

Institute for

COMPETITIVENESS & PROSPERITY

Rebalancing priorities for Canada's prosperity

REPORT ON CANADA 2006
MARCH 2006



The Institute for Competitiveness & Prosperity is an independent not-for-profit organization established in 2001 to serve as the research arm of Ontario's Task Force on Competitiveness, Productivity and Economic Progress. The mandate of the Task Force, announced in the April 2001 Speech from the Throne, is to measure and monitor competitiveness, productivity, and economic progress in Ontario 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 aspiration of the Task Force is to have a significant influence in increasing Ontario's competitiveness, productivity, and capacity for innovation. The Task Force believes this will help ensure continued success in the creation of good jobs, increased prosperity, and a higher quality of life for all Ontarians, and by doing so, improve the economic prospects for all Canadians. The Task Force seeks breakthrough findings from their research and proposes significant innovations in public policy to stimulate businesses, governments, and educational institutions to take action.

This Report on Canada was prepared for the "Rebalancing priorities for Canada's prosperity" conference in Ottawa in March 2006.

We welcome your comments on this report.

The Institute for Competitiveness & Prosperity is funded by the Government of Ontario through the Ministry of Economic, Development, and Trade.

Institute for

COMPETITIVENESS & PROSPERITY

How to contact us

To learn more about the Task Force and the Institute please visit us at: www.competeprosper.ca

Should you have any questions or comments, you may reach us through the web site or at the following address:

The Institute for Competitiveness & Prosperity
180 Bloor Street West, Suite 1100
Toronto, Ontario M5S 2V6
Telephone 416.920.1921
Fax 416.920.1922

Executive Director

James Milway
416 920 1921 x222
j.milway@competeprosper.ca

Researchers:

Lance Bialas
416 920 1921 x228
l.bialas@competeprosper.ca

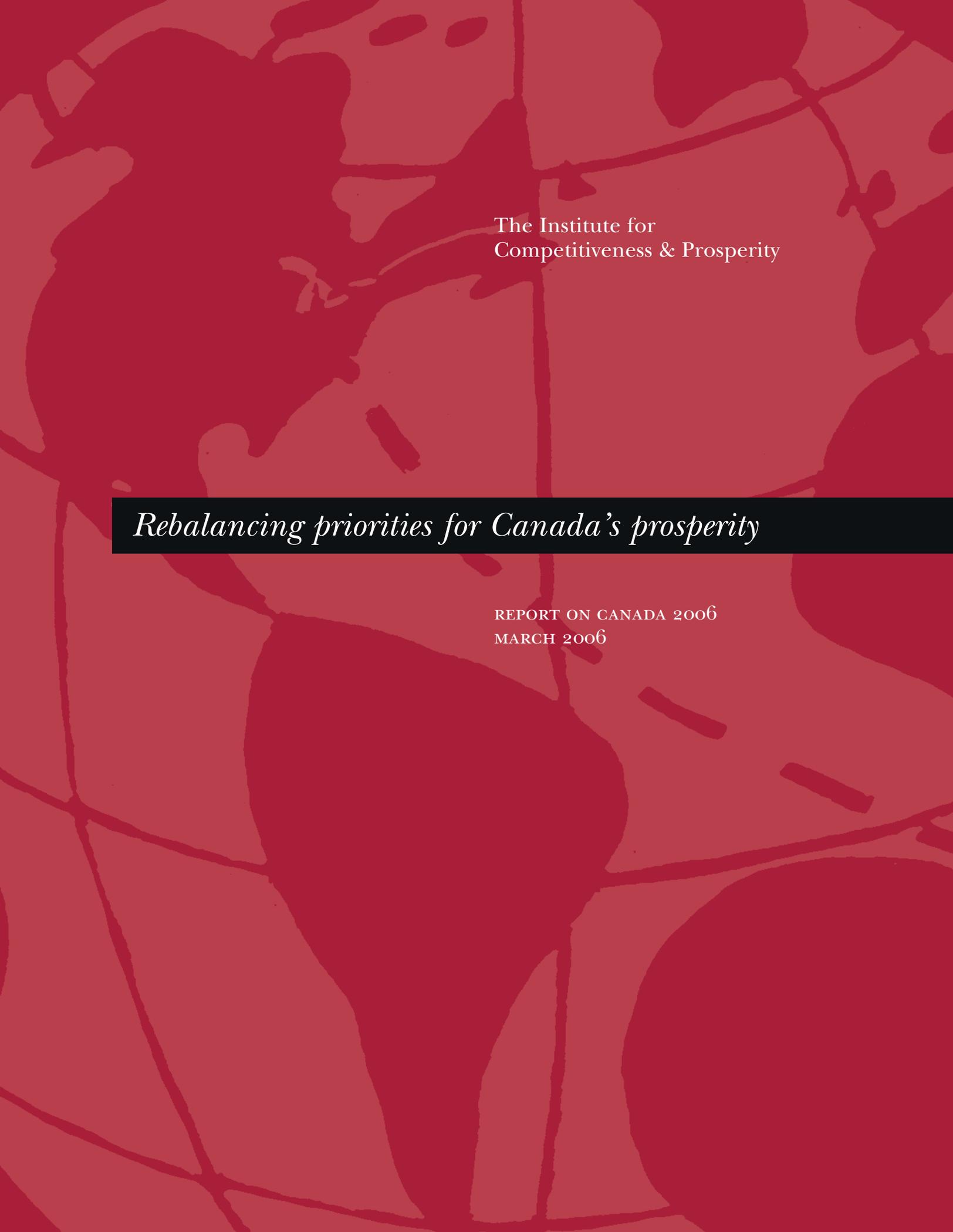
Alberto Isgut
416 920 1921 x227
a.isgut@competeprosper.ca

Jerome McGrath
416 920 1921 x221
j.mcgrath@competeprosper.ca

Sana Nisar
416 920 1921 x223
s.nisar@competeprosper.ca

Clairelle Poole
416 920 1921 x224
c.poole@competeprosper.ca

Ying Wang
416 920 1921 x225
y.wang@competeprosper.ca



The Institute for
Competitiveness & Prosperity

Rebalancing priorities for Canada's prosperity

REPORT ON CANADA 2006
MARCH 2006

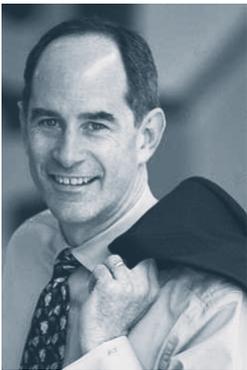
Exhibits

Exhibit 1	Canada's economy out performs most others	7
Exhibit 2	Canada's prosperity gap with the United States has widened	8
Exhibit 3	Productivity is the major source of Canada's prosperity gap	9
Exhibit 4	Societies trade off consumption of current prosperity and investment in future prosperity	10
Exhibit 5	Investment leads to prosperity; future consumption is the benefit of prior investment	11
Exhibit 6	Investing to increase future prosperity raises long-term opportunities for consumption	12
Exhibit 7	Americans out invest Canadians in post secondary education	13
Exhibit 8	Canada continues to under invest in machinery, equipment, and software	14
Sidebar	Canadians need to choose the "invest for tomorrow" path to close the prosperity gap	18
Exhibit 9	Institute assesses four elements of prosperity	23
Exhibit 10	Canada has a persistent gap in hours worked versus the United States	24
Exhibit 11	Lower productivity drives Canada's prosperity gap with the United States	25
Exhibit 12	AIMS drives prosperity; prosperity drives AIMS	29
Exhibit 13	Ontarians have positive attitudes toward competition and prosperity	30
Exhibit 14	Canadians earn fewer university degrees than Americans, especially at the master's level	31
Exhibit 15	Canadian university students report lower levels of engagement than their US counterparts	32
Exhibit 16	Governments in Canada have been shifting spending from investment to consumption	34
Exhibit 17	Reductions in taxes on investment are more effective than reductions in taxes on consumption	37
Exhibit 18	Canada's tax levels are about average, but the tax structure inhibits business investment	38
Exhibit 19	An effective innovation system requires pressure and support across three components	42
Exhibit 20	Canada trails the United States, especially in business R&D	43
Exhibit 21	Venture capital returns in Canada have been weak	44
Exhibit 22	Access to management talent is a key weakness for Canadian innovative start-ups relative to US competitors	46
Exhibit 23	Regional income inequality has narrowed more in Canada than in the United States	47
Exhibit 24	Regional GDP inequality has stayed higher in Canada than in the United States	49

Contents

<i>Foreword and acknowledgements</i>	4
<i>Perspective on Canada's prosperity 2006</i>	6
Individuals need to invest in their own future	13
Businesses need to invest more in physical capital	14
Governments need to invest more for future prosperity	15
Governments need to rethink approaches to taxation and market structures	16
Our recommendations require a fundamental rebalancing of priorities	18
<i>Canada's continuing prosperity challenge</i>	20
Canada's prosperity gap with the United States has widened	21
Closing the prosperity gap would benefit Canada	21
Improving productivity is the key to closing the gap	22
Rebalancing consumption and investment is the highest priority	27
<i>Shifting toward investment</i>	28
Canadians have positive attitudes toward competitiveness	29
Canadians should reverse persistent under investment	30
<i>Taxing smarter to motivate investment</i>	36
Encourage business investment through smart taxation	37
Lower perversely high marginal tax rates for individuals	38
Consider breakthrough proposals	39
Governments should lead the way	40
<i>Rebalancing market and governance structures</i>	41
Strengthen our innovation system	41
Fix fiscal federalism	47
<i>Recommendations for Canada's prosperity</i>	52
<i>References</i>	54
<i>Previous publications</i>	56

Foreword and acknowledgments



I AM PLEASED TO PRESENT our Report on Canada 2006, *Rebalancing priorities for Canada's prosperity*.

This is an opportune time for reflecting on the challenges for Canada's competitiveness and prosperity. Through 2005 these issues became a more important part of Canada's economic policy debates and were key elements in the federal government's fall economic and fiscal update. It is especially timely to discuss these challenges at the start of 2006 as the new government begins its mandate. We publish this report as a contribution to the discussions among stakeholders in Canada's prosperity.

It is important to remember that Canada is one of the world's most successful economies – with an enviable balance between prosperity and equity in sharing the benefits. Yet we are not performing to our full prosperity potential. In Gross Domestic Product, the measure of a country's competitiveness and prosperity, we trail our most important trading partner, the United States, by \$8,700 per capita. Over the past quarter century this gap has widened considerably from \$3,200. This is a worrisome trend that Canadians need to reverse.

What stands in the way of realizing our potential? In our four years of research, the Institute has found nothing immovable in our economy that precludes us from closing the prosperity gap significantly. But our research also shows that the major challenge we face is to strengthen our capabilities to improve our productivity. Higher productivity is the key to closing our prosperity gap.

We conclude that we Canadians need to rebalance our priorities and policies toward investing for the future, if we want to achieve our prosperity potential and close the widening gap we have with the United States. We have shown that stakeholders in Canada's prosperity – individuals, businesses and governments – are under investing for tomorrow in favour of consuming today. The flawed logic for choosing this consumption path is that we can consume the fruits of our past investments without worrying about investing for future prosperity. Simply put, we need to change course.

We urge Canadians to choose the “invest for tomorrow” path. The compelling logic for this choice is that investing today will lead to significantly higher prosperity down the road. To do this, we need to make important tradeoffs between consumption and investment.

Investment can take many forms. We can invest more in education to upgrade people's skills. We can also make additional investments in machinery, equipment, and software to increase productivity and wages. Fundamentally, higher investment is the means to making Canada more prosperous. With that greater prosperity, we will be able to sustain future investment and enjoy more consumption – the benefit of prudent past investment. For example, individuals could afford more leisure activities, businesses could contribute more to their communities, and governments could spend more on social services.

Over the past decades, Canada definitively has chosen the consumption path. By following this path – either by choice or by default – Canadians have been limiting our prosperity growth, now and for the future. Our choice is clear. We need to rebalance our priorities to invest more for tomorrow.

We gratefully acknowledge funding support from the Ontario Ministry of Economic Development and Trade.

We look forward to sharing and discussing our work and our findings with all Canadians. We welcome your comments and suggestions.



Roger L. Martin, Chairman
Institute for Competitiveness & Prosperity



Perspective on Canada's prosperity 2006

Canada's economy is one of the most competitive and prosperous in the world, but priorities must be rebalanced to achieve its full potential

CANADA RANKS AMONG THE WORLD'S MOST PROSPEROUS COUNTRIES. The high standard of living enjoyed across the country today is the result of achieving above-average growth in economic output, eliminating government deficits, and quelling inflation pressures over the past decade. At the same time, Canada has built on its significant strengths:

Our people are our asset

- * We are a highly skilled and educated population and work force
- * We have a richly diverse culture with talented immigrants

Our businesses drive our economy

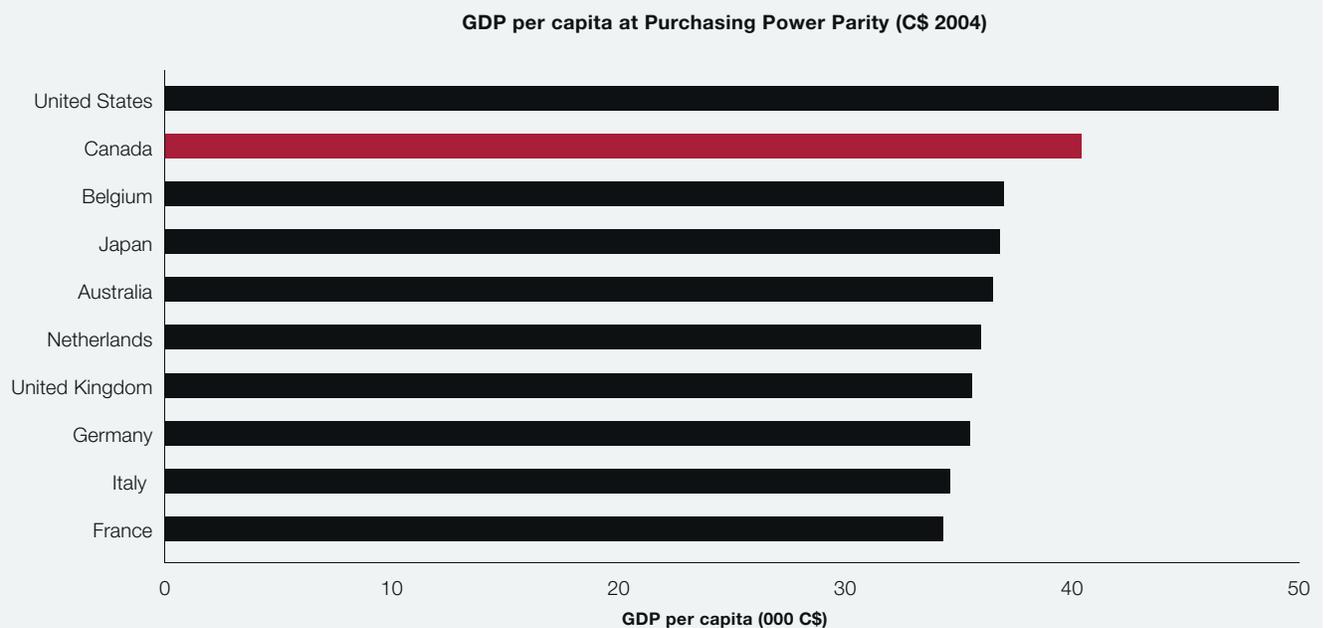
- * Our economy is based on an enviable mix of industries that drive productivity and wealth creation
- * The attitudes among the general population and our business leaders match those of US counterparts in embracing the challenges of competition and innovation
- * Firms in Canada have preferred access to the world's largest and most sophisticated economy

Our governments support our well being

- * We have built a first-rate educational system that supports pathfinding research and provides excellent training opportunities
- * We have achieved both a high level of income overall, and we share this income more equitably than many other developed countries
- * We have strong social safety nets to provide support for all Canadians.

