

Opportunity in the turmoil

Institute for Competitiveness & Prosperity | Martin Prosperity Institute
Report on Canada 2009



The Institute for Competitiveness & Prosperity is an independent organization established in 2001 to serve as the research arm of Ontario's Task Force on Competitiveness, Productivity and Economic Progress. The mandate of the Task Force, announced in the April 2001 Speech from the Throne, is to measure and monitor Ontario's competitiveness, productivity, and economic progress compared to other provinces and US states and to report to the public on a regular basis. In the 2004 budget, the Government asked the Task Force to incorporate innovation and commercialization issues in its mandate. The Institute is funded by the Government of Ontario through the Ministry of Economic Development.

The Martin Prosperity Institute at the University of Toronto's Rotman School of Management is the world's leading think-tank on the role of sub-national factors – location, place and city-regions – in global economic prosperity. We take an integrated view of prosperity, looking beyond economic measures to include the importance of quality of place and the development of people's creative potential.

We welcome your comments on this report.

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Foreword and acknowledgements



I AM PLEASED TO PRESENT OUR REPORT ON CANADA 2009. This is the Institute for Competitiveness & Prosperity's sixth annual contribution to the important conversation about Canada's competitiveness and prosperity, this year in collaboration with the Martin Prosperity Institute.

This Report comes at a time of unprecedented economic volatility and uncertainty in Canada 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 huge government deficits.

In Canada, our manufacturing industries are being challenged by reduced demand worldwide; our financial institutions face ever greater uncertainty; weakened commodity prices are hurting our resource industries; our construction and real estate sectors are under duress. These are just a few of our challenges.

My colleagues and I are highly sensitive to the economic turmoil and hardship that have beset many of us. Still we are urging Canadians to look for hope and optimism in these stormy times. As we look at the economic situation around the world, we cannot help but conclude that this represents a time of opportunity for many Canadian businesses and people. Our financial institutions have withstood the gale force of economic headwinds better than perhaps all others in the world. Our governments are less burdened by debt than many other countries.

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

In this year's Report, we continue the themes from our recent Canadian reports, where we set out a long-term Prosperity Agenda to achieve our 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.

“The current economic turmoil is certainly a time for concern, but it has to be a time for opportunity and hope – if we are prepared to take bold action.”

Investing in our future prosperity continues to be a key theme of our work. 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.

In 2008, 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 Canadians to consider its recommendations seriously.

Canada has to compete in the global economy on the basis of value added innovation. We have many firms in Canada that are doing just that, and we continue to encourage the Prime Minister and Premiers to reach out to these companies to understand their needs and aspirations for global leadership.

As we address the concerns about our current economic situation, let us keep the bigger picture in mind. Canada is one of the most prosperous jurisdictions in the world, but we have still not achieved our prosperity potential, as defined by the gap in GDP per capita with the United States – even with the most recent reported results. And in the last two years, the Netherlands edged past Canada, moving to second place from third place in 2006. Also, Australia has narrowed the gap with Canada. Regardless of short-term economic events, we need to keep an eye on our long-term prosperity in our increasingly competitive global economy.

As in the past, we gratefully acknowledge the funding support from the Ontario Ministry of Economic Development. We look forward to sharing and discussing our work and findings with all Canadians. We welcome your comments and suggestions.



Roger L. Martin, Chairman
Institute for Competitiveness & Prosperity
Dean, Joseph L. Rotman School of Management, University of Toronto



Seizing opportunity in the turmoil

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

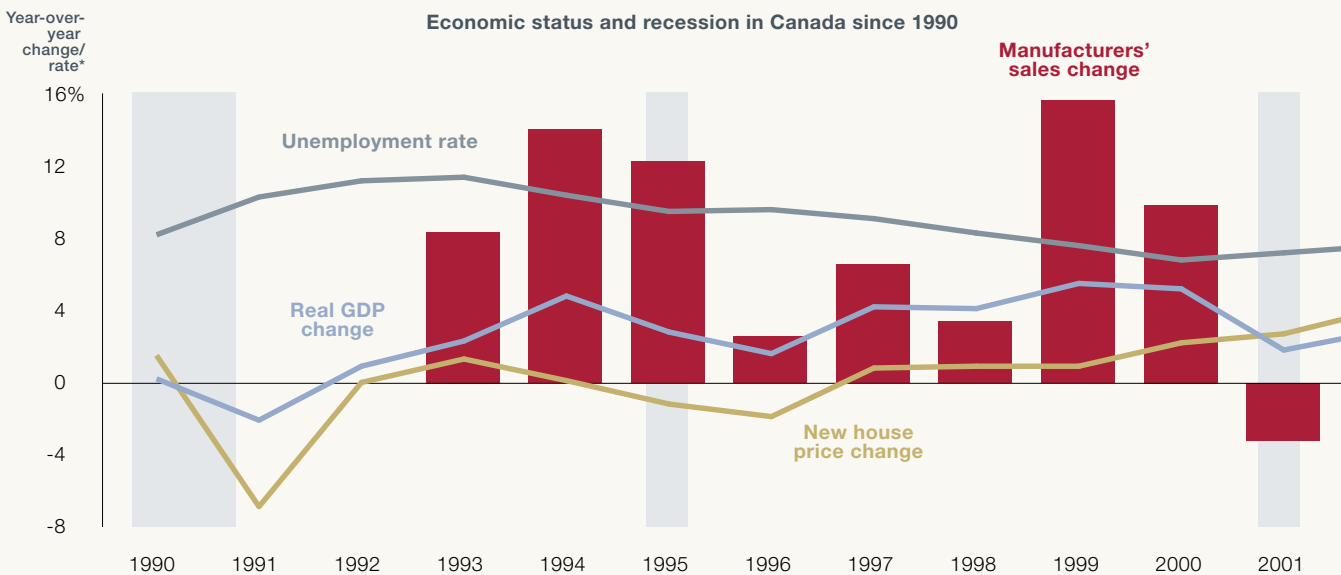
THIS, OUR SIXTH REPORT ON CANADA, is being released in an environment that is much different than that of past reports. In each of our previous reports, we have observed the basic good health of our economy and that of our most important trading partner, the United States. But the prevailing scene is starkly different. Our North American economies and all economies around the world are under significant stress. A mood of pessimism and panic has set in among ordinary Canadians and our business and public leaders. It is easy to understand this negative mood – our businesses and institutions have not been under such duress in many years.

We are conscious of this changed environment. Everywhere there are signs of weakness (*Exhibit 1*). Manufacturing is very weak; unemployment is starting to move up after a long period of nearly full employment; new house sales are weak; government deficits are back with a vengeance. These signals could drive us to focus on short-term solutions at the expense of our long-term prosperity; to become frozen rather than taking bold actions; to become insular rather than expansive; to focus our energy on preserving what we have, not in reaching for creative solutions. But we have to recoil from these instincts and look for opportunity.

As weak as our manufacturing may be, our recent past has seen ever increasing value added from the sector. While unemployment is growing, it is still well below previous highs. New house sales may be weak, but our mortgage market is fundamentally healthy. Government deficits have returned, but as a percentage of GDP they are well below rates in our own history and across other economies today. Our banks are now among the global leaders in market capitalization.

Our best hope for weathering this storm is to take a resolute stand that focuses our efforts on achieving our long-term prosperity potential. To do this, we continue to stress the themes we have developed in our past work. Stakeholders in Canada'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.

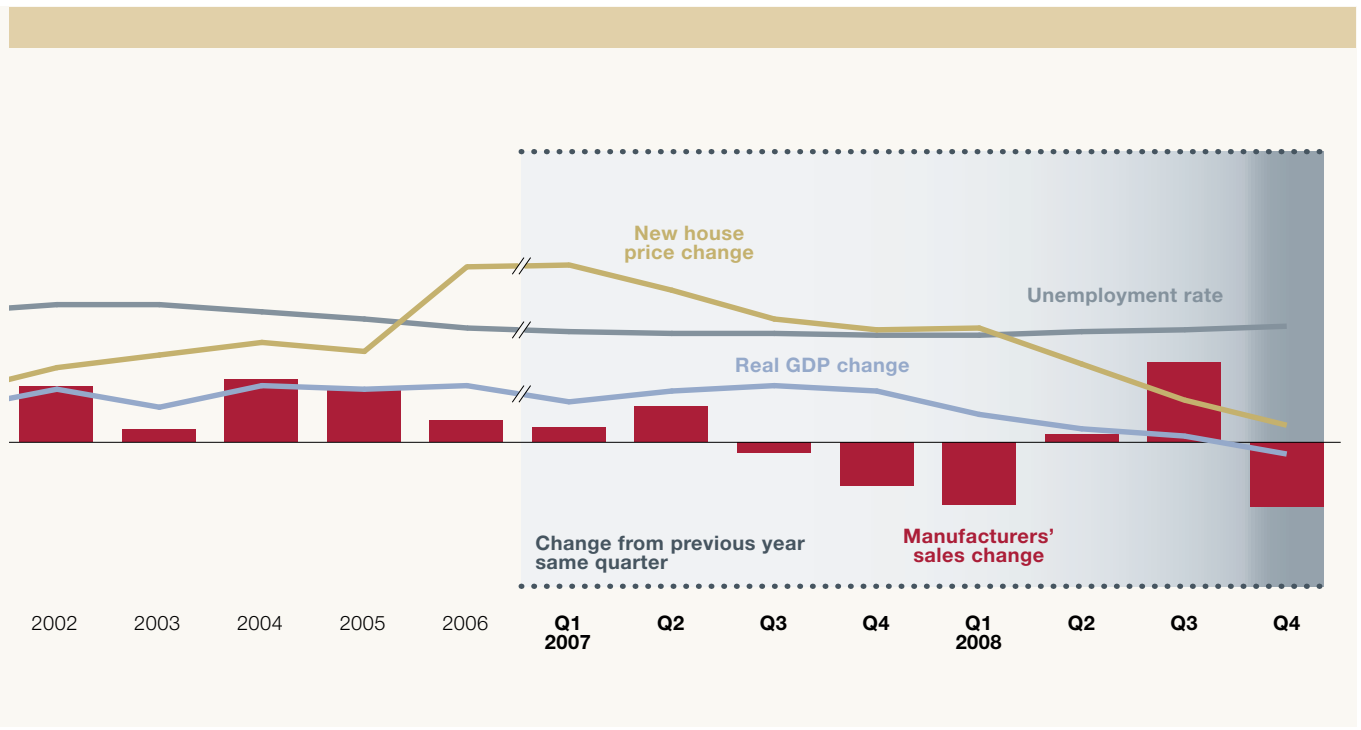
Exhibit 1 Recent economic trends are worrisome



* Growth rates for 1990-2006 are year-to-year change rates; for 2007-2008 they are change rates from previous year's same quarter. Unemployment rates for 2007-2008 are seasonally adjusted. Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada.

We need to remind ourselves that Canadians still operate in one of the most vibrant economies in the world. We have a high level of prosperity versus most jurisdictions with population greater than 10 million (*Exhibit 2*).¹ 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 had our fiscal houses in order, federally and provincially, as we entered the current downturn
- We are much better prepared to face an economic downturn now than in the early 1990s
- We have a tolerant and diverse population
- We are a sought after destination for people from other parts of the world.



¹ Throughout this report, we use constant 2007 Canadian dollars converted at Canada/US Purchasing Power Parity (PPP) rate of 1.198 unless otherwise specified.

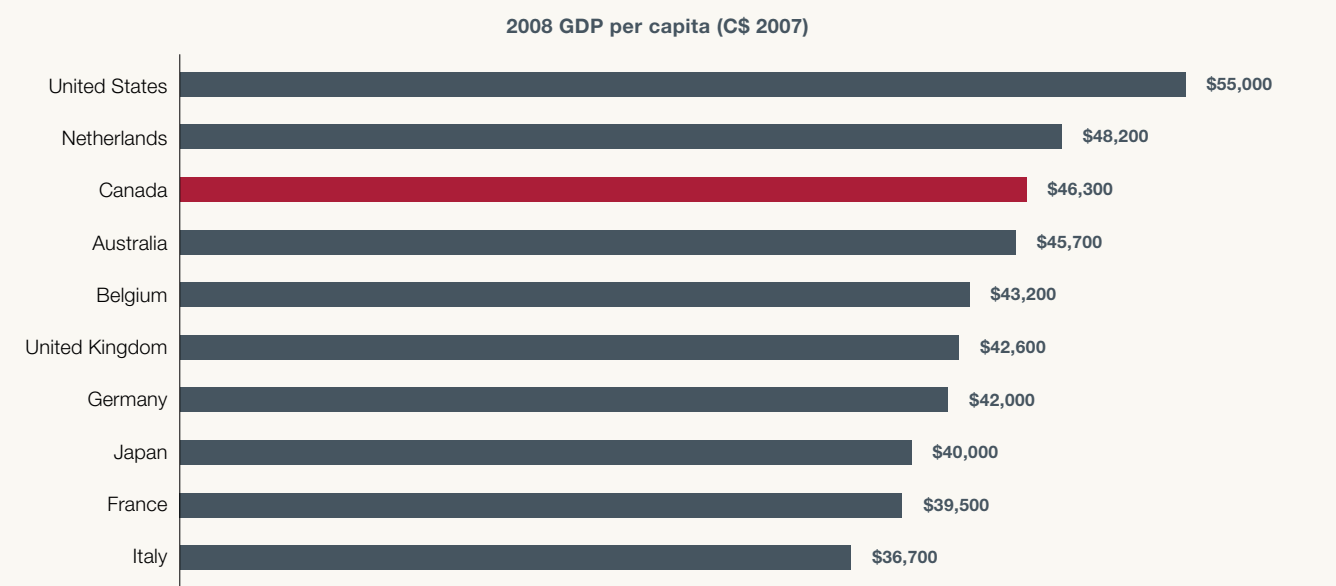
Nevertheless, we continue to trail the US economy significantly – even with the negative news on their GDP results for the fourth quarter of 2008 (*Exhibit 3*). For the last two years, Canada has not been in second place. To be sure, our results have been very close to the Netherlands over the years, but the Netherlands outpaced us in 2007, and Australia is closing its gap with us.

In the early 1980s, Canada's economic performance was much closer to that of the United States. But since that time, our growth has lagged. In 2006, Canada's GDP per capita was \$8,400² below US performance. Since that time the gap has remained largely unchanged at \$8,500, plus or minus \$200.

Our challenge continues to be our poor productivity and innovation performance. Canadians provide the effort for economic gain, but we do not innovate enough or create comparable value add in our hours worked. We have garnered new insights in the past year that help explain why this is – in spite of a good mix of industries that by their nature are innovative and productive.

Over the past year, the Institute for Competitiveness & Prosperity and the Martin Prosperity Institute at the University of Toronto's Rotman School of Management collaborated to measure the creativity content of our clustered industries. For the first time, we assessed the occupational makeup of our industries to determine the interaction of Richard Florida's creativity-oriented occupations and Michael Porter's clustered industries. We find that we are not deploying the workers in creativity-oriented occupations to the same extent as our counterparts in the United States. This

Exhibit 2 Canada is more prosperous than most international peers



Note: Currency converted at PPP.

Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Department of Economic Analysis - Bureau of Economic Analysis; US Census Bureau; and OECD.

² In Institute for Competitiveness & Prosperity, Report on Canada, *Setting our Sights on Canada's 2020 Prosperity Agenda*, April 2008, we calculated the prosperity gap to be \$8,800 (C\$2006). Minor re-estimates by government agencies in Canada and the United States, an update of PPP, which we convert US dollars into Canadian dollars, and a shift to a 2007 base have resulted in an adjusted 2006 gap of \$8,400 when expressed in 2007 Canadian dollars.

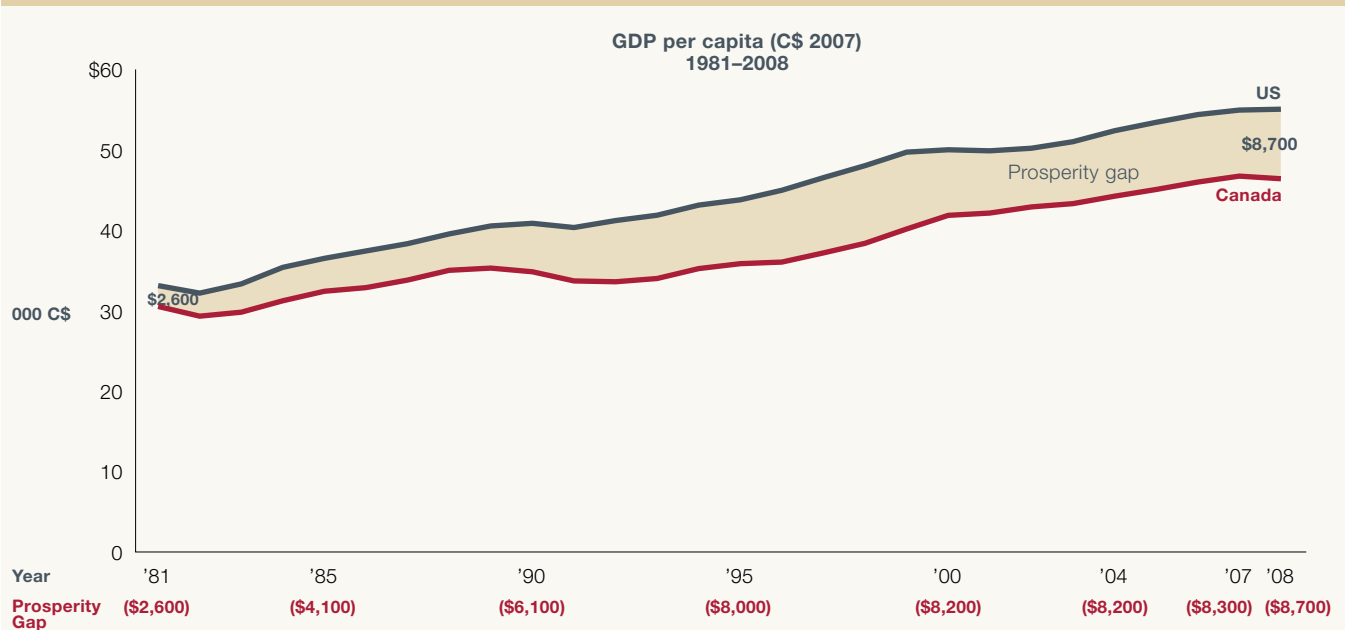
research helps us understand why Canada is unable to gain more productivity, innovation, and prosperity from our good mix of clustered industries.

We also carried out research into the quality of management in Canada in our manufacturing sector. We found that our managers are among the best in the world, but trail their US counterparts especially in performance and talent management. In effect, managers are not achieving the full potential of management creativity in our manufacturing sector – and this may also be true in the rest of our economy.

Being able to explain more of our productivity and innovation gap may be cold comfort to those feeling economic pain, as the economies in North America and around the world are experiencing a deep recession. But we have our eye on the long term. We are mindful of current circumstances, but we are not frozen by them. We are encouraging the development of economic policies and strategies that will secure economic success for decades to come.

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 Canadians to compete to win in the global economy. We see investments in our workers and our businesses as the key to long-term 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 between pursuing our agenda for long-term prosperity and addressing short-term economic challenges.

