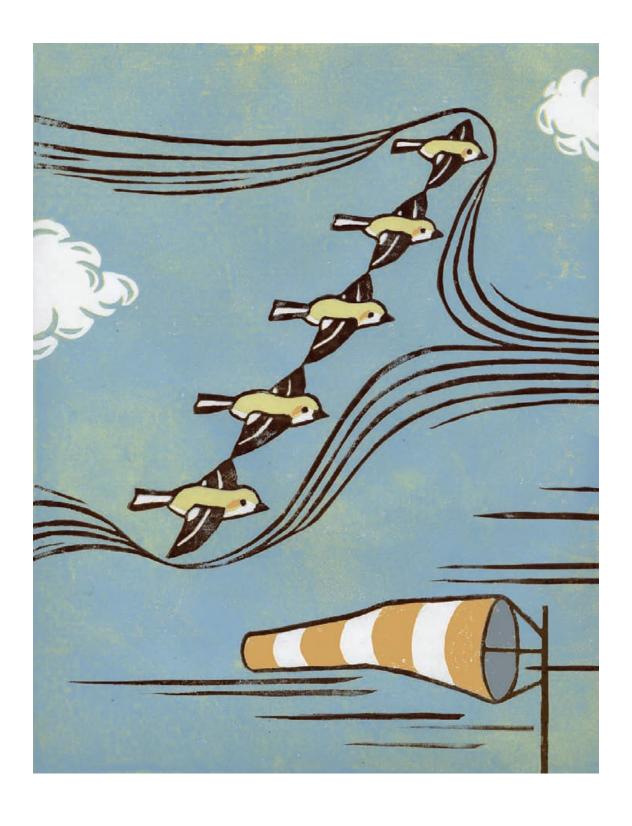
As we address the concerns about our current economic situation, let us keep the bigger picture in mind – Ontario has to compete in the global economy on the basis of value added innovation. We have many firms in Ontario that are doing just that, and we continue to encourage the Premier and the Minister of Economic Development to reach out to these companies to understand their needs and aspirations for global leadership.

Ontario is one of the most prosperous jurisdictions in the world, but we lag our prosperity potential, as defined by the gap in GDP per capita with our North American peers. It is tempting to be self satisfied about the apparent relative weakness of the US economy; yet it is by no means clear that Ontario will escape the impact of the economic downturn that is affecting our trading partners here in North America and around the world. Regardless of short-term economic events, we need to keep an eye on our long-term prosperity.

We gratefully acknowledge the research support from the Institute for Competitiveness & Prosperity and the funding support from the Ministry of Economic Development. We look forward to sharing and discussing our work and findings with all Ontarians. We welcome your comments and suggestions.

Roger L. Martin, Chairman

Task Force on Competitiveness, Productivity and Economic Progress Dean, Joseph L. Rotman School of Management, University of Toronto



Leaning into the wind

Ontario needs to buck the headwinds to overcome the challenges of economic turbulence

THIS, OUR SEVENTH ANNUAL REPORT, is being released in an environment that is much different than that of the previous ones. In each report since our First Annual Report in November 2002, we have observed the basic good health of the Ontario and North American economies. But the prevailing mood is different. The credit crisis in the United States is accentuating a slowdown across our economy, and some observers conclude that the US economy is in or headed for recession. Some think that Ontario and Canada are also headed for a significant economic downturn.

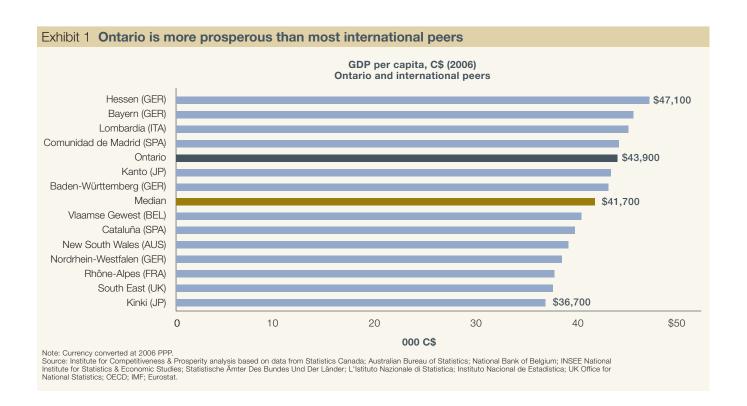
The Task Force is conscious of this changed environment. But our focus is on the long term. In this Seventh Annual Report, we continue to stress the themes we have developed in our past work. Stakeholders in Ontario's prosperity need to take action to ensure that we achieve our economic prosperity potential. Our challenge has always been to make a strong economy even better when no fundamental crisis is apparent. An economic downturn could make public and private stakeholders more focused on short-term considerations when we need to be resolute about a long-term agenda for prosperity.

Here in Ontario, some are calling for a new vision for our economic future. The recent announcement that for the first time Ontario qualifies for equalization payments is sobering for some. As the title of this year's report indicates, we need to lean into the wind if we want to achieve our long-term prosperity potential. Improving the fundamentals of prosperity, including productivity, will benefit Ontarians in the short term and long term.

Despite the signs of an economic slowdown and increasing turbulence in the US economy, Ontarians still operate in one of the most vibrant economies in the world. We have a high level of prosperity versus most jurisdictions outside North America (*Exhibit 1*). Against the median of these jurisdictions, Ontario had a prosperity lead of \$2,200 in 2006.

Several factors created this strength:

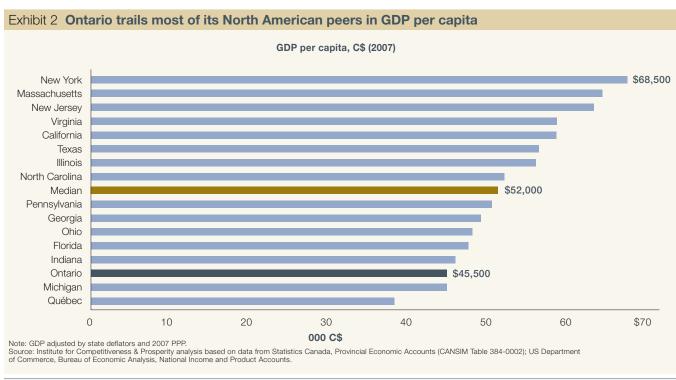
- → We have a highly skilled work force
- → We have an attractive mix of industries with good productivity and innovation potential
- → We have our fiscal houses in order federally and provincially. We are much better prepared to face an economic downturn now than in the early 1990s
- → We are a sought after destination for people in other parts of the world.



But we continue to drift economically. Against the world's most prosperous regions here in North America, our prosperity continues to lag (*Exhibit 2*). Unless otherwise specified, we use constant 2007 Canadian dollars converted at Canada/US purchasing power exchange rate of 1.198.

In the early 1980s, Ontario ranked in the midst of the most successful economies in the world. But since that time, the growth in Ontario has lagged our US peers – the fourteen US states whose population is at or exceeds six million, one-half of Ontario's. For thirteen of the last sixteen years, Ontario has ranked fifteenth of the sixteen North America jurisdictions with at least six million people. Last year, Ontario's GDP per capita was \$6,800¹ below the median of these peers. In 2007, this gap fell slightly to \$6,500. As we saw in the 2001 slowdown, Ontario closed its prosperity gap slightly more as a result of economic sluggishness in the United Sates than robust growth in Ontario.

In 2007, Michigan slipped behind Ontario, as its auto industry continued to slump and the state's economy was generally moribund. Ontario managed to achieve growth in its GDP per capita while Michigan's declined, and we moved to fourteenth of sixteen. So, while the prosperity gap narrowed slightly in 2007, this was due mainly to a slowdown across the peer states (*Exhibit 3*).

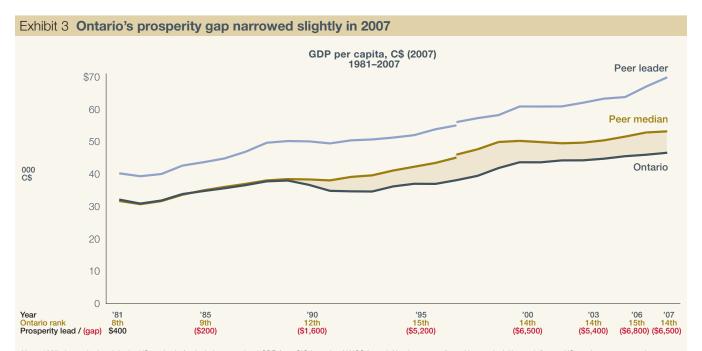


¹ In last year's Annual Report, we reported the prosperity gap in 2006 was \$6,000 C\$(2006). Revised information and the expression of the gap in 2007 dollars makes the 2006 gap \$6,800 C\$(2007).

Today, the signals are clear that economic activity is not robust. North American economies are indeed in a slowdown right now, though they have perhaps not yet met the official definition of a recession.

But the Task Force has its eye on the long term. We are encouraging the development of economic policies and strategies that secure economic success for decades to come. We are mindful of current circumstances, but we are not frozen by them. Our recommendations are aimed at meeting our prosperity potential for 2020 and beyond. We encourage attitudes that welcome competition and innovation, because we are confident about the capabilities of Ontarians to compete to win in the global economy. We see investments in our workers and our businesses as the key to longterm success. We continue to explore ways of ensuring our tax system motivates investment and innovation for the long term. And we see the need for improvement in market and governance structures to stimulate the competitive pressure and the specialized support so necessary for success. We see no conflict in our agenda for long-term prosperity and for addressing short-term economic challenges.

As we have discussed in past reports, the consequences of not achieving our prosperity potential are significant. Closing the GDP per capita gap would result in an increase of \$9,200 in after-tax disposable income per Ontario household (Exhibit 4). This increase would mean a significant improvement in our standard of living since mortgage payments among mortgage holders is \$12,500 annually; among tenants,



Note: 1997 shows the break in the US method of calculating state-level GDP from SIC-based to NAICS-based. Numbers are adjusted by provincial/state deflators. US results are converted to Canadian dollars using 2007 PPP.
Source: Institute for Competitiveness & Prosperity analysis based on data from Provincial Economic Accounts (CANSIM Table 384-0002); US Department of Commerce, Bureau of Economic Analysis. National Income and Product Accounts.

rental payments are \$8,400. Tuition is \$4,600 per household with college or university students. The average Ontario household spends \$4,300 on recreation and vacation. Annual RRSP contributions are \$3,500.

Closing the prosperity gap would also generate \$29 billion in tax revenues for all three levels of government in the province – more than enough to fund increased public expenditure needs, such as infrastructure, early childhood education, public transit, and Green House Gas reductions.

In our recent reports, we set out our Prosperity Agenda for Ontario – an integrated set of actions that could close the prosperity gap by 2020 (*Exhibit 5*). We have made some progress in the areas of investing in post secondary education, eliminating labour sponsored venture funds, and cancelling the capital tax. But we have much to do in shifting attitudes, investing adequately for long-term prosperity, creating a smart taxation system, and ensuring our market and governance structures create the conditions for innovation.

We are also mindful that the economies of our fourteen US peers are undergoing significant challenges, driven primarily by the crisis in the financial and credit markets. Some observers see the current economic crisis as proof that US jurisdictions ought not to be peers for Ontario. We continue to believe that these states are Ontario's rightful peers and that the lessons we draw from them are still valid. Their citizens and their businesses benefit from a well funded and diverse system of post secondary education. Their businesses invest much more in technology to make their workers

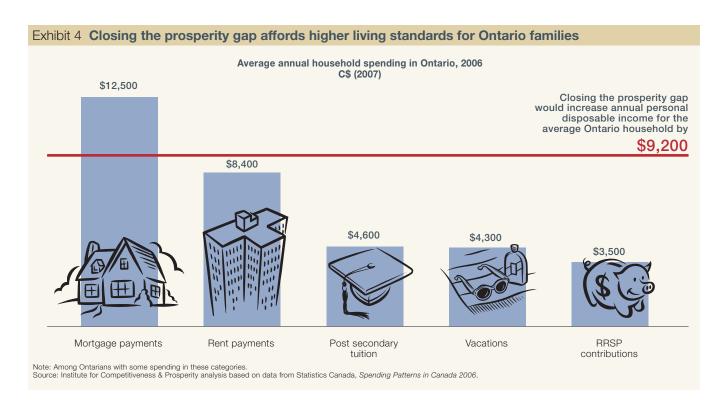


Exhibit 5 The 2020 Prosperity Agenda closes the Ontario gap with US peers										
THE GOAL	Current	Target 2020								
Close the prosperity gap	14th in peer group in 2007	At the median – 8th by 2020								
Attitudes	Collective complacency	Shared determination to close the gap								
Investment	Consume today	Invest for tomorrow's prosperity								
Motivations	Unwise taxation	Smart taxation								
Structures	Preserve status quo	Encourage creativity and growth								

more productive and better paid. In general, their market structures foster greater competition to drive innovation. Highly skilled managers create strategies that help companies thrive in globalizing markets.

So, while many may be worried about the short term in Ontario and in the peer states, we want to keep people's focus on the long term. Our major concern is that we are fostering an environment that will not lead to achieving our prosperity potential.

Our Prosperity Agenda can really only affect the conditions for prosperity. In reality, there is very little governments can do to halt an economic downturn or to achieve short-term economic growth. Governments and other leaders in our economic agenda are responsible for developing an "eco-system" for prosperity. Our concern is that our current eco-system is fostering mediocrity in Ontario. We see signs of this – and some signs for optimism – as we look across the eco-system, best represented by our AIMS framework.

Attitudes

OUR PREVIOUS RESEARCH HAS SHOWN that the Ontario public and business people have the desire to compete and to innovate. We have similar economic DNA as our counterparts in the US peer states. But we are complacent and satisfied with the economic success we have achieved, even when it is clear we should be doing better.

Research conducted for the Institute in 2006 indicated that, at first glance, Ontarians do not see that achieving our economic potential is a critical priority for government attention.² And yet, when informed of the economic and social benefits that we are

² Task Force on Competitiveness, Productivity and Economic Progress, Sixth Annual Report, Path to the 2020 Prosperity Agenda, November 2007, pp.36-38.

forgoing because of our missed economic achievements, a significant percentage change their minds. Our public leaders need to engage our citizens in the discussion about the future of Ontario's economy.

In late September, TD Economics called for a vision for Ontario's future. It concluded that some of Ontario's traditional strengths – a low Canadian dollar, access to the US market, and low energy prices – were disappearing. In light of this shift and with the deteriorating short-term economic situation, it recommended:

... that the Ontario government put out a broad discussion paper this fall on where it wants to take the economy over time. Such a report, which would replace the relatively sterile exercise of the mandated long-term economic and fiscal outlook, could form the basis of debate on the issue. It is vital that the discussion paper not just be about numbers and budget balances. It should address the fundamental issues that matter to Ontarians – jobs, income, and making people's lives better.³

Earlier this year, the Competition Policy Review Panel issued its report, *Compete to Win*. The Panel had been appointed in the summer of 2007 after a series of high profile foreign takeovers of Canadian businesses. The Panel urged Canadians to adopt an attitude of offence, not defence as they considered the impact of globalization. It acknowledged that competing globally was a challenge for Canadian people and businesses. But it also concluded that trying to preserve our economic success through defensive measures would not work.

The Panel urged Canadians to embrace competition and aspire to global success:

What will it take to deliver to our grandchildren the same measure of progress we have enjoyed? We believe that it will take a more competitive mindset. We need to view competition as being a necessary means to an end. We must become more engaged with enhanced competition domestically and with increased efforts to penetrate global markets.

... We call on our business leaders to be ambitious, raise their sights, seek out and capitalize on new opportunities, and relentlessly focus on improving how their businesses operate.

... we as a country need to regain our ambition to be the best. We cannot be content with simply being in the top ten or top twenty among our international competitors. Globalization and the accelerating pace of change will continue whether or not we step forward to address these fundamental transformations. If we want to control our destiny, we must acknowledge these issues and deal with them.⁴



³ TD Economics, "Time For A Vision of Ontario's Economy," September 29, 2008, available online: http://www.td.com/economics/special/db0908_ont.pdf, p. 1.