Based on our strengths, we can confidently say that, except for the United States, no other country – with population greater than 10 million – has accomplished what we have here in Canada (EXHIBIT 1).

Exhibit 1 Canada's economy out performs most others



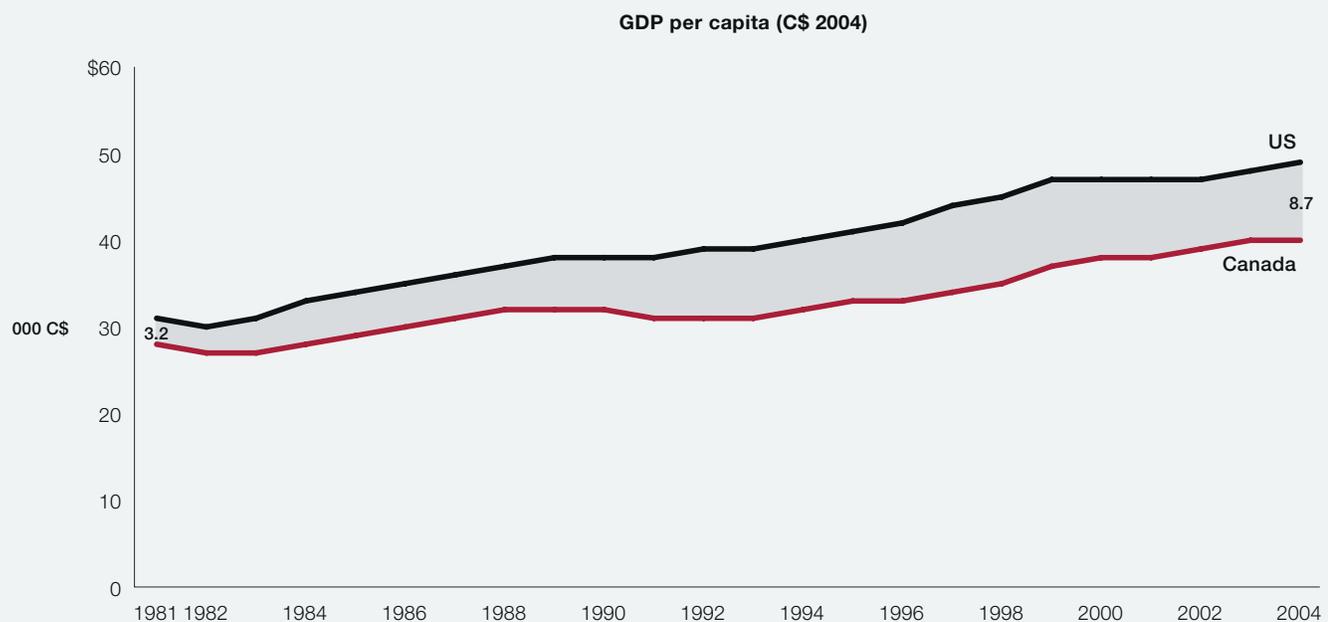
Source: Institute for Competitiveness & Prosperity analysis based on data from Statistics Canada, US Bureau of Economic Analysis, World Economic Forum, and OECD.

Nevertheless, we are not living up to our full potential. We have a large and widening prosperity gap with the United States – our most significant trading partner and North American neighbour. Compared to the United States, we are less successful in adding value to our human, physical, and natural resources. In 2004, the gap in Gross Domestic Product (GDP) per capita – the recognized measure of a country’s economic performance – was \$8,700. That means that our GDP per capita was 18 percent lower than that in the United States. In 1981, Canada’s prosperity gap with the United States was \$3,200, less than half of the current difference (EXHIBIT 2). We think it is possible to narrow this widening gap significantly and regain closer parity with US economic performance.

Why are we not realizing our full economic potential? The Institute has not identified any immovable barriers in our economy that would prevent us from closing the gap with the United States. But, in four years of research, we have found that lagging productivity explains most of the gap. Since 2000, productivity in Canada has fallen further behind that in the United States. Simply put, our key challenge is to strengthen our capability to improve our productivity.

Productivity measures how much value the average Canadian worker creates hourly, daily, or annually. Higher productivity leads to higher wages and higher standards of living.

Exhibit 2 Canada’s prosperity gap with the United States has widened

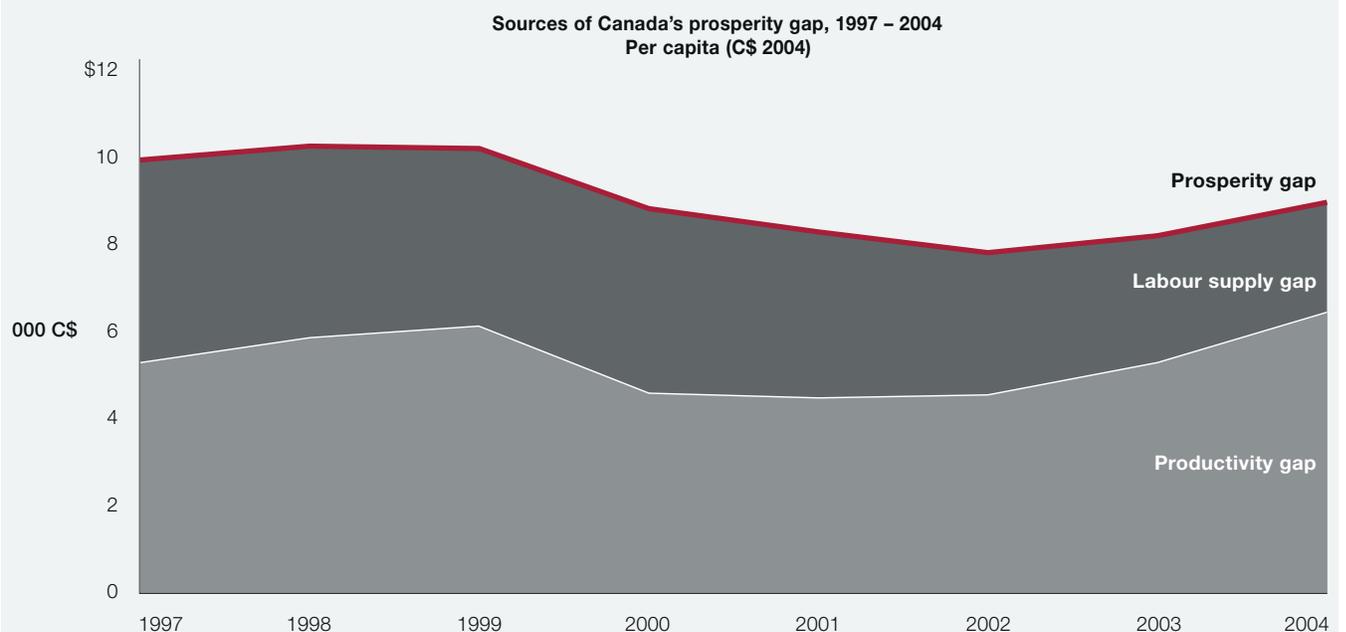


Source: Institute for Competitiveness & Prosperity based on data from Statistics Canada, US Bureau of Economic Analysis, and OECD.

Canadians have been increasing their work effort recently. A large percentage of our adult population is entering the work force, and we have made good strides recently in closing the difference in unemployment rates with the United States. Recent evidence indicates, however, that in hours worked per worker, we trail the United States significantly. Nevertheless, taking all these factors together, we conclude that, over the past five years, Canadians have made good progress in increasing hours worked per capita. We can do better in this area, but we have to recognize that working harder has limited potential for closing the prosperity gap. Instead, improving our productivity has higher leverage for raising prosperity (EXHIBIT 3). Productivity gains truly come from working smarter, not harder.

Why is our productivity lagging? Our productivity shortfall is the consequence of consistently under investing for future prosperity. First, we under invest in ourselves. Individuals, businesses, and governments spend less on education than those in the United States. This under investment is particularly acute at the post secondary levels. Second, our businesses under invest in the machinery, equipment, and software that enable workers – and the economy – to be more productive. Third, our governments have shifted their spending balance away from investment in infrastructure and post secondary education toward consumption, mainly in health care and social services.

Exhibit 3 Productivity is the major source of Canada's prosperity gap



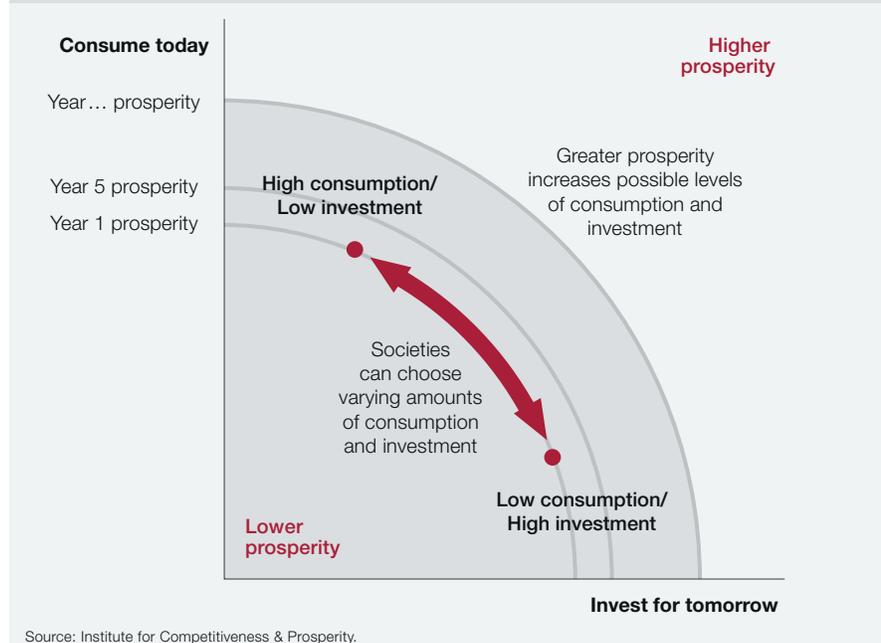
Source: Institute for Competitiveness & Prosperity, based on special tabulation prepared by Statistics Canada.

With the fruits of prosperity generated from past investments, individuals, businesses, and governments can choose between two paths: “invest for tomorrow” or “consume today” (EXHIBIT 4). The underlying logic for the consumption path is that prosperity will continue at an adequate level without investing in it, and that we can enjoy to the maximum the fruits of our prosperity today. The underlying logic for the investment path is that investing today and forgoing some consumption of current prosperity will create even higher prosperity down the road.

In one sense, these are the choices in all societies, and they are often tough to make. But in another sense, investment is a means to an end – greater future prosperity – that will enable countries to achieve their goal of higher future consumption. Setting aside a judicious portion of current prosperity for investment will increase future prosperity, which will then sustain greater future consumption as well as the capacity for robust future investment.

The balance between the two is important. Advanced societies that over invest at the expense of consumption run the risk of losing social cohesion. But societies that over consume and under invest do not create the conditions for increased future prosperity, and they also constrain their ability to increase consumption in the future. Worse, their capacity for future investment will fall, because prosperity has not moved toward its potential.

Exhibit 4 Societies trade off consumption of current prosperity and investment in future prosperity

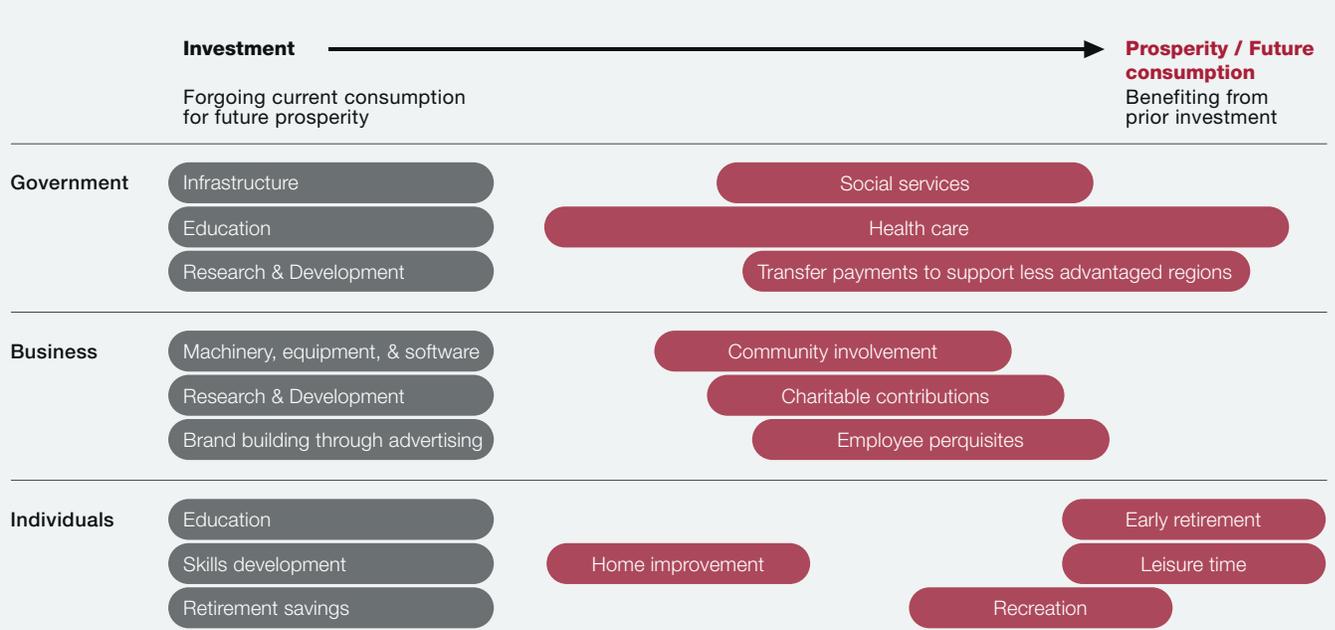




The choice requires societies to make important tradeoffs. How they make these tradeoffs and choose the path forward will decide the prosperity of future generations. Investment can take many forms – investing in upgrading people’s skills or investing in capital goods for business and government services – to generate future prosperity. Consumption – which is the benefit of prosperity – can also take many forms: for individuals, it can be more leisure activities; for businesses, it can be greater community involvement; for governments, it can mean higher spending on social services.