Exhibit 3 Canada trails the United States in GDP per capita



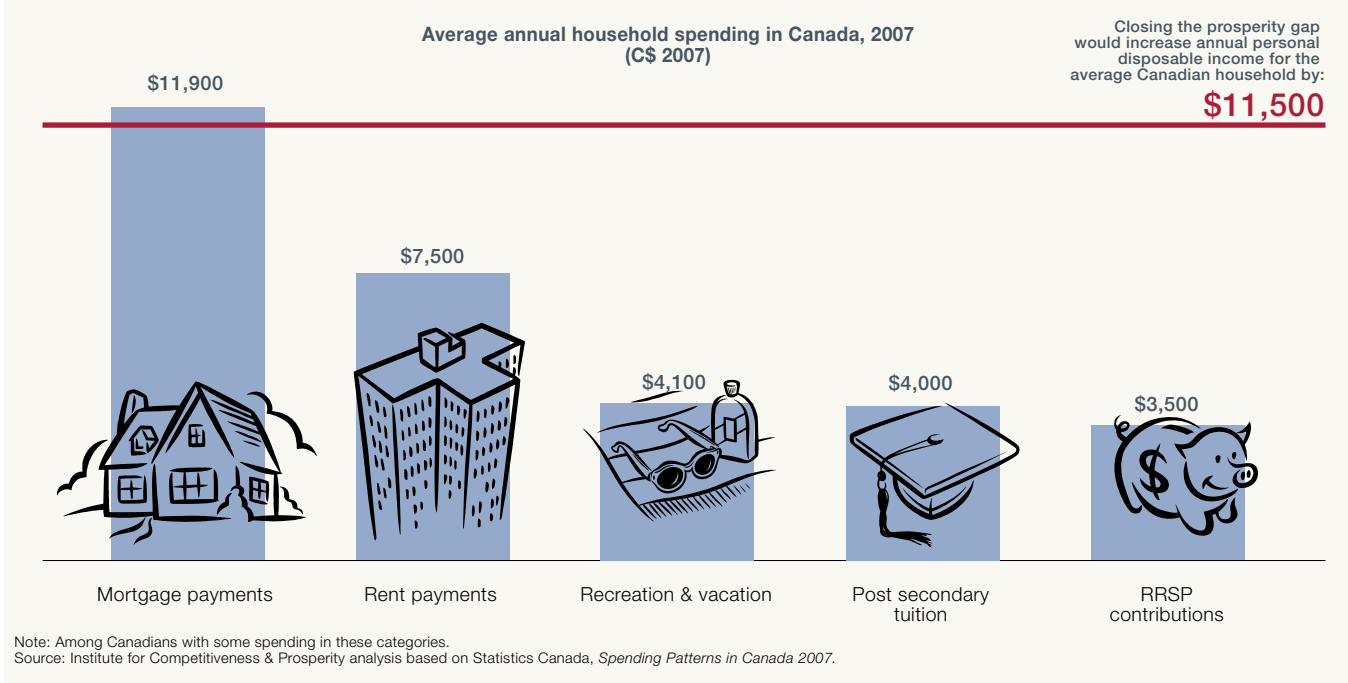
Note: Currency converted at PPP.
Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Department of Commerce - Bureau of Economic Analysis; and OECD.

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 \$11,500 in after-tax disposable income per Canadian household (*Exhibit 4*). This increase would mean a significant improvement in our standard of living, since among mortgage holders, annual payments are \$11,900; among tenants, rental payments are \$7,500. The average Canadian household spends \$4,100 on recreation and vacation each year, and tuition is \$4,000 per household with college or university students. Annual RRSP contributions are \$3,500.

Closing the prosperity gap would also generate \$66 billion in tax revenues for all three levels of government across Canada – more than enough to fund increased public expenditure on, for example, infrastructure, early childhood education, public transit, and Green House Gas reductions.

In our recent reports, we set out our Prosperity Agenda for Canada – an integrated set of actions that could close the prosperity gap by 2020 (*Exhibit 5*). More than ever, we believe this agenda is the right one for Canadians. To be sure, we have to pay attention to the current economic weakness and help people and businesses weather the storm. But, at the same time, we have to keep our eye on the long term.

Exhibit 4 Closing the prosperity gap affords higher living standards for Canadian families



We are also mindful that the US economy is undergoing significant challenges, driven primarily by the crisis in the financial and credit markets. Some observers see the current economic crisis as proof that the United States ought not to be a reference point for Canada's economic performance. But we continue to believe that the United States is a proper peer, and that many of the lessons we draw from the comparison 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 more productive and better paid. In general, their market structures foster more competition to drive innovation. And their highly skilled managers create strategies that help companies thrive in globalizing markets.

We also need to recognize that Canada needs to run faster to stay ahead of other advanced economies – there is no good reason for us to accept a relative decline in our living standards compared to most economies in the world.

So, while many may be worried about the short term in Canada, we want to keep people's focus on the long term. Our major concern is to foster an environment that will lead to achieving our prosperity potential.

Exhibit 5 The 2020 Prosperity Agenda creates opportunity to realize Canada's prosperity potential

The Goal: Realize Canada's prosperity potential	Target 2020	Threats from economic turmoil	Opportunity for Canada
Attitudes	Shared determination to close gap	Excessive concern about short term	Address short-term challenges while keeping eye on long-term prosperity potential
Investment	Investment for tomorrow's prosperity	Investment to meet current needs	Continue to invest in long-term prosperity
Motivations	Smart taxation	Tax increases to fund spending	Adopt bold tax innovations for long-term prosperity
Structures	Creativity and growth	Along with other countries, policies of insularity	Make Canada a competitive and open economy for the Creative Age



Attitudes: Keep eye on long-term prosperity potential

Our previous research has shown that the Canadian public and business leaders have the desire to compete, to innovate, and to take risks.³ And in 2008, the Competition Policy Review Panel urged Canadians to adopt an attitude of offence, not defence as they considered the impact of globalization. The Panel was appointed in the summer of 2007 after a series of high profile foreign takeovers of Canadian businesses. In its report, *Compete to Win*, the Panel 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 encouraged 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

The Panel urged Canadians to celebrate 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

³ Institute for Competitiveness & Prosperity, Working Paper 4, *Striking similarities: Attitudes and Ontario's prosperity gap*, September 2003.

⁴ Competition Policy Review Panel, *Compete to Win*, Final Report, June 2008, p. vi.

⁵ *Ibid.*, p. 26.

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 reviews of foreign investment and merger rules in financial services and broadcasting. The Panel also recommended that public leaders engage stakeholders in raising our prosperity.

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.

Another important feature of attitudes is tolerance toward diversity. Researchers with the Martin Prosperity Institute have found that economic development is driven by three Ts: tolerance, talent, and technology. All three are critical to generating sustained economic growth and prosperity. Canada's long legacy of tolerance and diversity makes the country a better and more inclusive place to live, but it also adds an important non-market advantage. As our research and that of others show, cities, provinces and states, and nations can all gain an economic boost from being open and tolerant. Openness to outsiders, newcomers, immigrants, minorities, and gays and lesbians signals that a community welcomes all, has low barriers to entry, and can attract the best and the brightest from around the world.⁶

Among the several measures of diversity, Canada does well on nearly all of them. For example, on the Mosaic Index, which measures the percentage of the population who are immigrants, Canada is a world leader.

Yet Canada's diversity advantage is not translating into innovation and prosperity, especially compared with the United States. Our challenge is to raise our "yield" from our diversity. This will require the continued development of an already strong culture of tolerance, which will improve the attraction and retention of talent when paired with the right support for developing technology. And that will contribute to higher economic performance and prosperity.

In these troubled times, our public leaders need to set an attitude of hope and optimism for our citizens and our businesses. All of us must welcome openness to diversity and to competition. Canada already has an open society and economy – now is not the time for attitudes of insularity and preservation.

⁶ Roger Martin and Richard Florida, *Ontario in the Creative Age*, Martin Prosperity Institute, February 2009, pp. 20-21.



Investment: Continue to invest in long-term prosperity

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 increase and 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 a top twenty ranking 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. We have a long way to go to have adequate resources for education.

Our people invest in themselves to a point, but then stop. Canadian students are almost 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.

Our concern about Canadians' under investment becomes even more pronounced in tough economic times. Lacking confidence in our future, individuals and businesses will not invest adequately. This is a mistake, but one that is more readily described than fixed. Our public leaders must inspire our citizens and businesses to have confidence in Canada's long-term success. Our business leaders must be bold and invest opportunistically – building on our strengths to gain global advantage.

Much is being written and discussed about infrastructure investments. But we need to be careful that our governments are not simply spending for the sake of spending – and we should not be overly optimistic about the efficacy of “shovel ready” investments. We know the kinds of investments that can drive our prosperity – education, research, and productivity enhancing infrastructure. They should be our priority. Businesses must have the confidence and capabilities to increase their investments in technology to drive innovations in their products, services, and operations.



Motivations: Adopt bold tax innovations

Our tax system in Canada 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 Canada 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.

The recent Ontario budget went a long way to make Canada's tax system more favourable for business investment by harmonizing its sales tax with the federal GST and by reducing corporate income tax rates. Importantly, it also eliminated the tax disadvantage for new investments by Ontario's services sector.

Our tax system needs to be innovative in encouraging lower income Canadians to advance economically. By clawing back social benefits and introducing income taxes for lower income Canadians, 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 Canada a leader in designing and implementing smart tax regimes for businesses and individuals. This may be an opportune time for dramatic changes in our corporate income tax system – switching to a cash flow approach instead of our current accrual approach. And, while the recent federal election results seem to indicate that a carbon tax has few 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: Make Canada a competitive and open economy for the Creative Age

If Canadians 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 only for a solid position in the domestic market will be candidates for takeover by foreign firms with global capabilities and strategies.

Consistent with the Competition Policy Review Panel, the Institute 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.

Our research this year shows that Canada has an important opportunity to raise productivity and prosperity by building on our management strengths and increasing our capabilities even more.

Over the last year, we also conducted new research into the kinds of skills driving economic performance in Canada. We identified three sets of skills of importance in the creative age – analytical skills, social intelligence skills, and physical skills. We found that our economy generates higher earnings for workers as occupations increase in their content of analytical and social intelligence skills. As occupations increase in their physical requirements, earnings drop.

So the good news is that our economy is rewarding the skills that support creativity and innovation. But the bad news is that the US economy rewards them to a greater extent. This is not to say that our businesses under pay for skills or that our workers are under skilled. Rather, our economy is “tuned” to a lower level of effectiveness. Our businesses do not use sophisticated strategies to achieve global leadership, and our people do not invest in developing their own human capital and skills adequately. Our economic system may be in harmony – but that is not leading to the level of prosperity that it could.

If Canada is to achieve its 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.

Governments around the world are taking actions that would not have been considered only months ago. Clearly, our public leaders must consider the short-term needs in providing support to industries and jobs at risk. But creative approaches ought to be considered. Perhaps, for example, our governments could help our global leaders take advantage of acquisition and investment opportunities that are presenting themselves through equity investments or low cost loans.

Canadians, like billions around the world, are in uncharted territory as the current economic situation unfolds. As concerned as we are about our present circumstances, we have to avoid hopelessness and despair. We are probably in a better position than most other countries to weather the economic storm. But we need to be prepared to seize the opportunities we have to ensure that we are on the right course when we come out of this recession. Now is not the time to take our eye off the long term. We need to make Canada a competitive and open economy for the Creative Age.



Canada's prosperity gap

Missing our prosperity potential is a lost opportunity for all Canadians

IN CARRYING OUT OUR MANDATE to measure and monitor Canada's competitiveness and prosperity, the Institute focuses on Gross Domestic Product (GDP) per capita as the summary measure of economic 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 Canada, and around the world. Prosperity can be raised by expending more labour effort to increase the goods and services produced by Canadians. Being more productive and innovative can also raise it. This growth comes about from 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 a higher quality of life through better health, increased life expectancy, and widespread 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 one other country with population above 10 million, the Netherlands, has greater prosperity per capita than Canada (see *Exhibit 2*). But closer to home we continue to trail the United States by \$8,700 per capita (see *Exhibit 3*). Canada's prosperity gap was much smaller twenty-five years ago, when our economic results compared more favourably with those in the United States. Starting with the 1990–92 recession, Canada began to fall behind and we have not been able to resume our earlier standing.

In the current recession, the gap between Canada and the United States has held steady. In the fourth quarter of 2008, real GDP in the United States decreased at an annual rate of 6.3 percent versus the previous quarter, while it decreased at an annual rate of 3.4 percent in Canada (Exhibit 6).

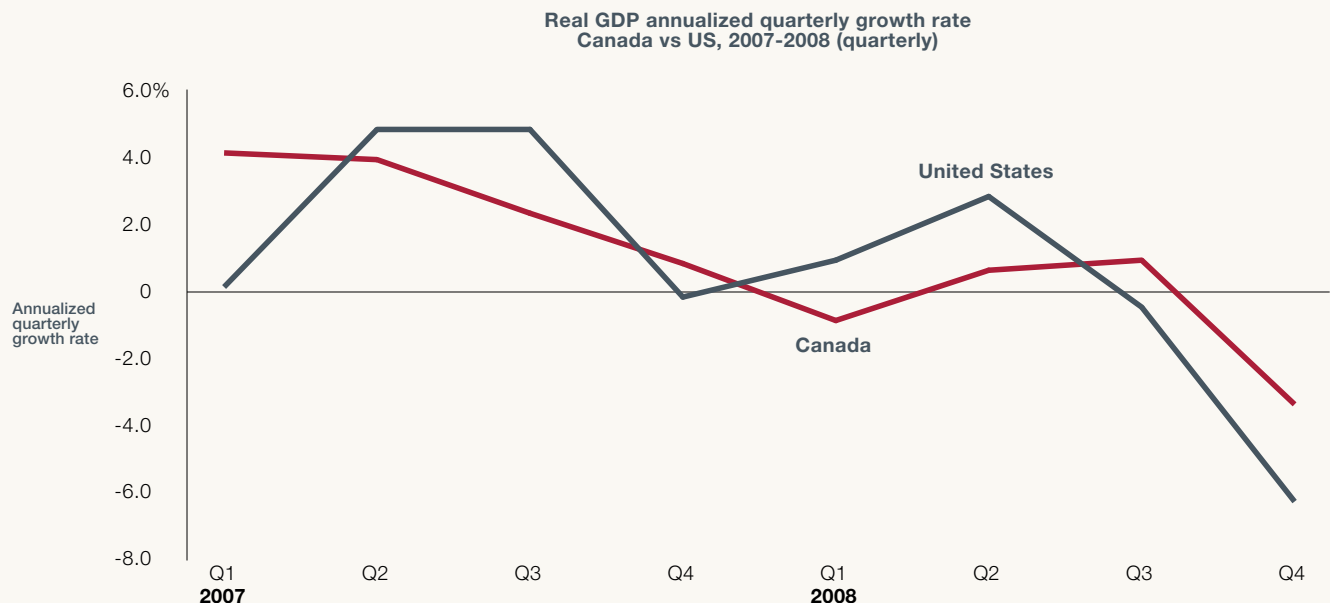
This prosperity gap matters to Canadians. It represents lost potential for our residents to gain economic security and well being and for our public institutions to provide services and investments for future prosperity.

Lagging intensity and productivity remain the biggest hurdles

To understand the reasons for our prosperity gap with the United States, we draw on the same framework we have used in our previous reports. This framework disaggregates GDP per capita into four measurable elements (Exhibit 7).

- **Profile.** Out of all the people in a country, 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 percent 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.

Exhibit 6 The current recession has similar effects in Canada and the United States



Note: Annualized quarterly growth rates are change rates from previous quarters. Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Department of Commerce, US Bureau of Economic Analysis.

- **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 country, how much economic output is created by its workers? Within productivity there are six sub-elements and a productivity residual:

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

Cluster mix – the productivity potential of the clustered industries that drive national productivity and innovation

Cluster effectiveness – how well our clustered industries compete

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

Canadians are expending to create economic value. The fourth factor – productivity – measures how effectively our labour efforts turn resources into economic value and prosperity.

Canada's most significant divergence from the prosperity performance of the United States occurred during the recession of the early 1990s. During that time, the key factor driving our economic weakness was lower labour effort, especially utilization and its two sub-elements, participation and employment. Since 1997, we have been successfully recovering to 1990 performance levels. But, at the same time, a growing gap in hours worked, intensity, and productivity has emerged relative to that in the United States. To the extent Canadians choose to work fewer hours, there is only limited potential for public policy to close the intensity gap. But we can be more productive and innovative in the fewer hours we are working – and this has to be our priority.

Exhibit 7 The Institute measures four components of prosperity

Prosperity		Profile		Utilization		Intensity		Productivity
GDP per capita	=	Potential labour force Population	X	Employed persons Potential labour force	X	Hours worked Employed persons	X	GDP Hours worked
				<ul style="list-style-type: none"> • Participation • Employment 				<ul style="list-style-type: none"> • Industry mix • Cluster mix • 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.

Canada has mixed labour effort performance

Canada continues to have a demographic profile advantage versus the United States, an advantage in utilization, but a significant intensity gap (Exhibit 8).

Profile remains an advantage for Canada.

The first factor in a country'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 Canada, this ratio has been stable over the short run and has had no appreciable impact on changes in our prosperity gap versus the United States. Nevertheless, it does create an ongoing starting advantage in Canada's prosperity.

In 2007, 69.5 percent of Canadians were aged 15 to 64, while in the United States this was 67.3 percent. So, Canada has a 3.2 percent potential profile advantage.⁷ Holding all other factors constant, we calculate this advantage to be worth \$1,200 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 the United States worth about \$1,200 per capita to our prosperity.

Demographic projections indicate that the proportion of Canadians 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 Canada will maintain its advantage versus the United States.⁸

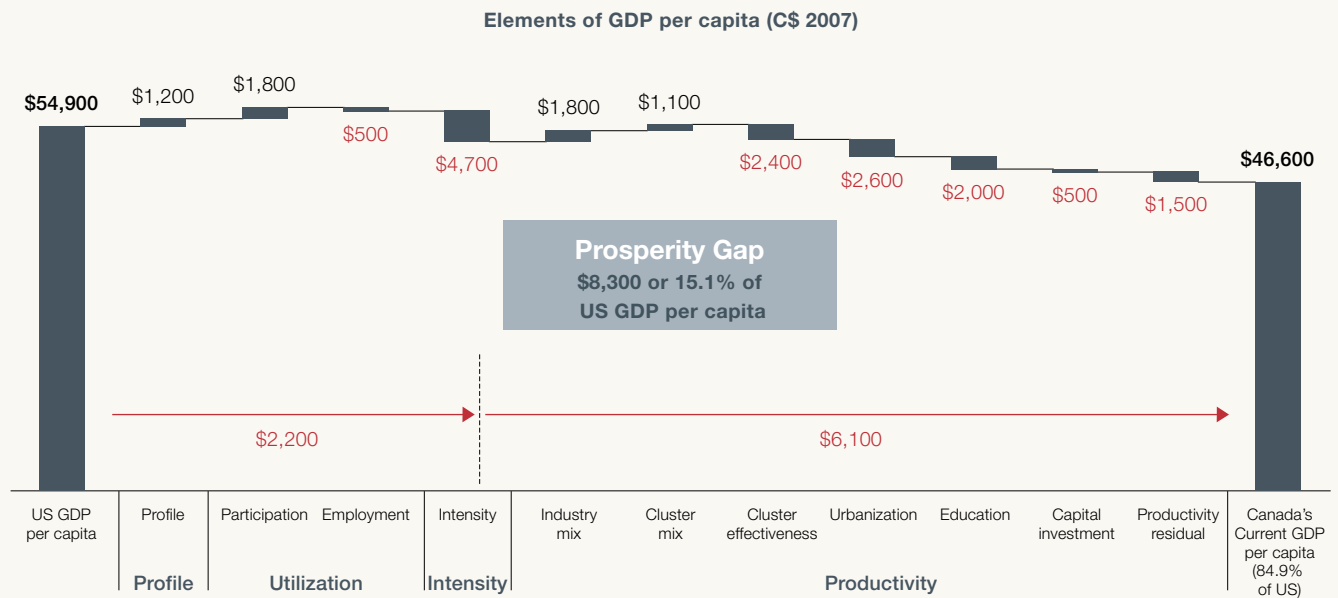
Nevertheless, Canada will have fewer workers to create prosperity in the

coming years. We estimate that by 2025 the smaller percentage of working aged Canadians will reduce GDP per capita potential by \$2,300.⁹ As we and others have observed, Canada will need creative retirement solutions to address this decline in our prosperity potential.¹⁰

Utilization is higher in Canada than United States.