Competition Policy Review Panel, Compete to Win, Final Report, June 2008, p. vi.

The Panel urged Canadians to celebrate our past success, but also to overcome our present complacency:

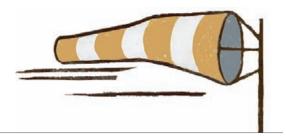
In the past, Canadians faced changing and adverse economic conditions, overcame risks and took great strides to improve our competitiveness, beginning with the implementation of the Canada-US Free Trade Agreement in 1989, the introduction of the Goods and Services Tax in 1991 and the signing of the North American Free Trade Agreement in 1994. We eliminated the federal government deficit by 1997. We can do great things again.

However, we have rested on the laurels of these successes. In the ensuing years, our public policy and political debate have been more about dividing the spoils, much of it due to past decisions and the good fortune of our natural resource endowments, rather than to increasing wealth and expanding opportunity. Global forces are putting pressure on Canada, like all nations, to revisit its economic position. Canada must take concerted action to remain current with competitive realities. We must plan and prepare for the future. We must act.⁵

The Panel recognized that Canadians are not attuned to thinking about global competitiveness and recommended that the Federal Government establish an independent Canadian Competitiveness Council under the federal Minister of Industry, with a small full-time staff overseen by a Board of Directors. The Council's mandate would be to "examine and report on, advocate for measures to improve, and ensure sustained progress on, Canadian competitiveness." This is an important recommendation and the Task Force encourages the Minister of Industry to consider it carefully.

A recent survey of Canadians on their opinions about the recommendations of the Competition Policy Review Panel indicates broad acceptance of most of them, with the exception of easing foreign investment reviews and merger rules in financial services and broadcasting. Public leaders need to engage stakeholders in our prosperity in the Panel's recommendations.

Ontarians and Canadians have a lot to be proud of in our economic performance, and we should be confident about our future success. But future success cannot be assured, especially if our collective focus is on preserving what we have. We need to encourage innovation for future success.



⁵ *Ibid.*, p. 26.

⁶ *Ibid.*, pp. 96-101.

Investments

INVESTMENT IN OUR FUTURE IS KEY. Yet, as we have discussed in the past, we attenuate our investments – investments of all kinds – stopping sooner than we should to solidify gains.

Our businesses invest quite adequately in the basics like buildings. They invest enough in traditional machinery and equipment to come close to matching the investments of our US competitors. But we are well behind in investing in information and communications technologies that make our workers and businesses more productive, innovative, and globally competitive. Our businesses invest enough to achieve top twenty status in the world, but we are well behind leading developed economies like the United States, the United Kingdom, Germany, and Sweden.

Our governments make it a priority to invest in our health care system, an important focus for our public spending, especially in the short term. But when considering investments in the long-term prosperity that comes through post secondary education, our governments have tended to come up short. To be sure, this under investing trend here in Ontario has been halted and is turning around. But we have a long way to go to have adequate resources for education.

Our people invest in themselves to a point, but then stop. Ontario students are just as likely to secure bachelor's degrees as their US counterparts, but stop investing in themselves by not going on to achieve graduate degrees.

Investment is the lifeblood for prosperity. If businesses, governments, and individuals are not investing adequately for future prosperity, we will continue to drift economically.

Motivations

OUR TAX SYSTEM IN ONTARIO is not a positive factor in motivating businesses to make new investments. As we and other researchers have shown repeatedly, we have a combination of policies and instruments that makes Ontario one of the highest tax jurisdictions in the world for new business investment. Tax experts are in general agreement on what changes are necessary to achieve parity with other developed economies in this regard. At the very least, our tax system should put our businesses on a level playing field in motivating business investment. But these changes are simply to catch up – they are by no means innovative.

Nor is the tax system innovative in encouraging lower income Ontarians to advance economically. By clawing back social benefits and introducing income taxes for lower income Ontarians, we have established a punishing marginal effective tax rate on these individuals and families as they attempt to climb the economic ladder.

We should consider innovative tax policies to make Ontario and Canada leaders in designing and implementing smart tax regimes for businesses and individuals. While the recent federal election results seem to indicate that a carbon tax has little future prospects, we urge policy makers not to abandon it as it may be an effective and efficient way to realize goals for reduced carbon emissions.

Structures

IF ONTARIANS ARE TO THRIVE in the era of globalization, we need to have market structures that encourage competition at home, thereby stimulating innovation and global success. We will not achieve this by focusing on preserving current positions, but by reducing barriers to competition from domestic and global players. It is clear that firms that strive for a solid position in the domestic market only will be candidates for takeover by foreign firms with global capabilities and strategies.

Consistent with the Competition Policy Review Panel, the Task Force continues to advocate 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.

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? The Institute concluded 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 the 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? The Institute's research indicates that head offices are indeed important to local economies, but there is little evidence that foreign-owned head offices' contributions are less than those of 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.

The Panel recommended that the federal Ministers of Finance and Industry should develop a public report on options, including tax incentives, to facilitate the provision of more private venture capital, particularly at the "angel" and late stage of development. But we continue to encourage the Provincial Government to follow through on its plans for ending special tax treatment for Labour Sponsored Venture Funds, as the evidence is clear that such approaches reduce the quality of venture capital – a more important problem than quantity of venture capital.

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.

Ontarians are in uncharted territory as the current economic situation unfolds around the world. We are in as good a position as any developed economy to weather the coming storm. But we still face long-term challenges in achieving our prosperity potential. We have been making some progress in implementing the 2020 Prosperity Agenda. Now is not the time to take our eye off the long term. Despite the stormy times ahead, we need to lean into the wind.



Our prosperity gap

Missing our prosperity potential is a lost opportunity for all Ontarians

IN CARRYING OUT ITS MANDATE to measure and monitor Ontario's competitiveness and prosperity, the Task Force has focused on Gross Domestic Product (GDP) per capita as the summary measure of success. It is important to note that GDP represents the value added to our endowed base of human, physical, and natural resources. The value we add is driven by our ability to develop and produce products and services that others want to buy – here in Ontario, across Canada, and around the world. Prosperity can be raised by expending more labour effort to increase the goods and services produced in Ontario. It can also be raised by being more productive. Productivity growth comes about by finding more efficient ways to produce the same amount of goods and services with the same effort; or by creating higher value added products, services, and features for which consumers will pay higher prices.

GDP is an imperfect measure. It does not measure quality of life or happiness. It focuses strictly on things that can have a dollar value attached to them. And it does not place a value on leisure time. But it is useful to the extent that a more prosperous economy creates the opportunity for greater quality of life through better health, increased life expectancy, and literacy. And, as long as we maintain the perspective that our focus is on competitiveness and prosperity – which are by nature economic concepts – we conclude that GDP per capita is a sound measure of economic results.

As we have seen, outside of North America, only four regions have greater prosperity per capita than Ontario (see *Exhibit 1*). But closer to home we continue to trail our North American counterparts considerably. Within our peer group of the sixteen North American jurisdictions with a population of six million, half Ontario's or more, Ontario stands fourteenth, ahead of only Québec and Michigan (see *Exhibit 2*). Ontario's GDP per capita moved ahead of Michigan in 2007 for the first time since 1990.

Ontario's prosperity gap, the difference between Ontario and the median of the peer jurisdictions, did not exist twenty years ago when we held a middle position among these highly competitive and prosperous jurisdictions. Starting with the 1990–92 recession, Ontario's ranking began to fall behind that of the peer states, and we have not been able to resume our earlier standing (see *Exhibit 3*). This prosperity gap matters to Ontarians. It represents lost potential for our residents to gain economic security and well being and for our public institutions to provide services and investments for future prosperity.

Lagging intensity and productivity remain the biggest hurdles

To understand the reasons for our prosperity gap with the peer jurisdictions, we draw on the same framework we have used in our previous reports. This framework disaggregates GDP per capita into four measurable elements (*Exhibit* 6):

- Profile. Out of all the people in a jurisdiction, what percentage are of working age and therefore able to contribute to the creation of products and services that add economic value and prosperity?
- Utilization. For all those of working age, what percentage are actually working to add to economic value and prosperity? To gain further insight into this element we examine the two contributors to utilization: participation, the percentage of those of working

age who are searching for work, whether they are successful or not; and *employment*, the rate at which those participating in the job market are employed.

- Intensity. For all those who are employed, how many hours do they spend on the job in a year? This element measures both workers' desire to work more or fewer hours and the economy's ability to create demand for work hours.
- Productivity. For each hour worked in a jurisdiction, how much economic output is created by a jurisdiction's workers? Within productivity there are six sub-elements and a productivity residual:

Cluster mix – how the mix of industries into traded clusters, local industries, and natural resources affects our productivity potential

Exhibit 6 The Task Force measures four components of prosperity

Prosperity	Profile		Utilization		Intensity		Productivity
GDP per capita	Potential labour force Population	Х	Employed persons Potential labour force	Х	Hours worked Employed persons	Х	GDP Hours worked
			 Participation Employment 				Cluster mix Cluster content Cluster effectiveness Urbanization Education Capital investment Productivity residual

Source: Adapted from J. Baldwin, J.P. Maynard and S. Wells (2000). "Productivity Growth in Canada and the United States" Isuma Vol. 1 No. 1 (Spring 2000), Ottawa Policy Research Institute.

Cluster content – the productivity potential of the sub-industries that make up our clusters of traded industries

Cluster effectiveness – how well our clusters of traded industries compete

Urbanization – the proportion of our population that lives in urban areas, which typically increases a jurisdiction's productivity

Education – the educational attainment of our population and its impact on productivity

Capital investment – the degree to which physical capital supports our workers' productivity

Productivity residual – a residual value that relates to productivity but remains unexplained.

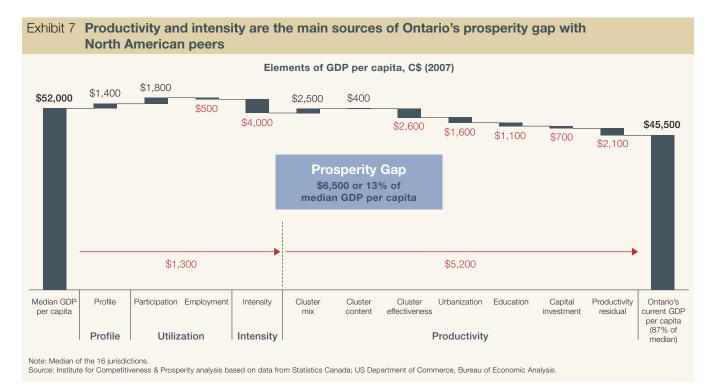
The first three factors – profile, utilization, and intensity – add up to our labour effort, or the hours worked per capita. That captures the human effort Ontarians are expending to create economic value. The fourth factor – productivity – measures how effectively our labour efforts turn resources into economic value and prosperity.

Ontario's divergence from the prosperity performance of our peer states occurred during the recession of the early 1990s. During that time the key factor driving our economic weakness was labour effort, especially utilization and its two sub-elements, participation and employment. Since 1995, we have been successfully recovering to 1990 performance levels. But, at the same time, a growing productivity gap has emerged relative to the peer states. If we are to close the prosperity gap, our Prosperity Agenda has to be a priority for all stakeholders.

Ontario has mixed labour effort performance

Ontario continues to have a demographic profile advantage versus the peer states, an advantage in utilization, but a significant intensity gap (*Exhibit 7*).

Profile remains an advantage for Ontario. The first factor in a jurisdiction's prosperity creation potential is its demographics. The percentage of the population that is of working age – aged 15 to 64 – is a basis for prosperity. With more people in that age range, a higher percentage of the population can work and create economic value. In Ontario, this ratio has been stable over the short run and has had no appreciable impact on changes in our prosperity gap versus our peer states. Nevertheless, it does create an ongoing starting advantage in Ontario's prosperity.



In 2007, 69.3 percent of Ontarians were aged 15 to 64. Among the peer jurisdictions, only Québec has a higher percentage of working age population. All fourteen peer states have a smaller percentage. Relative to the 67.5 percent median of the sixteen peer jurisdictions, Ontario has a 2.6 percent potential profile advantage.8 Holding all other factors constant, we calculate this advantage to be worth \$1,400 in per capita GDP. In other words, because we have a higher proportion of our population able to add to our prosperity, we have a profile advantage versus our peer jurisdictions worth about \$1,400 per capita to our prosperity.

As we discussed in our Fourth Annual Report, demographic projections indicate that the proportion of Ontarians of working age will decline over the coming decades as baby boomers retire and are not being replaced by equal numbers in subsequent generations. Still, the projections indicate that Ontario will maintain its advantage versus its peers.9

Nevertheless, Ontario will have fewer workers to create prosperity in the coming years. We estimate that by 2025 the smaller percentage of working aged Ontarians will reduce GDP per capita potential by \$2,300.10 As we discussed in our 2006 Working Paper on intensity, we will need creative retirement solutions to address this decline in our prosperity potential.¹¹

Ontario utilization out performs peers. As we discussed in our 2005 Annual Report, Ontario successfully reversed a decline in its utilization of its working aged population during the latter part of the 1990s.12

In 1990, Ontario led all its peers in participation. Ontarians were more eager to work than people in any other state or province in its peer group. However, through the 1990-92 recession and continuing until 1995, Ontario's participation rate plunged dramatically. By 1995, Ontario's participation rate ranked tenth among the sixteen peers. Clearly, the economic weakness of the early 1990s created many discouraged workers – people who simply stopped looking for work and were no longer recorded as participants in the labour force. As economic conditions improved, more adult Ontarians reioined the labour force, contributing to our economic potential. The province's participation rate increased every year until 2004, when Ontario once again ranked first among the peers. In 2007, 66.3 percent of Ontarians fifteen years of age and older worked or sought work. Among the peer jurisdictions we ranked second to Illinois. The median participation rate was 64.0 percent. This advantage for Ontario translates into \$1,800 in GDP per capita.

In the other component of utilization, employment, Ontario has traditionally trailed its peers, but the gap versus the peer median accounts for only a small part of our prosperity gap. As with participation, the 1990-92 recession adversely affected Ontario's unemployment rate, which increased both on an absolute basis and relative to that in our peer jurisdictions. In 1990, before the recession, 94.3 percent of Ontarians in the labour force held jobs, just above the 94.2 percent rate for the median peer jurisdiction. By 1993, Ontario's employment rate fell to 89.8 percent that is, the unemployment rate reached 10.2 percent - while the rate in the median peer state was 92.7 percent.

From that point, Ontario's unemployment rate trended down. By 2007, 94.2 percent of the Ontario labour force was employed – 1.1 percentage points lower than the median of the peer jurisdictions. This cost us \$500 in lower GDP per capita in 2007.

The combined effect of more discouraged workers and increased unemployment in the first half of the 1990s was a key driver of Ontario's growing prosperity gap during those years. Beginning in 1995, Ontario successfully increased the utilization of its human capital; by 2007, Ontario employed 62.4 percent of its working age population, ranking fourth among the sixteen peer jurisdictions and above the peer median of 61.1 percent. This superior performance translates to a \$1,300 utilization advantage (the net effect of a \$1,800 participation advantage and a \$500 employment disadvantage) in GDP per capita.

Intensity is a significant part of our prosperity gap. While Ontario out performs the peer states in profile and utilization, we have a significant intensity gap – our workers are on the job fewer hours in a year than their counterparts in the peer states. In 2007, the average Ontario worker worked 1,710 hours, while in the median of the peer states the average worker worked 1,865 hours. This gap of 155 hours, or 4.1 weeks annually, narrowed from 2006, when Ontario trailed the peer median by 161 hours weekly or 4.3 weeks. Consequently, the importance of intensity on Ontario's prosperity gap decreased slightly from 2006, but still is an important part of our prosperity gap.

In 2006, the Institute conducted significant research into differences in intensity between Ontario workers and their

Calculated as [1 minus (67.5 (Peers) / 69.3 (Ontario))] = 2.6 percent.