Canadians need to invest more in our future prosperity than we have in the past. Some expenditures are pure investment – they completely forgo current benefit for the prospect of long-term prosperity. Investment in machinery and equipment, R&D, and retirement savings are examples. Very few expenditures are pure consumption. Many are a mixture of consumption and investment. For example, a vacation consumes some of a family’s current prosperity; yet the family leisure time can recharge energy and ultimately make its members more productive (EXHIBIT 5).

Exhibit 5 Investment leads to prosperity; future consumption is the benefit of prior investment



Source: Institute for Competitiveness & Prosperity.

Health care is an interesting and complicated mix of consumption and investment. In many respects, it is a prototypical consumption item. Societies that are sufficiently prosperous can afford to provide the benefit of health care to all citizens. Perhaps the purest form of consumption is health care for retired citizens. However, health care that enables a child who would otherwise never enter the workforce to get a job and work for forty years is an investment. There is zero economic benefit today, but a huge payoff for the future.

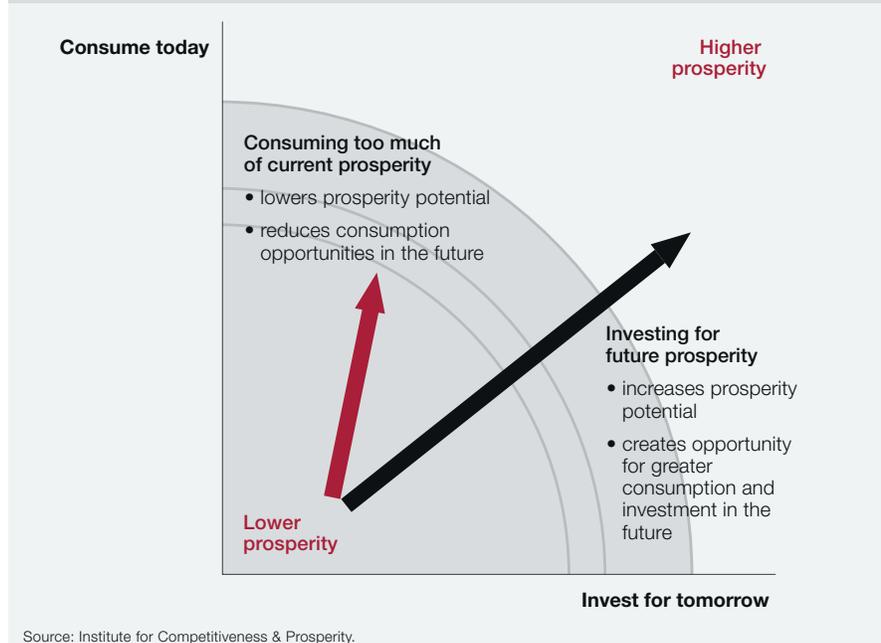
The important point is that these types of spending are not fundamentally opposed to each other, but are, in fact, complementary. Investment spending is a means to an end; future consumption spending is the end goal of prosperity (EXHIBIT 6).

Canadians need to invest for tomorrow

Over the past decades, Canada has clearly been on the “consume today” path. And that is hurting our prosperity. We need to change course to the “invest for tomorrow” path

The most pervasive challenge to achieving the adequate levels of investment in Canada’s productivity and prosperity is to rebalance consumption and investment. We see this need in several areas.

Exhibit 6 Investing to increase future prosperity raises long-term opportunities for consumption

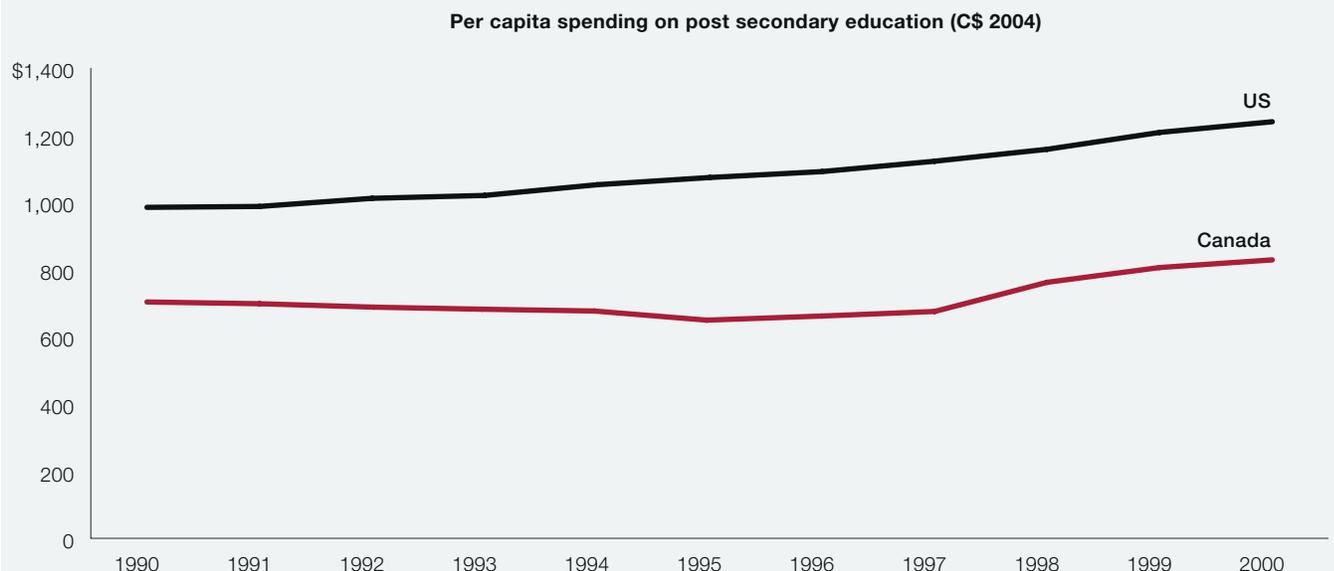




INDIVIDUALS NEED TO INVEST IN THEIR OWN FUTURE

As individuals, Canadians need to invest more in building their own skills and knowledge. Across all sources of funding, we invest less in education than our counterparts in the United States. This under investment is most pronounced at the post secondary level (EXHIBIT 7), particularly in university education. Compared with the United States, fewer of our workers have university degrees; we produce fewer graduate degrees; and this deficit is even more pronounced among managers. Since higher educational levels translate into higher incomes, our lower educational levels have a significant negative impact on our productivity and prosperity. We need to encourage more investment in our skills if we are to realize our prosperity potential. This should be reinforced by immigration policies that ensure that we both attract highly educated immigrants to Canada and – equally importantly – integrate them more readily into our economy.

Exhibit 7 Americans out invest Canadians in post secondary education



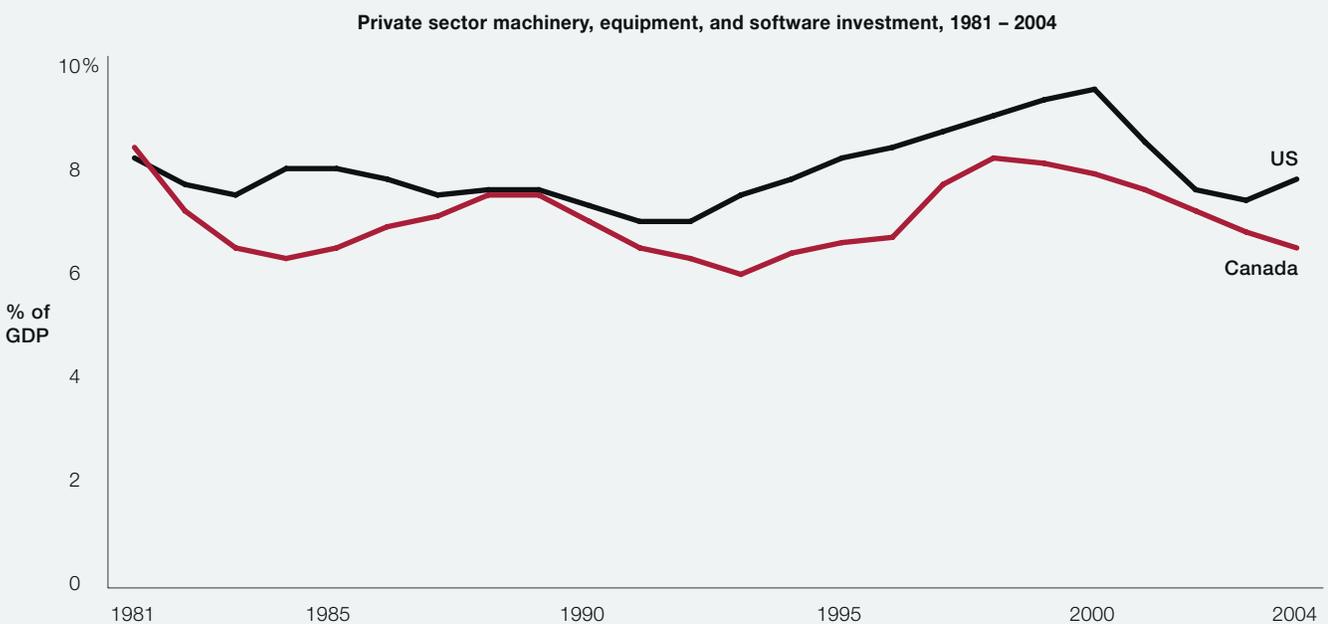
Note: Total expenditures comprise operating expenditures and capital expenditures; auxiliary enterprises (e.g. bookstores, student residences) are excluded from US to make data comparable; year 1990 represents fiscal year 1990/91; private spending data for fiscal years 1996/97 and after are estimates due to US accounting standards change.
 Source: Statistics Canada, CANSIM 478-0004, 478-0007, 051-0001, GDP; US Department of Education, National Center for Education Statistics, *Digest of Education Statistics* 1995-2004; US Census Bureau.



BUSINESSES NEED TO INVEST MORE IN PHYSICAL CAPITAL

Canadian businesses under invest in productivity-enhancing machinery, equipment, and software relative to the United States (EXHIBIT 8). Every year we fall further behind our US counterparts in the upgrading of our capital stock. Without the most up-to-date capital support, our workers are limited in how much they can increase their productivity. This limits their wages. Businesses are under investing, in part, because our tax structure does not motivate business investment. They are also under investing because our market structures do not provide the specialized support and competitive pressure from rivals and customers that are so necessary to spur innovation and upgrading in their companies.

Exhibit 8 Canada continues to under invest in machinery, equipment, and software



Source: Statistics Canada; US Department of Commerce, Bureau of Economic Analysis; Institute for Competitiveness & Prosperity analysis.

GOVERNMENTS NEED TO INVEST MORE FOR FUTURE PROSPERITY

Our governments also need to re-orient their spending so that we invest more for future prosperity and consume less current prosperity. During the 1990s, they attacked high deficits by reducing their spending. Governments in Canada lowered real per capita spending on investment – on education and infrastructure – by 16 percent between 1992 and 1997. Over the same period, they cut consumption spending – largely on social services and health care – by 5 percent. Hence, Canadian governments attacked deficits more through cutting investment rather than consumption. After 1997 government spending growth resumed. Between 1997 and 2003, real per capita consumption spending increased 12 percent, while investment spending grew by 7 percent. Consequently, the investment ratio fell from 58 cents of investment per dollar of consumption in 1992 to 49 cents in 2003.

In the meantime, government spending in the United States took a different path. Between 1992 and 2003, US governments increased investment at a faster rate than consumption. Over the period, investment by governments grew by 28 percent; consumption grew by 24 percent. As a result the ratio of investment-to-consumption spending went from 52 to 54 cents. The path they chose put a priority on investment.

The federal government should rethink fiscal federalism because today's system is too costly for future prosperity

It could be argued that in fighting the deficits, our governments had to make tough choices and that it was imperative that we had to forgo investments temporarily. This argument is unpersuasive. As we subsequently saw, when the large deficits were overcome – and Ottawa's new fiscal challenge was how to deploy the unanticipated surpluses – the federal government chose the consumption path. Between 1994 and 2004, the federal government spent \$39 billion of "found money." For every dollar of new consumption spending, it invested only 31 cents – dreadful investment performance. More recent spending by Canadian governments has also placed a priority on consumption. Between 2003 and 2005, governments' real per capita spending on consumption has grown by 2 percent – driven largely by health care spending; meanwhile, investment spending has remained unchanged.

Consumption of current prosperity through spending on adequate social safety nets and accessible health care has to be the first priority for government spending. But it is not the only priority. Why? Because choosing consumption today too much at the expense of investment

means that we reduce our potential for future consumption of these vital services. Our federal, provincial, and municipal governments must find ways to re-orient spending from the consumption path to the investment path. With significantly higher prosperity than Canada, governments in the United States were able to invest nearly \$340 more per capita in 2003 on investment and spend \$300 more on consumption. With a bias toward investment in future prosperity, the United States has a greater capacity to invest in still greater future prosperity.