Canada's economy is slightly more successful in generating jobs for its adult population – the net effect of a slightly higher participation rate and a slightly higher unemployment rate. In the 1990–91 recession, Canada fell behind the United States on this measure as our deeper downturn discouraged workers from looking for employment and reduced the number of jobs available.¹¹ Canada reversed this trend beginning in 1997, and it is again an advantage in our economy.

Exhibit 8 Productivity and intensity are the main sources of Canada's prosperity gap with the United States



Note: Currency converted at PPP. Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Department of Commerce, Bureau of Economic Analysis.

⁷ Calculated as [1 minus (67.3 (United States) / 69.5 (Canada))] = 3.2 percent.
⁸ Task Force on Competitiveness, Productivity and Economic Progress, Fourth Annual Report, *Rebalancing priorities for Ontario's prosperity*, November 2005, p. 29.
⁹ This comparison is between Canada's GDP per capita in 2005 and its potential in 2025; not the difference between Canada and the United States.
¹⁰ Institute for Competitiveness & Prosperity, Working Paper 9, *Time on the job*, September 2006, p. 21.
¹¹ Task Force on Competitiveness, Productivity and Economic Progress, Fifth Annual Report, *Agenda for our prosperity*, November 2006.

In 2007, 67.6 percent of Canadians fifteen years of age and older¹² worked or sought work, versus 64.3 percent in the United States. This participation rate advantage for Canada translates into \$1,800 in GDP per capita.

In the other component of utilization, employment, Canada has traditionally trailed the United States, but this gap has been narrowing in recent years. In 2007, 94.0 percent of Canada's labour force was employed, or in other words, unemployment was 6.0 percent through the year. This compares with 95.2 percent in the United States, costing us \$500 in lower GDP per capita in 2007.

Results for participation rates in 2008 are not yet final, but preliminary results indicate that Canada maintained its advantage. While unemployment rates in 2008 for the United States and Canada are still under revision, the gap in unemployment rates between the two countries shrank in 2008.¹³

Intensity is a significant part of our prosperity gap. While Canada out performs the United States in profile and utilization, we have a significant intensity gap – our workers are on the job fewer hours in a year than their US counterparts. In 2007, the average employed Canadian worked 1,700 hours, while in the United States, the average per worker was 1,873 hours. This gap of 173 hours, or 4.6 weeks annually, narrowed from 2006, when Canada trailed the United States by 180 hours weekly or 4.7 weeks. Consequently, the importance of intensity on Canada's prosperity gap decreased slightly from 2006, but still is a large part of our prosperity gap.

Our previous research on differences in hours worked points to more vacation weeks taken by Canadians, greater incidence of part-time work in Canada, and fewer workers on the job for long work weeks (greater than 50 hours).¹⁴ Much of our intensity gap reflects the desires of Canadians for more leisure to take more vacation, which is a preference, not a weakness.¹⁵ But nearly a quarter of the gap is because our economy does not create adequate opportunities for full-time work.

¹² 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.

¹³ However, while sources vary on the exact crossover point during 2008, the US unemployment rate rose above Canada's.

¹⁴ Working Paper 9, *Time on the job*.

¹⁵ *Ibid.*, p. 34.

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

As we have seen, in the three labour effort factors, Canada has an advantage in the percentage of our population of working age and a very small disadvantage in the percentage of these adults who are employed. Still, the difference in the number of hours worked is a major contributor to our prosperity gap. Even with the overall gains in utilization, our prosperity gap persists (*Exhibit 9*).

Over the last decade, productivity has accounted for the greatest share of the prosperity gap with the United States. Canada's slight narrowing of the prosperity gap in 2007 is the result of gains in our utilization advantage. In effect, the prosperity gap narrowed because more Canadians were working.

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

Our industry mix contributes positively to our productivity.¹⁶

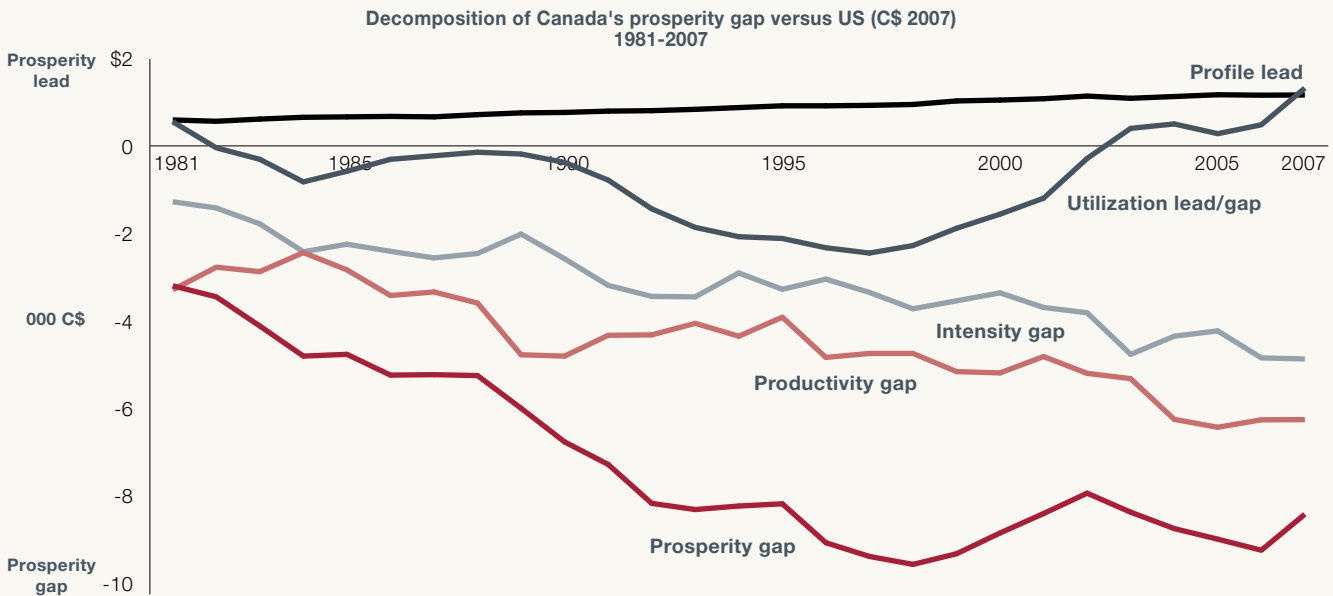
Canada benefits from a mix of industries that is more heavily weighted toward clustered industries, and within these clustered industries, we have a more favourable mix for productivity and prosperity.¹⁷ As research by Michael Porter of the Harvard-based Institute for Strategy and Competitiveness has shown, the geographic clustering of firms in the same and related industries increases productivity and innovation. These clustered industries, or traded clusters as Porter calls them, typically sell to markets beyond their local region. In addition, the presence of clustered industries in a region has a spillover

effect, in that they typically generate opportunities for increased success of the local economy.

The other major industry type is dispersed industries, or local industries as Porter calls them. These industries, such as retailers and restaurants, tend only to serve their local markets and so do not realize economies of scale and are less challenged by competitors outside their local area to be innovative. As a consequence, they have lower rates of productivity, innovation, and wages.

Porter identifies a third industry type, natural endowment industries, whose location is driven by the presence of natural resources. These include forestry, mining, and agriculture. These are very small industries – accounting for 0.9 percent of employment in the United States and 1.4 percent in Canada in 2006.

Exhibit 9 Lower productivity and intensity are the major sources of Canada's prosperity gap



Note: Currency converted at PPP. Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Department of Commerce, Bureau of Economic Analysis, US Census Bureau; US Department of Labor, Bureau of Labor Statistics.

¹⁶ In this year's Report, we analyze our overall industry mix separately from our mix of clustered industries. Previously, we grouped these together as cluster mix. We also reported cluster content, but as this factor accounts for a small portion of the productivity difference, we have dropped it from our analysis. Our cluster data are now based on North American Industry Classification System (NAICS) to be consistent with the recent change by Harvard's Institute for Strategy and Competitiveness from Standard Industrial Classification (SIC) to NAICS.

¹⁷ 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, we determined that fully 34.8 percent of employment in Canada is in clustered industries versus 27.4 percent in the United States. We estimate the potential productivity benefit from this higher percentage of clustered industries in our industry mix to be worth \$1,800 per capita. This benefit is derived from a higher output than would be likely if Canada’s mix were the same as that of the United States.¹⁸

Within clustered industries Canada has a beneficial mix. While all clustered industries are positive contributors to productivity and innovation, some have higher potential than others. Canada’s relative employment strength in financial services, oil and gas products and services, heavy construction services, entertainment, and others has created

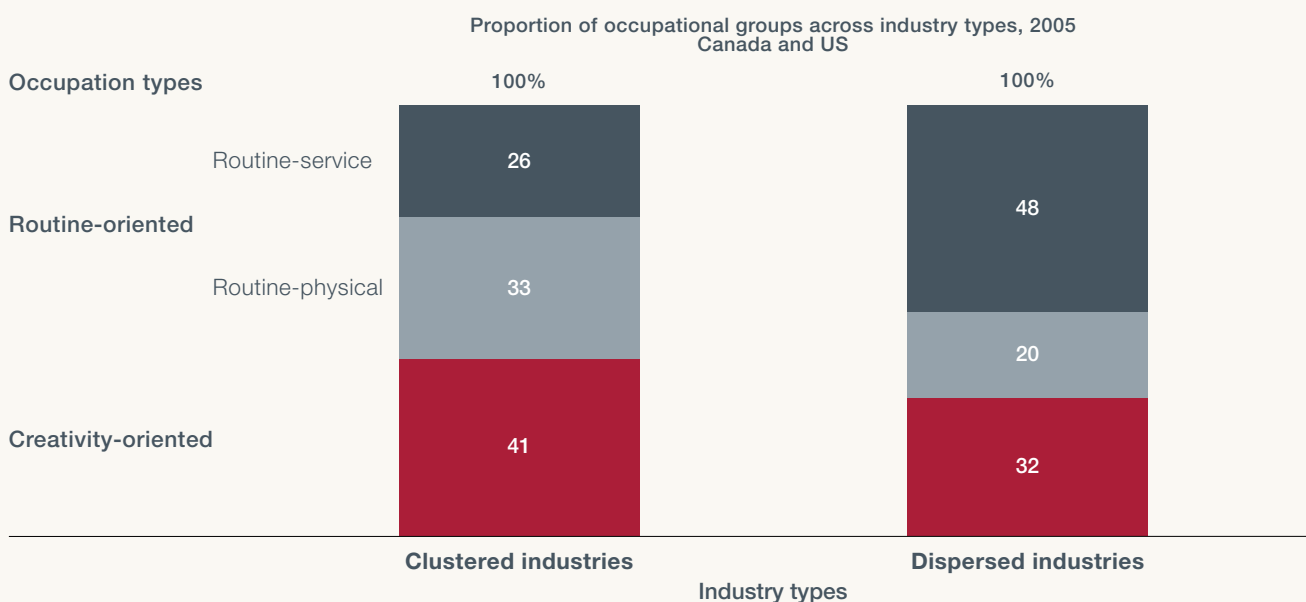
an attractive mix of clustered industries. Our analysis of Canada’s cluster mix indicates a \$1,100 per capita advantage.

We know that creativity increases economic growth and we know that clusters increase productivity. But no one had put the two together. So that is exactly what we did: we combined the effects of creativity-oriented occupations and industry clusters (see *Realizing prosperity through creativity*).

This is the first effort, to our knowledge, to examine a nation’s economy through two lenses industries and occupations. In other words, we looked at the economy from the perspective of both what workers do and what firms produce – a powerful approach to understanding our economy better. The implications for Canada are striking.

Clustered industries are more likely to draw on creativity-oriented occupations (*Exhibit 10*). The greater propensity to use creativity-oriented occupations occurs because these industries compete on productivity and value-added innovation and are more likely to be challenged to upgrade continuously by global competitors. Those in routine-oriented physical occupations are also more likely to be employed in clustered industries. This is driven largely by the need for successful North American manufacturers to achieve scale to compete effectively. Workers in routine-oriented service occupations are more likely to be employed in dispersed industries. Many of these industries are primarily local service providers, like restaurants and local banks, and they rely more on face-to-face or personal service.

Exhibit 10 Clustered industries draw more on creativity-oriented occupations



Note: Full time and part time combined. Source: Martin Prosperity Institute and Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Census Bureau, American Community Survey, County Business Patterns.

¹⁸ It is important to note that our measure focuses on the mix of industries only. It calculates the productivity performance we could expect in Canada if each cluster were as productive as its US counterpart. It does not measure the effectiveness of our industries in Canada.

Realizing prosperity through creativity^a

We live in a time of great promise. We have evolved economic and social systems that are tapping human creativity as never before. This in turn creates an unparalleled opportunity to raise our living standards, build a more humane and sustainable economy, and make our lives more complete.

Human creativity is the ultimate economic resource. The ability to generate new ideas and better ways of doing things is ultimately what drives innovation to raise our productivity and our living standards. The great transition from the agricultural to the industrial age was based upon natural resources and physical labour power, and ultimately gave rise to giant factory-based economies. The transformation now in progress is potentially bigger and more powerful. The shift we are seeing now is based fundamentally on human intelligence, knowledge, and collaborative skills.

The transformation involves moving from routine-oriented jobs to creativity-oriented jobs – the two basic types of occupations in our economy. Routine-oriented jobs require workers to carry out tasks in a prescribed order or to do the same tasks repetitively according to a pre-ordained set of operating procedures.

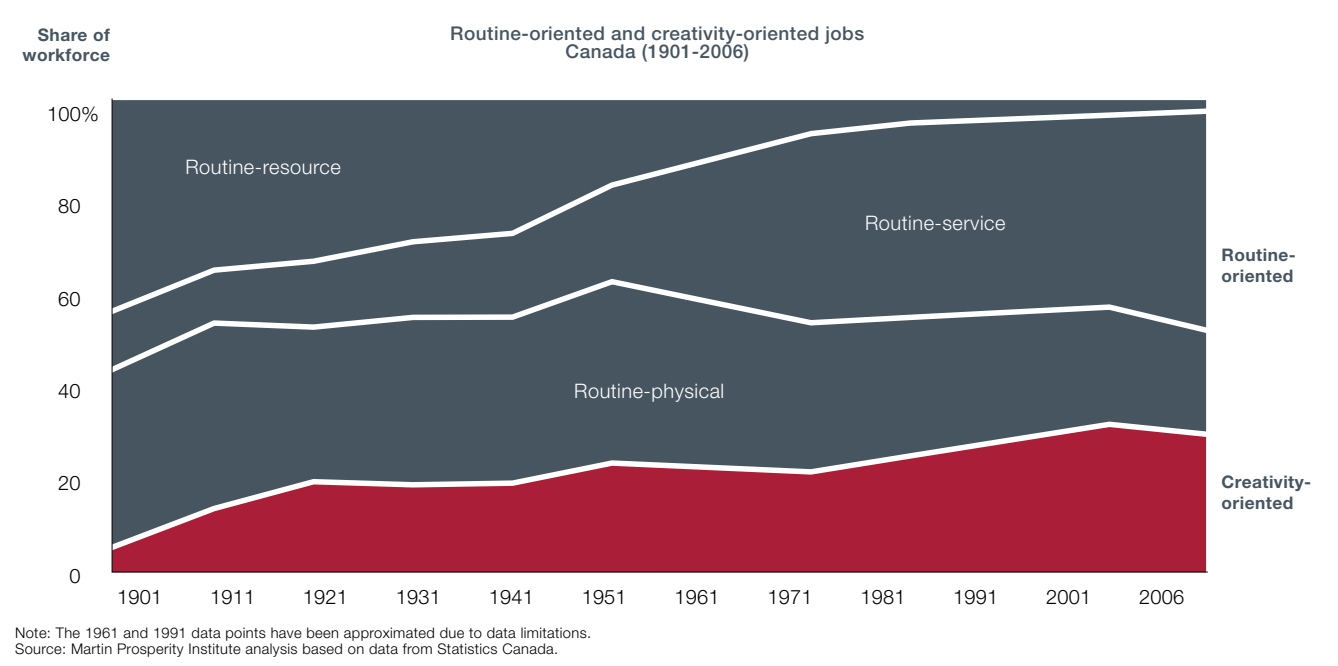
Workers in routine-oriented occupations are either performing routine-physical labour or routine-service functions. The number of workers in occupations based on physical labour is declining as a percentage of the total work force (*Exhibit A*). These workers are much more likely to be unemployed, especially in an economic downturn. But workers in routine-oriented service occupations – retail clerks and restaurant and hotel staff – are much more numerous as a result of the rise of creative occupations. Those in creativity-oriented occupations, who often work long days and nights, rely on those office cleaners, delivery people,

and many others in the service economy. In fact, the service economy is the supporting infrastructure of the creative age.

Creativity-oriented occupations require workers to apply thinking and knowledge skills to changing situations and to make decisions on how best to proceed. An experienced lawyer, for example, will recognize the key problems in a case and apply experience to determine what tasks need to be done in what order for that specific case. But every lawyer's case is different. Creativity-oriented jobs require knowledge and understanding in specific fields, but they also depend heavily on the ability of workers to recognize patterns, analyze alternatives, and decide the best way to proceed. Creativity-oriented jobs include scientists and technologists, artists and entertainers, and managers and analysts.

The proportion of people in creativity-oriented occupations has increased threefold over the past century and

Exhibit A The share of creativity-oriented jobs is increasing



^a This sidebar is adapted from Roger Martin and Richard Florida, *Ontario in the Creative Age*, Martin Prosperity Institute, February 2009.

especially over the past two decades. And those who earn their income from their creativity do much better economically than those who work in jobs based on rote tasks.

We need to improve the wages and working conditions of those who work in the routine-oriented jobs that are the lifeblood of that infrastructure. Just as in the industrial age, we succeeded in improving working conditions in once hellish steel mills and auto assembly plants, we now need to ensure workers in routine-oriented jobs enjoy the benefits of the creative age. Certainly a lot of jobs – in the hair salon, on the construction site, or in the restaurant kitchen – already involve creative work. We need to recognize and reward that creativity more than we do. Some other jobs, too, can become more creative with higher rewards.