Task Force on Competitiveness, Productivity and Economic Progress, Fourth Annual Report, Rebalancing priorities for Ontario's prosperity, November 2005, p. 29.

This comparison is between Ontario's GDP per capita in 2005 and its potential in 2025; not the difference between Ontario and its peer group

Institute for Competitiveness & Prosperity, Working Paper 9, Time on the job, September 2006, p. 21

¹² Task Force on Competitiveness, Productivity and Economic Progress, Fifth Annual Report, Agenda for our prosperity, November 2006. Labour statistics base participation, unemployment, and hours estimates on all workers including those who are 65 and over; we follow this convention for utilization and intensity

counterparts in the peer states. 13 We found that half of the intensity gap is due to more weeks of vacation taken by Ontario workers and half is due to fewer hours worked when workers are on the job. Within this shorter work week, we found that the largest component, about half, was the result of more Ontarians working part time. This gap, in turn, was due to an inability of our part-time employees to find full-time work. Fully 32 percent of part-time workers in Ontario over the 1997-2004 period indicated that they worked part time because they could not find fulltime work. Across the peer states, this proportion was only 16 percent. Much of our intensity gap reflects the desires of Ontarians to take more vacation, which is a preference, not a weakness. 14 But nearly a quarter of the gap is because our economy does not create adequate opportunities for full-time work.

Productivity continues to be the key to closing Ontario's prosperity gap

As we have seen, in the three labour effort factors, Ontario's advantage in the percentage of our population of working age has strengthened slightly, and we have made remarkable progress in the percentage of Ontarians who are working. Still, differences in the number of hours worked continue to be a major contributor to our prosperity gap. Even with the overall gains in utilization, our prosperity gap persists (*Exhibit 8*).

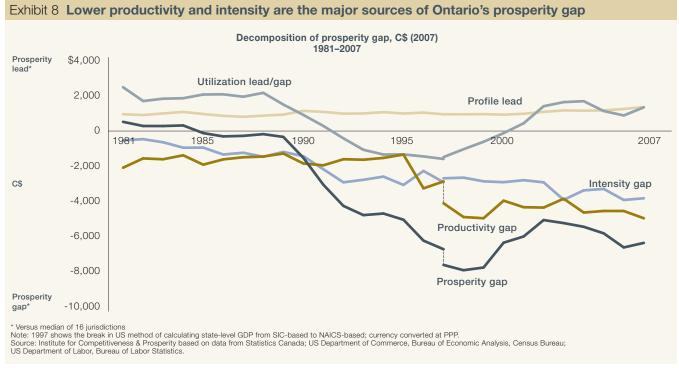
Over the last decade, productivity has accounted for the greatest share of the prosperity gap with our peers. Ontario's slight narrowing of the prosperity gap in 2007 is the result of gains in our utilization advantage and a lessening of our intensity disadvantage. Our productivity gap widened further. The net effect was a reduction of the prosperity gap. In effect, Ontarians narrowed the pros-

perity gap in 2007 by working more, not by being more productive.

We assess the six sub-elements of productivity to determine the impact of this key driver of our prosperity gap.

Cluster mix and cluster content contribute positively to our productivity.

The Task Force continues to conclude that Ontario benefits from a good cluster mix of traded industries¹⁵ that are typically concentrated in specific geographic areas and sell to markets beyond their local region. Research by Michael Porter of the Harvard-based Institute for Strategy and Competitiveness has shown that clusters of traded industries increase productivity and innovation. In addition, the presence of clusters in a region has a spillover effect, in that they typically generate opportunities for increased success of the local economy.



¹³ Working Paper 9, Time on the job, September 2006.

⁴ Ibid., p. 34.

¹⁵ Institute for Competitiveness & Prosperity, Working Paper 1, A View of Ontario: Ontario's Clusters of Innovation, April 2002 and Working Paper 5, Strengthening structures: Upgrading specialized support and competitive pressure, July 2004.

Drawing on Porter's methodology, the Institute has determined that fully 39.8 percent of employment in Ontario is in traded industries versus 31.4 percent in the peer jurisdictions. Ontario's employment strength in financial services, automotive, metal manufacturing, publishing and printing, and others has created an attractive mix of traded industries. Our analysis of Ontario's cluster mix indicates a \$2,500 per capita advantage over our peers. This benefit is derived from a higher output than would be likely if Ontario's mix were the same as the peers' mix.¹⁶

In the sub-clusters that make up each cluster of traded industries,¹⁷ there are also wage and productivity differences. As we compare these with those in the peer states, we conclude that our cluster content creates a \$400 advantage for Ontario.

Cluster under performance is a significant part of Ontario's productivity gap. While Ontario has excellent cluster mix and content, cluster effectiveness is much lower than that in the peer states. In Ontario and the peer states, traded clusters are more productive than local industries, as represented by wages. In Ontario, the productivity premium is 46.7 percent. 18 But across the peer states, the median productivity premium is 63.3 percent. Taking the prevailing wage in local industries as a given, our clusters are under performing their counterparts in the US peers by 11.3 percent (the difference in the peer performance index of 1.63 versus Ontario's 1.47).

Porter has observed that greater competitive intensity comes from sophisticated customers and vigorous rivals. In addition, specialized support from excellent factor conditions, capable suppliers, and related industries pushes productivity higher in traded clusters. As we discussed in our 2004 Annual Report, ¹⁹ our structures of specialized support and competitive pressure are inadequate relative to the experience in clusters of traded industries in the peer states.

If Ontario clusters were as effective as US clusters, wages would be \$6,000 per worker higher. As traded clusters account for 39.8 percent of Ontario employment and given the relationship between wages and productivity, our overall productivity would rise by 6.6 percent.²⁰ From this, we estimate the productivity loss from the lower effectiveness of our clusters to be \$2,600 per capita.

Adding together the effects of cluster mix (+\$2,500), content (+\$400), and effectiveness (-\$2,600) Ontario's clusters provide a net benefit of \$300 in GDP per capita versus the peer states.

Relatively low urbanization is a significant contributor to our productivity and prosperity gap. In our work, we have established the higher level of productivity that results from greater rates of urbanization. This is the result of the increased social and economic interaction of people in firms in metropolitan areas, the cost advantages of larger scale markets, and a more diversified pool of skilled labour. The interplay of these factors promotes innovation and growth in an economy.

¹⁶ It is important to note that our measure focuses on the mix of industries only. It calculates the productivity performance we could expect in Ontario if each cluster were as productive as its US counterpart. It does not measure the effectiveness of each cluster in Ontario.

¹⁷ Institute for Competitiveness & Prosperity, Working Paper 1, A View of Ontario, April 2002, pp. 18-20.

Institute for Competitiveness & Prosperity, Working Paper 5, Strengthening structures, July 2004, p. 26.
 Task Force on Competitiveness, Productivity and Economic Progress, Third Annual Report, Realizing our prosperity potential,

¹⁹ Task Force on Competitiveness, Productivity and Economic Progress, Third Annual Report, Realizing our prosperity potential, November 2004, pp. 40–48.

We have netted out the effects of Ontario's lower urbanization, our under investment in capital, and our lower educational attainment in this calculation.

Since fewer people in Ontario live in metropolitan areas than in the peer states, our relative productivity and prosperity potential are reduced.²¹ Our analysis this year indicates that we have a \$1,600 per capita disadvantage against the peer median that is related to our lower level of urbanization.

Lower educational attainment weakens our productivity. Economists agree that a better educated workforce will be more productive. Education increases workers' base level of knowledge necessary for improved job performance. It increases workers' flexibility so that they are able to gain new skills throughout their lifetime. Many studies show the increased wages that accrue to more highly educated individuals.²² And higher wages are the result of higher productivity.²³ Ontario's population has, on average, a lower level of educational attainment compared to those living in the peer states, particularly at the university graduate level. Adjusting the mix of educational attainment in Ontario to match the US mix and holding wages constant at each attainment level, Ontario's productivity would be higher by \$1,100 per capita. Note that this is higher than the \$1,000 per capita we reported last year. However, our estimate for this year is based on 2006 census data while last year our estimate was based on 2001 census data. In fact, if we calculate our estimate for last year on the basis of the 2006 census our estimate would have been \$1,400. Our educational attainment gap with US peers has in fact declined.

Under investment in capital lowers productivity. Ontario businesses have under invested in machinery, equipment, and software relative to their counterparts in the United States²⁴ so that the capital base that supports workers in Ontario is not as modern as that of their counterparts in the peer states. As a result. Ontario workers are not as productive. We estimate this under investment in capital equipment lowers Ontario's productivity by \$700 per capita. This estimate is based on our simulation of Ontario GDP if we had matched the rate at which the US private sector invested in machinery, equipment, and software. For our estimate, we assumed that higher growth in this investment would translate directly into higher growth in GDP. The primary source of this capital investment gap is in information and communications technology (ICT). Canada's businesses invest about a third less per dollar of GDP in ICT and slightly more in non-ICT machinery, equipment, and software.²⁵

The residual is related to productivity.

We have been able to account for the impact of profile, utilization, and intensity on prosperity. We have also accounted for the effects of several elements of productivity. The \$2,100 per capita gap that remains is related to productivity on the basis of like-to-like cluster mix and strength, urbanization, education, and capital intensity.

Productivity gap continues to be important

As we have seen, through most of the 1980s, Ontario's prosperity was close to the median of the peer states. During that period, we had a productivity and intensity disadvantage versus our peers - but our utilization advantage compensated for this. Our prosperity gap began to develop at the outset of the 1990-92 recession. It was driven mostly by our poor utilization performance - both participation and employment worsened significantly with the recession. Our utilization problem began to dissipate around 1997 and by 2001 it was an advantage again. However, our productivity disadvantage began to grow in 1995 and by 2005 it had more than doubled. Since that time, it has essentially held steady. At the same time, our intensity gap continues to be a significant part of our prosperity gap.

In summary, against our North American peers, Ontario has a wide and growing prosperity gap; sluggish productivity growth is a critical reason we are not realizing our prosperity potential. As we broaden our perspective beyond North America, we see that Ontario has a prosperity lead, but we still lag in productivity.

²¹ See "Prosperity and productivity lag in Ontario cities" sidebar Path to the 2020 Prosperity Agenda, p. 24-25.

²² For example, see Ana W. Ferrer and W. Craig Riddell, "The Role of Credentials in the Canadian Labour Market," Canadian Journal of Economics, 2002 Vol. 35, No.4 and Statistics Canada, "Education and earnings," Perspectives on Labour and Income, 2006, Vol. 38, No. 03.

²³ See Exhibit D in "Why productivity is important for our prosperity" sidebar in Annual Report 6, Path to the 2020 Prosperity Agenda, p. 28-30.

²⁴ Capital investment results are not available at the state level. Our analysis uses US results to estimate peer state investments and compares these to Ontario.

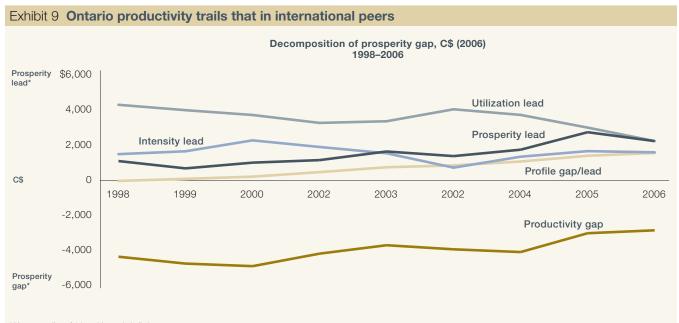
²⁵ Fifth Annual Report, *Agenda for our prosperity*, pp. 34-35. See also Andrew Sharpe, "What Explains the Canada-US ICT Investment Intensity Gap?" Centre for the Study of the Living Standards, December 2005.

Ontario's prosperity compares well globally, though productivity still trails

Ontario's prosperity compares favourably with international peer regions - using a similar criterion for identifying North American peers. Few regions are like Canadian provinces and US states in that they are part of a federal state and have their own economic policy levers, including a wide range of tax powers and spending responsibilities. Australia's states and Germany's Länder are the only ones that closely resemble North American provinces and states. Many countries with developed economies - such as the United Kingdom, Japan, and France – are unitary states where regions have little economic control. In most countries, we took their formal structure (e.g., France and departments, Italy and regions, etc.) as the peers for analysis. In Japan, we relied

on OECD divisions, which combined prefectures, as several of these were city based, into regions. However, we have only included the two largest, Kanto, which includes Tokyo, and Kinki, which includes Osaka. These two make up more than 50 percent of Japan's population. Including all regions would add five other regions, all with lower GDP per capita than Ontario. In addition, some of the important data for Japan are only available at the national level.

We also removed jurisdictions that were essentially metropolitan areas. Our rule was to exclude jurisdictions or regions whose density exceeded that in the Toronto Census Metropolitan Area or where one city's metropolitan population accounted for more than 65 percent of the state population – the highest ratio among the North American peer states (Boston and Massachusetts). These filters excluded Île de France



^{*} Versus median of 14 world peer jurisdictions
Note: Currency converted at PPP
Source: Institute for Competitiveness & Prosperity based on data from Statistics Canada; Instituto Nacional de Estadística; Eurostat; OECD; Australian Bureau of Statistics;
Statistischen Ämterdes Bundes und der Länder; Statistics Bureau of Japan; National Bank of Belgium; INSEE National Institute for Statistics & Economic Studies;
L'Istituto Nazionale di Statistica; UK Office for National Statistics; IMF.

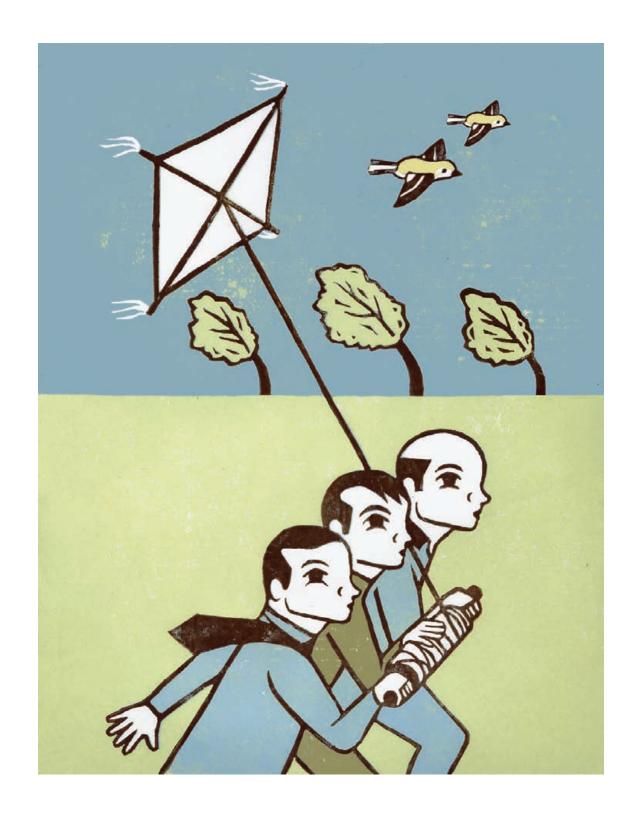
(Paris), Greater London, and Randstad (Amsterdam, Rotterdam, the Hague, and Utrecht in The Netherlands).

Among the peer set of fourteen international regions, Ontario stands fifth in GDP per capita (see Exhibit 1). It is fair to say that we have built one of the most globally competitive jurisdictions here in Ontario. However, just as we have found in comparisons with North American peers, Ontario's main challenge is to improve its productivity. We are out performing international peers through more labour effort, but we trail the median of our international peers in productivity.

We compared Ontario's sources of prosperity with these international peers using the same waterfall approach we have developed for North American peer comparisons. Data availability prevents us from providing the same level of detail, but we can compare Ontario's work effort – comprising demographic profile, utilization of adults in the work force, and intensity of hours worked per worker – and productivity – the value created in the average hour of work effort (*Exhibit* 9).