In Canada, the approach to fiscal federalism pushes us further along the consumption path. The structures that drive the flow of resources from have to have-not provinces in Canada are geared almost entirely to transferring prosperity from have provinces to assist residents of have-not provinces, and they then consume health care and social services. We have created a system that transfers resources from have provinces at the rate of \$1,400 per capita, lowering Canada's overall investment and productivity.

While fiscal federalism raises the level of personal disposable income in the have-not provinces, the system does little to stimulate investment in future prosperity there. One result is that we have a system that perpetuates itself – with limited convergence in potential prosperity in the have-not provinces. Consequently, have provinces are less able to invest in their future prosperity, and have-not provinces are not capturing opportunities to raise their investment in future prosperity.

It is incumbent on the federal government to rethink the way fiscal federalism works, because it is too costly for long-term prosperity. It should consider providing substantial tax relief to stimulate investment in the have-not provinces rather than have them continue to depend on transfer programs. Increased capital investment in Canada's have-not provinces will help boost productivity, and this will increase their capacity for wealth creation. In turn, this will free up resources for Canada's have provinces to invest in their own prosperity.

GOVERNMENTS NEED TO RETHINK APPROACHES TO TAXATION AND MARKET STRUCTURES

Our governments also need to rethink our tax system, which does not adequately motivate investments by businesses or individuals. In fact, Canada is becoming the industrialized world's least attractive jurisdiction in the taxation of business investment. Around the world, governments of our trading partners and competitors are realizing that tax systems can motivate investment for productivity and prosperity. They are lowering the rate at which they tax business investment through a variety of ways – reducing tax rates on corporate earnings, avoiding taxation of existing capital, ensuring sales taxes are not applied to capital investments,

speeding up depreciation schedules, and implementing other initiatives. In Canada, we need a smarter taxation system that would drive us toward greater business investment and adjust the balance toward investing in future prosperity.

For individuals, our tax system, combined with how we structure our social programs, creates perversely high marginal tax burdens for lower income Canadians trying to scale the economic ladder. As individuals progress from annual income levels of \$22,000 to \$54,000, they face higher marginal tax rates on their income, and they experience clawbacks of tax credits, social benefits, and transfers. The combined effect of the rising marginal tax rates and the clawbacks is that a single earner couple with two children faces a marginal effective tax rate of 60 percent on their higher income after they pass \$31,000 in taxable income. In other words, these families are keeping only 40 cents of each new dollar they earn. As their taxable income reaches \$36,000, the marginal rate climbs to an absurd 90 percent. And research shows that the potential negative impact of high marginal effective tax rates caused by clawbacks is greatest for single-parent families, which are usually headed by women. At these high marginal rates, they need to consume every last after-tax dollar and have no incentive to invest for the future.

Our challenge in designing personal tax and benefit systems is to rebalance our priorities. We need to balance the requirement to support lower income individuals and families with the need to ensure that individuals have incentives to work and upgrade skills.

Other imbalances also need to be corrected. Innovation policy needs to rebalance support and competitive pressure in the supply of and demand for innovation. Currently, too much of our public policy focuses on providing support – R&D spending, publicly financed venture funding, tax incentives – for innovation. But we have not adequately balanced these initiatives with policies and investments that build competitive pressure for innovation. Nor do we have an adequately educated management cadre in Canada to insist on more innovation in their businesses. Added to this, we lack enough knowledgeable and demanding customers that would provide beneficial pressure to make available the most innovative products and services.

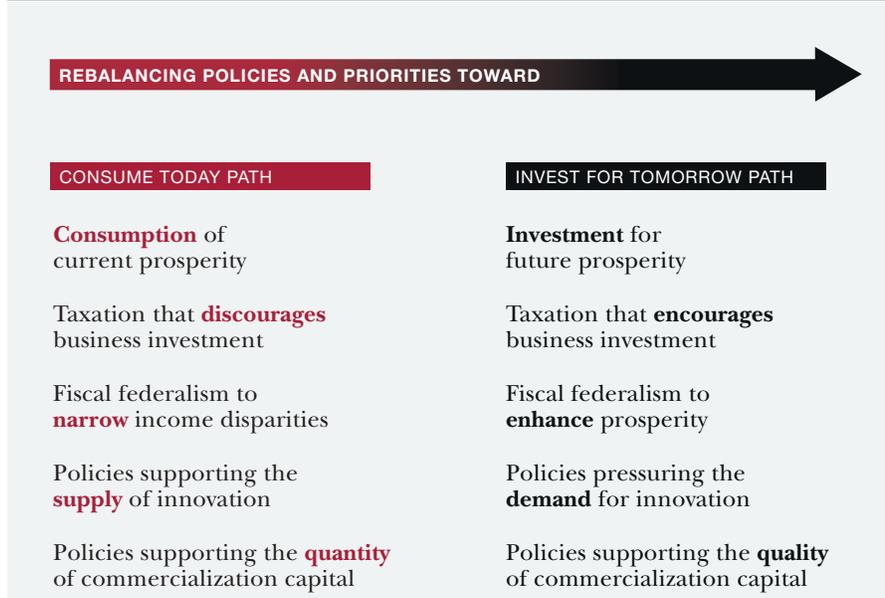
Financing for innovation needs to shift toward quality and away from quantity. Our public policy has focused on creating supply of capital and funneling it into organizations that have neither the incentives nor the capability to help Canada succeed in commercialization and innovation. In effect, we have emphasized the quantity of risk capital at the expense of quality. We need to stimulate demand from venture capitalists who expect the highest returns.

OUR RECOMMENDATIONS REQUIRE A FUNDAMENTAL REBALANCING OF PRIORITIES

We recommend a shift in the course of our current economic path so that we are investing for future generations. To close the prosperity gap, we need to:

- * Raise Investment by individuals, governments, and businesses in our human capital, particularly through post secondary education. As well, we need to raise investment in machinery, equipment, and software.
- * Tax smarter to encourage Motivation to invest for long-term prosperity. This will promote job creation, higher physical and capital investment, more innovation, and the adoption of new technology.
- * Strengthen market Structures to provide a balance of pressure and support that will drive innovation and upgrading in Canada. This will shift the focus from support for the supply of innovation to demand for more innovation and higher quality commercialization capital.
- * Fix the Structure of fiscal federalism to improve the prosperity potential of all regions in Canada. The goal is to increase the potential for productivity-enhancing investments in all provinces.

Canadians need to choose the “invest for tomorrow” path to close the prosperity gap





In our view, stakeholders in Canada's prosperity agree on what we want from our economy. We want more opportunities for our children. We want good jobs and the means to acquire the skills to secure those jobs. We want a clean environment and a strong social safety net.

Strong and committed leadership is required when there is consensus on the goals, but not the path toward those goals. In Canada, we agree on the goals – a prosperous and equitable country. However, we lack consensus on the path toward those goals. And we conclude that the current path will not achieve what Canadians desire.

To get on the right path to prosperity, we need political leaders to set the prosperity agenda and to back the agenda with the will to shift policy and spending priorities. Equally, we need business leaders with the vision to invest in skills, capital, innovation, and upgrading. Last but not least, we need all citizens to show personal leadership by investing in their own future.

To make all of these shifts possible, we will need to have all stakeholders engage in the discussion about rebalancing our priorities for our future prosperity. The lesson of the last twenty-five years is clear. Inattention to prosperity policy has put us on the consumption path – to the detriment of all Canadians. Switching to the more effective investment path will not be easy. It will require leadership at many levels and the development of a strong reinforcing culture.

The choice is clear. The time is now.

Canada's continuing prosperity challenge

Prosperity matters for all Canadians' quality of life

WHILE ECONOMIC PROSPERITY IS ONLY one dimension of our quality of life, it is an important base requirement for achieving the elements of the quality of life that Canadians value – the potential to enjoy a high standard of living, opportunities for personal development, sound social safety nets, adequate health care, and a clean environment. Without a growing economy, these are difficult to achieve, and the fight against poverty and inequality is harder to win, as there is less for everyone to share.

We have argued that Gross Domestic Product (GDP) per capita is the best measure of our economy's economic success. GDP measures the value added by Canadians in converting our human, physical, and natural resources into products and services that consumers buy here and around the world. Over the last four years, the Institute has focused on deepening our understanding of Canada's prosperity potential, explored reasons why we are not realizing this potential, and developed recommendations for closing the prosperity gap we have identified.

In *Partnering for investment in Canada's prosperity*, Report on Canada 2004, we set out the arguments for why competitiveness is a necessity, not an option, for a country in today's

globalizing economy. We concluded that Canada is one of the world's most competitive and prosperous economies. Outside North America, no other country of similar or greater size is as prosperous as Canada. However, we also concluded that a comparison of the economic performance of Canada and the United States is a more robust gauge of Canada's prosperity. On this, Canada significantly trailed the United States in GDP per capita, and there was a considerable prosperity gap between the two countries on this measure.

Our concern was that the prosperity gap indicated that Canadians were not fulfilling their economic potential, since we could identify no fundamental reason for us to lag the United States. We identified lower productivity as the key challenge we faced and proposed that Canadians aspire to close the prosperity gap in the next decade; increase productivity-enhancing investments in areas such as machinery, equipment, and software and post secondary education; encourage motivations to invest through tax reform; and strengthen market structures.

In *Realizing Canada's prosperity potential*, Report on Canada 2005, we identified the importance of under investment in explaining Canada's prosperity gap. We concluded that, in several key areas, Canadians were making the base level of investments, but compared to our neighbour, we stopped short of making additional

productivity-enhancing investments. In education, for example, we traditionally kept pace with the United States in investing in primary and secondary grades but trailed at higher levels of education. In business, we found that Canadian firms invest less than their US counterparts, especially in machinery, equipment, and software. We also identified other areas where Canadian individuals, businesses, and governments were under investing to close the prosperity gap. Our tax system, Canada's fiscal federalism structures, and our market structures were all identified as reasons for our under investment.

Our recommendations reinforced those in Report on Canada 2004. We called for greater encouragement for students to pursue higher education, strengthened processes for integrating immigrants into the economy, more investment in machinery and equipment, smart reform of our tax systems, and more competitive market structures.

This year, in *Rebalancing priorities for Canada's prosperity*, Report on Canada 2006, we continue to urge Canadians to take action to close the prosperity gap we have with the most advanced economy in the world. Not closing the prosperity gap could put Canadians in a vicious circle that could spiral downward from our currently healthy economic situation. Not realizing our prosperity potential would reduce the pressure and support for innovation and upgrading so necessary for future investments. With investment stalled, productivity would fall further behind our peers, tax revenues would slip, and higher tax rates would be required. Attitudes embracing competition and

innovation would be dampened. Closing the prosperity gap would overcome these challenges and sustain a virtuous circle of prosperity.

Canada's prosperity gap with the United States has widened

Canada has an enviable economic position. Among countries with a population that is similar to or greater than Canada's, no other country in the world has achieved Canada's success in building such a competitive and prosperous economy (see *Exhibit 1*).

As solid as our record is in the international sphere, however, Canada lags the economy that most closely resemble ours. We continue to measure our competitiveness and prosperity against the United States. We estimate that prosperity in Canada stood at \$40,400 per capita in 2004, while in the United States the comparable figure was \$49,100. Canada was fully \$8,700, or 17.7 percent, behind the United States. This \$8,700 gap is higher than the \$8,000 difference in 2003.¹

As we have seen, since 2002 the prosperity gap has widened significantly (see *Exhibit 2*). Before 1990, Canada's economic results compared more favorably with those in the United States. However, the Canadian recession that began in the second quarter of 1990 and ended in the fall of 1992 marked a turning point for Canada against the United States. While the United States experienced a recession at about the same time, it began later than Canada's. Canada's recession was also more severe than the US downturn. According to University of Toronto economists Tom Wilson, Peter

Dungan, and Steve Murphy, Canada's recession was caused primarily by tight money supply and tax increases. They concluded that the transition to the Goods and Services Tax (GST) and the US recession were minor factors in Canada's recession. The authors also found little evidence that free trade caused Canada's severe recession.²

With all these factors, Canada's prosperity gap widened through the mid-1990s and reached a maximum of \$10,000 in 1997. After 1997, the gap trended downward until 2002, when it reached \$7,200. But since 2002 the gap has begun to widen again, reaching a worrisome \$8,700 in 2004.

Closing the prosperity gap would benefit Canada

Closing the prosperity gap would add \$281 billion to Canada's output. The average Canadian household would gain \$12,100 in after-tax disposable income. This could benefit families in many different ways. For example, among mortgage holders, more than their average annual payment (\$9,600) would be covered. Among tenants, average rental payments (\$7,100) would be offset, and many renters could choose to own their own homes. Alternatively, closing the prosperity gap would make home renovation (\$5,800 current annual spending among renovators), recreation spending (\$3,600), RRSP contributions (\$3,500), and other expenditures more affordable.³ In addition, realizing our prosperity potential would generate \$112 billion more in taxes for federal and provincial governments. This would significantly increase their revenues without raising tax rates.

¹ In our Report on Canada 2005, we indicated the prosperity gap for 2003 was \$ 7,200. This differs from the current estimate of \$8,000 for 2003, because the latter is in 2004 dollars, US statistical agencies revised the data, and the currency conversion factor changed (Purchasing Power Parity).

² P. Dungan, S. Murphy, T. Wilson (1994), "The Sources of the Recession in Canada: 1989-1992" *Canadian Business Economics*, Winter 1994, pp. 3-15.

³ Statistics Canada, *Spending Patterns in Canada 2003*, Catalogue no 62-202-XIE.

Improving productivity is the key to closing the prosperity gap

To understand the reasons for the prosperity gap and its recent trends, we draw on the same framework we have used in previous reports to disaggregate Canada's prosperity gap into four measurable elements of our GDP per capita (*Exhibit 9*):

- How many people are of working age? The demographic *profile* in a jurisdiction – the percentage of the population that is between 16 and 64 and can therefore contribute to economic prosperity
- How many people are active in the work force? The *utilization* of the working age population – the percentage of the population between 16 and 64 who are seeking and succeeding in finding work
- How many hours do people work? The *intensity* of work – the number of hours workers on average spend on the job
- How much do workers produce? The *productivity* of the workforce – the success in translating working hours into products and services of value to customers in Canada and around the world.