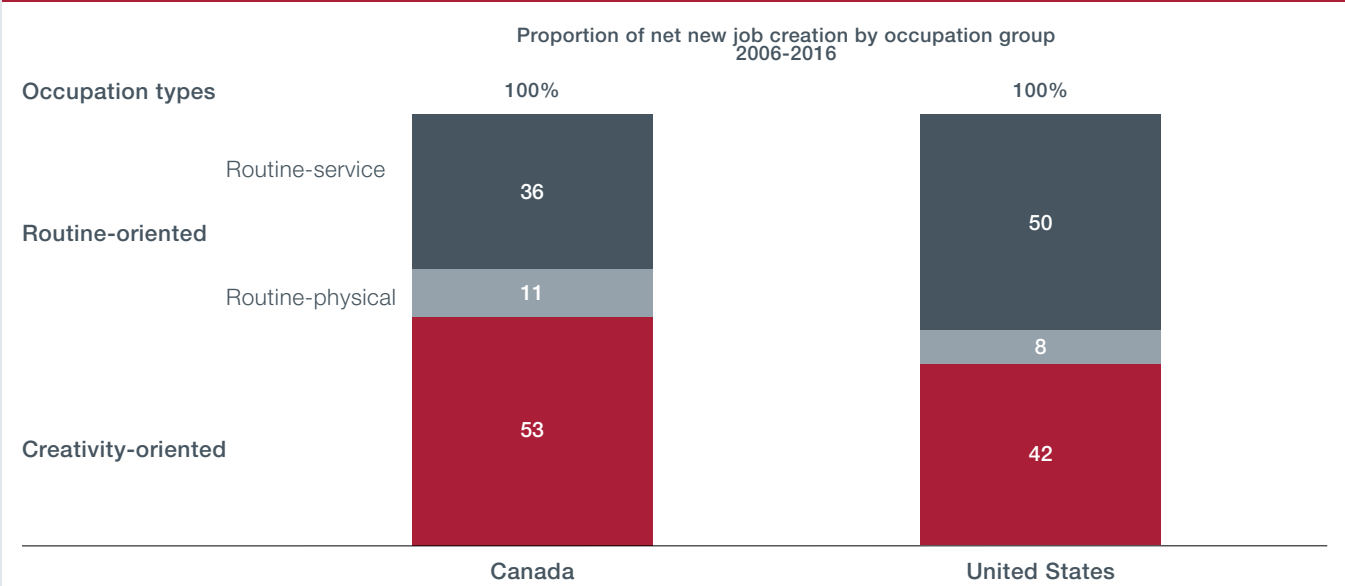
There is no magic bullet. But sooner or later some jurisdiction will determine how to tap more fully the creative talents of

much broader segments of its people – and it will gain a distinctive advantage. Japan’s auto manufacturers plumbed the knowledge and creativity of their shop-floor workers and gained a tremendous competitive advantage. Canada’s own Four Seasons has done so in bringing guest service to new, world beating levels, thanks to empowered front-line employees. Drawing on the creativity of people whose jobs presently ask for none will multiply this many times over. Relegating vast numbers of people to do work that is more routine than it needs to be is a dreadful waste of human capabilities.

Businesses in Canada do not currently deploy creative workers to the best advantage. What’s more, our economy is currently “tuned” to under value increases in the creative content of all occupations. We need a dramatic transformation in both our occupational structure – what people do – and in our industrial structure – what we produce.

Our economy has experienced the dramatic growth of some occupational classes, alongside the significant decline of others. Employment in creativity-oriented occupations is growing faster than average in Canada. Over the past twenty-five years, the creativity-oriented occupations have increased from 24 percent of the country’s work force to 29 percent, while routine-oriented jobs have declined from 75 to 71 percent. But within routine-oriented occupations, we have seen a massive shift. Routine-oriented physical jobs, like those in manufacturing, transportation, and construction, have fallen from 29 percent to 22 percent, while those in routine-oriented service jobs have grown from 41 percent to 46 percent.^b Our projections show that creativity-oriented occupations and routine-oriented service occupations will continue to grow much faster than routine-physical occupations (*Exhibit B*).

Exhibit B New jobs in the coming decade will be in creativity-oriented and routine-oriented service occupations



Source: Martin Prosperity Institute and Institute for Competitiveness & Prosperity analysis based on data from Human Resources and Skills Development Canada; US Bureau of Labor Statistics, Occupational Employment Projections (2006-2016).

^b The other type of routine-oriented occupation is resource-oriented (e.g., agriculture, mining, or forestry workers) where employment has declined from 5 percent to 3 percent of the workforce, over the past 25 years.

Wages are dramatically higher for workers in creativity-oriented occupations in clustered industries – more than twice as high as those in routine-oriented occupations and about 28 percent higher than those in creativity-oriented occupations in dispersed industries (*Exhibit 11*).

Cluster under performance is a significant part of Canada’s productivity gap. While Canada has an excellent mix of clustered industries, their effectiveness is much lower than that in the United States. Part of this is due, as we have just seen, to their lower propensity to employ workers in creativity-oriented occupations. But this does not account for all the lower effectiveness – as measured by overall wage levels and productivity. In Canada and the United States, clustered industries are more productive than dispersed industries, as represented by wages. In Canada, the productivity

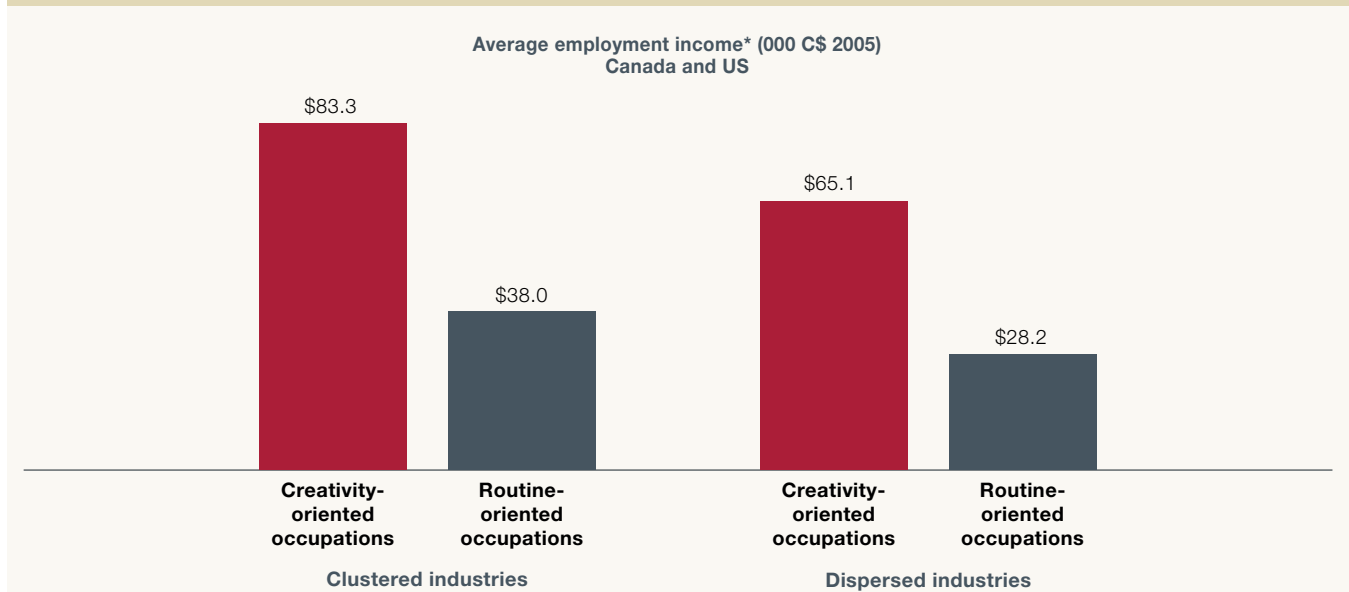
premium is 32.4 percent.¹⁹ But across the United States, the median productivity premium is 54.3 percent. Taking the prevailing wage in local industries as a given, our clusters are under performing their counterparts in the United States by 16.5 percent (the difference in the US performance index of 1.54 versus Canada’s 1.32).

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 clustered industries. As we discussed in our Third Annual Report in 2004,²⁰ our structures of specialized support and competitive pressure are inadequate relative to the experience in clustered industries in the United States.

If Canada’s clusters were as effective as US clusters, wages would be \$8,100 per worker higher. As clustered industries account for 34.8 percent of Canadian employment and given the relationship between wages and productivity, our overall productivity would rise by 7.9 percent.²¹ From this, we estimate the productivity loss from the lower effectiveness of our clusters to be \$2,400 per capita.

In future research, we will assess the creativity content of our clustered industries – that is, to what extent do they draw on creativity-oriented occupations? Our concern is that our economy may be tuned to a lower level than the US economy – our clustered industries may not draw on creativity-oriented occupations as much as their counterparts in the United States. As developing economies, like China and India, improve their performance and innovation in these clustered industries, the challenge for Canada will grow.

Exhibit 11 Creativity-oriented clusters generate higher earnings



* Weighted average.
 Note: Currency converted at PPP; full time and part time combined; 18 years old and above.
 Source: Martin Prosperity Institute and Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada; US Census Bureau, American Community Survey, County Business Patterns.

¹⁹ Working Paper 5, *Strengthening structures*, p. 26.
²⁰ Task Force on Competitiveness, Productivity and Economic Progress, Third Annual Report, *Realizing our prosperity potential*, November 2004, pp. 40-48.
²¹ We have netted out the effects of Ontario’s lower urbanization, our under investment in capital, and our lower educational attainment in this calculation.

For Canada to prosper, workers in creativity-oriented occupations need the skills necessary to command higher wages, and employers need more sophisticated business models to warrant paying those wages. Otherwise, potential and existing creativity-oriented workers will not invest in acquiring and upgrading the valued skills they need and thus not develop to their full potential. This will result in Canada's economy languishing at a lower level of creativity, innovation, and competitiveness. We must increase the creativity content of all our occupations and industries. The increased efficiency from better job design along with greater use of technology and better management will make these occupations more efficient and thus require fewer workers. This will allow for a shift in employment from dispersed industries to clustered industries. At the same time, we must encourage the greater presence of creativity-oriented occupations in clustered industries.

In summary, Canada has a good mix of industries, especially clustered industries. But our economy is tuned to a lower level of effectiveness in how we compete in those industries. Because they are less creative, innovative, and productive than they could be, our prosperity under performs.

Relatively low urbanization is a significant contributor to our productivity and prosperity gap. In our work, we have established that a higher level of productivity 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.

Since fewer people in Canada live in metropolitan areas than in the United States, our relative productivity and prosperity potential are reduced.²² Our analysis this year indicates that we have a \$2,600 per capita disadvantage against the United States 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 that higher wages accrue to more highly educated individuals.²³ And higher wages are the result of higher productivity.²⁴ Canada's population has, on average, a lower level of educational attainment compared to those living in the United States, particularly at the university graduate level. Adjusting the mix of educational attainment in Canada to match the US mix and holding wages constant at each attainment level, Canada's productivity would be higher by \$2,000 per capita.

²² Task Force on Competitiveness, Productivity and Economic Progress, Sixth Annual Report, *Path to the 2020 Prosperity Agenda*, November 2007, p. 24-25.

²³ 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.

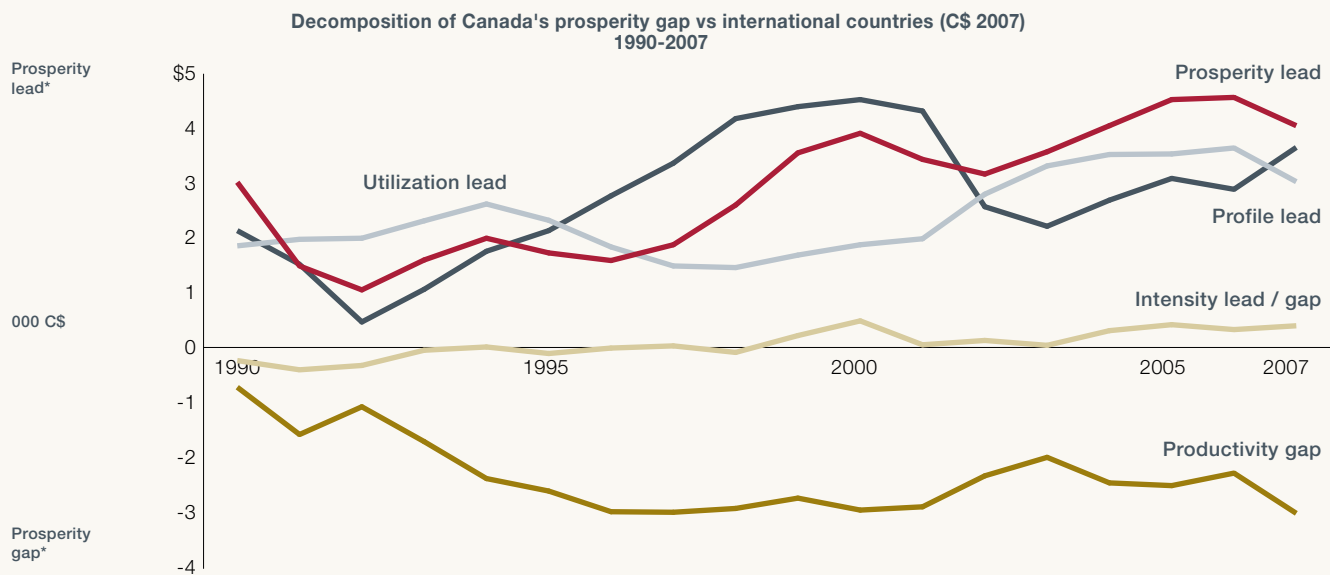
²⁴ See Exhibit D in "Why productivity is important for our prosperity," in our Sixth Annual Report, *Path to the 2020 Prosperity Agenda*, pp. 28-30.

Under investment in capital lowers productivity. Canadian businesses have under invested in machinery, equipment, and software relative to their counterparts in the United States, so that the capital base that supports workers in Canada is not as modern as that of their counterparts in the United States. As a result, Canadian workers are not as productive. We estimate this under investment in capital equipment lowers Canada's productivity by \$500 per capita. This estimate is based on our simulation of Canada's 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 \$1,500 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.

Exhibit 12 Canada's productivity trails that in international peers



* Versus median of 10 peer countries.
 Note: Currency converted at PPP.
 Source: Institute for Competitiveness & Prosperity based on Statistics Canada; US Department of Commerce, Bureau of Economic Analysis, US Census Bureau; US Department of Labor, Bureau of Labor Statistics; OECD; IMF.

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.

Productivity gap continues to be important

We have seen that over the past two decades, Canada's prosperity gap with the United States has been driven by an intensity gap in hours worked and in productivity. Our gap widened dramatically through the first half of the 1990s, as our employment performance worsened dramatically. Since that time, Canada's prosperity growth has been driven more by growth in employment than by productivity.

In summary, against our North American neighbour, Canada 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 Canada has a prosperity lead, but we still lag in productivity.

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

We compared Canada's sources of prosperity with these international peers using the same waterfall approach we have developed for US comparisons. Data availability prevent us from providing the same level of detail, but we can compare Canada'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. This international comparison indicates that lagging productivity is Canada's challenge – we work more than those outside North America, but we are less successful at creating economic value in the hours we work (*Exhibit 12*).

Canada'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 Canadians. Higher productivity through greater use of creative workers, higher urbanization, greater educational attainment, and more business investment in technology are critical to our success.



AIMS and the long-term opportunities for Canada

The current economic turmoil presents significant challenges to the 2020 Prosperity Agenda, but it also creates great opportunities for Canada

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 ecosystem:

- **ATTITUDES** toward competitiveness, growth, and global excellence and toward diversity and tolerance. 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, and in the creativity and diversity that are important factors for that growth, they are more likely to take the actions required to drive competitiveness and prosperity.
 - **MOTIVATIONS** for hiring, working, and upgrading as a result of tax policies and government policies and programs. Taxes that discourage investors or labour will reduce their 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. Structures also reflect the “tuning” of an economy, where the elements of pressure and support work in harmony to determine the level of innovation, growth, and economic prosperity in an economy.
- 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, Canadians would invest more in machinery, equipment, software, and education. Motivations 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 13*).
- **INVESTMENTS** in education, machinery, research and development, and commercialization. As businesses, individuals, and governments invest for future prosperity, they will enhance productivity and prosperity.

Our 2020 Prosperity Agenda comprises elements in each of the four AIMS factors. The current economic turmoil has changed the conditions around each element of the agenda and raises concerns for Canadians – but it also creates great opportunities for us to realize our long-term prosperity potential.

We are concerned that in this current economic environment, our attitudes may turn insular, and Canadians will not embrace global competition and the benefits we secure through immigration. In fact, this is exactly the time to seek out global markets and benefit from global competition. This is an opportunity for Canada to gain competitive advantage by becoming an even more open economy and society, as other countries risk being protectionist toward imported goods and services and xenophobic toward immigrants.

We are threatened by reduced investments by businesses, individuals, and governments because of their concern about future prospects and short-term

budget constraints. These are valid concerns. But what we need to aim for is the appropriate balance between long-term and short-term considerations, between prudence for our future and confidence in our capabilities to weather the storm.

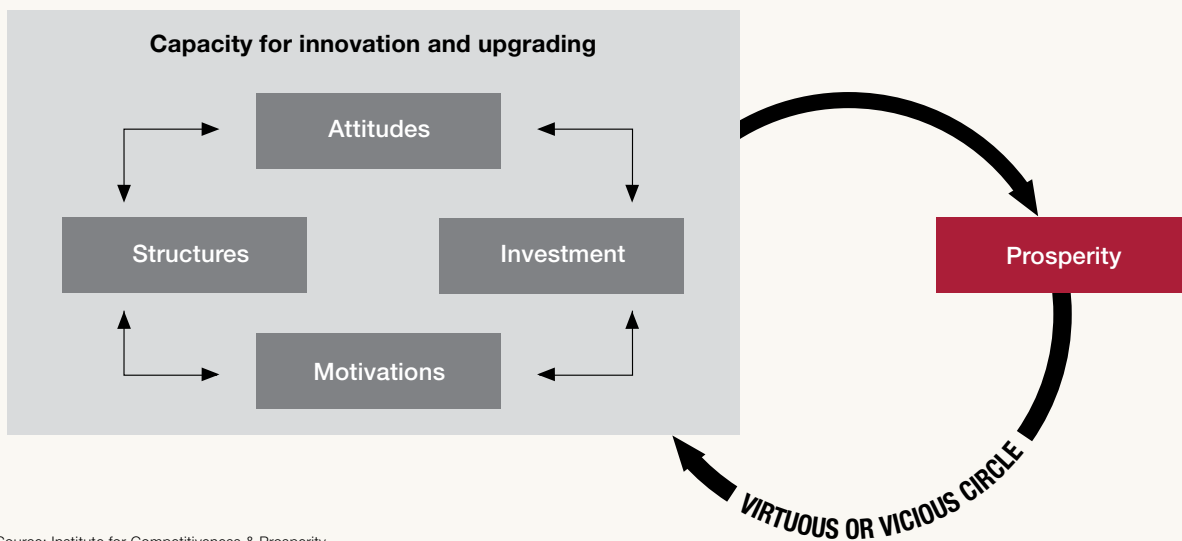
Motivations to invest can be threatened by an inability of governments to continue the reduction in marginal effective taxes on investment because of a need to bring in more revenue to avoid excessive deficits. Worries over deep deficits are valid. But the best way to deal with them is to ensure stimulus spending is effective and well thought out. In addition, governments need to recognize that higher tax rates on business investment do not generate large sources of new revenue. In fact, if Canada’s tax rates are too much offside versus other developed economies, we may lose tax revenue.

And finally, our prosperity will be threatened if we are not aggressively trying to tune our economy to higher

levels of performance through greater openness to international markets and competitors. We also need to continue searching for ways to increase competition in our domestic market. Much of what is required was set out by the Competition Policy Review Panel, which released its report in June 2008. We have a great opportunity to make our economy even more open, thereby sharpening our skills and increasing the rewards for creativity.

Canadian consumers and producers succeed when we reach out to the world and are open to it. We need to manage prudently through today’s economic turmoil, but also see and seize the opportunities that emerge from it.

Exhibit 13 **AIMS drives prosperity; prosperity drives AIMS**



Source: Institute for Competitiveness & Prosperity.

Attitudes: Keep eye on long-term prosperity potential

With positive attitudes to openness, Canada can gain competitive advantage from the current global economic turmoil

Attitudes are an important foundation for a region's competitiveness and prosperity. In our previous work, we found that Canadians do not have a fundamentally different outlook on many aspects of competitiveness than our US counterparts.

Canada's leaders need to help strengthen positive attitudes toward international economic openness

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 for Ontario, *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 the 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 businesses in the province and its US 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. Projecting the Ontario results nationwide, it does not appear that Canadians lack

the personal DNA to embrace competition and pursue innovation.