This international comparison indicates that lagging productivity is Ontario's challenge – we work more than those outside North America, but we are less successful at creating economic value in the hours we work.

Ontario's economy is one of the most successful in the world. Our challenge is to build on this success to realize our full prosperity potential for the benefit of all Ontarians. Higher productivity is critical to our success.



AIMS and a prosperity eco-system

Tackling the prosperity challenge requires an "eco-system" approach

OUR AGENDA FOR PROSPERITY builds from the AIMS framework that guides our work. AIMS is built on an integrated set of four factors – the foundation for a prosperity eco-system:

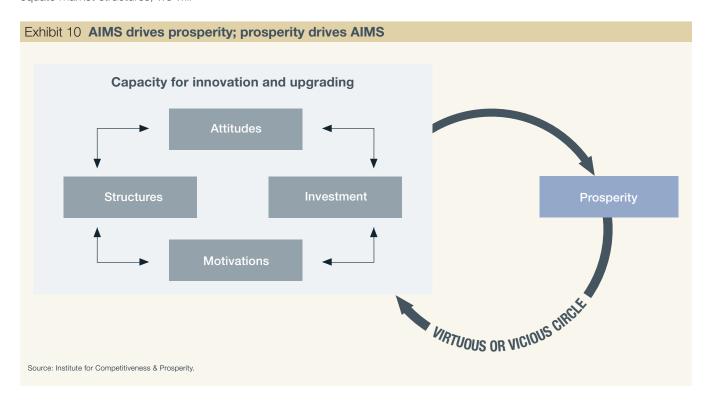
- Attitudes toward competitiveness, growth, and global excellence. Our view is that an economy's capacity for competitiveness is grounded in the attitudes of its stakeholders. To the extent that the public and business leaders believe in the importance of innovation and growth, they are more likely to take the actions to drive competitiveness and prosperity.
- Investments in education, machinery, research and development, and commercialization. As businesses, individuals, and governments invest for future prosperity they will enhance productivity and prosperity.
- Motivations for hiring, working, and upgrading as a result of tax policies and government policies and programs. Taxes that discourage investment or labour will reduce the motivations for investing and upgrading.
- Structures of markets and institutions that encourage and assist upgrading and innovation. Structures, in concert with motivations, form the environment in which attitudes are converted to actions and investments.

These four factors can create an ongoing reinforcing dynamic. When AIMS drives prosperity gains, each one of the four factors would be reinforced. In an economy of increasing prosperity, attitudes among business and government leaders and the public would be more optimistic and welcoming of global competitiveness, innovation, and risk taking. Given these positive attitudes and with the greater capacity for investment generated by prosperity, Ontarians would invest more in machinery, equipment, and software and in education. Motivations from taxation would be more positive, as governments would not see the need for raising tax rates. And greater economic prosperity would improve structures as more opportunities for specialized support were created. Then increased economic activity would drive more competitive intensity. These developments would lead to even higher prosperity, which would further strengthen each AIMS element, and so on in a virtuous circle (*Exhibit 10*).

But this AIMS-prosperity dynamic could also create a vicious circle. Unrealized prosperity potential could create pessimism and concerns about competitiveness and innovation rather than openness to them. These less positive attitudes would be less conducive to investments, and reduced prosperity would also lead to fewer investment opportunities anyway. Unrealized economic potential means tax revenues would not meet fiscal needs, leading governments to raise tax burdens, thereby de-motivating investments. And reduced economic activity would create fewer nodes of specialized support and less openness to the public policies that would result in more competitive intensity.

We are concerned that if we do not address our current challenges in our complacent attitudes, under investment, de-motivating tax burdens, and inadequate market structures, we will be on the trail to a vicious circle. We must avoid this trend and ensure we maintain our economy on the virtuous circle track.

Our 2020 Prosperity Agenda comprised elements in each of the four AIMS factors. Our agenda for the coming year does likewise.



Attitudes: Raise our sights

With raised sights, Ontarians can take control of our new economic destiny

ATTITUDES ARE AN IMPORTANT foundation for a region's competitiveness and prosperity. In our previous work, we found that Ontarians do not have a fundamentally different outlook on many aspects of competitiveness than our US counterparts in the peer states.

Ontarians have positive attitudes toward competitiveness and most elements of our Prosperity Agenda

Attitudes that lead to high aspirations, self-confidence, the desire to succeed, an entrepreneurial spirit, and creativity are important drivers of economic success.

In our First Annual Report, Closing the prosperity gap, we hypothesized that Ontarians might not possess the aspirations to succeed or the willingness to compete. To test this out, the Institute conducted attitudinal research among public and business communities. In Working Paper 4, Striking similarities: Attitudes and Ontario's prosperity gap, we concluded that attitudinal differences between the public and business in Ontario and the peer states are not significant roadblocks to closing the prosperity gap. In contrast to commonly held perceptions, we differ very little from our counterparts in how we view business and business leaders, risk and success, and competition and competitiveness.

The survey asked nearly seventy different questions to help us understand the attitudes of Ontarians and their counterparts in the peer states. On most questions, we show similar attitudes towards risk and success; and on several questions, Ontarians' responses indicated more positive attitudes towards competitiveness and innovation than their peers' answers. More generally, we found no differences in the attitudes towards risk-taking, innovation, and the importance and causes of personal success.

Overall, the survey results suggest that, across numerous dimensions, attitudes among the general business population and members of the business community in Ontario and the US are very similar. In fact, we found significant similarities in key areas that relate to innovation and upgrading and to competitiveness:

- Ontarians view business and business leaders in much the same way as the public in peer group states
- Ontarians have similar attitudes towards risk and success as their US peers
- Ontarians' attitudes towards competition and factors of competitiveness are similar to those in the US peer states
- Ontarians' willingness to take action to achieve a higher standard of living does not vary from US peer responses.

Notably, the survey did identify significant differences in attitudes towards post secondary education that affect our financial and human capital investments, as we shall see. Overall, the attitude results are heartening.

We would be quite pessimistic about our prospects for closing the prosperity gap if Ontarians did not have the will to win. Yet our research indicates that in nearly all areas we have the disposition to take the right actions for our future prosperity.

In last year's Annual Report, however, we reviewed evidence from a different perspective about Ontarians and their attitudes towards issues of competitiveness and prosperity. This survey looked at how Ontarians perceived broad issues about competitiveness and prosperity, not their own attitudes. The results showed that we are more concerned about not achieving our potential than the prosperity gap. The study, conducted in March 2006, indicated that most Ontarians reported being satisfied with their current standard of living, although only a quarter were confident that the next generation of Ontarians will be able to afford a better standard of living than we do currently.

Ontarians are not overly concerned about the prosperity gap – most see it as just one of the many problems a government faces or not a problem at

Exhibit 11 Canadians agree that many of the Competition Policy Review Panel recommendations will help Canada's competitiveness Help a lot Help a little No response / don't know Not much help No help at all % of respondents Invest more in education and training Cut taxes for middle and lower income Promote entrepreneurship among young Encourage venture capital in small companies Making cities more attractive for head offices Eliminate trade barriers within Canada Harmonize environmental assessment Trade and investment agreements with more countries Ensure new laws do not harm competitiveness Do more to stimulate intellectual property Promote young people to study business Reduce capital investment taxes Tailored immigration to employment needs Harmonize sales taxes Encourage work after 65 for those who want to Harmonize product and professional standards with US Allowing more foreign investment and competition in airlines Allowing more foreign investment and competition in telecom Harmonize Canada's business laws with US laws Reduce corporate income taxes Allowing more foreign investment and competition in banking Allowing more foreign investment and competition in broadcasting Allowing Canadian banks to merge Allowing mergers between banks and insurance companies Cutting government foreign investment review processes 75 100% 50

25

Source: Harris Decima, "Canadian Competitiveness: How Canadians Feel About Our Ability to Compete" (October 2008), available online: http://www.chamber.ca/cmslib/general/BruceAnderson.pdf

all. Yet when they are presented with facts on what the impact of the prosperity gap is, a significant percentage change their minds about the importance of the prosperity gap.

Views on taxation of business investment are ambiguous. Ontarians agree that business taxes that are too high may affect investment decisions and living standards. At the same time, they tend to think it is important that businesses pay their fair share of taxes.

Many are unwilling to shift government spending from consumption to investment. While most see the benefits of infrastructure and education investments, nearly 60 percent of Ontarians agree that spending on health care, poverty, and homelessness are priorities – even if it means that important investments have to wait.

Respondents split evenly on the benefits and threats of free trade. Slightly more Ontarians agree than disagree that free trade agreements are good way to create economic growth in Canada; yet three-quarters of survey respondents agree that too many good Canadian jobs are being lost to low-wage countries like China and India.

In summary then, it does not appear that Ontarians lack the personal DNA to embrace competition and pursue innovation. Yet few have a sense of urgency about the need to realize our prosperity potential – until they are informed about the benefits of achieving this potential. And, in early 2006, Ontarians had some difficulty with the types of recommendations made by the Institute and others: to reduce taxes on business investment, encourage investment over consumption, and pursue free trade agreements.

Recently, the Competition Policy Review Panel released its final report and called on Canadians to accept the challenge of globalization – to move from defence to offence on our competitiveness capability. The Panel called on governments, businesses, and the public to be more ambitious, to raise their sights, and to take control of their destiny in facing the issues of globalization. And it proposed that the Federal Government establish an independent Canadian Competitiveness Council with a mandate to advocate for greater competitiveness of our businesses.

The Panel made important specific recommendations to realize the vision they set out for Canadians. Most of these are consistent with the Task Force's 2020 Prosperity Agenda. But are Canadians willing to accept these recommendations?

Recently, the Canadian polling firm Harris Decima measured Canadians' reactions to twenty-five key recommendations on behalf of the Canadian Chamber of Commerce. For each of these recommendations, respondents were asked to indicate whether they thought the recommendation would "help a lot," "help a little," "not help much," or "not help at all" (Exhibit 11).

Harris Decima concluded that of the twenty-six ideas they tested, twenty-one are embraced by Canadians. The five issues that are not embraced are related to allowing greater foreign competition and ownership in banking and broadcasting and allowing mergers in the financial service sector. But on balance, more Canadians see the benefits of lower corporate taxes, reduced capital taxes, promotion of business studies for young Canadians, greater investment in education and training, and elimination of trade barriers inside Canada.

Clearly, given the attitudes of Canadians and Ontarians, many of the elements of our Prosperity Agenda would be acceptable to most Canadians. To be sure, some of the important recommendations by the Panel and us to increase competitive pressure in Canada would need more discussion among stakeholders before they would be acceptable.

We conclude that, while issues of competitiveness are not top-ofmind for most Ontarians, most are prepared to accept that they are important for our long-term prosperity. And they are very open to many of the recommendations in our 2020 Prosperity Agenda. Some of the recommendations are not accepted by a majority of Canadians, and we are prepared to engage them in discussing the merits of our proposals and considering the concerns they have. But we are encouraged that much of the Agenda is already supported by the average citizen.

Investment: Focus on people and technology

Ontarians have to step up their investment in capital and in themselves

ONTARIANS ARE NOT investing adequately for their future prosperity. This is true for investments in physical assets and people by individuals, businesses, and governments. Our future prosperity and our ability to achieve our full potential depend on the investments we make today in these areas.

We continue to urge business leaders to invest more in productivity enhancing equipment and technology. And we reinforce our call for more investment in people's education and skills.

Increase investment in machinery and equipment, particularly Information and Communication Technology

Ontario businesses continue to trail their US counterparts in investing in machinery, equipment, and software to make their workers more productive. Such investments that are made are typically allocated to information and communications technology (ICT) and to all other categories, such as transportation equipment and traditional factory equipment. ICT accounts for about a third of investment in machinery, equipment, and software. While data on these allocations are available only at the national level in Canada and the United States, we have made estimates of investments in Ontario. These results indicate our major gap is in ICT investment.

On a current dollar basis, as a percentage of GDP, Ontario businesses lag their US counterparts in traditional (non-ICT) machinery and equipment and ICT investments. The gap is wider for ICT investment as a percentage of GDP.

On a per worker basis, US businesses out invest Ontario businesses in machinery and equipment overall with the gap being larger in ICT. However, the per-worker gap has narrowed significantly since 2005 as the strengthening Canadian dollar has lowered the real costs of machinery and equipment. As much of machinery and equipment is imported, changes in the currency exchange rate match changes in purchasing power parity for machinery and equipment (even though PPP for the whole economy does not follow exchange rate changes). Consequently, the gap between Ontario and US investment per worker began to narrow slightly in 2003 and more significantly beginning in 2005. In 2007, our businesses invested 16 percent less per worker in all machinery, equipment, and software than their US counterparts; in 2003 this gap was 24 percent and in 1987, this gap was only 13 percent (Exhibit 12).

In 2007, the Ontario-US gap in ICT investment per worker was \$1,050 or 29 percent while in other machinery and equipment the gap was \$380 or 7 percent.

It is a positive step that we are gradually closing the machinery and equipment investment gap - but it appears that this is driven by relatively lower costs in Canada as our dollar has strengthened rather than a fundamental change in the investment stance of our businesses.

Closing the investment gap offers the potential for closing the prosperity gap. With higher machinery, equipment, and software investment our workforce could be more productive.

In 2006, the Institute assessed the lower adoption of ICT by Canadian businesses, particularly small and medium enterprises.²⁶ The research we reviewed indicated that investment in ICT enhances productivity at three levels. At the most basic level, research by OECD and others indicates that equipping staff with computers and software increases firm and national productivity. At the

Capital Stock Trends: Canada vs United States, available online: http://www.csls.ca/data/ict.asp

second level, connecting computers in networks and drawing on more technologies can drive productivity even higher. But the most significant benefit of ICT adoption can be that it enables profound transformation of businesses through changes in business processes or organizational design or both.

We concluded that the lack of investment in ICT could be attributed to factors we have identified in previous annual reports - lack of competitive pressure to spur Canadian businesses to adopt technology, less adequate management capabilities to discern the benefits of technology and to capitalize on them, and higher taxation on business investment.

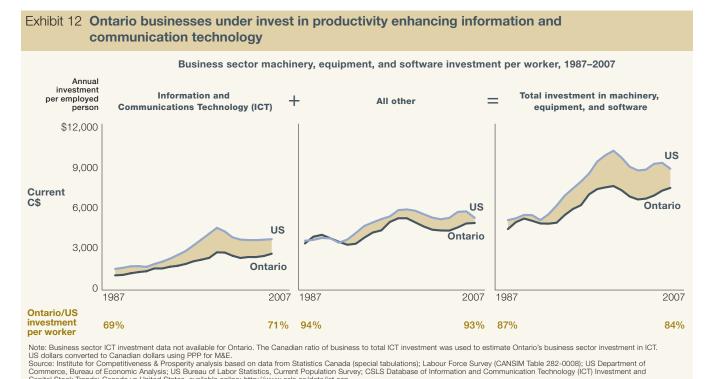
Raise our investment in people

Since our First Annual Report, we have been urging stakeholders in

Ontario's prosperity to increase our investment in education. We also see the need to keep our young people in school to achieve higher levels of skills and accreditation and to bring more Ontarians into higher earnings streams.

Rebalance education/health care spending

In past reports, we have expressed our concern that governments in Ontario have been trading off necessary investments in education to fund health care. As we compare our current public spending patterns in Ontario with those in the previous decade and in the United States, we find that we are falling behind in education. As recently as 1992, all levels of government in the province spent \$2,400 per capita on education (in 2007 dollars) – 6.8 percent more than we spent on health care (Exhibit 13).



28 Roger Martin and James Milway, Enhancing the Productivity of Small and Medium Enterprises through Greater Adoption of Information and Communication Technology, Information and Communication Technology Council, Ottawa, March 2007, available online: http://www.ictc-ctic.ca/uploadedFiles/Labour_Market_Intelligence/Enhancing-the-Productivity-of-SMEs.pdf

But, as governments tackled deficits, they cut real per capita spending on education at a much faster rate than that on health care spending. By 1999, governments were spending more on health care than on education. This gap widened considerably as health care spending per capita increased at an annual trend-line real rate of 4.9 percent between 1999 and 2007, while education spending increased only 1.9 percent annually. Last year, per capita public spending on health care outpaced spending on education by 24.3 percent - a significant reversal over the decade. At the same time, spending by governments in the United States grew at about the same rates for health care and education.