To gain further insight into these elements we sub-divide two of them further.

Within *utilization*, we examine:

- the rate at which working-age Canadians participate in the job market by searching for work, whether they are successful or not, and

- the rate at which those who are participating in the job market are employed.

Within *productivity*, we examine seven sub-elements:

- Cluster mix – the mix of industries into traded clusters, local industries, and natural resources
- Cluster content – the sub-industries that make up our clusters of traded industries
- Cluster effectiveness – how well our clusters of traded industries compete
- Urbanization – the degree to which our population lives in urban areas
- 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.

Note that the first three factors – profile, utilization, and intensity – add up to hours worked per capita, what economists call “labour supply.” Combined, these three factors measure the physical effort Canadians are expending to create economic value. The fourth factor – productivity – measures how effective our labour efforts are in translating resources into economic value and prosperity. As we shall see, through the 1990s, the key factor in our widening prosperity gap was labour supply, especially utilization and its

two sub-elements – participation and employment. Since 1995, we have been successfully recovering to 1990 performance levels. Today, the key opportunity for closing the prosperity gap and realizing our economic potential is in raising productivity.

Canada has mixed performance in labour supply factors

Canada now out performs the United States in profile and utilization, but under performs in intensity.

Profile remains an advantage. The first factor in a country's potential to create prosperity relates to demographics – what percentage of the population is of working age? All other things being equal, a country with a higher percentage of its population between the ages of 16 and 64 will have greater prosperity potential than a country with a lower percentage.⁴ As expected, this ratio has been stable over the past decade. Canada's demographic profile represents an advantage versus the United States. Currently, 67.8 percent of our population is between 16 and 64. The US population in this age group stands at 65.5 percent.

Canada, therefore, has a 3.3 percent advantage versus the United States in demographic profile.⁵ Holding all other elements constant, demographic profile represents a \$1,300 advantage in GDP per capita versus the United States.

Much has been written about the transition of the baby boomer bulge into retirement age. The earliest baby boomers, those born in 1946, will be reaching retirement age in less than six years. What do these demographic trends imply for Canada's prosperity potential?

⁴ As the retirement age advances, the 16-64 age bracket becomes less useful in measuring profile, participation, and employment. However, at this time, it is still a good range, and most government statistics report on this basis.

⁵ Calculated as $[1 \text{ minus } (65.5 \text{ (United States)} / 67.8 \text{ (Canada)})] = 3.3 \text{ percent}$.

Obviously, a smaller percentage of the population of working age means fewer workers will be available to create prosperity. Demographic projections by Statistics Canada and the US Census Bureau indicate the phenomenon will be similar in the two countries. These two sets of projections indicate that Canada's relative advantage in demographics will not fall. Nevertheless, the projections in both countries – and across all industrialized nations – point to the growing importance of generating more prosperity with fewer workers.

Canada out performs the United States in utilization. Canada has achieved remarkable progress in putting its potential labour force to work through the 1990s and in recent years. In fact, in 2004 Canada led the United States in the percentage of working age population who were working. Canada has performed well on both sub-elements of utilization – participation and employment.

Participation is high. The participation rate measures the percentage of the working age population who are in the labour force, comprising people who have successfully found a job as well as those who are continuing to look for work. In the early 1990s, Canadians had a higher participation rate than their counterparts in the United States. In fact, in 1990, with its 67.6 percent participation rate, Canada led the United States. As Canada fell into the 1990-92 recession, its participation rate dropped significantly, and reached a low point of 65.3 percent in 1996. In 1997, Canada's participation rate began to climb and regained leadership in this element of prosperity by 2002.

In 2004, Canada's participation rate stood at 68.2 percent versus the US result of 66.0 percent. This difference in participation rates is a 3.2 percent advantage for Canada. If the participation rate were the only prosperity

element, then Canada would lead the US by \$1,300 in GDP per capita.

Employment gap has narrowed. Canada has traditionally trailed the United States in employment, which measures the percentage of those participating in the labour force who have successfully found work. The recession of the early 1990s had a dramatically negative effect on Canada's employment rate. In 1990, before the recession, 91.9 percent of Canadians in the labour force held jobs – below the 94.4 percent rate for the United States. By 1993, Canada's employment rate fell to 88.6 percent (in other words, the unemployment rate reached 11.4 percent), well behind the US rate. The United States also experienced a dip in employment, but its decline was not as severe as Canada's.

In 1994, as Canada climbed out of the recession, its employment rate began to improve, growing each year through the

Exhibit 9 Institute assesses four elements of prosperity

Prosperity		Profile		Utilization		Intensity		Productivity	
GDP per capita	=	Potential labour force	X	Employed persons	X	Hours worked	X	GDP	
		Population		Potential labour force		Employed persons		Hours worked	
				<ul style="list-style-type: none"> • Participation • Employment 				<ul style="list-style-type: none"> • Cluster mix • Cluster content • Cluster effectiveness • Urbanization • Education • Capital investment • Productivity residual 	

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

rest of the decade and outpacing US growth. By 2000, Canada had considerably narrowed the employment gap. The 2001-02 recession was milder in Canada than in the United States, and the gap narrowed further. By 2004, the employment rate in Canada was 92.9 percent, 1.6 percentage points lower than that in the United States.

Our lower employment rate relative to the United States costs Canada \$700 in lower GDP per capita. However, this performance is an improvement over earlier years, and the employment rate now represents a much less significant part of our prosperity gap than it did in the mid-1990s.

Utilization is the combined effect of participation and employment. It indicates what percentage of the working aged population is actually employed and contributing to Canada’s competitiveness and prosperity. As we have

seen, Canada suffered significant declines in participation and employment during the early 1990s from the recession. This double impact on the utilization of human capital caused the rate to fall from 62.1 percent in 1990 to 58.4 percent in 1993.

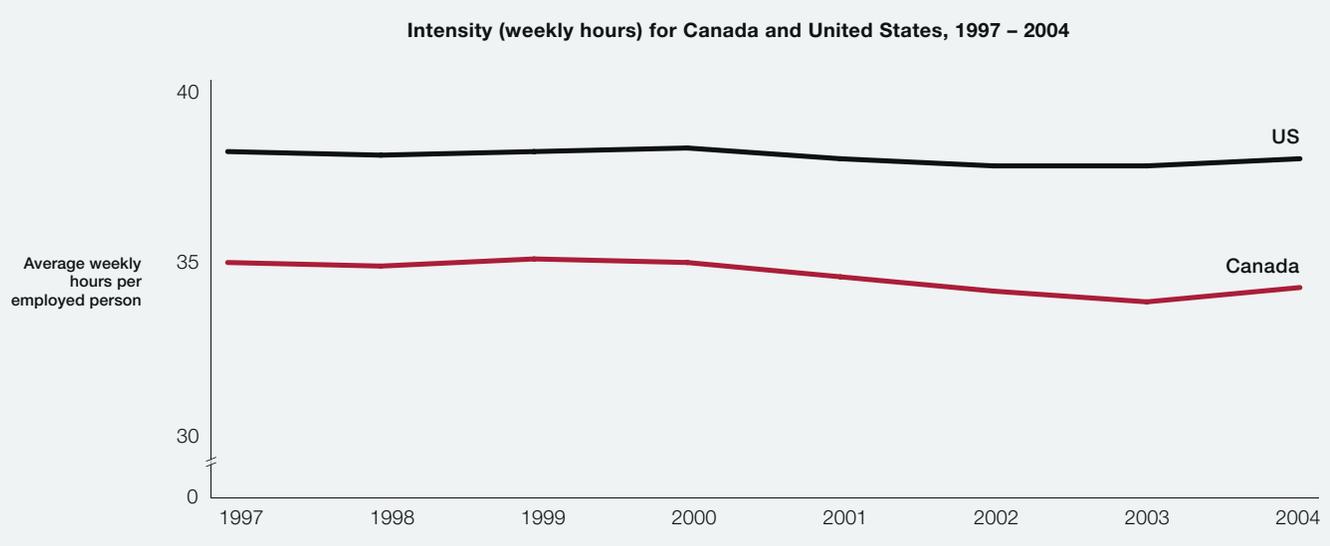
Canada’s utilization remained stuck around the 59 percent rate until 1996. However, beginning in 1997, Canada’s utilization rate increased absolutely and relative to the US rate. This performance continued up to 2004, when Canada achieved a 63.4 percent utilization rate – above the US rate of 62.3 percent. This superior performance translates to a \$600 advantage (the net effect of a \$1,300 participation advantage and a \$700 disadvantage in employment) in GDP per capita.

Intensity gap is significant. Intensity represents the number of hours the average worker works in a week or a

year. In our research to date, we have reported that hours worked represented a small difference in prosperity potential between Canada and the United States.

Getting this measure right has been a challenge for us and for others as we compare Canadian and US economic performance. US statistical agencies have two sources of hours worked data – the Current Population Survey and the Current Employment Survey – neither of which is directly comparable to Canada’s source of hours worked, the Labour Force Survey. In 2005, Statistics Canada published the results of its attempts to reconcile the two sources of data. Statistics Canada researchers assembled the original data from the US surveys and recreated the hours worked data to match Canada’s and the OECD’s approach to calculating hours worked data.⁶

Exhibit 10 Canada has a persistent gap in hours worked versus the United States



Source: Institute for Competitiveness & Prosperity based on special tabulation prepared by Statistics Canada.

⁶ John R. Baldwin, Jean-Pierre Maynard, Marc Tanguay, Fanny Wong, and Beiling Yan, *A Comparison of Canadian and U.S. Productivity Levels: An Exploration of Measurement Issues*, Statistics Canada. Catalogue no. 11F0027 No. 28, January 2005.

Their research indicated that Canada had a persistent and significant disadvantage versus the United States in hours worked per employee and per job. In 2004, the average Canadian worker worked 34.3 hours per week, while the average US worker worked 37.9 hours (*Exhibit 10*). This disadvantage has remained fairly consistent since 1997. We are unable to determine the relative impact of the 1990-92 recession, but we do know that Canada's hours worked fell significantly during the recession and slowly recovered beginning in 1994. For the years 1997 to 2004, US hours worked were fairly constant; and using the traditional measures of hours worked in the United States, we estimate that the US intensity record was flat between 1990 and 1997.

Based on the hours-worked-per-employed person differences between Canada and the US in 2004, we estimate the intensity factor hurts Canadian prosperity by \$4,500 per capita.

Lower productivity is the biggest challenge to closing the prosperity gap

As we have seen, in the factors related to the supply of labour, Canada's advantage in the percentage of our population of working age has strengthened slightly, and we have an advantage in the percentage of working-aged Canadians who are employed. The number of hours worked continues to be a disadvantage for Canada.

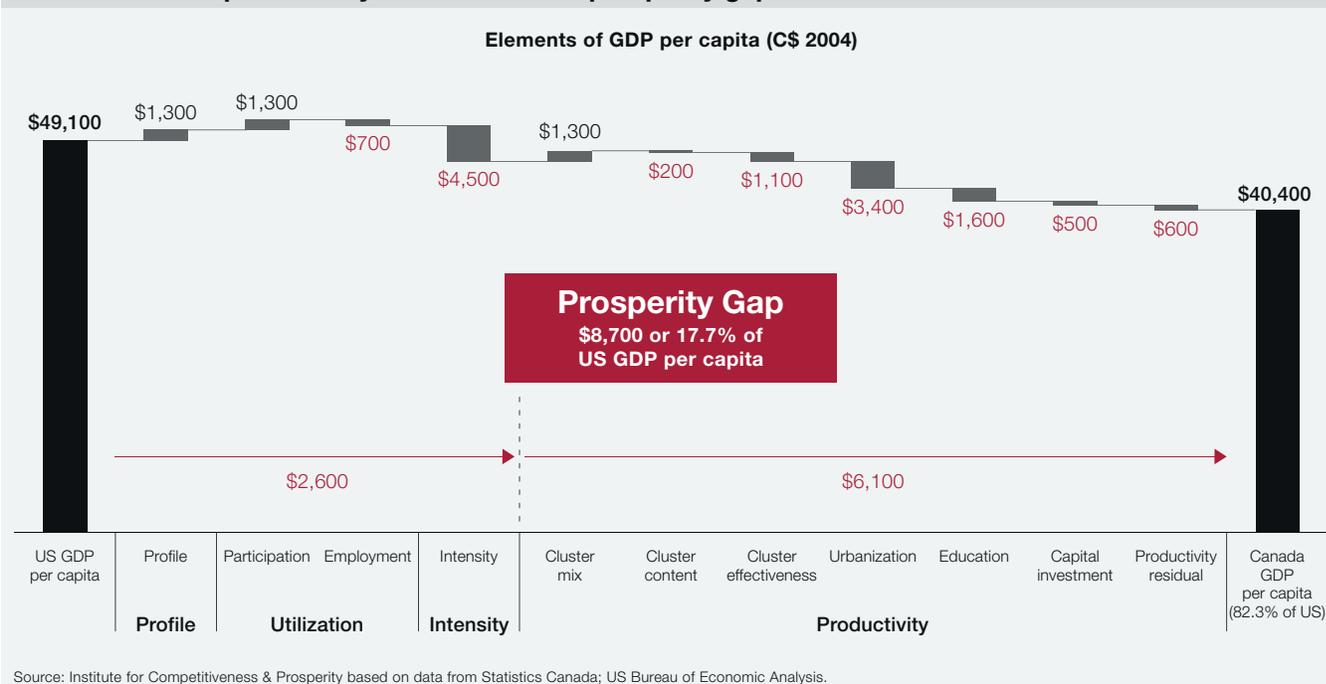
Clearly, the 1990-92 recession exacted a significant toll on Canadians' prosperity

in the early 1990s, and we spent much of the recent past recovering from that, especially to get Canadians back to work. Even with these gains, our prosperity gap has widened.

Productivity accounts for the greatest share of the prosperity gap with the United States (*Exhibit 11*). We assess seven sub-elements of productivity to determine the impact of this key driver of our prosperity gap.

Cluster mix contributes positively to our productivity. Our mix of clusters contributes to our productivity; making them more effective is our key challenge. In our earlier work, the Institute has described the theory and evidence behind the importance of clusters of traded industries.⁷ Traded industries are those that are typically concentrated

Exhibit 11 Lower productivity drives Canada's prosperity gap with the United States



Source: Institute for Competitiveness & Prosperity based on data from Statistics Canada; US Bureau of Economic Analysis.