In its final report, the Competition Policy Review Panel called on Canadians to accept the challenge of globalization – to move from defence to offence to increase our competitiveness.²⁶ 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. The Panel made important specific recommendations to realize the vision they set out for Canadians. Most of these are consistent with the Institute's 2020 Prosperity Agenda. But are Canadians willing to accept these recommendations?

In the fall of 2008, on behalf of the Canadian Chamber of Commerce, the Canadian polling firm Harris Decima measured Canadians' reactions to twenty-five key recommendations from the Panel.²⁷ 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." Harris Decima concluded that Canadians embrace twenty-one of the ideas they tested. Among these ideas, some indicate a greater openness to the global environment – "trade and investment agreements with more countries" and "harmonize product and professional standards with US." Among

the recommendations that elicited less support were ones that called for loosening of restrictions on foreign investment and foreign competition in banking and broadcasting and allowing mergers in the financial services sector. But on balance, more Canadians see the benefits of lower corporate taxes and 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.

But the federal and provincial governments should not shy away from taking strong stands in support of international openness. Rather than following the current US "Buy American" plan or adopting disastrous beggar-thy-neighbour policies, we need to accelerate free trade negotiations with other significant economies. Of course, this will do little to help us in the current downturn. But if we start the negotiation process now, we may be able to accelerate the next upturn with expanded trading. More trade also means more foreign direct

²⁶ *Compete to Win*, Final Report.

²⁷ Source: Harris Decima, "Canadian Competitiveness: How Canadians Feel About Our Ability to Compete" (October 2008), available online: <http://chamber.ca/smslib/general/BruceAnderson.pdf>

Diversity can be a bigger advantage for Canada^a

As research by Richard Florida and the Martin Prosperity Institute has shown, economic development is driven by 3Ts – Tolerance, Talent, and Technology. All three are critical to generating sustained economic growth and prosperity.

For example, a place like Pittsburgh or Rochester in the United States can have substantial Technology, but will fail to grow if Talent leaves, and it lacks the openness and Tolerance to attract new people. By contrast, a place like Miami may be a magnet for openness and Tolerance, but it too will lag without Technology and Talent. The places that grow and prosper, like Silicon Valley or Seattle, are those that perform well on all 3Ts.

Canada's long legacy of Tolerance and diversity makes it a good and inclusive place to live. But it also adds an important "non-market" advantage that can be an even more significant advantage if other countries are becoming less tolerant of "outsiders."

Research by Florida and the Martin Prosperity Institute as well as that by others^b shows how cities, provinces and states, and nations can all gain an important economic boost from being open and tolerant. Openness to outsiders, newcomers, immigrants, minorities, and gays and lesbians signals a community that welcomes all types of people and has low barriers to entry for Talent, enabling that place to attract the best and brightest from around the world. This is a core advantage of high-tech centres like Silicon Valley where, according to recent studies, between a third and a half of all high-tech startup companies have a new immigrant on their founding team. Openness to diver-

sity demonstrates broader receptivity to new ideas, intellectual freedom, risk tolerance, and an entrepreneurial spirit.

There are several measures of diversity on Tolerance, and our research indicates that Canada out performs on nearly all of them. As an example, Canada out performs the United States – just as Ontario out performs its peer jurisdictions – on the Mosaic Index, which measures the percentage of the population who are immigrants. The population in Canada has 20 percent immigrants compared to 12 percent in the United States. Ontario at 28 percent and British Columbia at 27 percent match the highest US state, California. Canada's openness to gays and lesbians is strongly associated with higher percentages of well-educated workers and the presence of creativity-oriented occupations.

Our research also found that openness to immigrants and visible minorities is strongly related to higher regional incomes in Canada and the United States. Open immigration policy can pay significant dividends in economic development, and we need to capture more of this potential in Canada.

Yet our diversity advantage is not translating to innovation and prosperity. This is certainly the case when we contrast Canada with the United States and Ontario with its US peer states. US states and cities achieve more leverage from diversity and openness in their economic performance. So, while we are more tolerant than our US counterparts and this Tolerance does generate economic advantage, we gain less from that than we could – because we have not developed the other Ts to their full potential.

^a This sidebar is adapted from Roger Martin and Richard Florida, *Ontario in the Creative Age*, Martin Prosperity Institute, February 2009.

^b Ronald Inglehart, *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton: Princeton University Press, 1997; S. Page and L. Hong, "Groups of diverse problem solvers can outperform groups of high-ability problem solvers," *Proceedings of the National Academy of the Sciences*, 16385-16389, 2004; M. Noland, "Tolerance Can Lead to Prosperity," *Financial Times*, August 18, 2009.

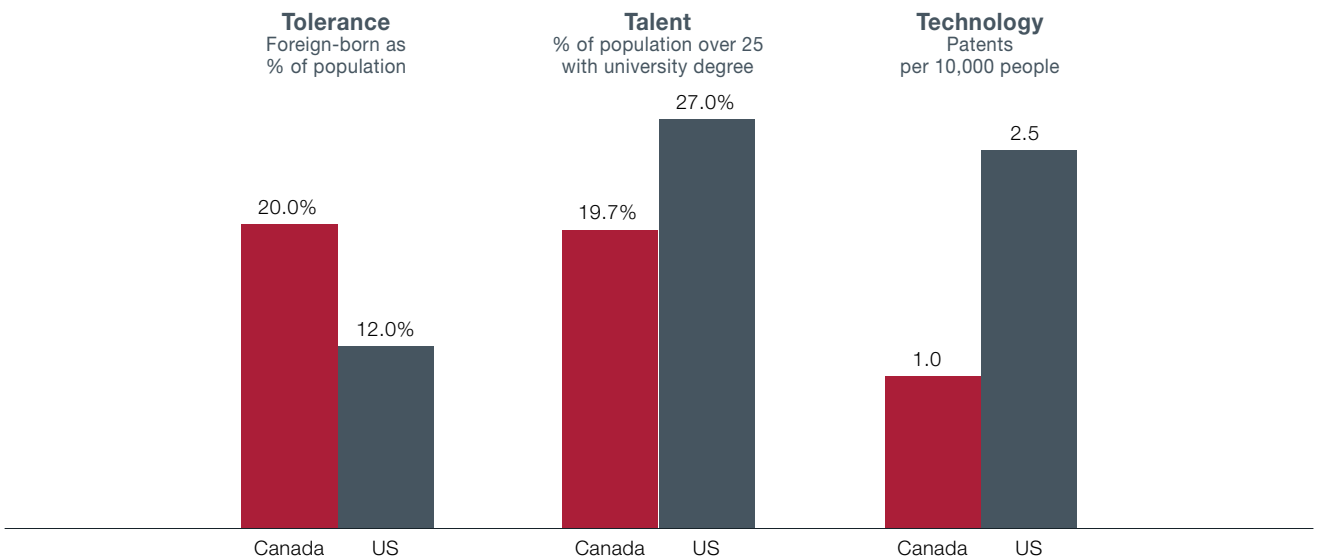
The second T of economic development is Talent. Prosperity is closely associated with concentrations of highly educated people (*Exhibit C*). With 30 percent of our workforce employed in creativity-oriented occupations, Canada nearly matches the level in the United States, 31 percent; still, our work force overall is less well educated. As we saw in our research on Canada’s productivity lag, our less educated population is a challenge to achieving our economic potential.

The third T, Technology, is critical to economic growth. Technology is a public and private good that increases wealth, attracts Talent to regions, and leads to economic growth. Innovation, often associated with Technology, can come in the form of product or process improvement, and the benefits of these improvements accrue widely across individuals, firms, and regions. As a share of total employment, Canada’s high-tech industry employment at 6.1 percent is close to the 6.9 percent

proportion in the United States, and Ontario’s is among the highest in North America. However, Canada has a low level of innovation as measured by patents. Our firms also perform less R&D.

Our lower performance on Talent and Technology contributes to our lower “yield” from our diversity and Tolerance advantage. Our challenge is to build greater advantage from our Tolerance. And this opportunity is even more pronounced with signs of less openness to immigrants in the United States.

Exhibit C Canada leads the United States on Tolerance but lags on Talent and Technology



Source: Martin Prosperity Institute analysis based on data from Statistics Canada; US Census Bureau, American Community Survey; Patent analysis: Dieter Kogler, Department of Geography, University of Toronto; USPTO (1975-07).

investment, and this will help our economy expand. There is also a psychological benefit to this. One of the drivers of the Great Depression was the erection of trade barriers. If we are looking to widen our network of trading partners, we must avoid the temptation to close off trade.

Now is the time to increase our diversity advantage

Canadians benefit from a more open and tolerant society (see *Diversity can be a bigger advantage for Canada*). There is no indication that these positive attitudes are flagging in the current downturn. The same cannot be said south of the border, where recent legislation has raised barriers for highly skilled immigrants. This creates a significant opportunity for Canada.

One provision in the US stimulus package is to “prohibit any recipient of TARP funding from hiring H-1B visa holders.” According to the Bank of America, the provision is forcing it to rescind job offers to foreign-born students graduating from US business schools. Contrary to the arguments of protectionists, skilled immigrants make an economy stronger. In fact, according to research conducted by the US National Foundation for American Policy, for every H-1B position they requested, US technology companies in the S&P 500 increased their employment by five workers. As the *Wall Street Journal* concluded, “if US companies can’t hire these skilled workers – many of whom graduate from US universities, by the way – you can bet foreign competitors will.”²⁸ In the same *Wall Street Journal* issue, the leaders at Dartmouth’s Tuck School of Business expressed concern that these provisions will reduce the dynamism of the US post secondary

education system. They concluded that with foreign-born students finding less attractive employment prospects in the United States, it is quite likely that fewer will enroll there.²⁹

This policy mistake – driven by attitudes of fear – can be Canada’s opportunity. Our universities are already admitting large numbers of students, including advanced graduate and doctoral students, from foreign countries. Foreign students represent a huge potential advantage because they bring skills and energy to Canada. But, as the Martin Prosperity Institute found in Ontario for example, there are currently economic disincentives for our universities to admit foreign students. The Ontario government provides no support to foreign doctoral students, and they are the most expensive students to train. Given that many doctoral students end up staying in Canada following graduation and have the skills and capabilities that are vital to our competitiveness in key fields, we should extend normal domestic doctoral student funding to foreign students. This will ensure that we can compete for the world’s best and brightest students³⁰ – and help Canada gain a global advantage in the search for talent as economic growth resumes.

We conclude that, on most issues of competitiveness, Canadians have positive attitudes that help shape actions and policies favourable to our prosperity. Our attitudes toward economic openness are less well developed, and a potential risk of the current downturn is that Canadians may become more defensive toward international competition. Our political leaders must work to strengthen our competitive offence. Canadians have very positive attitudes toward diversity. We can widen this advantage in the current economic downturn, as US attitudes toward skilled immigrants harden.

²⁸ “Turning Away Talent,” *Wall Street Journal*, March 11, 2009, p. A14

²⁹ Paul Danos, Matthew J. Slaughter and Robert G. Hansen, “It’s a Terrible Time to Reject Skilled Workers,” *Wall Street Journal*, March 11, 2009, p. A13

³⁰ *Ontario in the Creative Age*, p. 33.

Investment: Continue to invest in long-term prosperity

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

Canadians are not investing adequately for their future prosperity. This is true for investments in physical assets and in 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.

Obviously, we are now in a period of belt tightening, and making long-term investments has to be weighed against short-term considerations. But successful people, businesses, and governments can achieve the right balance. 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

Canadian 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. As a percentage of GDP, on a current dollar basis,

Canadian businesses matched their US counterparts in traditional (non-ICT) machinery and equipment.

The major source of our investment gap is in ICT investments. On a per worker basis, US businesses out invest Canadian businesses in machinery and equipment overall, with the gap being larger in ICT. As much of our 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, as our dollar strengthened, the gap between Canada and US investment per worker began to narrow slightly from 29 percent in 2000, and more beginning in 2005. In 2007, our businesses invested 16 percent less per worker in all machinery, equipment, and software than their US counterparts (*Exhibit 14*). In 2007, the Canada-US gap in ICT investment per worker was \$1,370 or 37 percent, while in other machinery and equipment the gap was only \$20.

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

continued to close through 2008 when the Canadian dollar lost ground to the US dollar and prices for imported technology and equipment rose.

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 late 2006, the Institute assessed the lower adoption of ICT by Canadian businesses, particularly small and medium enterprises.³¹ 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 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 our previous reports – lack of competitive pressure to spur Canadian businesses to adopt technology, less

³¹ 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.ictcctc.ca/uploadedFiles/Labour_Market_Intelligence/Enhancing-the-Productivity-of-SMEs.pdf

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 Report on Canada in 2004, we have been urging stakeholders in our prosperity to increase their 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 Canadians into higher earnings streams.

Rebalance spending on education and health care

In past reports, we have expressed our concern that governments in Canada have been trading off necessary investments in education to fund health care. As we compare our current public spending patterns in Canada 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 across the country spent \$2,400 per capita on education – 4.4 percent more than we spent on health care (*Exhibit 15*).

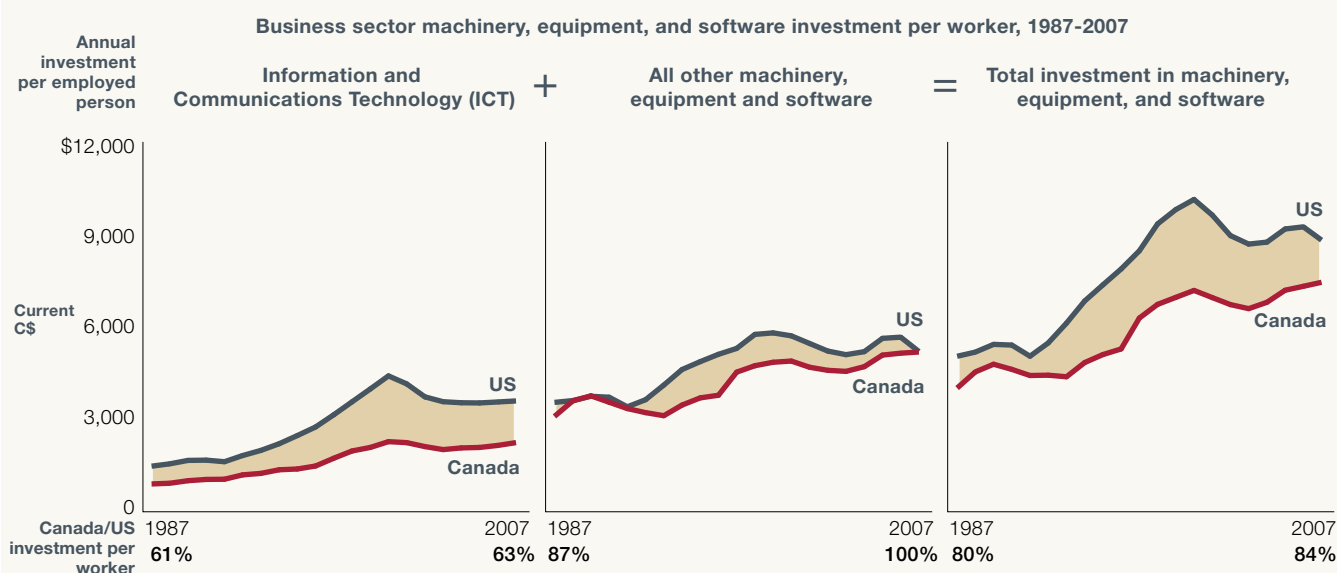
But, as governments tackled deficits through mid- to late-1990s, they cut real per capita spending on education at a much faster rate than that on health care spending. By 1999, governments were spending more on health care than on education. This gap widened considerably as health care spending per capita increased at an annual trend-line real rate of 3.7 percent between 1999 and 2007, while education spending increased only 1.5 percent annually. Last year, per capita public spending on health care outpaced spending on education by 26.6 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.

Canadian public spending on education has remained relatively flat in recent years. While constant dollar per capita public investments in education across the country increased slightly at a rate of 1.6 percent annually between 1997 and 2003, this annual growth rate fell to 1.3 percent between 2003 and 2007. In the United States, the annual growth in constant dollar public expenditure on education was 2.2 percent between 2003 and 2006. Much remains to be done, as the gap to be closed remains considerable.

Our challenge in Canada is to avoid seeing education spending as discretionary, while keeping public spending on health care sacrosanct. Both are necessary – health care for our current

Exhibit 14 Canadian businesses under invest in productivity enhancing information and communication technology



Note: US dollars converted to Canadian dollars using PPP for M&E.
 Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada (special tabulations); Labour Force Survey (CANSIM Table 282-0002); US Department of Commerce, Bureau of Economic Analysis; US Bureau of Labor Statistics, Current Population Survey; CSLs Database of Information and Communication Technology (ICT) Investment and Capital Stock Trends: Canada vs United States, available online: <http://www.csls.ca/data/ict.asp>

needs, and education to ensure we have the prosperity to afford high quality health care. In the United States, the proposed budget by the new administration has significant increases in education expenditure at all levels of schooling. If Canadians are to be competitive in the future, we have to be prepared to invest significantly in our future skills and knowledge.

In its recent budget, the federal government reduced funding for the major granting councils – the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institute for Health Research (CIHR), and the Social Sciences and Humanities Research Council (SSHRC) by \$148 million over the next three years, after which they will operate from the resulting lower base. CIHR, for example, will need to find \$35 million of savings most of which will come from grants to research teams. To

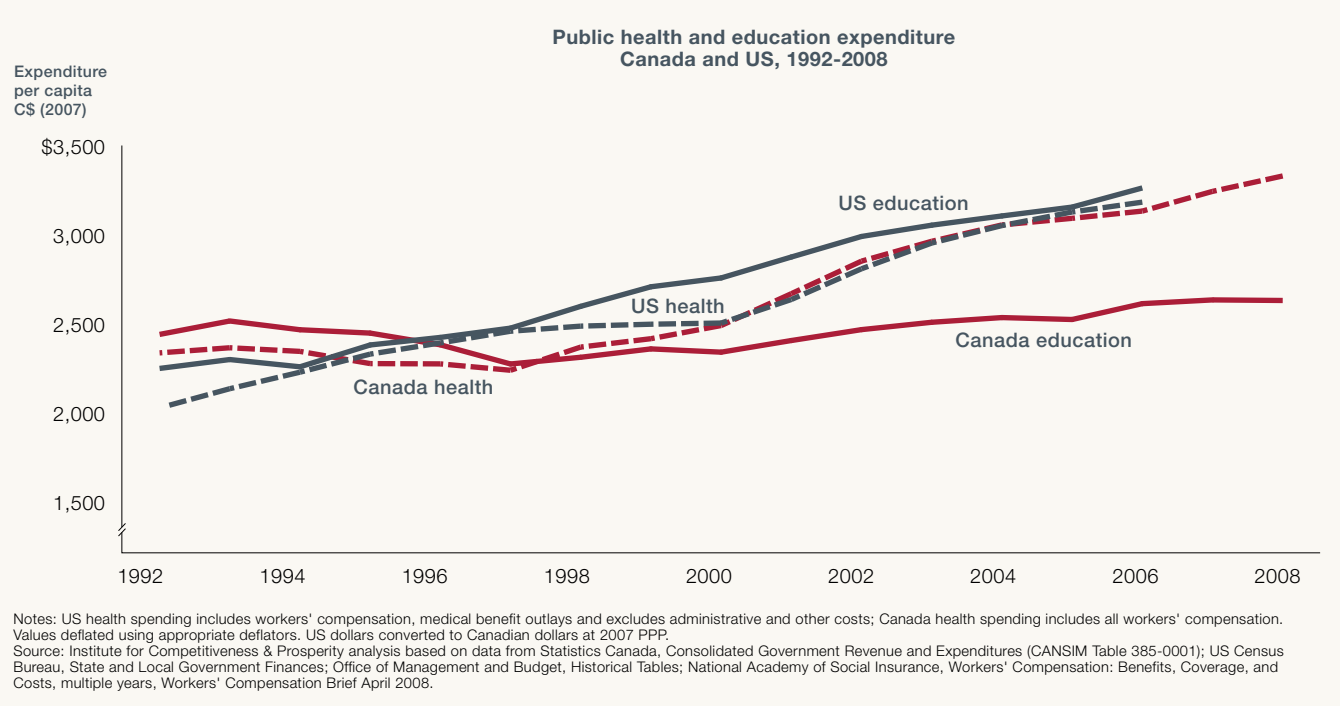
be sure the government announced \$5.1 billion new spending on infrastructure, researchers, and commercialization and \$2 billion for university infrastructure. It also added \$88 million in the graduate scholarship program, through the Canada Graduate Scholarships program and created 600 more graduate internships in the Industrial Research and Development Internship program.