It is encouraging to note that public spending on education in Ontario has turned up in recent years, led by the investments of the Ontario Government in post secondary education. While constant

dollar per capita public investments in education increased slightly at a rate of 0.8 percent annually between 1997 and 2003, this annual growth rate increased to 3.4 percent between 2003 and 2007. In the United States, the annual growth in constant dollar public expenditure on education was 2.5 percent between 2003 and 2006. Still, much remains to be done, as the gap to be closed remains considerable.

Continue to address the challenge of high school dropouts

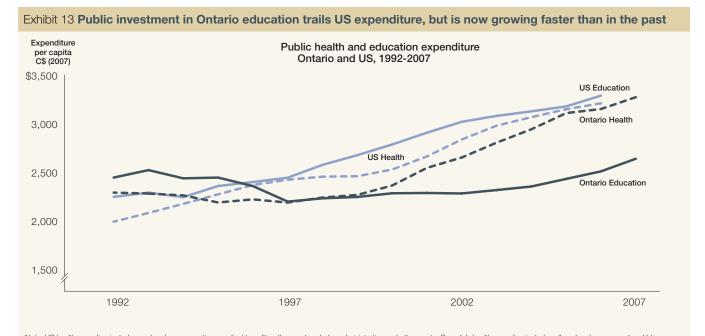
In our research, the Institute has identified the relationship of failure to complete high school and poverty. This is in addition to previous evidence of the consequences of low educational attainment. As we have shown in previous reports, high school dropouts trail the population considerably in literacy, numeracy, and problem-solving skills. They are much less likely to find full-time work and more likely to be working part

time involuntarily. Their hourly wages trail those with a high school diploma. They are much more likely to be low income earners and be at the bottom of income distribution.²⁷

Continue to focus on apprenticeships

One area of hope for potential high school dropouts – and many others – is in the skilled trades. The evidence indicates that high school dropouts who successfully gain trade certification improve their economic outcomes. For somebody who has not completed high school, securing a trade certificate adds about 20 percent to his or her annual income. In fact, these individuals out earn high school graduates without a trade certificate.²⁸

The returns from a trade certificate (versus dropping out of high school) are higher for men than for women. For women, the returns from university



Note: US health spending includes workers' compensation, medical benefit outlays and excludes administrative and other costs; Canada's health spending includes all workers' compensation. Values deflated using appropriate state and provincial deflators. US dollars converted to Canadian dollars at PPP.

Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada, Consolidated Government Revenue and Expenditures (CANSIM Table 385-0001); US Census Bureau, State and Local Government Finances; Office of Management and Budget, Historical Tables; National Academy of Social Insurance, Workers' Compensation: Benefits, Coverage, and Costs, multiple years.

²⁷ Institute for Competitiveness & Prosperity, Working Paper 10, *Prosperity, inequality, and poverty*, September 2007, pp. 29-31.

²⁸ *Ibid.*, p. 31.

education are higher than for men. This may explain why more women and fewer men are currently attending university.

In a knowledge economy, it is almost certain that those without a base level of skills will be left behind. We are seeing that now. The public policy imperative is to find ways to encourage (even coerce - as in Ontario now) youth to complete their high school diploma. We need creative ways to help students complete their high school studies. We need to make a concerted effort to strengthen apprenticeship programs, including creatively addressing the economic challenge of ensuring the benefits and costs are borne by the same people and are not subject to the problems of free riders and poaching.

Raise awareness of the benefits of post secondary education

Our research into inequality and poverty indicates yet again the importance of education, not only for Ontario's competitiveness and prosperity overall, but also as a way to assist the disadvantaged move into the economic mainstream.

As we have pointed out in the past, more education means higher labour force involvement and higher earnings.²⁹ Yet the evidence indicates that students from lower income families are less likely to receive post secondary education, particularly at a university.³⁰ Other factors, partly related to family income, like parents' educational attainment, achievement in high school, and quality of high school also drive the likelihood of post secondary attendance.³¹

Lack of information on the costs and benefits of post secondary education is also an important barrier. According to polling data gathered by the Canada Millennium Scholarship Foundation, Canadians whose family income is below \$30,000 tend to over estimate the cost of annual undergraduate university tuition compared with the cost estimates of more affluent families. Lower income Canadians also under estimate the earning potential of the average university graduate - more so than others. This lack of information, along with other characteristics, may explain why students receiving aid to attend post secondary institutions are less likely to complete their degree than those who receive no aid.32

Increase investment in post secondary education, particularly in improving the student experience

As we have pointed out in the past, Ontarians under invest in university education relative to their counterparts in peer states. 33 Some might argue that comparing private universities to our public universities is invalid. We think, however, it is appropriate to include private universities, because these schools are part of the post secondary education system and account for fully 32 percent of US undergraduates. To benchmark Ontario's investment in human capital for future competitiveness, we need to look at all post secondary students.

On a positive note, we were pleased that the Ontario Government in its 2005 budget stepped up its commitment to post secondary education. Over five fiscal years, annual operating grants

are growing by \$6.2 billion – beginning with an increase of \$683 million in the 2005–06 fiscal year and rising to \$1.6 billion in 2009–10. This represents a 39 percent increase over the 2004–05 funding base.

One of the goals of the higher funding will be an increase in graduate education spaces by 12,000 in 2007–08 over 2002–03 and 14,000 by 2009–10. In addition, the 2005 budget committed the provincial government to increase funding for student financial assistance and for training, apprenticeship, and other initiatives.

As an indication of the strength of Ontario's research universities, eight were ranked in the world's top 500 research universities by Shanghai Jiao Tong university in 2008.³⁴ In per capita performance among the sixteen peer states and provinces, Ontario stood second behind Massachusetts. While these rankings are by no means definitive, they do indicate the relative strength of Ontario's universities in the field of natural and social science research.

A priority for enhanced funding needs to be enhancing the student experience. In 2006, Ontario's universities participated in the national survey of student engagement (NSSE), a US-based survey that measures students' experiences in their universities.

The results indicate that Ontario universities compare favourably with their US peers in providing a solid academic challenge to their students. But in other areas – enriching educational

²⁹ Institute for Competitiveness & Prosperity, Report on Canada 2007, *Agenda for Canada's prosperity*, March 2007, p. 33. See Thomas Lemieux, Craig Riddell, and Brahim Boudarbat 2003, "Recent Trends in Wage Inequality and the Wage Structure in Canada," in D. Green and J. Kesselman (eds.), *Dimensions of Inequality in Canada*. Vancouver: UBC Press, 2006, pp. 1-46 – for evidence on the growth in returns to post secondary education in Canada between 1980 and 2000.

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Solution Lavallée, Bert Pereboom, and Christiane Grignon, 2001, "Access to Postsecondary Education and Labour Market Transition of Postsecondary Students," Canada student Loan program, HRDC, Mirneo; and Marc Frenette, "Why are youth from lower-income families less likely to attend university? Evidence from academic abilities, parental influences and financial constraints," Statistics Canada Working Paper 11f0019mie – no. 295, February 2007, p. 7.

³¹ Atiq Rahman, Jerry Situ, and Vicki Jimmo, "Participation in postsecondary education: Evidence from the Survey of Labour and Income Dynamics," Statistics Canada Working Paper 81-595-mie2005036.

22 Canada Millennium Scholarship Foundation, "Low-income Canadians' perceptions of costs and benefits – a serious barrier to higher education," Mimeo, 2004, available online: www.

millenniumscholarships.ca/en

33 Task Force on Competitiveness, Productivity and Economic Progress, Annual Report, Investing for prosperity, November 2003, p. 21; Third Annual Report, Realizing our prosperity potential, November

^{2004,} p. 24; Fifth Annual Report, Agenda for our prosperity, November 2006, pp. 37-39.

³⁴ Rankings are available online: http://www.arwu.org/rank2008/en2008.htm

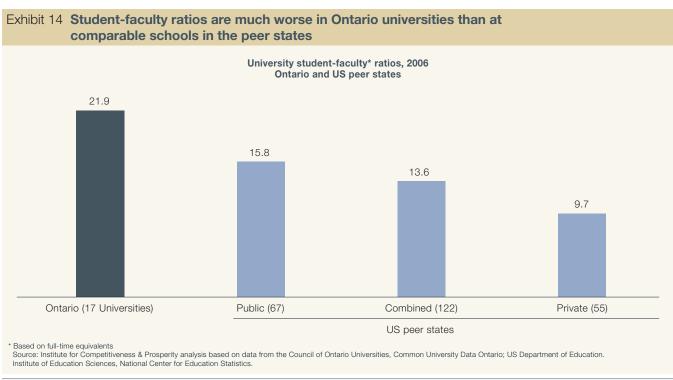
experiences, active and collaborative learning, and student-faculty interactions – our students are less positive about their experiences. Typically, our universities are in the bottom third of ratings in these factors.³⁵

One of the factors that likely drive these ratings is the differences in studentfaculty ratios. The Institute calculated these ratios for each Ontario university and the most similar institutions in the fourteen peer states. On average, student faculty ratios are 39 percent higher in Ontario than in their US public peers and more than twice as high as in private peers (Exhibit 14). Taking an average of the US student-faculty ratios (based on public and private universities' share of enrolment), we see that the ratio is 62 percent higher in Ontario than in a comparable set of universities in the peer states. We think university administrators, leaders in public policy, and the

research community should investigate this issue further to ensure that we are striking the right balance in research and teaching in Ontario's universities. It is possible that in gradually increasing the student-teacher ratio over time, we have failed to recognize the impact on student experience.

We should celebrate Ontario's prowess in higher education research; we need to ensure we are as focused on the quality of our students' experiences.

Investment in assets like machinery and technology and in our own skills and knowledge is a critical driver of increased productivity, and productivity growth is necessary if we are to realize our full prosperity potential. Ontarians need to step up our investments.



³⁵ This varies by university. Specific results can be found by accessing the Council of Ontario Universities Web site http://www.cou.on.ca/_bin/relatedSites/cudo.cfm and linking to each school's NSSE results

Motivations: Innovate to achieve smart tax policies

Eliminate unwise taxation that hinders prosperity growth and consider smarter, innovative tax approaches

TAXES ON NEW BUSINESS INVESTMENT in

Ontario are among the highest across developed economies. To raise our competitiveness and prosperity, Ontario needs to pursue tax reform as a high priority.

Lower taxes on new business investment

Business investments in machinery and equipment, including those in advanced information and communication technology, have been shown to be important contributors to productivity and prosperity. ³⁶ As we have seen, Ontario under invests in this productivity enhancing capital, and this contributes to our prosperity gap. Addressing Ontario's high taxation of new business investment is an important step to improving this weakness.

Taxes on new investment hurt prosperity

Tax revenues are necessary for making public investments, delivering government services, and achieving a more equitable distribution of income. All advanced economies tax business investment through some combination of corporate income taxes, sales taxes on capital goods, and taxes on capital assets. But these taxes, like all taxes, can motivate behaviours that work against competitiveness and prosperity. The challenge is to ensure that the

negative economic impact of specific taxes does not outweigh their benefits. Specifically, Ontario incurs multiple economic costs associated with taxes on new business investment:

- Finance Canada's research has shown that relative to taxes on consumption, taxes on business investment work against the average Canadian's prosperity and economic well being. Reducing corporate capital taxes and income taxes would also be beneficial to the average Ontarian more so than reductions in the GST. This paradoxical result comes about because shifting taxation from business expenditure to consumption expenditure will increase the motivation for business to invest, which in turn drives up wages and job creation.
- A study by UK economists Wiji Arulampalan, Michael Devereux, and Giorgia Maffini³⁷ concluded that most corporate taxes are borne by workers. Firms are able to pass on a significant portion of the additional costs of corporate taxation to their employees in the form of lower wages. In the long run, the researchers found that more than 100 percent of corporate taxes are borne by workers through the negative impact of lower investment in productivity- and wage-enhancing investments in machinery, equipment, and software.

³⁶ See Roger Martin and James Milway, Enhancing the Productivity of Small and Medium Enterprises through Greater Adoption of Information and Communication Technology, and Andrew Sharpe, "The Relationship between ICT Investment and Productivity in the Canadian economy: A Review of the Evidence," Centre for the Study of Living Standards, December 2006, pp. 46-68.

³⁷ Wiji Arulampalam, Michael P. Devereux, and Giorgia Maffini, "The Incidence of Corporate Income tax on Wages," Oxford University Centre for Business Taxation, Oxford, WP 07/07, April 2007.

- More recently and closer to home, research by federal Department of Finance economists Aled ab lowerth and Jeff Danforth³⁸ suggests that a 10 percent reduction in the cost of capital (which is the effect of a reduction in marginal tax rates on business investment) can increase investment in machinery and equipment by 10 percent in Canada.
- Research conducted in Ontario by the Institute found that eliminating the sales tax on capital goods, eliminating the corporate capital tax, and increasing the capital cost allowances on new investments in machinery and equipment had positive effects on GDP, net of lost tax revenue.39
- · Recently the federal Department of Finance released a report on research it had conducted on the impact on business investment of general

corporate income tax reductions implemented over the 2001-2004 period.40 Using two different statistical methods, the study concluded that a 10 percent reduction in the cost of capital from a tax reduction led to an increase in the stock of capital investment by 3 percent in the year of the tax reduction to 7 percent over a five-year period. These results are within the range found in other studies in Canada and the United States.

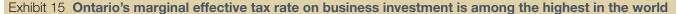
Ontario is a high tax jurisdiction in new business investment

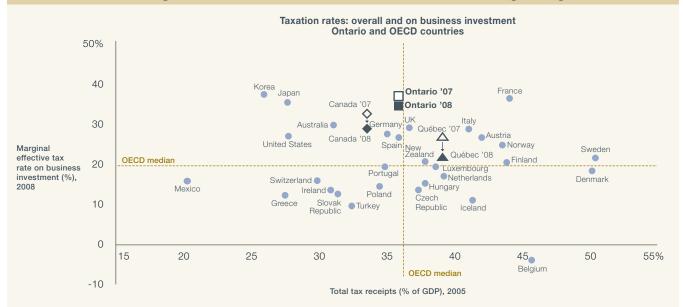
The latest research by Duanjie Chen and Jack Mintz indicates that Ontario is still one of the higher tax jurisdictions among developed economies.41 Chen and Mintz calculate tax rates on new business investment by determining the tax paid by businesses on a new dollar of investment. They include corporate income taxes on the profits generated

by the new investment, applicable sales taxes on the capital goods as they are purchased, and taxes on the capital assets once in place, where such capital taxes exist.

On the positive side, Ontario's taxation of new business investment fell in 2008 primarily as a result of the reduction in federal corporate income tax rates (from 22.1 percent in 2007 to 19.5 percent in 2008) announced in the October 2007 economic update. Still, Ontario remains one of the highest taxing jurisdictions for new business investment, combining a relatively high corporate income tax, a capital tax in service industries, and a sales tax on capital goods (Exhibit 15).

For 2008, Canada's marginal effective tax rate on business investment is 29.1 percent. That is, each new dollar of investment in Canada is taxed at 29.1 cents. This compares unfavourably





Source: Institute for Competitiveness & Prosperity analysis based on data from OECD, OECD Revenue Statistics 1965-2005, 2006 edition; Statistics Canada, Provincial Econo mic Accounts (CANSIM Table 384-0002 and Table 384-0004); Duanjie Chen and Jack Mintz, "Still a Wallflower: The 2008 Report on Canada's International Tax Competitiveness" C.D. Howe Institute e-brief September 2008, available online: http://www.cdhowe.org/pdf/ebrief_63_pdf and "Limited Horizons: The 2008 Report on Federal and Provincial Budgetary Tax Policies," C.D. Howe Institute Commentary 270, July 2008, available online: http://www.cdhowe.org/pdf/commentary_270.pdf

³⁸ Aled ab lowerth and Jeff Danforth, "Is Investment not Sensitive to its User Cost? The Macro Evidence Revisited," Department of Finance, Working Paper 2004-05. Ottawa.