⁷ 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.

in specific geographic areas and sell to markets beyond their local region. Research by Michael Porter of the Harvard-based Institute for Strategy and Competitiveness has shown that clusters of traded industries increase productivity (as represented by wages) and innovation. In addition, the presence of traded clusters in a region has a spillover effect in that they typically generate opportunities for increased success of the local economy. The Institute has found the same patterns of the impact of clusters of traded industries in Canada.⁸

Drawing on Porter's methodology, the Institute has determined that fully 37.0 percent of employment in Canada is in traded industries versus 30.5 percent in the United States. Canada's employment strength in financial services, automotive, metal manufacturing, publishing and printing, and others has created an attractive mix of traded industries. Our analysis of Canada's cluster mix indicates a \$1,300 per capita advantage over the United States. This benefit is derived from a higher output than would be likely if Canada's mix were the same as the US mix.⁹

Sub-clusters make up each cluster of traded industries.¹⁰ There are wage and productivity differences across sub-clusters that make up clusters. As we analyze the sub-clusters that make up our clusters of traded industries and compare these with the mix in the United States, we conclude that the impact of cluster content on GDP per capita is a \$200 disadvantage for Canada.

While Canada has an excellent mix of clusters, cluster effectiveness is much lower here than in the United States. As we discussed in Report on Canada 2005,¹¹ our structures of specialized support and competitive pressure are inadequate relative to the experience in clusters of traded industries in the United States. In both countries, traded clusters are more productive than local industries, as represented by wages. As Porter has observed, the greater competitive intensity from sophisticated customers and vigorous rivals, along with specialized support from excellent factor conditions, capable suppliers, and related industries pushes productivity higher in traded clusters. In Canada, the productivity premium is 42 percent.¹² Across the United States, the productivity premium is 57 percent. Taking the prevailing wage in local industries as a given, our clusters are under performing their counterparts in the United States by 10 percent (the difference in the US performance index of 1.57 versus Canada's 1.42).

If our clusters were as effective in the Canadian environment, wages in them would be \$4,600 per worker higher. As traded clusters account for 37.0 percent of Canadian employment and given the relationship between wages and productivity, our overall productivity would rise by 4.6 percent. However, this includes some double counting. Clusters are more effective in urban settings and Canada is less urban than the United States. Similarly, part of our productivity gap is due to under investment in capital and education – which we discuss below. We have netted these effects

out of the cluster effectiveness factor to arrive at an estimated productivity and prosperity loss from our weaker clusters to be \$1,100 per capita.

Adding together the effects of cluster mix (+\$1,300), content (-\$200), and effectiveness (-\$1,100), Canada's clusters do not provide a net benefit in GDP per capita versus the United States.

Relatively low urbanization is a significant contributor to our productivity and prosperity gap. We have observed the higher level of productivity that results from greater rates of urbanization. This is likely 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 Canadians than Americans live in metropolitan areas, our relative productivity and prosperity potential is reduced. Our analysis indicates that we have a \$3,400 per capita disadvantage against the United States related to our lower level of urbanization.¹³

Lower educational attainment weakens our productivity. Most economists agree that a better educated workforce will be more productive. Education increases workers' base level of knowledge necessary for improved job performance. It increases workers' flexibility so that they are able to gain new skills throughout their lifetime. Many studies show the increased wages that

⁸ *Strengthening structures*, pp.20-24

⁹ 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 each cluster.

¹⁰ *A view of Ontario*, pp. 18-20.

¹¹ Institute for Competitiveness & Prosperity, *Realizing Canada's prosperity potential*, Report on Canada 2005, January 2005, pp. 26-29.

¹² *Strengthening structures*, p. 26.

¹³ See Task Force on Competitiveness, Productivity and Economic Progress, First Annual Report, *Closing the prosperity gap*, November 2002, p. 26 for a discussion of our methodology in measuring the productivity disadvantage resulting from our lower rate of urbanization.

accrue to more highly educated individuals.¹⁴ Increased wages are the result of higher productivity.¹⁵

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, we estimate that Canada's productivity and prosperity would be higher by \$1,600 per capita.

Lower capital investment in Canada reduces our productivity. As we discuss later, Canadian businesses have under invested in machinery, equipment, and software compared to their counterparts in the United States. The capital base that supports workers in Canada is not as modern as that which supports workers 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 Canadian 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 a higher growth in this investment would translate directly into higher growth in GDP.

The productivity residual is the unexplained gap. 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 \$600 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.

Rebalancing consumption and investment is the highest priority

Since our Report on Canada 2004 two years ago, we have consistently urged Canadians to address the productivity challenges we face. As remarkable as our recent progress in the utilization of our labour force has been, we have not closed the prosperity gap with the United States – because we have fallen further behind on productivity.

Productivity is limited only by human ingenuity, and over the long term there has been no indication that this is a limiting factor. There are natural limits to the amount of work we can carry out – limits of population and time. But through better educated workers, greater capital supporting their efforts, more creative ways to organize work, and ongoing pressures for improvement, productivity growth is not constrained. But a key requirement for achieving productivity growth and reaping its rewards is investment for the future.

Achieving prosperity creates the opportunity for a higher standard of living. To the extent that we are more productive and more prosperous, we have greater access to the things we value most – economic opportunities, quality health care, strong social safety nets, and a safe environment for work and play. But to get them, we need a better balance of consumption and investment. We also need a more effective balance of labour supply and labour productivity. Rebalancing these is Canada's highest priority.

¹⁴See Task Force on Competitiveness, Productivity and Economic Progress, Second Annual Report, *Investing for prosperity*, November 2003, p. 20 for our own calculations of the impact of education on wages in Ontario and the peer states.

¹⁵*Closing the prosperity gap*, p. 27.

Shifting toward investment

Canadians spend more on consumption today than they invest for tomorrow – a trend that needs to be rebalanced

IN OUR WORK TO DATE, WE HAVE

attempted to determine the important factors that drive the productivity and prosperity gaps with the United States. What are the factors that can strengthen our capacity for innovation and upgrading? To help us guide our analysis and recommendations, the Institute developed the AIMS framework (*Exhibit 12*). AIMS is built on an integrated set of four factors:

- **Attitudes toward competitiveness, growth, and global excellence.** Our view is that an economy's capacity for competitiveness is grounded in the attitudes of its stakeholders. To the extent that the public and business leaders believe in the importance of innovation and growth, they are more likely to take the actions to drive competitiveness and prosperity.
- **Investments in education, machinery, research and development, and commercialization.** As businesses, individuals, and governments invest for future prosperity, they will enhance productivity and prosperity.

- **Motivations for hiring, working, and upgrading as a result of tax policies and government policies and programs.** Taxes that discourage investment or labour will reduce the motivations for investing and upgrading.
- **Structures of markets and institutions that encourage and assist upgrading and innovation.** Structures, in concert with motivations, form the environment in which attitudes are converted to investments and actions.

Within the AIMS framework, we have found that Canadians invest less in future prosperity than their US counterparts. This under investment results from inadequate structures and inappropriate fiscal motivations, even though attitudes encourage innovation and upgrading.

As we work with the AIMS framework, we see that its factors can create an ongoing reinforcing dynamic. That is, 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 become 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 then invest more in machinery, equipment, and software and in education. Motivations from taxation would be more positive, as governments would not see the need for raising tax rates. And greater economic prosperity would improve structures as greater 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.

But this AIMS prosperity dynamic can work in reverse to create a vicious circle. Unrealized prosperity potential may create pessimism and concerns about competitiveness and innovation rather than openness to them.

These less positive attitudes would be less conducive to investments, and reduced prosperity would also lead to fewer investment opportunities anyway. Unrealized economic potential means tax revenues would not meet fiscal needs, leading governments to raise tax burdens, thereby discouraging investments. And reduced economic activity would create fewer nodes of specialized support and less openness to the public policies that would result in more competitive intensity. This downward spiral would significantly erode our prosperity.

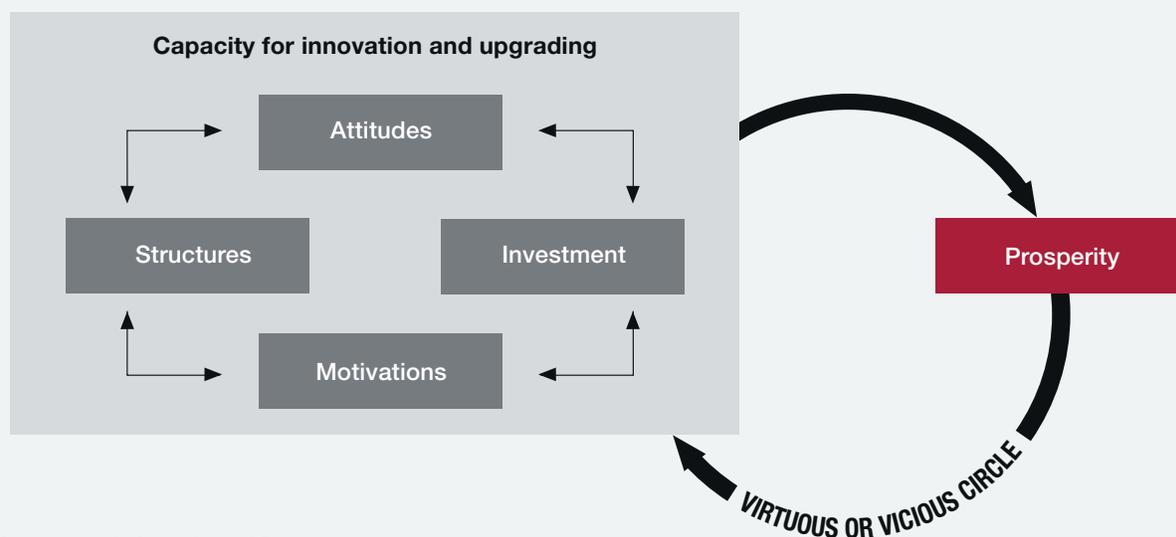
We are concerned that if we do not address our current challenges – under investment, de-motivating tax burdens, and inadequate market structures – we may be on the trail to a vicious circle. We must avoid this trend and put our economy firmly on the virtuous circle track. We think this is possible.

Canadians have positive attitudes toward competitiveness

Our research on attitudes toward growth, competitiveness, and global excellence has to date focused on Ontario and eleven of the province's peer states. There, we found that Ontarians' attitudes toward competitiveness and prosperity indicate that public leaders and business people have a positive outlook on what it takes for the province to move forward – differing little from the views of their US counterparts. There is nothing to suggest that we would not find similar results if the sample were expanded across Canada and all the US states.

Attitudes that lead to high aspirations, self-confidence, the desire to succeed, the entrepreneurial spirit, and creativity are important drivers of economic success. To measure attitudes, the Institute conducted research among the public and business communities.¹⁶

Exhibit 12 AIMS drives prosperity; prosperity drives AIMS



Source: Institute for Competitiveness & Prosperity.

¹⁶Institute for Competitiveness & Prosperity, Working Paper 4, *Striking similarities: Attitudes and the prosperity gap*, September 2003.

In contrast to commonly held perceptions, we differ very little from our counterparts in how we view business and business leaders and competition and competitiveness. In response to most of the questions in the survey, we show similar attitudes toward risk and success; and on several questions Ontarians' responses indicated more positive attitudes toward innovation than their peers' answers (*Exhibit 13*). More generally, we found no differences in the attitudes toward risk-taking and the importance and the causes of personal success.

Canadians should reverse persistent under investment

As we have seen in our previous reports, Canadians are not investing as aggressively as our counterparts in the United States. If we are to close the significant prosperity gap, we need to invest more for future prosperity, and that requires a more balanced approach to the consumption/investment tradeoff than Canada has today.

As we have observed, Canadians invest in the basic requirements for keeping our businesses and individuals competitive in the global setting. But after we spend our last investment dollar, our counterparts in the United States continue right on investing. This pattern of attenuation is true for individuals, businesses, and governments. Our pattern of under investment is wide ranging. Relative to the United States:

- We under invest in education as students move through the system, limiting the benefits to the economy from more capable human resources

- We under invest in integrating immigrants and do not benefit from their economic potential
- We under invest in machinery, equipment, and software that enhances productivity
- We under invest in future prosperity, as our governments' spending has been shifting from areas that are investments for future prosperity to those that consume current prosperity.

Investment in post secondary education increases productivity

Canada's under investment in post secondary education is an important factor in our productivity under performance. As we have seen, Canadians invest significantly less in post secondary education than our US counterparts (*see Exhibit 7*). The result of this under investment is that we lag in degrees granted and we deliver a

lower quality of education to our post secondary students.

With lower investment in Canada, we have seen that a smaller percentage of Canadian adults have university degrees than their US counterparts. According to the most recent census data, 20 percent of Canadians aged 25 to 64 have a university degree compared to 26 percent in the United States.¹⁷ Fewer of our managers have university degrees – 31 percent in Canada versus 50 percent in the United States.¹⁸ And most recently available information for 2002/03 indicates that we are not closing this gap. In degrees conferred per 1,000 population, Canada trailed the United States – 5.58 versus 6.56. (*Exhibit 14*). At the bachelor's level the gap was smaller – 4.55 in Canada versus 4.64 in the United States. At the PhD level Canadian universities conferred 25 percent fewer degrees per capita than US universities, although

Exhibit 13 Ontarians have positive attitudes toward competition and prosperity

Ontarians agree slightly more than peer state citizens, managers, and business leaders with the following statements:

“People who start their own businesses deserve all the money they make”

“When businesses do well, we all win”

“Business is the most important contributor to prosperity”

“Competition between businesses is a good thing”

“Being globally competitive makes a firm stronger”

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

¹⁷Institute for Competitiveness and Prosperity, *Partnering for investment in Canada's prosperity*, Report on Canada 2004 p.16

¹⁸*Realizing Canada's prosperity potential*, p. 19.

on a small base. The largest source of the attainment gap is at the master's degree level. In Canada, 0.92 master's degrees were granted per 1,000 population, just over half the 1.76 rate achieved in the United States.