So while the net reductions are small, as other governments, most notably the United States, ramp up public support for research and development, this is not the time to look for spending reductions in these kinds of investments which require patience and faith.

Continue to address the challenge of high school dropouts

In our research, the Institute has identified the relationship of the failure to complete high school with 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.³²

Exhibit 15 Public investment in education in Canada trails US spending significantly



³² Institute for Competitiveness & Prosperity, Working Paper 10, *Prosperity, inequality, and poverty*, September 2007, pp. 29-31.

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.³³

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 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 Canada's competitiveness and prosperity overall, but also as a way to assist the disadvantaged to move into the economic mainstream. As we have pointed out in the past, more education means higher labour force involvement and higher earnings.³⁴ Yet the evidence indicates that students from lower income families are less likely to receive post secondary education, particularly at a university.³⁵

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.³⁶ 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.³⁷

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. The current economic weakness makes such investments more of a challenge. But the need for adequate investment has not abated.

Individuals, businesses, and governments need to ensure that we Canadians are investing adequately for our future prosperity. It may require tough choices on our spending for short-term needs. But we have to achieve the right balance.

³³ *Ibid.*, p. 31.

³⁴ Institute for Competitiveness & Prosperity, Report on Canada 2007, *Agenda for Canada's prosperity*, March 2007, p. 33; 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 – evidence on the growth in returns to post secondary education in Canada between 1980 and 2000.

³⁵ Laval Lavallée, Bert Pereboom, and Christiane Grignon, 2001, "Access to Postsecondary Education and Labour Market Transition of Postsecondary Students," Canada Student Loan Program, HRDC, Mimeo; 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.

³⁶ 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.

³⁷ 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

Motivations: Adopt bold tax innovations for long-term prosperity

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

Taxes on new business investment in Canada are among the highest across developed economies. Federal and provincial governments are making progress on this front; but to raise our competitiveness and prosperity, we need to continue 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.³⁸ As we have seen, Canada under invests in this productivity enhancing capital, and this contributes to our prosperity gap. Addressing our high taxation of new business investment is an important step to improving this weakness. And we need to keep our fiscal house in order so that we can consider bold new approaches to taxation while other countries may not have the opportunity to do so.

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, Canada 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 Canadian – 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 Maffini³⁹ 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.
- More recently and closer to home, research by federal Department of Finance economists Aled ab lowerth and Jeff Danforth⁴⁰ suggested 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.⁴¹

³⁸ "Enhancing the Productivity of Small and Medium Enterprises through Greater Adoption of Information and Communication Technology," and "The Relationship between ICT Investment and Productivity in the Canadian economy: a Review of the Evidence," Centre for the Study of Living Standards, pp. 46-68.

³⁹ Wiji Arulampalan, 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.

⁴⁰ 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.

⁴¹ Institute for Competitiveness & Prosperity, Working Paper 7, *Taxing smarter for prosperity*, March 2005, pp. 43-49.

- 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.⁴² 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 from 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.

Canada is a higher tax jurisdiction in new business investment

The latest research by Duanjie Chen and Jack Mintz indicates that Canada is still one of the higher tax jurisdictions among developed economies.⁴³ 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, Canada'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, we remain one of the highest taxing countries for new business investment, combining a relatively high corporate income tax, a capital tax in service industries, and a sales tax on capital goods in some of our provinces (*Exhibit 16*).

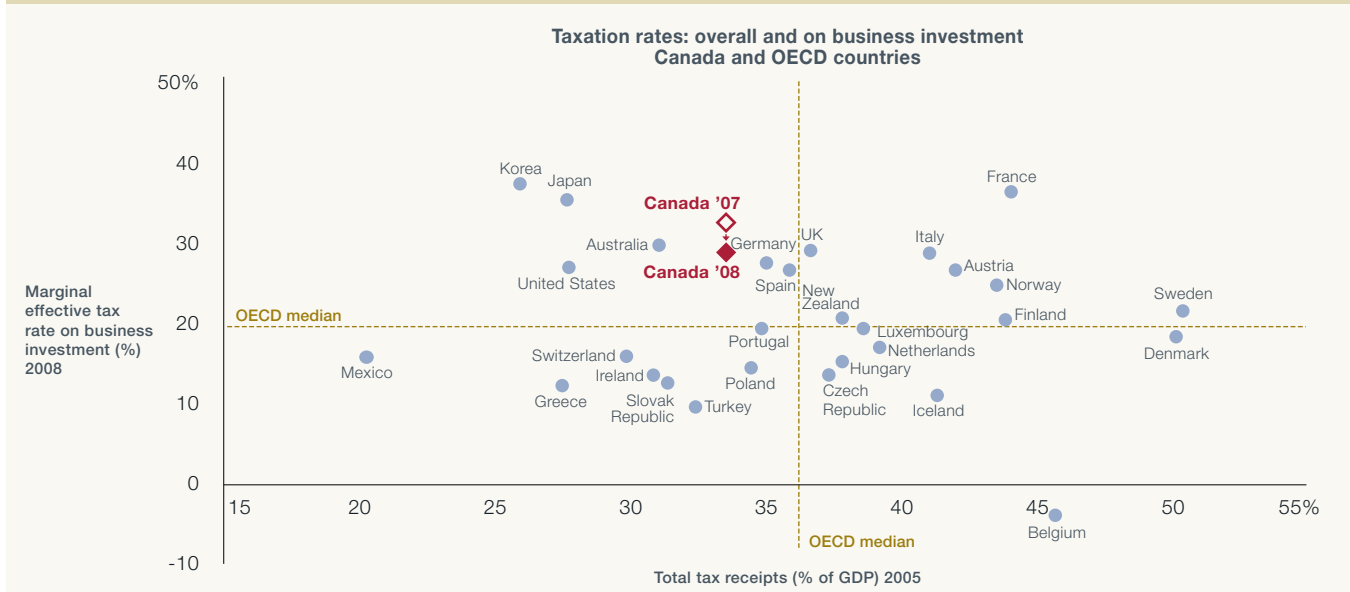
For 2008, Canada's marginal effective tax rate on business investment was 29.1 percent. That is, each new dollar of investment in Canada was taxed at 29.1

cents. This compares unfavourably with the rates in most other developed economies; the median rate among OECD countries was 19.6 percent in 2008.

However, planned reductions in federal corporate income taxes as well as the recently announced reduction in Ontario and New Brunswick's corporate income tax rates will reduce Canada's marginal tax rates on new business investments to below the OECD median by 2012.

In the past, we have warned that our tax system could become a liability if the United States ever did address its own unwise tax system by bringing down tax rates on new business investment. But we may have opportunities for significant tax reform here in Canada, as the United States will likely be struggling under serious government deficits in the coming years. It is unlikely that there will be a serious appetite for significant tax reform that reduces taxation on new

Exhibit 16 Canada's marginal effective tax rate on business investment is among the highest in the world



Source: Institute for Competitiveness & Prosperity analysis based on data from OECD, OECD Revenue Statistics 1965-2005, 2006 edition; Duanjie Chen and Jack M. 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

⁴² "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

⁴³ 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.

business investment. The current administration has not indicated that this is a high priority as it begins its mandate.

As a means to reduce taxes on new business investment and also to reduce carbon emissions, the federal government should revisit the issue of carbon taxes. As we discussed in our latest report on Ontario's prosperity, a carbon tax is a more practical approach than cap-and-trade and is likely a more efficient means of raising revenues than corporate income taxes. While results from the last federal election were fairly definitively against the carbon tax, we urge the parties and the government to reconsider their opposition, as a carbon tax has some significant benefits that we should not ignore at this time.

Ontario has taken bold action to harmonize its retail sales tax and reduce corporate tax rates

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.⁴⁴ The tax paid on these business costs are ultimately borne by consumers as part of the final price they pay.⁴⁵

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, Duanjie Chen, and Andrey Tarasov attribute one-fifth of Canada's current marginal effective tax rate on new business investment to provincial retail sales taxes (in Ontario, British Columbia, Manitoba, Saskatchewan, and Prince Edward Island).⁴⁶ 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.⁴⁷

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. The provinces that still have retail sales taxes can ease the harm of this policy by converting them to a value added tax and harmonizing its collection with the GST – as is currently done by three Atlantic provinces and by Québec.

The recent Ontario budget represents an exceedingly important step forward with its bold tax measures that will benefit all Ontarians – and Canadians.

Unfortunately, Ontario traditionally has been a high cost jurisdiction when it comes to taxing new business investment because of its provincial sales tax, its relatively high taxes on corporate income, and its lingering tax on capital assets. But in the provincial budget, released in late March 2009, Ontario has announced it will harmonize its sales tax with the federal GST in July 2010, reduce income taxes for businesses from the current 14 percent (12 percent for manufacturers

and processors) to 10 percent by 2013, and eliminate the capital tax by 2010.

Ontario's budget's importance stems from its size in the Canadian economy. But recent reductions in New Brunswick's corporate tax rates will also help reduce the marginal effective tax rate across Canada. By 2010, Canada will be below the OECD average in this benchmark measure.

It is fair to say that converting the provincial sales tax on goods to a value added tax on goods and services will affect lower income Ontarians more. But the government exempted items like books and children's clothing from the new tax. It also reduced personal income taxes and introduced tax credits for lower income Ontarians – which more than compensates for the higher sales tax.

Taken together these measures take Canada from being one of the world's highest tax regimes for new business investment to being meaningfully better than average – a dramatic change for the better.

Lowering taxes on business investment aren't "business friendly", they're prosperity friendly. The Ontario government took very bold action when the easier but less productive political strategy would have been to wait until conditions are better. Many argue that governments can't be bold; can't do the right thing because it isn't politically saleable. This government with this budget shows that is the view of defeatists.

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

An unfortunate part of Canada's tax systems is the dramatically different treatment afforded to manufacturers versus firms in the service sector. In

⁴⁴ Michael Smart, "Lessons in Harmony," C.D. Howe Institute Commentary, no. 253, July 2007, p. 6.

⁴⁵ *Ibid.*, p. 2.

⁴⁶ Duanjie Chen, Jack Mintz, and Andrey Tarasov, "Federal and Provincial Tax Reforms: Let's Get Back on Track," C.D. Howe Institute, 2007.

⁴⁷ 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.

recent budgets, the federal government has 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 Ontario, the changes in its recent budget eliminate the difference in taxation of investment between goods and service industries.

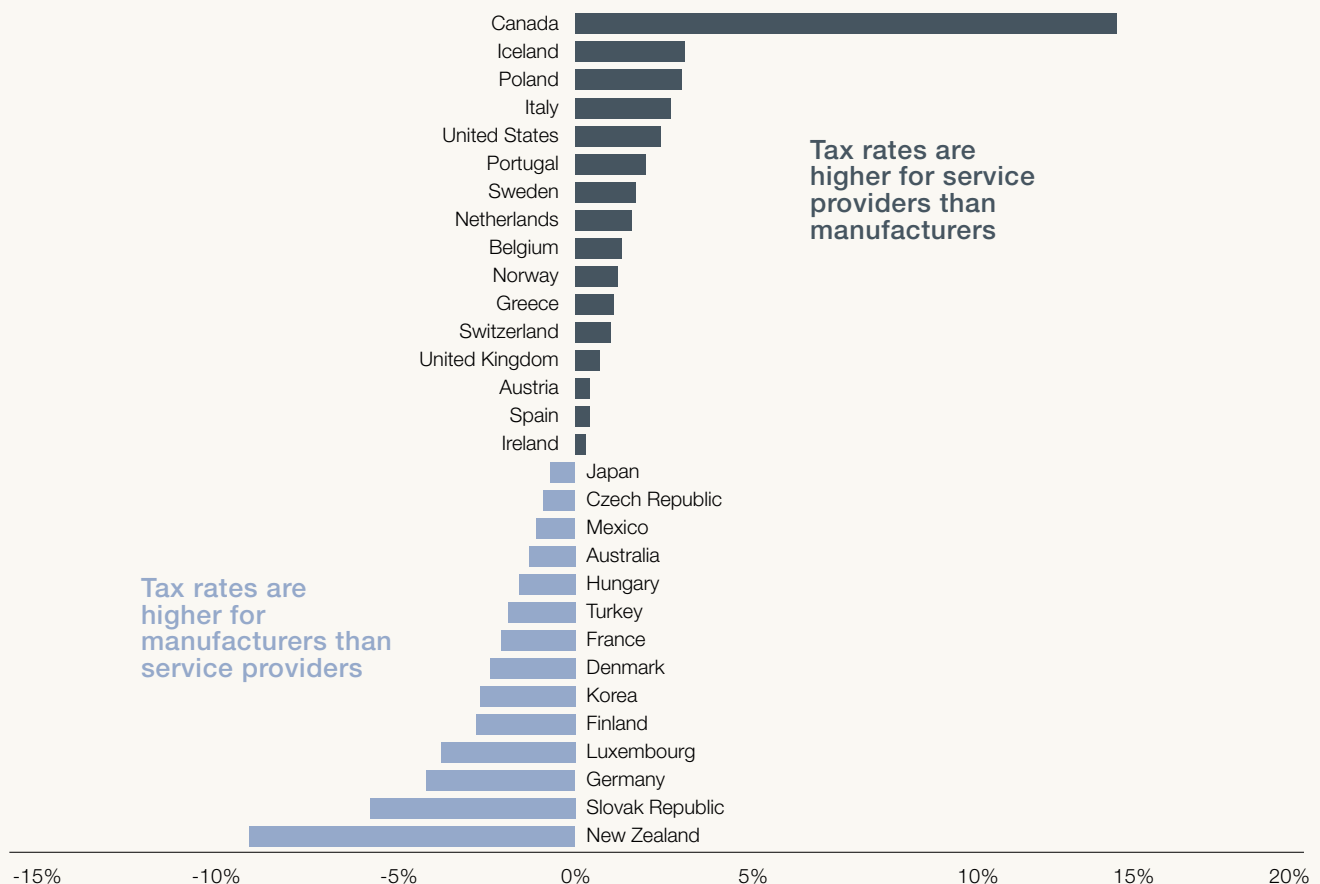
For Canada as a whole, the marginal effective tax rate on new investments in manufacturing fell to 19.3 percent in 2008 from 23.2 in 2007 making our rate the seventeenth highest among OECD countries. At the same time, the marginal effective tax rate on investments by businesses in the services sector in Canada stood at 34.6 percent in 2008, down slightly from 36.8 percent in 2007 – we are fourth highest among OECD countries.

By adding these distortions onto a tax system already severely tilted against service industries, our governments have made Canada a significant outlier in how we differentiate our tax treatment of manufacturers and service providers (*Exhibit 17*). 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 indus-

Exhibit 17 No other country's tax system penalizes services like Canada's

Manufacturing-service sector differences in marginal effective tax rates on business investment, 2008



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

tries 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 tradable services is increasing. Services, such as business services, financial services, transportation, and hospitality and entertainment, are among Canada's largest clustered industries.⁴⁸ Governments ought to be much more even handed in their taxation of all business investment – relying on entrepreneurs and competitive businesses, not preferential tax rates, to drive investment decisions.

The recent Ontario budget is very helpful in eliminating this disparity. We encourage all governments in Canada to address this problem.

Assess bold new approaches to taxation

The recommendations we have set out really do no more than achieve “best practice” among the world's developed economies, and governments across Canada should adopt these as quickly as possible. Since it is likely that governments in other jurisdictions around the world are not in the mood for bold improvements in tax policy, this is Canada's opportunity to give serious consideration to some bold tax reforms.

Convert corporate tax to cash flow basis

Under the current system of corporate income taxation, firms are allowed to depreciate the costs of capital investment over time as well as to deduct the interest cost of financing the investment. With a cash flow tax, a firm's taxes essentially would be based on its cash receipts less its cash expenditures; in years when a large capital expenditure was made relative to sales revenue, taxes paid would be relatively low. We

recognize that this approach would require elimination of interest deductibility as well as reforms in the personal income tax system. Nevertheless, it would simplify tax accounting and potentially increase business investment.

Eliminate corporate income taxes

However beneficial our other recommendations on corporate taxes could be, eliminating the corporate income tax could be a much more innovative approach to increasing productivity and prosperity. A corporation's taxes are actually paid by its workers, whose wages are lower than they would otherwise be; by its customers, who must pay higher prices; and by its shareholders, including pension funds and mutual funds in their registered retirement savings plans (RRSPs). Eliminating corporate income taxes has the potential to enhance prosperity by increasing wages, lowering prices, and increasing investment returns. Governments in Canada should explore this fundamental shift to a potentially smarter tax system.

Base personal taxation on lifetime earnings

Our system currently taxes individuals on the basis of one-year slices of their life. Assessing income taxes on the basis of lifetime earnings, rather than annual earnings, is potentially far better for Canada's poor and enhances prosperity for all Canadians. Income would be

calculated cumulatively rather than annually; instead of giving individuals an annual personal allowance of tax free income, the system would give a lifetime exemption. This exemption would be set at five to ten years of average income – say \$250,000. Any income beyond this would be taxed at a base rate until the individual reached the next cumulative income level, when rates would rise again. With a system based on lifetime earnings, poor Canadians would be dramatically better off and have even better prospects for advancement. For years, even decades for lower wage earners, they would face a zero marginal tax on work, savings, and investment. A critical element of the lifetime earnings approach is to disentangle social benefits from the tax system, so that we can provide assistance to those in need without complicating the income tax system and creating perversely high marginal tax rates for low income people.

Taxes on new business investment in Canada are among the highest in the world, especially in the services sector. Reducing these taxes is key to increasing our competitiveness and prosperity. Governments across Canada have recognized this and we are moving slowly to alleviate this burden on investment. This progress may be threatened by the perceived need to put such reforms aside as we absorb the blows of the current economic storm.

Tax reductions may remain a low priority during the recession, as governments work to bring down the deficits we are creating. This is understandable. But now is not the time for timidity. In fact, this is the opportunity for boldness. Canada should move from being a laggard in tax policy to an innovator.

⁴⁸ Cluster employment data available online: www.competeprosper.ca/index.php/clusters/data

Structures: Make Canada a competitive and open economy for the Creative Age

If Canadians are to thrive in the turbulent global economy, we need to have market structures that encourage competition and stimulate innovation 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 embrace the challenges and opportunities embedded in the ongoing shift in economic forces toward the Creative Age. This can be achieved through an environment that provides a good balance of specialized support and competitive pressure (*Exhibit 18*).