³⁹ Institute for Competitiveness & Prosperity, Working Paper 7, *Taxing smarter for prosperity*, pp. 43–49.

40 "Corporate Income Taxes and Investment: Evidence for the 2001-2004 Rate Reductions," Tax Expenditures and Evaluations 2007, Department of Finance Canada, 2008, pp. 40–56, available online: http://www.fin.gc.ca/toce/2007/taxexp07_e.html

⁴¹ Duanjie Chen and Jack Mintz, "Limited Horizons: The 2008 Report on Federal and Provincial Budgetary Tax Policies," C.D. Howe Institute Commentary, No. 270, July 2008.

with the rates in most other developed economies; the median rate among OECD countries is 19.6 percent in 2008. The Ontario comparison with OECD countries is even worse; its marginal effective tax rate is 34.8 percent (although as we shall see the rate varies considerably between manufacturing and service industries). The Ontario Government did little in 2008 to reduce the tax rate on new business investment in the province, other than extending accelerated capital cost allowances for manufacturing and processing machinery and equipment investments made before 2012. In its March budget, the province introduced a ten-year corporate income tax holiday for new corporations commercializing intellectual property developed by qualifying Canadian universities, colleges or research institutes. Research has shown that such tax holidays have little impact on attracting new investment⁴² and the logic of providing the tax holiday for new corporations only is slim.

Marginal tax rates on business investment are slightly higher in Ontario than those in the United States, which benefited from a 50 percent bonus depreciation in 2008. Currently, our tax system in Canada and Ontario is not a significant liability against the United States; it could become one if the United States ever did address its own unwise tax system by bringing down tax rates on new business investment.

Provincial retail sales taxes increase investment tax burden

While the common perception may be that the provincial sales taxes (in the provinces where they still exist) are levied mostly on retail purchases by the public, more than 40 percent of their revenues are estimated to come from

purchases by businesses, including capital investments.⁴³ The tax paid on these business costs are ultimately borne by consumers as part of the final price they pay.⁴⁴

A value added tax, like the federal GST, is paid by the end consumer of a good or service. Businesses pay the GST as they make purchases or investments, but these are reimbursed as they sell their output. In effect, a value added tax is similar to the retail sales tax in that the end consumer ultimately pays – but much of the retail sales tax (paid by upstream producers) is buried in the price. The major difference between the value added and retail taxes is that retail sales taxes add to the marginal federal tax for new business investment.

Tax experts Jack Mintz and Duanjie Chen attribute one-quarter of Canada's marginal effective tax rate on new business investment to provincial retail sales taxes (in Ontario, British Columbia, Manitoba, Saskatchewan, and Prince Edward Island). ⁴⁵ And, according to recent work done by economists Peter Dungan, Jack Mintz, Finn Poschmann, and Tom Wilson for the C.D. Howe Institute, eliminating Ontario's provincial sales tax would increase the stock of capital investment in the province by 9 percent or \$36 billion. ⁴⁶

To be sure, switching to a value added tax could reduce provincial revenues, but the authors suggest this could be offset by some implementation approaches and a possible transfer of revenue from the federal government. In addition, their economic simulations suggest the potential for adverse effects for lower income Ontarians. These could be offset by an increase in refundable Ontario sales tax credits.

Because value added taxes are more conducive to business investment – which in turn improves productivity, creates jobs, and increases wages – most economists conclude that they are a much smarter tax than retail sales taxes. The Federal Government's decision to cut Canada's GST from 7 percent to 5 percent was a mistake.

Ontario can ease the harm of this policy by converting its provincial retail sales tax to a value added tax and harmonizing its collection with the GST – as is currently done by three Atlantic provinces and by Québec. Our own research shows that this change would have the most beneficial impact (net of lost provincial revenues) on Ontario's investment, employment, and prosperity of the various measures we assessed in our Working Paper, *Taxing smarter for prosperity*. ⁴⁷ Dungan *et al.* reached the same conclusion. ⁴⁸

Taxes are much higher on new business investment on services than on manufacturing

An unfortunate part of Canada's and Ontario's tax systems is the dramatically different treatment afforded to manufacturers versus firms in the service sector. In its 2007 budget, the Federal Government introduced accelerated depreciation for manufacturers only, thus widening our already high gap between taxation on investment by manufacturers versus services, such as financial services, transportation, construction, and communications. In its 2008 budget, Ontario eliminated its capital taxes – but only for manufacturers.

Ontario's marginal effective tax rate on new investments in manufacturing fell to 24.2 percent in 2008 from 26.0 in 2007 making our rate in the province the

⁴² Jack Mintz. "Tax Holidavs and Investment" in Shah. Anwar. ed. Fiscal Incentives for Investment and Innovation. Oxford University Press, 1995, pp. 165-194.

⁴³ Michael Smart, "Lessons in Harmony," C.D. Howe Institute Commentary, no. 253, July 2007, p. 6.

⁴ *Ibid.*, p. 2.

Language Chen and Jack Mintz, "Assessing Ontario's Fiscal Competitiveness," available online: www.competeprosper.ca/images/uploads/ChenMintzreport_251103.pdf

⁴⁶ Peter Dungan, Jack Mintz, Finn Poschmann, and Tom Wilson, Growth Oriented Sales Tax Reform for Ontario, C.D. Howe Institute Commentary No. 273, September 2008, p. 4.

⁴⁷ Working Paper 7, *Taxing smarter for prosperity*, March 2005.

⁴⁸ Dungan et al., op. cit.

Consider a revenue neutral tax on carbon emissions

any stakeholders agree that reducing Green House Gases (GHG) is an important priority and that carbon emissions are a leading contributor to GHG emissions. But it is clear that government policies to date have done little to achieve reductions and to move toward achieving previous targets for reducing emissions and the Kyoto target for Canada will not be achieved (Exhibit A).

Over the past two decades, public policy has focused on providing information and subsidies to effect reductions in emissions. Economic theory and our experience here in Canada indicate that such approaches will not work. Unless producers and consumers of carbonbased fuels face the direct economic effects of their use of these fuels, their behaviour will not change.^A

Some of the subsidies offered by the Federal Government are nowhere near being cost-effective solutions to reducing greenhouse gases. The most egregious example is probably the Public Transit Tax Credit established by the Federal Government in its 2006 budget. Public transit riders receive a tax credit worth about \$150 annually. The bulk of recipients of this tax credit are already transit riders, and it is unlikely to attract significantly many car drivers to public transit. Economists Marc Jaccard and Nic Rivers estimate that the annual cost in lost tax revenue exceeds \$100 million and that the net reductions in GHG emissions are 145,000 tonnes annually. Thus they conclude that the reduction in GHG emissions, through the tax credit, costs more than \$1,000 per megatonne.^B

Their analysis of the Federal Government's strategy for reducing GHGs indicates that it will not likely achieve the reduction targets it has set out. As the National Round Table on the Environment and the Economy has concluded from its research, "a strong economy-wide price signal is required regardless of the pathway – to get at the substantial Green House Gas (GHG) Emissions contemplated for 2050."C But there is not a solid consensus on the best way to achieve this. The two leading alternatives for a market-based mechanism are a cap-and-trade system and a carbon tax.

A cap-and-trade system is a conceptually sound approach to reducing GHG emissions

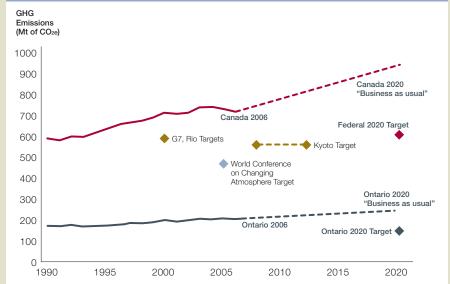
This system begins with the establishment of the emission levels we desire. For example, Canada's Kyoto commitment is to reach an annual emission level of 558 megatonnes (Mt) by 2012. Starting with the 2006 level of 727 Mt, the Government of Canada could set a schedule of annual permissible emissions to achieve this result. It would then implement a system in which existing emitters are issued permits for specific amounts of emissions. These permits could then be traded throughout the economy. Those who were unable to reduce their emissions could purchase permits from others. This would provide economic incentives to polluters to reduce this activity; those emitters who could not or would not meet their permit level would pay higher costs.

Proponents of this system point to the success of a similar approach in the United States to reducing sulphur emissions that were causing acid rain in the 1970s. However, there are some significant differences. The sulphur permit program focused on a single sector - coal-fired utilities and plants - which originally numbered only 110, growing eventually to 445. A carbonbased cap-and-trade system would need to cover many more establishments and potentially all households - to be effective. Sulphur producers had many ways to reduce their emissions, such as installing scrubbers, using low-sulphur coal, and switching to natural gas. Carbon emitters face fewer substitution options.

An important feature of a cap-andtrade system is that it allows society to set target quantities of emissions, which is, after all, the important consideration in this issue. However, permit prices per tonne cannot be determined in advance and can vary considerably over time. The sulphur cap-and-trade experience showed great price volatility, ranging from US\$66 per ton in 1997 to \$860 in 2006. Annual price changes were as high as 43 percent. D

Another challenge to cap-and-trade is the practical problem of establishing initial allowances and tracking changes

Exhibit A Meeting Green House Gas emission targets has been a challenge



Source: Institute of Competitiveness & Prosperity analysis based on data from Government of Canada (2008), "Turning the Corner; Detailed Emissions and Economic Modelling," Ottawa: Environment Canada, available online: http://www.ec.gc.ca/doc/virage-corner/
2008-03/571/tdm_toc_eng.htm; Government of Ontario (2007), "Ontario Greenhouse Gas Emissions Targets: A Technical Brief,"
Toronto: Ministry of Environment, available online: http://www.ec.gc.ca/doc/virage-corner/
2008-03/571/tdm_toc_eng.htm; Government of Ontario (2007), "Ontario Greenhouse Gas Emissions Targets: A Technical Brief,"
Toronto: Ministry of Environment, available online: http://www.ec.gc.ca/doc/virage-corner/
(2007), "Estimating the Effect of the Canadian Government's 2006-2007 Greenhouse Gas Policies," C.D. Howe Institute.

A Mark Jaccard and Nic Rivers, "Estimating the Effect of the Canadian Government's 2006-2007 Greenhouse Gas Polices," C.D. Howe Institute Working Paper, June 2007.

C National Round Table on the Environment and the Economy, Getting to 2050: Canada Transition to a Low-Emission Future, 2007, p.16.
Greene, Hayward, and Hassett, "Climate change: Caps vs Taxes," p.2.

over time. Each industry sector will have arguments for why they require special treatment. The forest products industry will be able to argue that it should receive credits for the carbon reducing benefit of the trees it plants. Manufacturers will want credits for their product innovations that allow reduce carbon emissions.^E There will be arguments based on regional considerations

Finally, a cap-and-trade system would require a totally new system for allocating permits and for setting trading prices. This could be a very costly venture, especially if public sentiment were to turn against a cap-and-trade system, and it needed to be dismantled.

The current approach by the Federal Government is to apply a cap-and-trade system among large emitters. F Ontario has signed an agreement in principle with Quebec to pursue a cap-and-trade system, although few details have been announced.

A cap-and-trade system can be part of the solution to GHGs. It is a marketbased approach that will drive behaviours to reduce GHG emissions. And through auctioning of permits, it can raise revenue for governments, which can offset other taxes. G But much more work is required to develop a practical system that is not overly complex and ripe for granting special favours to specific industries and regions.

A carbon tax is a simpler approach to reducing GHG emissions

Most political observers believe that the latest federal election has ended the possibility of a system of taxing carbon emissions in Canada. That is a shame, because such a system has the potential of reducing carbon emissions and improving the efficiency of our tax system. Many observers would consider this a double dividend.H

A carbon tax is simple

A tax on carbon emissions could be levied on all fuels, including oil, natural gas, and coal depending on how much carbon each fuel emits in use. The tax would be passed on to fuel consumers like other operating costs.

A carbon tax eliminates the need to determine how the initial allocation of permits is determined or to set myriad trading and accounting rules. Unlike the cap-and-trade approach, a carbon tax can be easily reversed if circumstances change.

Most important, a carbon tax delivers exactly the right incentives to reduce GHG emissions. Users of GHGs will pay for every unit they emit to the atmosphere, whether they are automobile drivers, residents heating their houses, or factories using energy. All will have incentives to reduce their carbon usage. Scientists, engineers, and entrepreneurs will look for new ways to develop alternatives that reduce carbon usage.

The carbon tax has two disadvantages. First, while it creates certainty on the price of emissions, it does not allow us to know the level of GHGs we will achieve at various tax rates. Governments may need to vary the tax rate, depending on its real-world impact on emissions. Second, it could be very expensive to consumers. In the Green Shift program, the Liberal Party proposed a tax rate of \$40/tonne phased in over four years. This reflected the value of the current federal gasoline tax; so the Green Shift would have had no impact on gasoline prices. Consistent with calculations done by Jack Mintz and Nancy Olewiler for the think tank, Sustainable Prosperity, J the new revenue raised by the carbon tax would reach about \$15 billion annually. Further increases beyond Year 4 would reflect the true social costs of pollution.

By 2045, according to the National Round Table on the Environment and the Economy, rates per tonne would need to be as high as \$160 to \$300, depending on how quickly and how deeply we want to cut emissions. K Closer in, by 2020 if we want to achieve Kyoto emissions of 558 MT, its calculations indicate that we will need a \$150/tonne carbon tax. This equates roughly to 36 cents/litre of gasoline, or 26 cents more than the current excise tax.

A carbon tax has potential to increase tax system efficiency

At \$150/tonne, the carbon tax would generate \$83 billion in new revenue to governments, about 17 percent of current federal and provincial revenues. La This is more than Canadian governments raise through corporate income taxes or payroll taxes.

In Ontario, target reductions are not as severe as national reductions. Consequently, a provincial carbon tax would not be as high as what has been considered at the federal level. More Ontario-specific economic and financial analysis is required.

A carbon tax can and should be revenue neutral. Because of the government revenue it raises, a carbon tax provides the opportunity to lower taxes on business investment and on personal income. Given the distorting impact of these existing taxes, a carbon tax may actually improve the efficiency of our tax system, the second part of the "double dividend." But this has not yet been shown to be the case. Work done by M.K. Jarrard and Associates and EnviroEconomics for the David Suzuki Foundation indicates that implementing a carbon tax of \$150/tonne nationally and reducing other taxes could actually reduce GDP by 0.8 to 1.2 percent.^M

Clearly, there is much more analysis required to determine the best marketbased solutions to reducing GHGs. But the carbon tax and a cap-and-trade system, show the most promise for achieving reductions effectively and efficiently. Despite the results of the latest federal election, we urge policy makers not to abandon initiatives to tax carbon emissions.

Government of Canada, "Turning the Corner: Regulatory Framework for Industrial Greenhouse Gas Emissions." Ottawa: Environment Canada, available online: http://www.ec.gc.ca/doc/virage-corner/2008-03/pdf/COM-541_Framework.pdf

[©] See for example Pew Center on Global Climate Change, "Cap and Trade," Climate Change 101: Understanding and Responding to Global Climate Change, Arlington, Va.,

available online: www.pewclimate.org

H Kenneth P. Greene, Steven F. Hayward, and Kevin A. Hassett, "Climate Change: Caps vs. Taxes," Environmental Policy Outlook, No. 2, June 2007, American Enterprise Institute for Public Policy Research, p.10.

Although the Quebec Government is insisting that its carbon royalty on fuel would not be passed on to consumers

Jack Mintz and Nancy Olewiler, Bettering the Environment and the Economy: Restructuring the Federal Fuel Excise Tax, Sustainable Prosperity, 2008.