Recent research by the National Survey of Student Engagement (NSSE) indicates that our under investment at the university level is also affecting the quality of student experience. Five benchmarks were created to measure how effective are the educational practices in university settings. These include, level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences and supportive campus environment. In 2004, eleven Canadian universities participated in the annual survey conducted by NSSE. Students at these universities were sampled as part of the NSSE process, and results were compared against a

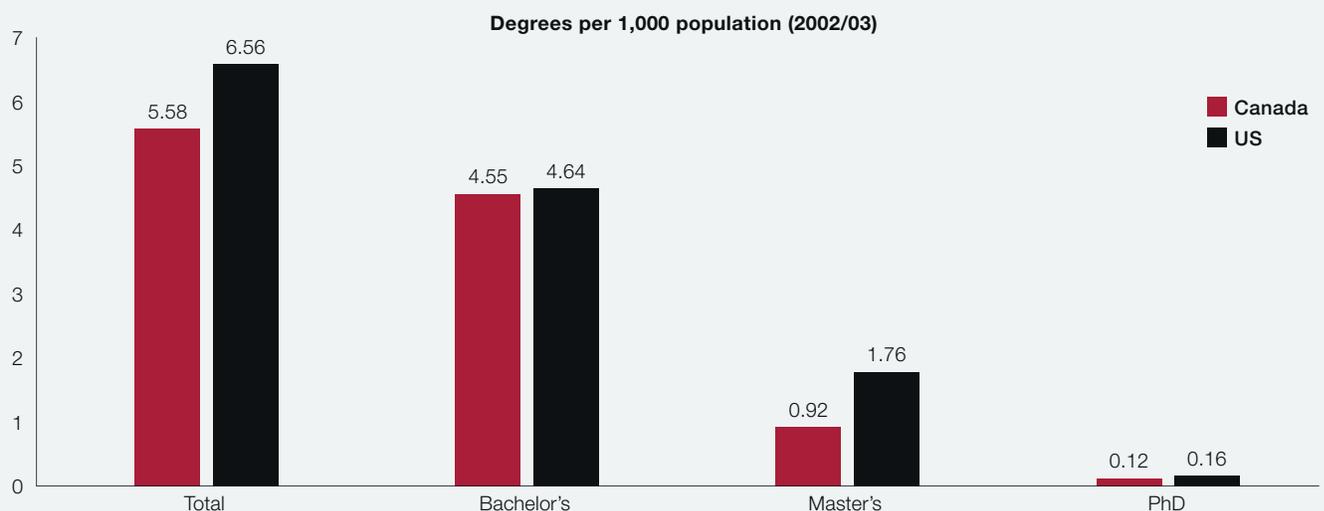
peer group of US universities as well as the national average (*Exhibit 15*).

On only one of the benchmarks – level of academic challenge – Canadian universities ranked around the median of US results. On two benchmarks – enriching educational experience and supportive campus environment – Canadian universities were around the bottom quartile of US counterparts. And on two others – active and collaborative learning and student faculty interaction – Canadian universities ranked close to the bottom in the survey. Clearly, Canadian universities are providing students with reduced opportunities for interaction with their teachers and peers. Canadian students are less likely to agree that they ask questions in class or contribute to class discussions or that they discussed ideas from their readings or classes with faculty members outside of class.

The results from this research signal that student-faculty ratios in Canada may be too high in relation to US peers. As we have shown, Canadians invest significantly less than our US peers in post secondary education. The NSSE results indicate that lower spending may be undermining the quality of educational experiences our students are receiving.

This under investment in Canada's human capital comes despite the high returns on investment from undergraduate and graduate education. As we have reviewed in a previous report,¹⁹ the financial returns to individuals with bachelor's degrees are impressive. In Ontario, individuals with a bachelor's degree earn 38 percent more than those with a high school diploma. The income boost is even higher for those with graduate degrees – a 57 percent earnings premium. Even after considering tuition costs and the opportunity

Exhibit 14 Canadians earn fewer university degrees than Americans, especially at the master's level



Source: Statistics Canada, data commissioned by the Institute for Competitiveness & Prosperity; CANSIM II Table 0510001, (population); US Department of Education, National Center of Education Statistics, *Digest of Education Statistics 2004*; US Census Bureau.

¹⁹*ibid.*, pp. 19-20.

cost of delaying entry to the work force, individuals earn excellent returns on their investment in education.

Canadians' under investment in post secondary education is puzzling, given the solid high school performance of Canadian students. In international standardized tests of the academic achievement of 15-year olds, Canadian students significantly out perform their US counterparts.²⁰

Our under investment in post secondary education is worrisome, since those with higher levels of education earn more over their lifetimes, and our economy benefits more from their knowledge and capabilities. We all lose when individual Canadians fall short of their educational potential. Raising educational aspirations and increasing investment in education at all levels by individuals, governments, and businesses are important ways to increase Canada's productivity and prosperity.

In *The Economic and Fiscal Update 2005*, the federal government announced a significant increase in investment in human capital. This included investment in Canada's work-force skills, and in improved labour mobility and labour market efficiency. Between fiscal year 2005/06 and 2010/11, the government proposed the provision of \$7.6 billion to enhance Canada's work force, including funds for Canada access grants, improvement to student financial assistance, Canada graduate scholarships, a post secondary education innovation fund, and workplace-based skills development.²¹ This kind of increased investment would be an important step in raising Canada's productivity and prosperity potential.

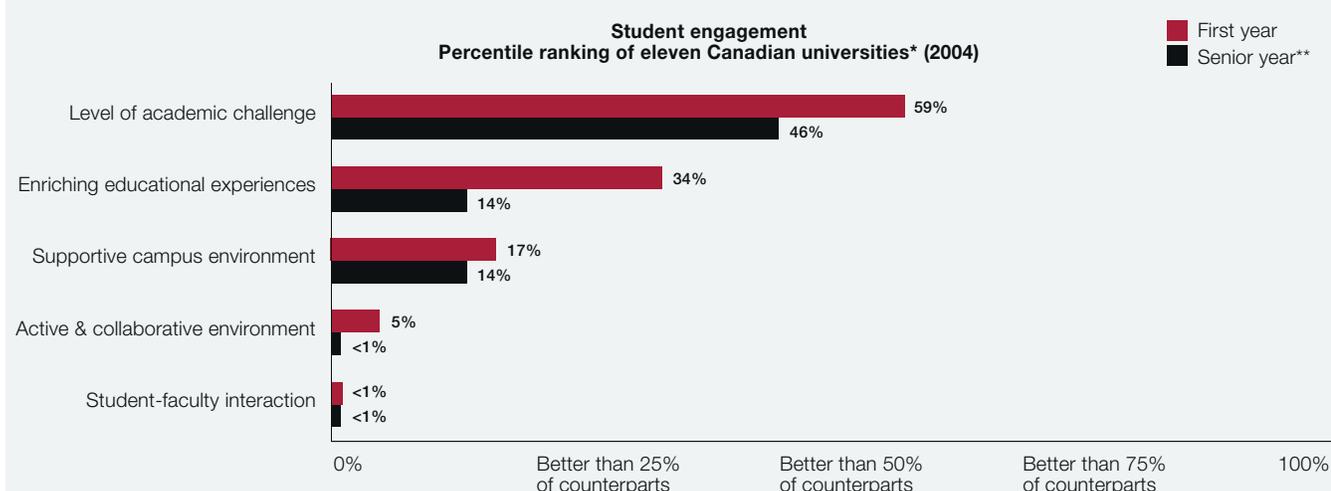
Investing in integrating immigrants strengthens our economy

Canada has a competitive advantage over the United States – the presence of more highly trained and skilled

immigrants. According to some estimates, educated immigrants to Canada counteract the “brain drain” of Canadian talent to the United States by a margin of four to one.²² Canadians are missing out on this potential “brain gain” opportunity as many immigrants have difficulty entering the professions and careers they once held.

To improve integration and settlement of new immigrants, the federal government announced \$1.3 billion in additional funding. The addition of new federal additional funding for integrating and settling new immigrants is a welcome injection, so that both talented immigrants and Canada will benefit fully from their arrival. Recently, the government also launched the Internationally Trained Workers Initiative (ITWI), which is mandated to deliver programs to achieve more effective integration of our educated and skilled immigrants into Canada's economy.

Exhibit 15 Canadian university students report lower levels of engagement than their US counterparts



* Among US counterparts – 46 US universities with doctoral extensive programs.

** 3rd or 4th year depending on the program.

Source: Special tabulation prepared by the National Survey of Student Engagement for the Institute for Competitiveness & Prosperity.

²⁰ *Investing for prosperity*, November 2003, p.22

²¹ Department of Finance Canada, *The Economic and Fiscal Update 2005*, November 2005.

²² Andrew Brouwer, "Immigrants need not apply," Caledon Institute of Social Policy, October 1999.

Most observers agree that, in the past, foreign-trained persons have often arrived in Canada without knowing the requirements for working in their profession. The ITWI in cooperation with the provinces and territories is implementing a Going to Canada immigration Internet portal that will raise awareness about the criteria for certification or licensing, the cost of registration, and the relevant labour force conditions that immigrants will face.

Assessing and recognizing prior learning has also been a major challenge for newcomers as well as employers and regulatory bodies. Without a systematic way for understanding and valuing the knowledge, skills, and language proficiency of immigrants gained in their country of origin, employers are deterred from hiring immigrants because of the time and cost involved in conducting these assessments. The Foreign Credential Recognition program is another ITWI enterprise that will offer a systematic approach to international academic recognition.

Once knowledge or skills gaps are identified, there needs to be targeted training for immigrants. The federal government has committed to providing \$20 million a year in funding to the Enhanced Language Training Initiative, which helps immigrants obtain the specific language skills needed for specific professions and trades. In many provinces, "bridging programs" are being piloted to assist newcomers to fill specific gaps to enable them to be licensed to practise their profession or trade.

Another factor that affects the integration and potential of foreign trained individuals is location. More than half

– 55 percent – of all new immigrants choose to reside in Ontario, mainly in our cities. Many new immigrants have a strong preference for urban centres like Toronto, Montreal, and Vancouver.²³ Provincial Nominee Programs (PNP) have been established to actively recruit talented immigrants to balance workforce shortages. Attracting immigrants to smaller places and retaining them there is difficult. Manitoba has increased its PNP numbers from 200 in 1998 to 3081 in 2003. An evaluation of the program has shown that 90 percent of immigrants have continued to live in Manitoba, that 77 percent plan to stay longer than five years, and that the program has proved to be successful in enhancing integration and settlement. All the provinces have tailored their approaches to attracting and retaining immigrants.

Some provinces are investing in approaches to help international students gain Canadian experience while they are studying here. In Manitoba, after a successful two-year pilot program allowing international students to work off campus, the federal Minister of Citizenship and Immigration, the Manitoba Minister of Labour and Immigration, and the Minister of Advanced Education and Training have made this opportunity a permanent reality for international students studying in the province. New Brunswick and Quebec already are running similar pilot programs that will be up for review next year, and both Ontario and Nova Scotia are interested in launching their own off campus work experience program.

This is an exciting area for Canada, as stakeholders in the professions, the trades, and educational institutions are working together to find creative

solutions for integrating immigrants into our economy and helping close Canada's prosperity gap. Obviously, more needs to be done, and investments need to be increased. But we are making progress.

Investment in physical assets drives productivity

Canada under performs in investment in machinery, equipment, and software.²⁴ Capital investment enables workers to be more productive. Given the relationship between capital investment and growth in GDP per worker, our lower investment in equipment contributes to our productivity gap.

Private sector investment trails the United States. In Canada and the United States, the private sector accounts for about 80 percent of all capital investment, and thus is crucial in the overall picture. Canada's private sector trails its US counterpart in investing in machinery, equipment, and software, the component that research has identified as crucial for productivity growth.²⁵ Canada's business community under invested by an average of 11.8 percent below US business from 1988 to 2004. In 2004, this under investment was 16.9 percent, as Canada's private sector invested 6.4 percent of GDP in machinery, equipment, and software compared to the 7.7 percent investment in the United States.

As with utilization of human resources, Canada's capital investment performance fell during the 1990-92 recession (see *Exhibit 8*). It began its recovery in 1994, earlier than participation and employment rates began their recovery. However, since 1998, Canada's private sector investment in machinery, equipment, and software per

²³ Goss Gilroy Consultants, "Retention and Integration of Immigrants," p. 11 May 2005. <http://www.hrle.gov.nl.ca/hrle/immigration/pdf/ImmigrationStudyFinal.pdf>

²⁴ Capital investment has two major components: machinery, equipment, and software; and structures. Machinery, equipment, and software are the main drivers of economic growth and are the focus of our capital investment analysis. Structural investment includes infrastructure such as highways, streets, buildings, and public transit.

²⁵ J. Bradford De Long, Lawrence H. Summers, "Equipment Investment and Economic Growth, 1990". http://www.j-bradford-delong.net/pdf_files/QJE_Equipment.pdf

GDP dollar has been falling. US experience has been similar, but in 2004 its investment performance strengthened. As a result, our lag in capital investment has widened. Not since 1981, have our businesses invested as much as their US counterparts in machinery, equipment, and software.

The other component of private sector investment is structures (excluding residential building). In both the United States and Canada, the rate at which the private sector is investing in structures has been declining since 1981. But Canada's private sector has consistently out performed the United States in investing in non-residential structures.

Public sector capital investment trails the United States. While public sector capital investment accounts for a smaller part of overall capital investment than private sector investment, it is still an effective driver of growth in an economy. Public investment in

infrastructure stimulates private sector investment in plant and equipment, and the two sources are complements in raising productivity.²⁶ Public sector investment was slightly higher in Canada than in the United States during the 1981-96 period.²⁷ But between 1997 and 2003, Canada's rate of public sector investment fell behind the rate in the United States. In 2004, with a slightly lower decrease in Canada's rate than in the US, public sector investment was at 2.6 percent of GDP in Canada and at 2.5 percent in the United States.