Innovation is the result of the ongoing interaction of three elements in an Innovation System: the supply of

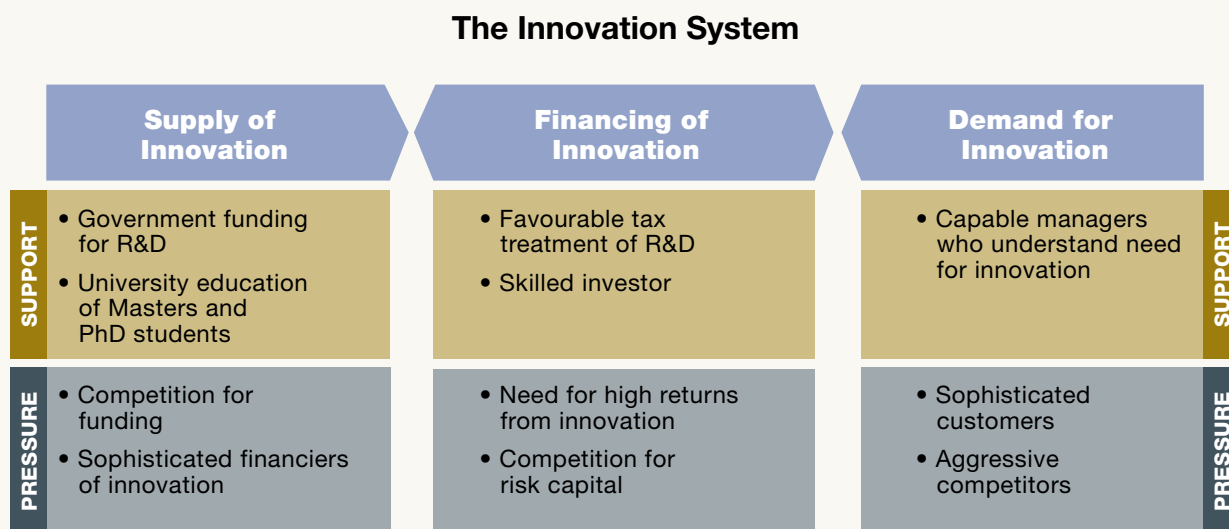
innovation, the demand for innovation, and the financing of innovation. These elements are driven by the competitive pressure and broad support that activate the Innovation System.

Each of the elements is critical for success; but all three need to work together in balance. The supply of innovation includes the activities and resources dedicated to increasing the stock of innovation, including highly qualified personnel and their facilities and resources. The demand for innovation is the combination of customer insistence on new products and process breakthroughs and corporate demand for

innovation within a firm. The financing of innovation is an important bridge between demand and supply since, even if the other two factors are in balance, significant funding is typically required to commercialize new ideas and scientific breakthroughs. Innovation requires pressure and support in each of these areas.

Our structure of support and pressure results in lower innovativeness and productivity in our economy. As we have shown in past work, our innovation system does not provide adequate pressure on the demand side of innovation through a large base of sophisticated customers or aggressive competitors. Support could also be enhanced with stronger management.⁴⁹ This imbalance tunes our economy to a lower performance level. Some recent evidence of this is that we under value creative skills. We also have new

Exhibit 18 Pressure and support drive all three elements of the Innovation System



Source: Institute for Competitiveness & Prosperity.

⁴⁹ Roger Martin and James Milway, "Commercialization and the Canadian Business Environment: A Systems Perspective," Comments on Public Policy Support for Innovation and Commercialization in Canada, July 2005, available online: http://www.competeprospers.ca/images/uploads/InnovationSystem_040705.pdf

evidence that our management skills, while better than those in nearly all other countries, trail US managers' skills. We need to challenge our management teams to be more globally oriented consistent with the recommendations of the Competition Policy Review Panel.

Canada's economy values creativity-oriented skills but we need to tune our economy to value them even more

In its research for *Ontario in the Creative Age*, the Martin Prosperity Institute identified three sets of skills in our economy (see *Tuning our economy to reward creativity skills*). These included analytical, social intelligence, and physical skills.

As the analytical skills requirements of occupations increase, wages increase (*Exhibit 19*). For example, a physicist – near the top of analytically skilled

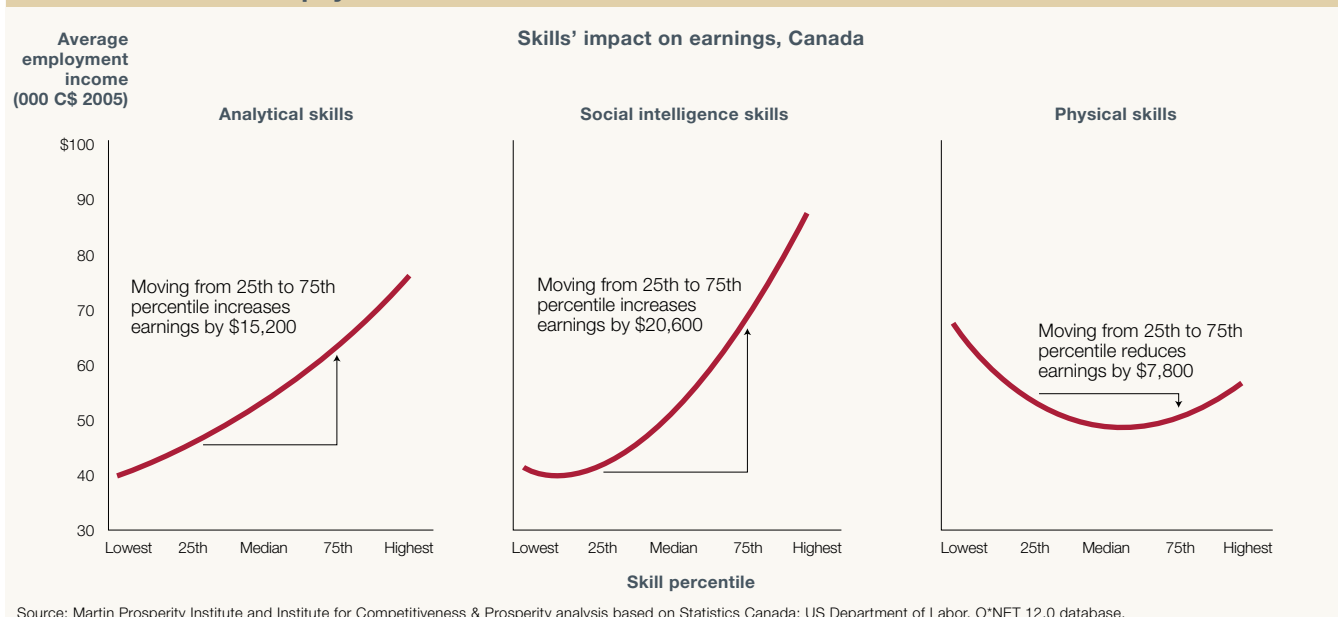
occupations – earned on average \$67,600 in 2005, while a pile-driver operator at the bottom of the list earned \$47,700. Across all occupations, the higher an occupation is on the analytical skills index, the more it pays.⁵⁰ Our economy clearly recognizes and values analytical skills – moving from a job at the 25th percentile of analytical content to one that is at the 75th increases earnings in Canada on average by more than a third, or \$15,200. For social intelligence skills, the ramp up is even higher – \$20,600.

But when we take physical skills, the reverse pattern is true. Wages do not rise with an increase in physical skills; just the reverse. Moving from the bottom quarter to the top quarter in occupations with physical skills actually reduces earnings in Canada by \$7,800 on average.

To raise wages, workers, firms, and the country would benefit from increasing the creativity content in as many jobs as possible. The key then is to shift more and more of our job requirements to higher analytical and social intelligence skills work.

When we look at how Canada values creative skills compared to the United States – the economy that most resembles ours and for which we have comparable data – Canadian businesses do not value increases in the two sets of creative skills nearly as much as our peers. Our workers get a lower jump in earnings from increases in analytical skills (*Exhibit 20*). The pattern is even more pronounced when it comes to social intelligence skills. US workers earn considerably more than Canadian workers for increased social intelligence skills. Canada pays relatively more for increased physical skills, which is a good

Exhibit 19 Earnings rise with increases in occupations' analytical and social intelligence skills, but not with physical skills



⁵⁰ Exhibit 20 simplifies the relationship between the skill requirements and average earnings for the 728 occupations analyzed – it shows the best-fit regression curve only. The “goodness of fit” as measured by the r-squared for the three relationships are: 0.24 for the relationship between analytical skills and earnings, 0.41 for social intelligence, and 0.06 for physical. Coefficients in each of the three relationships are statistically significant at the 1 percent level for social intelligence and physical skills and 10 percent for analytical skills. The relationships are still significant after controlling for other factors that influence occupational earnings, such as education, experience required, and training.

Tuning our economy to reward creativity skills^a

THREE BROAD SETS OF SKILLS play a role in our economy. Physical skills, like lifting and manual dexterity, are the ones we honed in the old economy. But two sets of creative skills matter more now: analytical skills, and social intelligence skills. (*Exhibit D*). Both are critical in our knowledge-driven economy.

- **ANALYTICAL SKILLS** This skill set includes capabilities such as determining how a system works and how changes in conditions will affect the outcome, developing and using rules and methods to solve problems, and quickly and accurately comparing and contrasting patterns or sets of numbers. Occupations that require the highest level of analytical thinking skills include surgeons and biomedical engineers, while those that require the least include pile-drive operators and fashion models.
- **SOCIAL INTELLIGENCE SKILLS** This skill set comprises abilities in understanding, collaborating with, and managing other people. It includes the ability to assess the needs and perspectives of others to facilitate negotiation, selling, and teamwork. It also includes complex thinking skills that are essential for assessing fluid, ambiguous human situations – such as deductive reasoning, the ability to apply general rules to specific problems to produce answers that make sense, or judgment – and for decision making. And it includes oral and written communication skills. Not surprisingly, the leading occupations in this skill set include psychiatrists, chief executives, marketing managers, and lawyers.

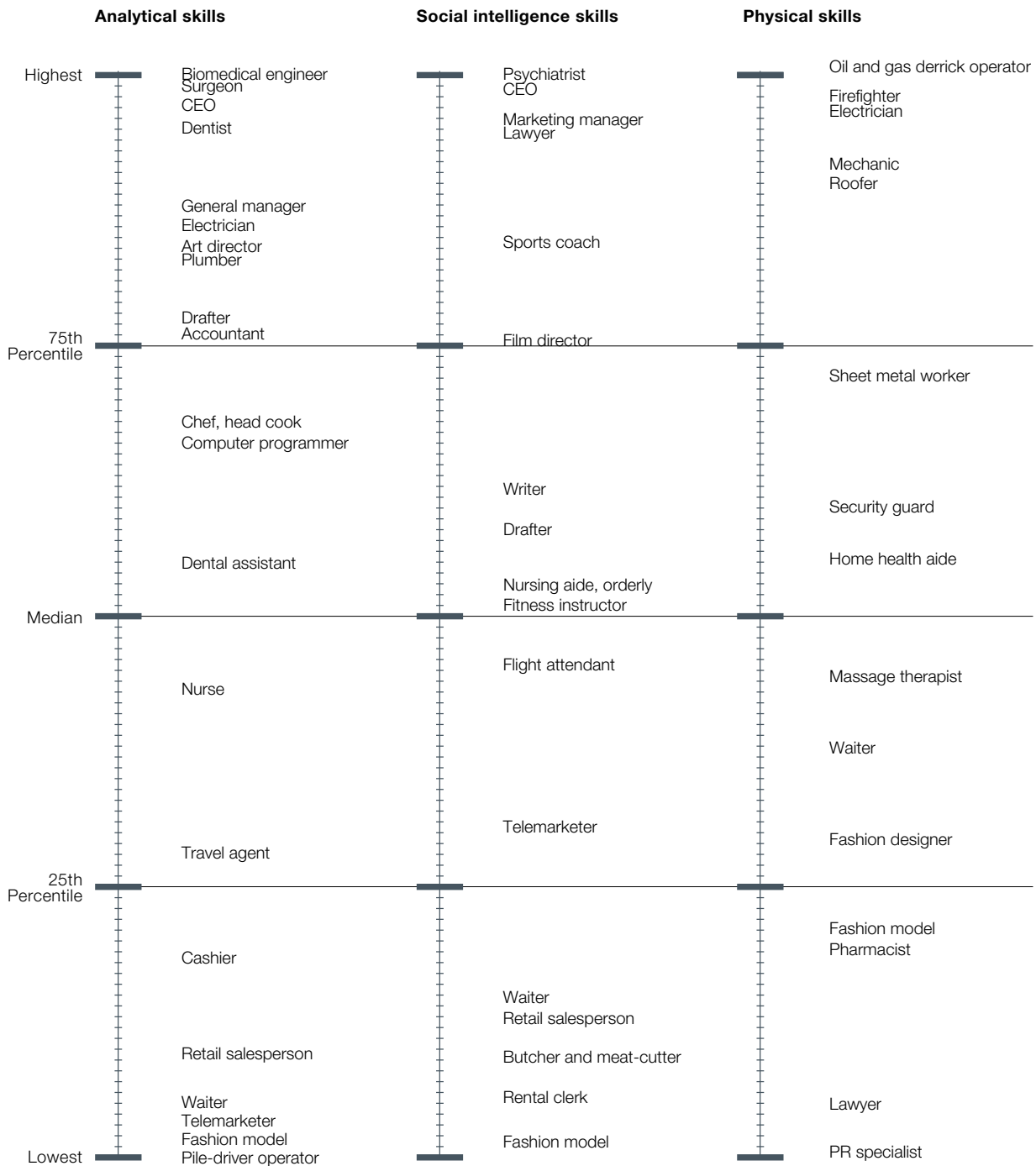
- **PHYSICAL SKILLS** Derrick operators are at the top of this list, along with steel workers, fire fighters, and electricians. What do they have in common? Arm-hand steadiness, strength, coordination, dexterity, and other physical abilities are some examples.

How do these skills map against jobs? The skills make-up of creativity-oriented occupations is weighted more heavily toward analytical and social intelligence skills; the opposite is true for routine-oriented occupations. All jobs require a mix of analytical, social intelligence, and physical skills to varying degrees.

We find that all occupations require some degree of creative skills. On analytical skills, electricians and plumbers, two routine-oriented physical occupations, generally have as many analytical skill requirements as art directors or architectural drafters, classified as creativity-oriented occupations. Chefs and head cooks, routine-oriented service jobs, have analytical skill requirements similar to those of accountants. On social intelligence skills, orderlies (routine-oriented service occupations) require social skills similar to drafters (creativity-oriented occupations). So, while it is generally true that analytical and social intelligence skills are important components of creativity-oriented occupations, all occupations have a requirement for some level of these skills.

^a This sidebar is adapted from Roger Martin and Richard Florida, *Ontario in the Creative Age*, Martin Prosperity Institute, February 2009.

Exhibit D Workers draw on three sets of skills



Source: Martin Prosperity Institute and Institute for Competitiveness & Prosperity analysis based on US Department of Labor, O*NET 12.0 database.

thing for an industrial age economy, but does little to position us to compete in the Creative Age economy.

This is a huge challenge for our nation. Since Canadian employers, compared to their US counterparts, value physical skills relatively more than they value analytical and social intelligence skills, workers in Canada have less incentive to change their skills profile from physical to creative. However, employment projections indicate that the economy will demand more social intelligence and analytical skills and relatively fewer physical skills. This cycle drives our economy to compete on yesterday's skills and industries, tuning our economy and our labour market in a way that will not achieve a distinctive advantage in the Creative Age.

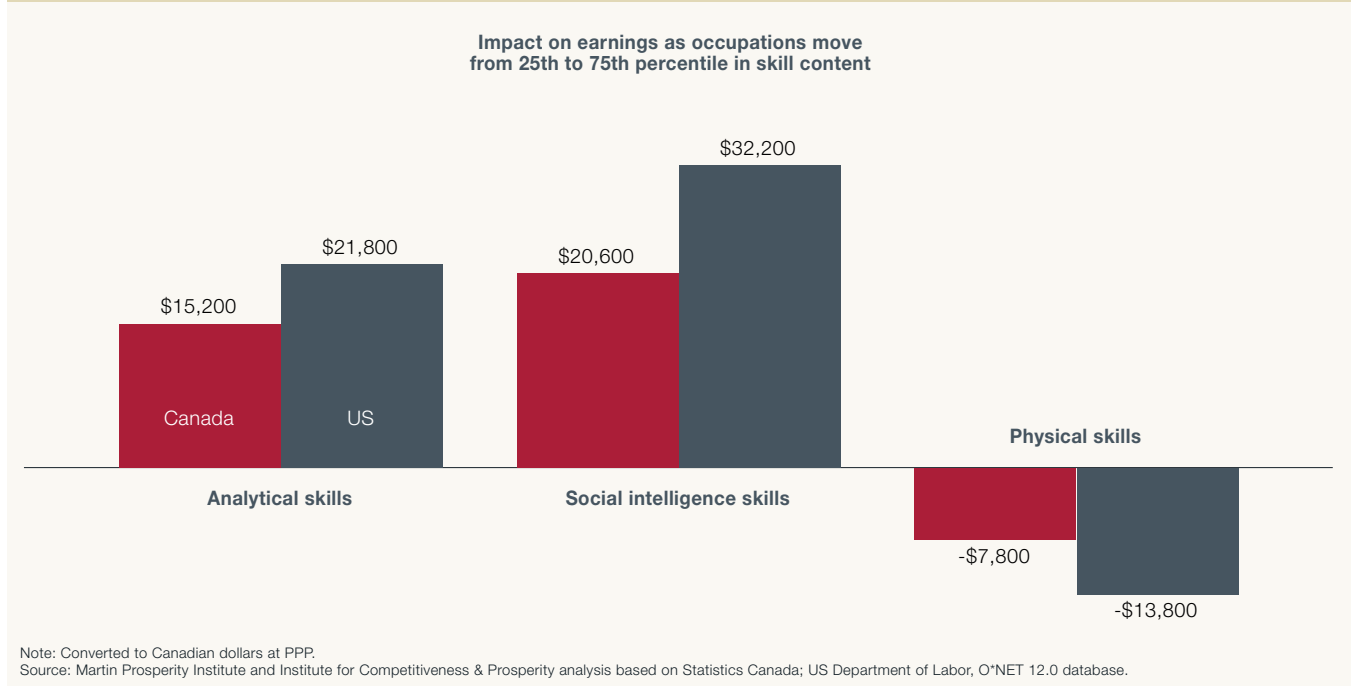
Building a distinctive advantage through a creative economy requires developing and valuing relevant skills. Our workers

need the analytical and social intelligence skills necessary to command higher wages, and employers need more sophisticated business models to warrant paying those wages. Employers and workers need to collaborate on redesigning jobs to enhance their creative content. The Japanese succeeded dramatically in enhancing the creative content of its traditionally routine-oriented physical occupations in the automotive industry through techniques such as quality circles, statistical training, and individual worker authority to stop production if necessary to attack quality problems.

Four Seasons is one of the world's leading luxury hotel chains. Since its modest beginnings as a Toronto-based motel in the 1960s, the chain has grown to encompass eighty-two hotels across thirty-four countries. Behind its many achievements lies a management ethos committed to increasing the creativity

content of hotel jobs that are traditionally more routine-oriented. While most hotel chains take a narrow view of management-employee relations – in which employees have little say in how the hotel is run and guest interactions are tightly regulated – Four Seasons adopts a different approach. There, employees are constantly solicited for feedback, and management responsibility is distributed. The hotels have no customer service department, for instance; instead, everyone – from dishwasher to general manager – is responsible for catering to the guests' needs. By treating its employees with dignity and leveraging their creative talents, Four Seasons is able to offer a level of hotel service without peer – a defining feature of the brand and one that has proved integral to its ongoing success.

Exhibit 20 Canada under values increases in analytical and social intelligence skills



We have a great opportunity to raise the creativity-oriented content and skills in jobs in Canada. We face a great risk if Canada's economy remains stuck at a lower level of creativity, innovation, and competitiveness than other places.

Management capabilities in Canada are a strength on which to build

In Working Paper 12, *Management matters*, recently released by the Institute, we presented our research on the quality of our management in Canada.⁵¹ The goal of our research was to determine the extent to which we trailed in productivity and innovation because our management capability is less well developed.