K National Round Table on the Environment and the Economy, Getting to 2050, p. 17.
 L M. K. Jaccard and Associates and EnviroEconomics, Pricing Carbon: Saving Green, David Suzuki Foundation, 2008, pp. 28.

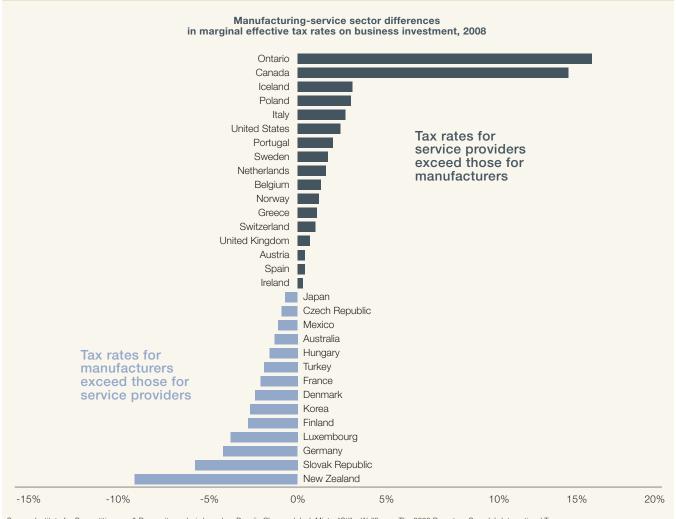
[™] Ibid., p.23. This range excludes an estimate of 2.0 percent in an extreme case.

12th highest among OECD countries. At the same time, the marginal effective tax rate on investments by businesses in the services sector in Ontario stood at 40.8 percent in 2008, down slightly from 42.4 percent in 2007 – the highest among OECD countries

By adding these distortions onto a tax system already severely tilted against service industries, our governments have made Canada and Ontario significant outliers in how we differentiate our tax treatment of manufacturers and service providers (*Exhibit 16*). No other jurisdiction even comes close.

Manufacturing is obviously important to Canada's economic strength. But it is not so important that we should be taxing investment in our service industries at a rate that is 50 percent higher than that in manufacturing. Services include some of the most dynamic sectors of our economy, and many pay high wages. Global competition of tradeable services is increasing. Services, such as business services, financial services, transportation, and hospitality and entertainment, are among Canada's largest clusters of traded industries.⁴⁹ Governments ought to be much more even handed in their

Exhibit 16 No other developed economy favours manufacturing over services through its tax system like Canada and Ontario



Source: Institute for Competitiveness & Prosperity analysis based on Duanjie Chen and Jack Mintz, "Still a Wallflower: The 2008 Report on Canada's International Tax Competitiveness" C.D. Howe Institute, September 2008; Ontario data provided by Duanjie Chen.

 $^{^{\}rm 49}$ Cluster employment data available online: www.competeprosper.ca/index.php/clusters/data

taxation of all business investment – relying on entrepreneurs and competitive businesses, not preferential tax rates, to drive investment decisions.

Eliminate special tax treatment for Labour Sponsored Funds

In our previous reports, we have urged the Ontario Government to scrap the special tax treatments for Labour Sponsored Investment Funds (LSIF). We continue to conclude that Ontario's and Canada's key challenge for venture capital is the quality of investments we are making. The special tax treatment for LSIFs attracts smaller investors to venture capital and reduces the pressure for venture capital managers to perform well.

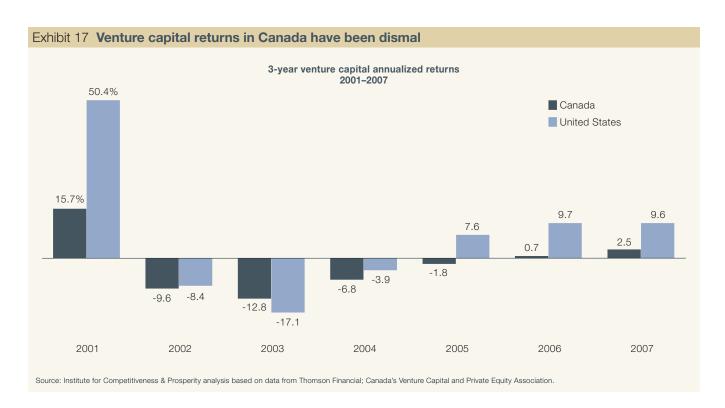
Latest return information for 2007 indicates that the average venture capital fund achieved a three-year return

of 2.5 percent versus 9.6 percent in the United States. This marks the sixth of seven years since 2001 that returns in Canada have trailed those in the United States (*Exhibit 17*). Not since 2001 has Canadian venture capital achieved higher returns than risk-free treasury bills.

In 2005, the Ontario Government announced the elimination of the special tax treatment for LSIFs. Yet it has been extending the life of special tax treatment, and in its fall 2007 economic outlook it announced that it will extend the LSIF tax credit one more year to 2011. The current 15 percent credit will now continue until 2009 before the credit is reduced 5 percent each year, vanishing entirely for the 2012 tax year. The government is also boosting the amount that can be invested in an LSIF and qualify for the tax credit to \$7,500 from the current \$5,000.

Much of what we have been recommending to achieve smarter taxation in Ontario is being proposed for discussion by the New Brunswick provincial government. (See New Brunswick tax policy shows the way forward)

Ontario taxes on new business investment are among the highest in the world, especially in the services sector. Reducing these taxes is key to increasing our competitiveness and prosperity. To fund broader reductions in taxes on business investment, eliminating the special tax treatment for LSIFs is a first excellent step. Ontario should also assess the benefit of a carbon tax for reducing GHGs.



New Brunswick tax proposals show the way forward

All eyes should be on New Brunswick as it considers bold reforms of its tax system, many of which are consistent with what the Task Force has called for in Ontario and more broadly across Canada.

In June 2008, New Brunswick's provincial government issued a discussion paper proposing a series of tax reforms. The stated primary objectives of the paper are to "ensure New Brunswickers can keep even more of their hard-earned dollars to save and invest," and to "make the province more attractive for business, investment and people by establishing a tax structure that is more competitive globally, resulting in job creation, income generation, and a bright future for New Brunswickers." Highlights of the discussion follow.

An over-arching goal of the reforms is to make the province "self-sufficient" by 2026, with more reliance on its own revenues and less dependence on federal equalization payments. This is a significant aspiration, as New Brunswick is set to receive \$1.58 billion in federal equalization payments in the 2008–2009 fiscal year. This accounts for 24 percent of the province's gross ordinary income. To realize this transformation, the province is aiming to reduce its reliance on income taxes, while raising a greater share of revenue through consumption

A simplified personal income tax structure would have a flat tax of 10 percent or two tax rates of 9 and 12 percent. This would replace the current four-bracket tax rate structure. Under the flat tax system, New Brunswick would be tied with Alberta for the lowest top marginal income tax rate (10 percent) of all the provinces. Under the two-rate system, New Brunswick would be in second place, with a top rate of 12 percent.

The 10 percent flat tax option includes basic personal and spousal exemptions of \$12,000 each. The exemptions are clawed back at a rate of 3 percent for incomes above \$35,000, so the basic personal exemption would be fully phased out at \$75,000, and both basic and spousal exemptions would be phased out when income reaches \$115,000.

Under the two-rate option, the 12 percent tax rate would start at \$35,000 of taxable income.

More features would be family friendly. The discussion paper considers three options for helping families. First is a non-refundable child tax credit of up to \$400 per child annually. Second is a universal child care benefit mirroring the federal benefit. Third is a tax free savings account, also mirroring the recently introduced federal program.

The general corporate income tax rate would fall from where it currently stands at 13 percent to 10, 7, or 5 percent. New Brunswick currently taxes small business at a rate of 5 percent. So reducing the large corporate rate to 5 percent would eliminate the tax disincentives for these businesses to grow larger.

The 10 percent option would tie New Brunswick with Alberta for the lowest rate, and the 7 and 5 percent rates would make New Brunswick's rate the lowest of all the provinces. This would be true even in manufacturing and processing where several provinces, including Ontario, discriminate against firms in the service sector with higher income rates.

Where discriminatory industryspecific tax rates currently exist in New Brunswick, the discussion paper considers eliminating these to simplify the tax system and even the playing field.

The provincial portion of the Harmonized Sales Tax (HST) would increase from 8 to 10 percent. This brings the HST back into line with the rate two years ago, before the ill-conceived federal GST reduction of two points. This measure is in line with the paper's guiding principle to shift taxation from income, savings, and investment over to consumption.

A carbon tax would be introduced. This would be phased in gradually over several years and includes a reimbursement credit to offset the impact on low-income New Brunswickers.

Business property taxes would be lowered. The discussion paper rightly acknowledges that business property taxes are taxes on investment and that, like in most jurisdictions, the property tax burden falls disproportionately on businesses. It calls for discussion of reducing property tax on businesses and aligning this more closely with residential taxes.

These are exciting proposals and could help change the economic landscape in the province. If successful, their implementation could spur changes in other provinces to stay competitive with New Brunswick.

Structures: Aspire to global leadership

If Ontarians are to thrive in the turbulent global economy, we need to have market structures that encourage competition and stimulate innovation and at home and abroad.

IN CONCERT WITH motivations, structures form the environment where competitive attitudes are converted to actions and investments. We will not achieve this dynamic by focusing on preserving current positions; instead, we need to reduce barriers to competition from both domestic and global players.

But many Ontarians are concerned that we are migrating to a world where our own companies will not be significant players in the national economic scene. They worry about the "hollowing out" of our economy, with the sale of major Canadian companies 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 the employment and community well being of our cities and regions as Canadian-owned companies. This leads them to the conclusion that Canada ought to have greater restrictions on foreign direct investment. Some think, 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. Our review of the research leads us to 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.

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

But we are convinced that public policy should be directed toward building an environment where companies, no matter where they originate, can prosper in Ontario. That way, Canada and Ontario will be strong players 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. As part of its investigations, the Panel asked the Institute for Competitiveness & Prosperity to assist by conducting research on two questions related to

the structures in our economy: What is the impact of head offices, especially Canadian ones, on local economies? Should Canada pursue a public policy that deliberately creates national champions?

We concluded that Canada is not hollowing out and that we have more global leaders now than in 1985, though we should continue to build more global companies all the time. We also concluded that a policy to create the environment for all companies to succeed domestically and internationally is a better bet than one that nurtures national champions.

Ontario's businesses need to aspire to achieve global leadership

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 18) up significantly from 33 in 1985, albeit down slightly from 83 in 2003.50 In 2008, 34 of the 77 Canadian global leaders were based in Ontario, down from 43 in 2003, but up significantly from 20 in 1985.

The creation of these new globally competitive Canadian champions dwarfs the losses. They have higher productivity and productivity growth than nonglobally 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.

Among the richest Canadians identified by Diane Francis in her book Who Owns Canada Now, an impressive 21 percent were builders of Canada's global leaders.51

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 deep 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.52

Of the 67 identified foreign takeovers since 2002, we have financial information for 57. Of these, 29 - or more than half - relied on Canada for the majority of their revenues in the year before

Exhibit 18 Canada has 77 global leaders

AbitibiBowater Agrium Ashton-Potter (MDC) Atco **ATS Barrick Gold Bombardier** CAE Cameco Canam Steel Canfor

CCL Industries Celestica CGI

CHC Helicopter **Chemtrade Logistics** Cinram

Cirque du Soleil **CN Rail** 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 **Material Technologies**) Major Drilling Manulife Financial

McCain **MDS** Methanex Mitel Norbord

North American Fur Auctions

Nortel

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

Note: Bold denotes Ontario head office Source: Institute for Competitiveness & Prosperity.

⁵⁰ Working Paper 11, Flourishing in the global competitiveness game, September 2008, p. 8.

⁵² *Ibid.*, p. 11.

they were acquired (*Exhibit 19*). These companies had not really ventured outside the Canadian market, providing 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, and Sleeman.

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. The remaining 13 companies were international players and were global leaders; 3 of these, 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 upgrading were acquired by foreign entities. ATI, Alcan Creo, VersaCold, and Zenon were acquired by bigger, broader players 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. 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, with more than half their revenues earned outside Canada.⁵³

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, 43 globally competitive Canadian companies grew, including RIM, Magna, Manulife Financial, Thomson, and Barrick Gold. The challenge for public policy is to create the environment for more to succeed.



⁵³ *Ibid.*, p. 13.

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. 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 Canadian and foreign-owned head offices is similar

Our research shows that there is no solid evidence that Canadian 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.

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. To be sure, for the United Wavs in Canada's largest business centres, Canadian-owned head offices donate more per firm through corporate- and employee-giving. But these differences are accounted for by the presence of the Canadian banks and the fact that foreign-owned companies headquartered in these cities tend to be smaller than Canadian-owned companies.

While head office location may have been an important determinant of **research** facilities in the past, it is less so now. Our research and that 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.

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. Most of the arguments for national champions policies are economic, but some address patriotic and social concerns. The arguments against national champions policies are based on evidence that they simply do not work.

Some argue for national champions policies

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. National champions proponents 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.

Arguments against see no evidence national champions policies work

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 – for example, shipbuilding, textiles, shoes, and furniture – and attempted to prop up heavy water plants and automotive facilities in depressed regions that were not competitive in their markets.

In addition, two fundamental reviews of Canada's economic progress in the past twenty-five 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."54 Up to now Canada has not generally followed a targeted national champions policy.

Public policy should create the environment for global leaders to emerge

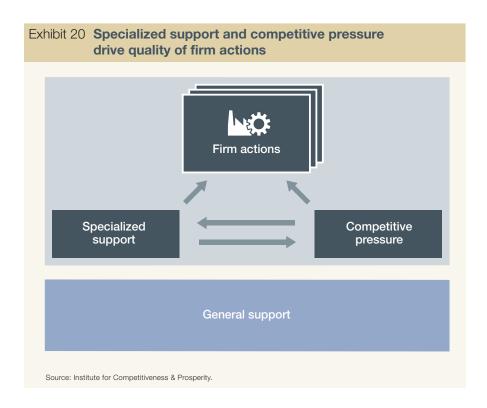
As Ontarians worry about the hollowing out of our economy, it is important to keep a sense of perspective. To be sure, some of our domestic corporate icons are being taken over by foreign investors. Companies that are not

aggressively staking out world beating strategies and leadership positions in their market niches are vulnerable to takeovers. More than ever, as the Panel concluded, the best defence is a good offence.

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 20). By and large, governments' 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 to ensure that Canada's environment

is not disadvantaged relative to other countries.

The Institute and the Competition Policy Review Panel have both concluded that Canada need not worry about preventing foreign takeovers and implementing national champions policies. They concur that the best way to achieve the global competitiveness to raise our prosperity is for companies to become global leaders. They reinforce the dictum that the best defence is a strong offence. Ontario's businesses should take this to heart.



Management matters

ood management is an important factor in firm productivity and likely a cause of the variation in firm productivity within countries – and even within industries. A But economists and management researchers have paid little attention to measuring effective management practices and their effect on firm productivity. A major stumbling block has been the lack of useful, consistent measurements of the quality of management across firms and countries. While researchers recognize the importance of effective management, they typically refer to it as an empirically unobservable variable in their research to account for the differences in productivity across firms within the same country and industry.

To fill this research gap, professors Nick Bloom, John van Reenen, and Raffaela Sadun developed a methodology to measure management practices within a manufacturing operation. They have applied this methodology since 2004 and have surveyed firms in twelve countries across Europe, Asia, and North America. Countries include developed economies, such as the United States, Germany, and Japan, as well as developing economies like China, India, and Poland. The Institute collaborated closely with Bloom to survey Canadian firms through the summer of 2008.

Bloom, van Reenen and Sadun's method to measure management practices in the firm is based on an interview evaluation tool that rates firms on a scale from worst practice to best practice across eighteen management practices, developed originally by McKinsey & Company, a leading international management consulting firm. The management practices cover three distinct, but related areas of management:

Adopting effective operations management approaches.