Our past research indicated that our senior and middle managers do not have fundamentally different attitudes toward competition, risk taking, and innovation from their US counterparts. So we concluded that our managers do not have a different culture or outlook. Instead, our under performance in innovation and productivity is driven by under developed management capabilities – lower educational attainment and less diffusion of best management practices; and context – less competitive intensity in the markets and the lack of sophisticated customers.

We need effective management to lead business innovation. Effective management provides pressure and support across the Innovation System in strengthening demand for innovation, providing supply of innovation, and driving the quantity and quality of financing for innovation (see *Exhibit 18*).

In our Working Paper, we provide research results that shed light on the importance of management in the prosperity of a jurisdiction. Michelle

Alexopoulos from the University of Toronto developed a methodology for measuring innovation in management techniques, going as far back as Taylor's scientific management. Her measures track Library of Congress records of the publication of management books to define adoption of management techniques, supplemented with augmenting counts of relevant academic journal publications. She successfully developed this technique earlier as a measure of technological innovation, and she concludes that adapting it to management gives a good proxy for the diffusion of advanced management techniques across the economy.

Recent research Alexopoulos and Trevor Tombe conducted for the Institute indicates that increases in the publication of books on management are correlated with growth in productivity and prosperity. They observed a positive impact from growth in the number of management books over a nine-year period. They concluded that economic growth results not only from increases in "tangible technology," such as R&D, and machinery and equipment, as most economists agree; but it also is the result of advances in "intangible technologies," such as management techniques and new processes disseminated in part through publications.

In another study, researchers Richard Florida and Kevin Stolarick with the University of Toronto's Martin Prosperity Institute, along with Charlotta Mellander of the Prosperity Institute of Scandinavia at Jönköping International Business School, recently examined the factors that shape economic development in Canadian regions. They found that a greater proportion of people in managerial and business and finance occupations was an important factor in explaining prosperity at the regional level.

Having reviewed the available research on the importance of management to regional prosperity, we turned to evidence on management capabilities in Canada versus those in other economies. In the summer of 2008, a team of analysts at the Institute for Competitiveness & Prosperity interviewed senior managers at 421 manufacturing operations across Canada. The interview was developed by an international team of professors led by Professor Nick Bloom of Stanford University and the Centre for Economic Performance at the London School of Economics. The research is a detailed approach to how well manufacturing operations have implemented advanced management techniques. The quality of management, as captured by the study, correlates well with firm and industry productivity.

The results for Canada were heartening. At the plant level, Canadian manufacturing management is among the world's best. Our management teams are leaders in implementing specific techniques in the area of Lean Manufacturing. They are solid performers in effecting good performance management, with some room for improvement. But while they match management teams in other leading economies in people management, Canadian firms trail US practices significantly. Canada under performs, especially in the willingness of managers to keep and promote high performers and to deal promptly with poor performers.

Our results also indicated that some of the key variables that drive – or at least are correlated with – better management are education, ownership, and winning global strategies. Our results revealed that the quality of manufacturing management is higher in Ontario than in the other regions of Canada.

⁵¹ Institute for Competitiveness & Prosperity, Working Paper 12, *Management matters*, March 2009.

The management research captured the performance of some of Canada's global leaders, whose results are impressive. On average, the Canadian global leaders we interviewed exhibited management that is better than foreign multinationals in Canada and firms in the United States. Canadian firms that achieve global leadership are among the best managed in the world. Businesses that strive for international success can and do achieve great results.

Improving our management capabilities will create great opportunities for strengthening our prosperity. At the same time, not moving forward on management capabilities exposes Canada to even greater vulnerability to emerging economies like China and India. Currently, our management capabilities are well ahead of those in emerging economies. But as they increase their business sophistication, we will need to stay ahead of them through sophisticated processes, products, strategies – and management.

Overall, we concluded that management capabilities are important contributors to national prosperity. And our manufacturing management, particularly in Ontario, is among the world's best. Nevertheless, our businesses have improvement opportunities, especially through greater education of our management cadre. Firms should continue to be open to foreign investment, as the research indicates that the quality of management in multinationals is much higher than that in firms that compete only in their native country. Our firms should also strive for globally competitive strategies, as Canada's global leaders are among the best managed firms in the world.

Canada's businesses need to aspire to achieve global leadership – perhaps with government help

Many Canadians 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.

In increasingly competitive markets, however, 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 Canada. That way, Canada will be a strong player in the world economy for decades to come.

In fact, rather than hollowing out, we find that the number of Canadian companies with revenues above \$1 billion that are global leaders is greater today than twenty years ago.⁵² As of April 2009, Canada had 42 global leaders (*Exhibit 21*) up significantly from 15 in 1985 and 39 in 2003.⁵³

The creation of these new globally competitive Canadian champions dwarfs the losses. They have higher productivity and productivity growth than non-globally competitive companies. They do more R&D and can afford to invest in larger 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.⁵⁴ And our latest research indicates that Canada's global leaders in the manufacturing sector are particularly well managed.

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.⁵⁵

⁵² This list excludes global leaders under \$1 billion in revenue.

⁵³ Institute for Competitiveness & Prosperity, Working Paper 11, *Flourishing in the global competitiveness game*, September 2008, p. 8.

⁵⁴ *Ibid.*, p. 10.

⁵⁵ *Ibid.*, p. 11. Note that Hurtig's list includes companies whose revenues are below \$1 billion.

Exhibit 21 Canada has 42 billion-dollar global leaders

	2003 39 Companies	2008 44 Companies	April 2009 42 Companies
	<p>2003 39 Companies</p> <p>Abitibi-Price Agrium Alcan Atco Ltd. <i>ATI Technologies</i> Barrick Gold Bombardier CAE Canfor CCL Industries Celestica CGI CN Rail Cott Couche-Tard <i>Domtar</i> <i>Falconbridge</i> Finning International <i>Inco</i> <i>Intrawest</i> Linamar Magna Manulife Financial <i>Masonite International Corporation</i> McCain MDS Methanex <i>Moore Corporation Ltd.</i> Nexfor (Norbord) Nortel NOVA Chemicals <i>Placer Dome</i> Potash Corp Quebecor World SNC-Lavalin Teck-Cominco Tembec Thomson Corporation Weston Foods</p>	<p>2008 44 Companies</p> <p>AbitibiBowater Agrium Atco Ltd. Barrick Gold Bombardier CAE Cameco Canfor Catalyst Paper Corporation CCL Industries Celestica <i>CGI</i> <i>CHC Helicopters</i> Cinram CN Rail <i>Connors Bros.</i> Cott Couche-Tard Finning International First Service Corp (Colliers International) <i>Fording (Elk Valley Coal)</i> Goldcorp Inc Linamar Magna Manulife Financial McCain MDS Methanex Norbord Nortel NOVA Chemicals PotashCorp Quebecor World Research in Motion <i>Russel Metals</i> Samuel, Son & Co. Shawcor Ltd. SNC-Lavalin TD Waterhouse Teck-Cominco Tembec Thomson Corporation Transat AT <i>Weston Foods</i></p>	<p>April 2009 42 Companies</p> <p>AbitibiBowater Agrium Atco Ltd. Barrick Gold Bombardier CAE Cameco Canfor Catalyst Paper Corporation CCL Industries Celestica Cinram CN Rail Cott Couche-Tard Finning International First Service Corp (Colliers International) Garda World Gildan Activewear Inc. Goldcorp Inc Husky Injection Molding Linamar Magna Manulife Financial McCain MDS Methanex Norbord Nortel NOVA Chemicals PotashCorp Quebecor World Research in Motion Royal Bank of Canada Samuel, Son & Co. Shawcor Ltd. SNC-Lavalin TD Waterhouse Teck-Cominco Tembec Thomson Corporation Transat AT</p>
	<p>1985* 15 Companies</p> <p>Abitibi-Price Alcan <i>AMCA</i> Atco Ltd. Bombardier Cominco CCL Industries Falconbridge <i>Hiram Walker</i> Inco Lavalin McCain Moore Corporation Ltd. Northern Telecom <i>Seagram Co.</i></p>		

Departures between 1985 and 2003

Departures between 2003 and 2008

Departures since 2008

Arrivals since 2008

*Dollar threshold for 1985 was \$617 million to equate to \$1 billion current dollars.
Notes: Companies that have sales revenue above \$1 billion and are in the top five of their market globally. Foreign acquisition of NOVA Chemicals is expected to be completed by mid-2009.
Source: Institute for Competitiveness & Prosperity analysis.

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 they were acquired (*Exhibit 22*). 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 included 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.

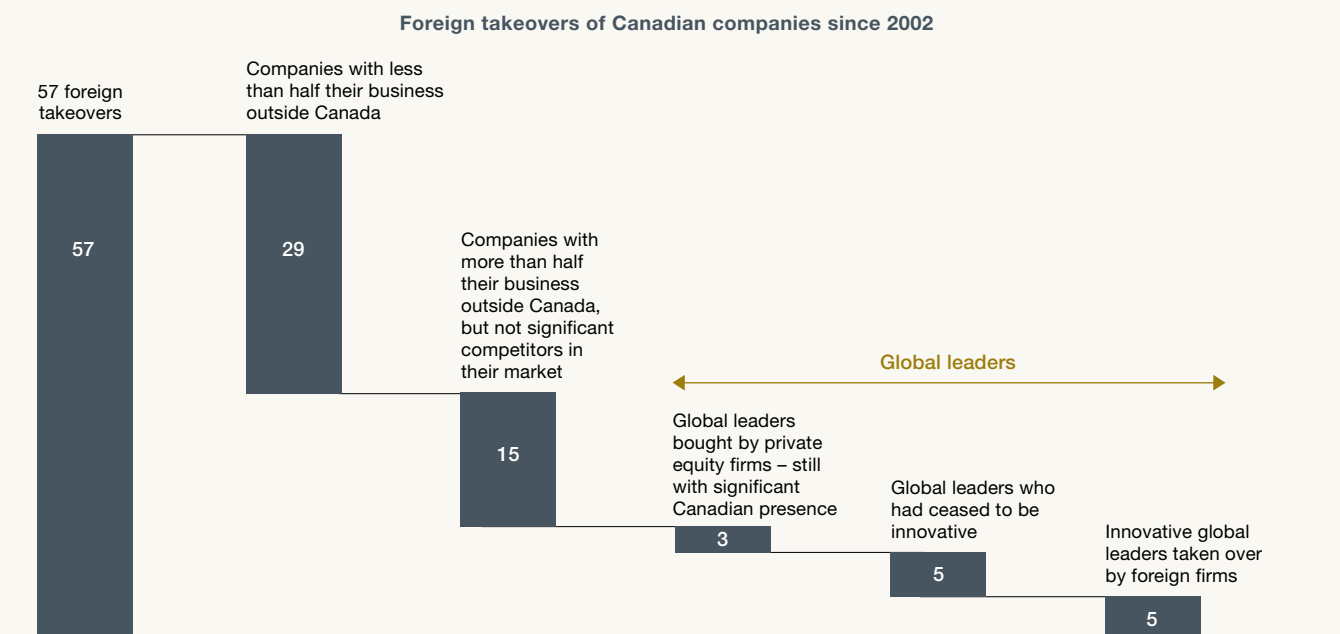
Only 5 Canadian-owned, globally competitive companies that were also actively engaged in innovating and upgrading were acquired by foreign entities. ATI, Alcan, Creo, VersaCold, and Zenon were acquired by bigger, broader players that turned their Canadian operations into branch offices.

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.⁵⁶

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, Canadians developed 27 new global leaders with revenues greater than \$1 billion, including RIM, Magna, Manulife Financial, Thomson Reuters, and Barrick Gold. The challenge for public policy is to create the environment for more to succeed.

Exhibit 22 Few companies acquired since 2002 were innovative global leaders



Source: Institute for Competitiveness & Prosperity analysis.

⁵⁶ *Ibid.*, p. 13.

Here again, the current economic environment presents challenges and opportunities. No doubt, many of our Canadian companies are being buffeted by the economic headwinds, and in many boardrooms opportunities for international expansion have moved down the agenda. But for many of our industries now, Canadian firms are better positioned to compete than their international competitors. Our Canadian banks have moved up international rankings simply by avoiding the financial disasters that have befallen the likes of CitiGroup, Royal Bank of Scotland, UBS, and the Bank of America. RBC is now a global leader – ranked number four in the world among money market banks as defined by market capitalization. Similarly Manulife, already a global leader, and Sun Life Financial are much healthier than companies like AIG, MetLife and Prudential Financial.

Are there opportunities for acquiring excellent assets at good prices? Clearly, the leaders of our banks and insurance companies are in the best position to make these determinations and to allocate the risk capital to such expansion. But in an environment when governments are at the ready to provide funding to preserve jobs, is this not an opportune time to consider public investments – preferably in the form of loans – to assist our financial services leaders to expand opportunistically?

To avoid the pitfall of “picking winners,” the federal government may consider making debt or equity financing available to any Canadian firm with a credible plan for significant international expansion. It could develop favourable tax treatment for such acquisitions. Again, general provisions available to all firms would be best.

Governments are responding to threats from the economic downturn by making funds available to preserve jobs – and such actions may be a necessary defence in these times. But this is also a time of opportunity and our businesses and governments need to play offence as well. Many of our international competitors are in dire straits. But they will recover – or powerful new global leaders will emerge. We need to seize the opportunity that has been presented to Canada while it exists.

Wilson Panel urges Canadians to compete to win

The report of the Competition Policy Review Panel, *Compete to Win*, released in June 2008, is an important milestone in Canada's economic policy. Commissioned in June 2007 at the height of concerns about Canada's hollowing out, the Panel undertook an intense research and consultation program and concluded that "raising Canada's overall economic performance through greater competition will provide Canadians with a higher standard of living."

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

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

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

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

In addition to these legislative changes, the Panel made recommendations to create the right foundation for businesses to succeed in the global economy. It emphasized that policies must continuously be adjusted along the way to enhance Canadian firms' ability to compete in the world:

- Implement a more competitive tax system, with supportive R&D tax regimes
- Attract and develop the best talent to have the best workforce in the world through ongoing investment in education and training to the highest standards, more partnerships with business and international exchanges, as well as an immigration policy tuned to meet labour market needs
- Provide more federal government support for municipal investment in infrastructures, education, and immigration and the development of alternative funding mechanisms for municipalities to help Canada's large urban centres thrive
- Improve domestic and international trade through elimination of trade barriers between the provinces and territories and better harmonization of securities regulation, reinforcement of trade with the United States, and extended international trade and investment opportunities
- Establish more effective patent and copyright laws
- Create an independent Canadian Competitiveness Council as an advocacy body for raising competitiveness

The federal government has enacted some of the Panel's recommendations in raising thresholds, removing some sectors for special treatment, and shortening timelines for review.

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

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. The right skills and strong managers can make this happen. Canada's businesses should take this to heart.



A long-term Prosperity Agenda to guide us through the turmoil

Despite the current economic uncertainty, we continue to conclude that the 2020 Prosperity Agenda we have set out is the right one for Canada 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 Canada'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 future.

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 Canada's prosperity, and to implement the most promising ideas.

Attitudes: We urge the Prime Minister, Premiers, and business, labour, and community leaders to turn up the volume on the importance of prosperity and productivity even in these times of economic uncertainty

Realizing our prosperity potential is not something that most Canadians are thinking about. But we are missing opportunities to achieve 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 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 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. For example, our companies should strengthen their competitiveness in the global economy, not retreat into defensive strategies. And Canada can benefit from becoming more open to foreign investment, not less welcoming. It is tempting to put a long-term agenda on the back burner and to focus on short-term considerations, including a concern about protecting what we have. But this is not the time for insularity. If other countries adopt that approach, this is an opportunity for Canada to emerge from the recession in a much stronger position.

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

Our chronic under investment in technology and ourselves contributes significantly to our not achieving our full prosperity potential. The risk now is that we could see retrenchment as everyone turns their focus to today's economic demands. Addressing both areas is a good start on the path to the 2020 Prosperity Agenda.

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. Modern technology can make our workplaces more effective and efficient, with new processes and management capability leading to higher productivity.

Raise our investment in people

Our governments need to rebalance education and health care spending so that we are investing adequately in our human capital for future prosperity. Now is not the time for the federal government to be cutting support for scientific and scholarly research in our labs and universities. This expenditure requires patience for results and faith that the economic benefit will follow in the long term. Guidance counsellors, parents, and community leaders need to stress the benefits of more education. Post secondary education is one of the most powerful ways to escape poverty and improve 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 certificate.

Motivations: Canada should pursue innovations in tax policy to gain advantage for Canadians

Taxes on new business investment in Canada are among the highest across developed economies. Federal and provincial governments are making progress on this front; but to raise our competitiveness and prosperity, we need to continue to pursue tax reform as a high priority. This is especially crucial now as we need innovative infant businesses to help lift the economy out of the recession. And we need our large businesses to see Canada as a preferred location for new investments. They need encouragement, not hindering taxes.

Reduce overall taxes on new business investment, especially in the service sector

With current weakness in revenues 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 in provinces that still have retail sales taxes 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 recent Ontario budget goes a long way to addressing these issues, but improvement is still required in some provinces

Consider a carbon tax

Recent federal election returns indicate the carbon tax is dead. But it holds too much promise for reducing carbon emissions and for replacing other distorting taxes to be discarded. Environmental policy needs to consider

market-based mechanisms like cap-and-trade and carbon taxes.

Pursue bold new approaches to taxation

Canada has an opportunity to implement some smart tax policies that would lead to more investment from our businesses and give them an advantage over their competitors at home and abroad. For example, converting the basis for corporate taxes from depreciation allowances to a cash flow basis would better match the timing of their sales revenues and ability to afford the tax. Eliminating corporate taxes would also be an innovative approach to increasing productivity – and in the process raise wages, lower prices, and increase investment returns. Finally, basing personal taxation on lifetime earnings would benefit young people starting out and lower income people over the long term.

Structures: Enhance our market structures to build skills and management capabilities, encourage competition, and stimulate innovation and at home and abroad

Canada has many economic strengths on which to build to achieve the economic potential we envision in our Prosperity Agenda. But currently, the economy is tuned to a lower level than is required. We need to retune some fundamental structures to raise the pressure and support that drive our Innovation System.

Continue to draw on creativity-oriented and international skills for our prosperity

Our recent research has convinced us that there is a big opportunity to raise our prosperity by increasing the number of people working in creativity-oriented occupations using well-honed analytical

and social intelligence skills, rather than physical skills, in their jobs. Shifting people into these areas and providing higher rewards to those in routine-oriented service occupations can open avenues to higher prosperity.

In the United States, there are signs that it is becoming less open to skilled immigrants. This creates a great opportunity for Canada to welcome skilled people from around the world to our educational institutions and to our work places – and, most important, to our communities.

Continue to expand innovation policy to build strong management capabilities

Our recent research in Canada's management capabilities indicates that we have broad strengths in manufacturing management, but with opportunities for improvement in human resources management. We have seen that management skills are important in providing pressure and support in the Innovation System. Our manufacturing managers have readily adopted best

practices in operations management. But they fall behind in managing goals and talent. Fewer managers in Canada have university education than in the United States, so facilitating their opportunities to upgrade their management capabilities through university education would lead to better management of our companies and better results.

Pursue the reduction of barriers to investment and trade

The 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 provinces can lend their support to these recommendations and look for opportunities for greater competitive intensity in areas of provincial responsibility like health care and education. The federal 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.

Canadians are rightly concerned about the impact of a prolonged or deep recession. Businesses and governments need to address these short-term concerns. But we cannot ignore our long-term prosperity prospects. We need to ensure that our current concerns do not crowd out the Prosperity Agenda that will benefit us and our children. This is a delicate balancing act – but it is critical that we get it right.

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