How well have firms implemented manufacturing management systems that are generally regarded by academics and consultants as best practice? "Lean manufacturing" is generally regarded as the most effective management system. Based on the production methods developed by Toyota, but applicable beyond the automotive industry, lean manufacturing achieves highly efficient production through a relentless drive to reduce waste of time and materials. It is characterized by an ethos of continuous improvement backed by close tracking of the operation to identify problems and improvement opportunities.

Managing performance effectively

Do firms' management set realistic stretch targets, monitor performance against these targets, and take corrective action when necessary? Effective management in this area means that companies are finding the right balance of targets to aspire to for maximum achievable performance. Setting targets too low means under performance; setting them too high will discourage improvements by workers and managers. Effective management also means determining how to measure performance and to follow through with actions when targets are not met.

Managing people well

Are companies promoting and rewarding employees based on performance, and systematically trying to hire and keep their best employees? The cliché that people are a firm's most important asset is true. Skilled workers and effective people management together are an important element of productivity in firms and across the economy. Well managed firms are able to attract and retain their top talent through effective reward and incentive programs. They also deal effectively with problem performers.

The survey process was designed according to rigorous academic research standards. We selected companies randomly for telephone interviews from comprehensive industry lists. Our analysts, who were business and economics students, were trained consistently with analysts in other countries. They then conducted phone interviews that lasted an average of forty-seven minutes with the most senior production manager

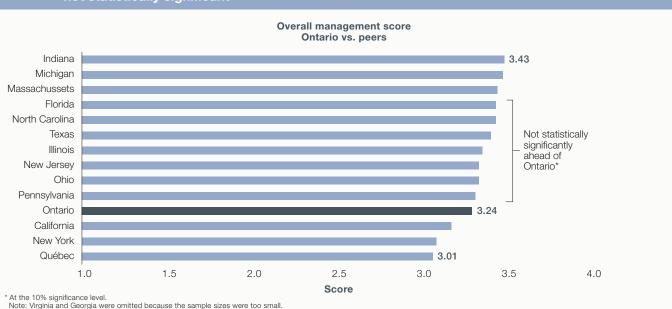
A See for example, Sixth Annual Report, Path to the 2020 prosperity agenda, pp. 49–50 and Roger L. Martin and James B. Milway, Strengthening management for prosperity, May 2007

B See, for example, Nick Bloom, and John Van Reenen, "Measuring and Explaining Management Practices Across Firms and Countries" NBER WP 12216, 2007; Nick Bloom, Rafaella Sadun, and John Van Reenen NBER, "Americans do I.T. better. US multinationals and the productivity miracle" WP 13085.

Exhibit B Canada is among the world leaders in the overall quality of its manufacturing management, but trails the United States significantly



Exhibit C Ontario underperforms most of the peer states, but for many the differences are not statistically significant



Note: Virginia and Georgia were omitted because the sample sizes were too small.

Source: Nick Bloom and John van Reenen, "Measuring and Explaining Management Practices Across Firms and Countries," Quarterly Journal of Economics, November 2007; Institute for Competitiveness & Prosperity analysis.

available at the plant. Through a series of structured, but open-ended questions, the analysts scored each company across eighteen factors on a scale of 1 to 5. These results generated scores on each of the three factors described above, which in turn generated an overall score for the quality of management at the operation.

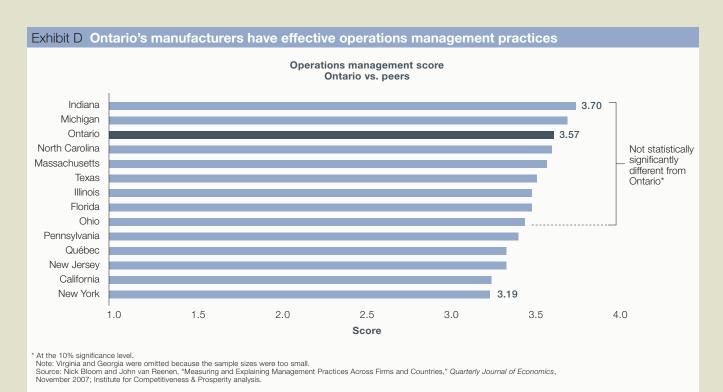
Analysts also "double-scored" nearly three-quarters of the interviews. That is, while one analyst conducted the interview, another, who was not taking part in the interview, listened and independently scored the company. Subsequent comparisons of the scores showed a high degree of consistency between analysts.

The Institute will release the complete results and their implications in a Working Paper early in 2009, but we are able to report some summary findings for Canada and for Ontario.

Canada's management practices score well by world standards. Across the thirteen countries for which surveys have been conducted, Canada ranks fourth, tied with Japan. Statistically, our results are no different than those in the two other leading economies – Germany and Sweden. Like all other countries, we trail the United States significantly (*Exhibit B*). This is similar to Canada's standing in GDP per capita – we are ahead or close to many of the advanced economies, but we trail the United States by a significant margin. If we are to close Canada's prosperity gap with the United States, improving the management practices in our manufacturing sector represents a significant opportunity.

Ontario's overall management capability performs about the same as many of the fourteen peer states. Although the score for Ontario-based manufacturing management ranks eleventh of fourteen among the jurisdictions for which we have sufficient sample sizes, statistically, Ontario does not significantly under perform seven of the ten states ahead of it. It does trail Indiana, Michigan, and Massachusetts significantly (*Exhibit C*).

Across the three elements of good management, Ontario does best in operations management approaches and less well in target management and people management.



In effective operations management, such as lean manufacturing techniques, survey results indicate that Ontario manufacturers are among the best in North America - and the world. Only Indiana and Michigan rank ahead of Ontario (Exhibit D). It appears that Ontario's manufacturing management has grasped and implemented effective techniques for efficient operations.

But Ontario falls behind in target management. It ranks ninth of fourteen on this measure (Exhibit E). Statistically, management in four states out perform Ontario's management in establishing solid performance targets, monitoring results against them, and using these for continuous improvement.

Finally, Ontario's managers are well behind in effective people management (Exhibit F). Cross-country results of the management survey indicate that US firms are significantly better managed than others in North America and around the world in attracting and retaining good talent and in dealing effectively with performance issues. Effective people management represents the greatest improvement opportunity for Ontario and Canada.

The survey identified five people management practices. In the following four areas, the research indicates that Ontario managers significantly lag their counterparts across the peer states:

- Rewarding top performers: How does the appraisal system work? How does the bonus system work? Are there non-financial rewards? How do these systems compare to the competitors' systems? In the interviews, we often heard that companies did not offer financial and non-financial rewards for special performance.
- Addressing poor performers: If a worker were continuously under performing, what is the course of action? How long would under performance be tolerated? We heard managers complain that they found it difficult to take action on poor performance, with some companies tolerating it for months.





Note: Virginia and Georgia were omitted because the sample sizes were too small.

Source: Nick Bloom and John van Reenen, "Measuring and Explaining Management Practices Across Firms and Countries," Quarterly Journal of Economics, November 2007; Institute for Competitiveness & Prosperity analysis.

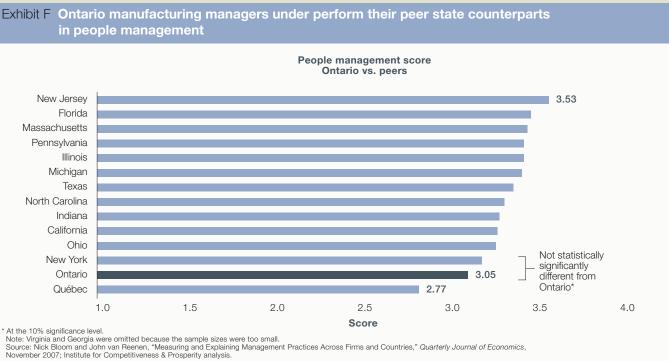
- Promoting high performers: If a worker is exceptionally good, can he or she move be promoted on a fast track? Are top performers routinely identified and developed? Is length of service unduly important in promotions? We found that job tenure was often an important contributor to promotion decisions.
- Retaining high performers: What special practices are in place to retain top performers who want to leave the company? Managers we interviewed often were unable to offer incentive for high performers to stay, once they had indicated they were leaving.

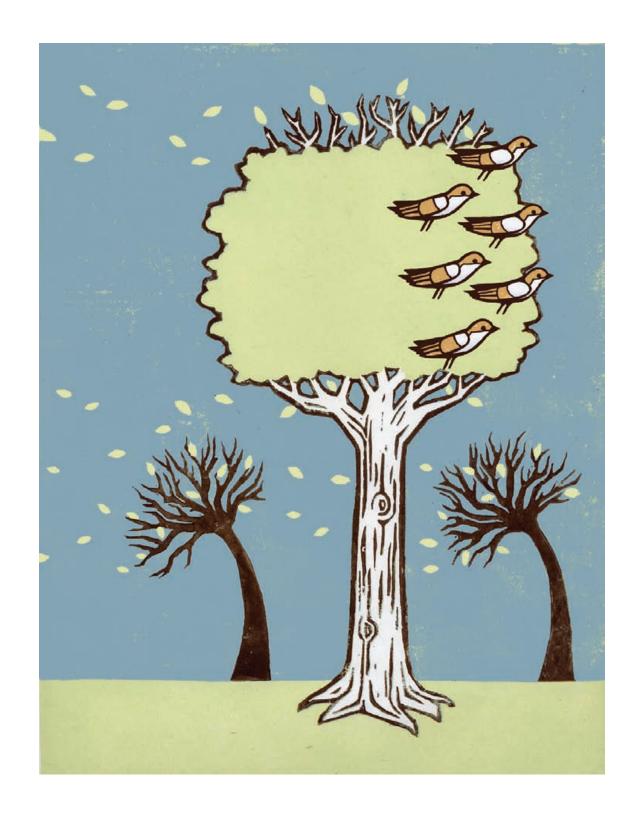
On the remaining one, the research indicates no statistically significant difference between management practices in Ontario and the peer states:

• Attracting human capital: Does the company offer a distinctive work environment that is attractive to top talent?

There is much room for improvement in this people management area. Ontario's companies need to re-evaluate their incentives and promotion packages, as well as retention strategies for both top shop-floor and management talent.

The overall results indicate that the management of Ontario manufacturing operations is among the best in the world. Generally, Ontario managers practice effective operations management techniques as well as their peer state counterparts. But in effective people management, the peer states lead Ontario's results significantly.





Keep our eyes on the 2020 Prosperity Agenda

Despite the current economic uncertainty, we continue to conclude that the 2020 Prosperity Agenda we have set out is the right one for Ontario and ought to be pursued vigorously.

THE 2020 PROSPERITY AGENDA is a long-term plan that will take years to implement and see results. We recognize that the current economic downturn and financial turbulence make it difficult for stakeholders in Ontario's prosperity to pursue initiatives and investments that have a longer term payback. Current considerations have to be a priority. And yet, we need to consider the long term. In the true spirit of innovation, we need to be pushing ourselves to find new ways to address prosperity issues. In many cases, we know that current approaches are not working. We have the opportunity to propose new approaches, to discuss them with stakeholders in Ontario's prosperity, and to implement the most promising ideas.

Attitudes

Realizing our prosperity potential is not something that most Ontarians are thinking about. But we are missing opportunities to realize our full potential and to ensure that we thrive, not just survive, in the globalization of our economy. Nor does the challenge of achieving higher productivity capture the public's imagination, largely because it

We urge the Premier and business, labour, and community leaders to keep the volume on the importance of prosperity and productivity even in these times of economic uncertainty.

is associated with ideas like efficiency, downsizing, and outsourcing. But we must have the sustainable productivity growth that comes from innovation – creating unique products, services, and processes that truly add value to people's lives. Higher productivity is our main opportunity for realizing our prosperity potential.

The Wilson Competition Policy Review Panel made several recommendations for strengthening our prosperity. Recent polling of Canadians' attitudes suggests that the public is quite prepared to accept many of these recommendations. We urge leaders in our society to consider these recommendations.

Investment

Step up investments in information and communication technology

Our businesses need to lean into the wind of economic turbulence and find ways to take full advantage of the improvements that technology can make to their top and bottom lines. We challenge business leaders to invest in technology from Canada and around the world.

Raise awareness among all Ontarians of the benefits of education

Guidance counsellors, parents, and community leaders need to stress the benefits of more education. Post secondary education is a means to escape poverty and improves intergenerational mobility. Yet research indicates that lower income Canadians over estimate the costs and under estimate the benefits of post secondary education. In addition, our youth must understand the life-long risks they take by dropping out of high school without a diploma or a skilled trade.

We encourage more investment to upgrade technology, enhance educational opportunities, and support groups at risk of falling into poverty.

Continue investments in post secondary education

This Government has committed to greater post secondary education spending and we are slowly re-orienting our public spending toward investment – but we need to sustain the momentum. We are still not investing adequately to ensure that Ontario is a world leader in innovation. As we step up our investments in post secondary education, we urge public policy leaders, academic leaders, and the research community to ensure we are investing adequately in improving the student experience in our universities.

Invest in focused and innovative ways to attack poverty

The best weapon against poverty is a buoyant economy – an important reason for achieving our prosperity potential. But a significant share of the incidence of poverty is among high risk groups. Each has its own challenges. For recent immigrants, the challenge is to match their skills with the economy's requirements. For lone parents, it is

how to create incentives to work, while providing high quality child care as well as early childhood education. For at risk youth, a key challenge is to encourage them to complete high school or to gain the skills that are in demand. There are examples of successful programs that have been developed here in Ontario and elsewhere. We urge social service policy leaders to identify and implement them in other appropriate places – but also to challenge themselves to create innovative programs here in Ontario

Motivations

Ontario needs to readdress its tax regime, to motivate business investment.

Pursue the adoption of a value added provincial tax, harmonized with the federal GST

The Federal Government has worsened the structure of Canada's tax system by reducing the GST. Ontario can mitigate this mistake by converting our retail sales tax to a value added tax.

We recognize that this is a complex and challenging initiative. But Ontario cannot compete globally and realize its prosperity potential if we are not open to radical changes in how we tax. We can do much good simply by following these best practices around the world. But we could do better if we challenged ourselves to implementing an innovative tax regime.

Assess the revenue benefits of a reduction in corporate tax rates

With current weakness in provincial revenue and a concern about deepening deficits, there is probably not much appetite for corporate income tax reductions. Yet this may be the right time for such reductions. If we want more business investment, we need lower marginal effective tax rates. Replacing the provincial retail sales tax is one part of the solution; reducing corporate income taxes is another. Jack Mintz's recent research suggests Canada would actually generate more tax revenue if it reduced its corporate tax rates. The Provincial Government should review this research and determine if the conclusions are applicable to Ontario.

Ensure special tax treatment for Labour Sponsored Investment Funds is ended

The Government should continue on its plan to end special tax incentives for Labour Sponsored Investment Funds. The lost government revenue stands in the way of a broader-based corporate income tax reduction. And venture capital policy should be focused on efforts to raise its quality through higher returns, not quantity.

Consider a carbon tax

Recent federal election returns indicate the carbon tax is dead. But it holds too much promise for reducing carbon emission and for replacing other distorting taxes to be discarded. Environmental policy needs to consider market-based mechanisms like capand-trade and carbon taxes.

Structures

Enhance our market structures to encourage competition and stimulate innovation and at home and abroad.

Pursue the reduction of barriers to investment and trade

The federal Competition Policy review Panel in its report *Compete to Win* set out an aggressive agenda for enhancing our competitiveness. Many of its recommendations are aimed at the federal government. But the province can lend its support to these recommendations and look for opportunities for greater competitive intensity in areas of provincial responsibility like health care and education. The Ontario Government should continue to encourage federal

efforts to expand international free trade agreements, lead national discussions on changing regulations in financial services, and investigate the benefits of more interprovincial trade.

Continue to expand innovation policy to include building management capabilities

The recently developed provincial innovation strategy is a promising break from previous public innovation strategies as it acknowledges the importance of management capabilities and aims to

enhance the "culture of commerce."
Our recent research in Ontario's
management capabilities indicates
that we have broad strengths in
manufacturing management, but with
opportunities for improvement in
human resources management.

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