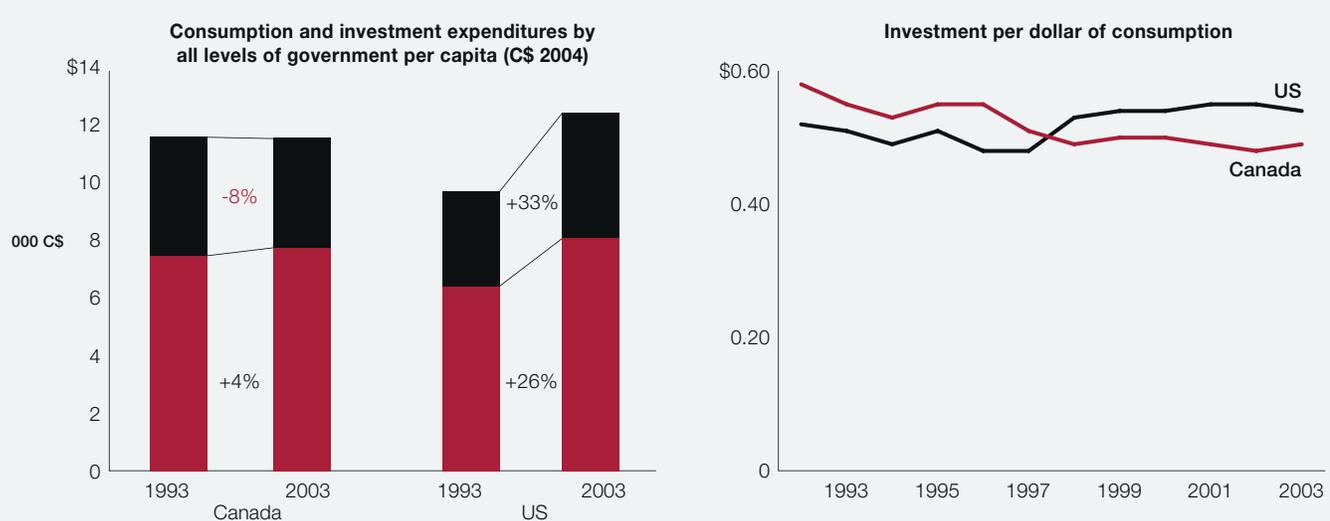
Under investment is costly. The Institute calculated that under investment in physical capital costs Canadians \$500 in lost GDP per capita. This estimate is conservative, as it only focuses on our under investment in private sector machinery, equipment, and software. Because there is little research into the productivity impact of investment in other areas, we have not included it in our assessment in Exhibit 11.

However, recent research²⁸ indicates that productivity in Canada also benefits from public and private investment in structures. And as stated earlier, public sector infrastructure investment complements private sector machinery, equipment, and software investment. If we use the same analysis for all public and private capital investment, we estimate GDP would have been \$1,100 per capita higher in 2004.

Government expenditures should trend toward investment

At the base level, governments must fund their own administration, protect citizens and the environment, and pay interest on the public debt. In both Canada and the United States, this accounts for about 30 percent of spending by federal, state/provincial, and local governments. In allocating the remaining 70 percent, a tradeoff between consumption and investment occurs. Consumption expenditures

Exhibit 16 Governments in Canada have been shifting spending from investment to consumption



Source: Institute for Competitiveness & Prosperity based on data from Statistics Canada, CANSIM II, Table 385 0001, 0510001; US Census Bureau (State and Local Government Finances), Statistical Abstract of the United States: 2004-05 (Federal Government Outlays by Detailed Function), Office of Management and Budget - historical budget tables.

²⁶ Sharon J. Erenburg (1994), "Linking Public Capital to Economic Performance, Public Capital: The Missing Link Between investment and Economic Growth," The Levy Institute. Public Policy Brief No. 14.

²⁷ US investment in the military is excluded from this analysis.

²⁸ Tahir A. Abdi. "Machinery & Equipment Investment and Growth: Evidence from the Canadian Manufacturing Sector." Department of Finance: Working Paper. Canada, January 2004.

include health care and social services; investment expenditures include transportation, communication, and housing.

Relative to the United States, governments in Canada continue to shift away from investment expenditures toward consumption (*Exhibit 16*). Between 1993 and 1997 when they were aggressively fighting deficits, governments in Canada decreased investment at faster rate than consumption – \$600 decrease on investment versus \$500 on consumption per capita. Consequently, for every dollar of consumption, investment fell from 55 cents in Canada in 1993 to 51 cents in 1997. Over the same period the investment-to-consumption ratio fell in the US from 51 cents to 48 cents, but because of faster increases in consumption spending than in investment spending. Consumption spending rose by \$900 and investment a modest \$200 per capita.

Since 1997, when government spending growth resumed in Canada, consumption spending grew much quicker than investment spending. Increases in health care and social services spending were much higher than increases in education and infrastructure spending. In the meantime, investment by US governments grew at a faster rate than consumption. Investment grew by \$800 per capita or 24 percent over the period; consumption also grew by \$800 per capita, but this represented only 11 percent growth. By 2003 the ratio of investment-to-consumption spending had

increased to 54 cents from 48 cents in 1997. So over the 1992-2003 period Canada's governments reduced the ratio of investment to consumption from 55 cents to 49 cents, while the ratio for US governments grew from 51 cents to 54 cents.

We should note that, with the increased prosperity of the United States relative to Canada, governments there now spend more per capita on both consumption and investment. Consumption spending by US governments was \$8,000 per capita in 2003, compared to Canadian governments' spending of \$7,700 per capita. In addition, US governments out invested Canadian governments – \$4,300 versus \$3,800 per capita. Closing Canada's prosperity gap would create greater opportunities for governments to invest in future prosperity and to provide services to Canadians that consume current prosperity.

Since 2003, governments in Canada have shifted further towards consumption. Per capita consumption spending has increased from \$7,700 in 2003 to \$7,800 in 2005 (C\$ 2004) driven largely by increases in health care spending. Investment spending has remained unchanged between 2003 and 2005 at \$3,800 per capita. Canada's investment-to-consumption ratio fell from 49 cents in 2003 to 48 cents in 2005. US results beyond 2003 are unavailable.

In summary, an economy must balance consumption and investment spending to ensure future growth and prosperity. In the important areas of post secondary education and investment in machinery, equipment, and software, Canada has under invested dramatically compared with the United States. Without addressing this under investment, it is unlikely that Canada will be able to make progress in the quest for higher prosperity.

Taxing smarter to motivate investment

Rebalancing toward a smarter tax regime will encourage investment for prosperity

MOTIVATIONS REFER TO THE INCENTIVES

or disincentives in our tax system toward investments in upgrading and innovation. In the past year, the Institute for Competitiveness & Prosperity carried out significant research into the motivations of Canadians to invest for the future. Our findings lead us to call for a smart tax system that will encourage investment for prosperity.

As in other areas, governments face a balancing act in fiscal matters. They need to make the appropriate expenditures to sustain Canada's quality of life and its business environment. They also need to ensure that the necessary taxes for these expenditures are not unduly hindering motivations to work, invest, and engage in entrepreneurial activity. Achieving the right balance requires smart taxation.

Smart taxation is about efficiently and equitably raising the funds for the public services and infrastructure that Canadians value. Today, Canada's tax system is not as smart as it could and should be. For example, our tax burdens are higher than those in the United States, and our tax mix is not as smart as Sweden's. In some ways, our tax system suffers from the worst of both inefficient and inequitable features.

The smart way to stimulate prosperity through tax policy is to shift away from taxes on capital investment and toward taxes on consumption. The higher levels of capital investment that would result would increase productivity and wages. We also need to find ways to reduce perversely high marginal tax burdens on low income Canadians as they climb the economic ladder.

Work done by the federal Department of Finance indicates that, relative to taxes on consumption, taxes on business and personal investment work against prosperity (*Exhibit 17*).²⁹ Reducing taxes on capital investment increases the rate of return on capital and encourages investment in capital goods, such as machinery, equipment, and software. Reducing or eliminating sales taxes on capital inputs is helpful, because they apply on new capital investment. Higher levels of capital investment result in higher levels of productivity and wages.

This shift would lead to higher taxes on consumption and employment income. Consumption taxes include value-added taxes (the federal GST) and provincial sales taxes on consumer spending. While taxes on consumption and employment income also lower real wages, they are relatively more efficient than taxes on investment, because the labour supply is less sensitive to changes in wages than investment is to the cost of capital.

²⁹ Canada, Department of Finance, "Taxation and Economic Efficiency: Results from a General Equilibrium Analysis," in *Tax Expenditures and Evaluations 2004*. Available online: http://www.fin.gc.ca/toce/2004/taxexp04_e.html

In sum, analysis by the federal Department of Finance indicates that our economic well being would be enhanced most by reducing taxes on investment. This conclusion is consistent with work done by other economists and tax experts.³⁰

Encourage business investment through smart taxation

Unfortunately, Canada does not have smart taxation. Overall, our tax rates are in the middle among OECD countries. However, the combination of high corporate tax rates, sales taxes on capital goods, and capital taxes means that Canada has significantly higher taxes on business investment than most other industrialized countries.

We compared the levels of taxation and smartness of taxation across the OECD (*Exhibit 18*). Some countries, like Ireland, have both low overall tax rates and smart taxes. Some, like

Denmark and Sweden, have high rates of taxation, but tax in a way that motivates business investment. Some, like the United States and Japan, have low rates of taxation overall, but do not have particularly smart structures that stimulate business investment. And some countries, like Italy and France, have the worst of both – high rates of taxation overall and not very smart taxation. Overall, Canada has the highest marginal tax rate on business investment – dumb taxation – even though our tax rates are in the middle of the pack.

Canada has many options for smarter taxation of business and individuals to increase equity and efficiency – and investment in our long-term prosperity. One key taxation challenge is to motivate productivity-enhancing investments by businesses. We identify some improvement opportunities within the current system before putting forward a proposal for fundamental change

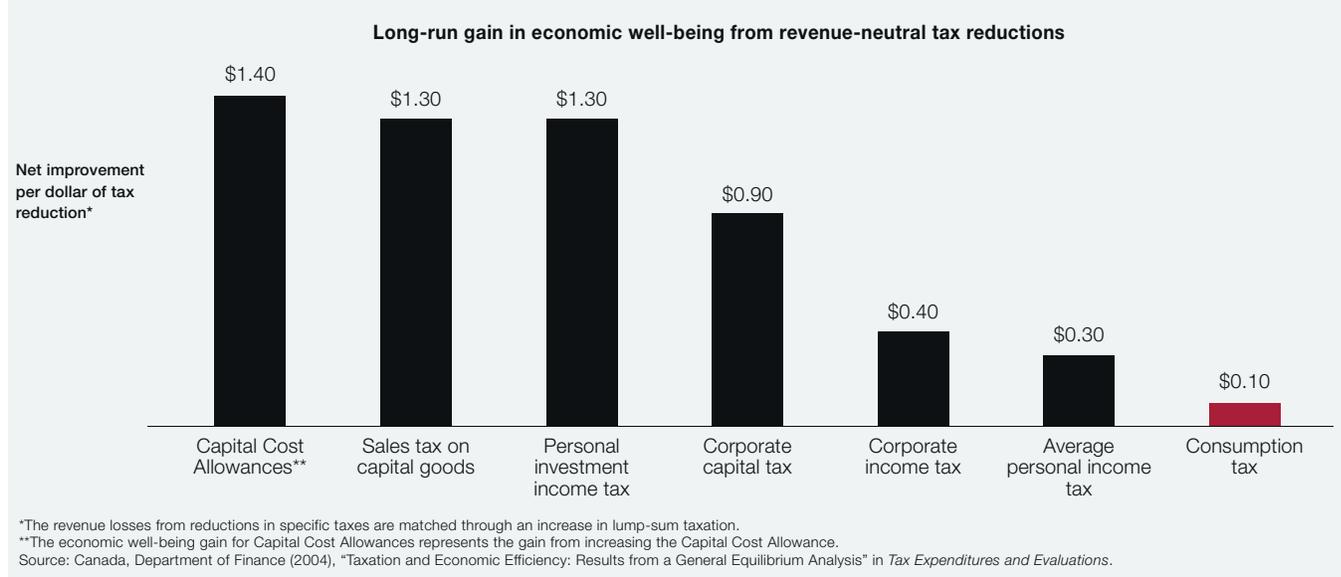
– the elimination of corporate taxes altogether.

Eliminate or reduce taxes levied on capital investments

The first improvement opportunity is to eliminate federal and provincial taxes on existing business capital. They are particularly damaging to investment, because they are levied even if the business is not profitable. Few other advanced economies levy business capital taxes. On a positive note, the federal government has announced that its corporate capital tax will be eliminated in 2006. Six of the provinces have capital taxes on non-financial corporations.³¹ Ontario is taking a positive step as it is scheduled to eliminate its capital tax by 2012. Quebec and Nova Scotia announced reductions in their capital tax in their 2005 budgets.

The second opportunity is to reform provincial sales taxes on capital goods. While most people regard provincial

Exhibit 17 Reductions in taxes on investment are more effective than reductions in taxes on consumption



³⁰For further detail regarding taxation and economic growth see R. Kneller, M.F. Bleaney, and N. Gemmill (1999) "Fiscal Policy and Growth: Evidence from OECD Countries," *Journal of Public Economics*, 74, pp. 171–90; OECD (1997), OECD (2004a) *OECD Economic Surveys: Canada* (Paris: OECD); Dale W. Jorgensen and Kun-Young Yun (1991) "The Excess Burden of Taxation in the United States," *Journal of Accounting, Auditing & Finance*, 6 (Fall), pp. 487–508.

³¹Alberta has no capital tax. British Columbia, PEI, and Newfoundland have capital taxes on financial institutions, but not general corporations.

sales taxes (PST) as retail taxes aimed at personal consumption, this is not always the case. In Ontario, for example, they also apply to many items for capital investment – such as office equipment and steel for construction. These taxes raise overall prices to businesses making capital investments and can affect their decisions to invest or when to invest. Currently, some exemptions are in place, but Ontario could allow businesses to recover the sales tax paid on all investments by claiming input tax credits. Converting the PST into a broad-based value-added tax covering goods and services would be even better. One way to achieve this purpose is by following the lead of Newfoundland and Labrador, New Brunswick, and Nova Scotia, which have harmonized their provincial sales taxes with the federal GST.

Finally, we need to consider taxing corporations on cash flow, not accounting earnings. 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 firm made a large capital expenditure relative to sales revenue, it would pay relatively low taxes. In the current system, the tax benefits businesses receive from capital investments are spread over the life of the asset – even though the business must raise and invest the capital at the start of the asset’s life.

Consider eliminating corporate income taxes

However beneficial each of these measures would be, eliminating all corporate taxes, including the corporate income tax, could be a breakthrough approach to increasing productivity and prosperity. Governments in Canada should explore this fundamental shift to a smarter tax system.

A corporation’s taxes are actually paid by its workers, whose wages are lower than they would otherwise

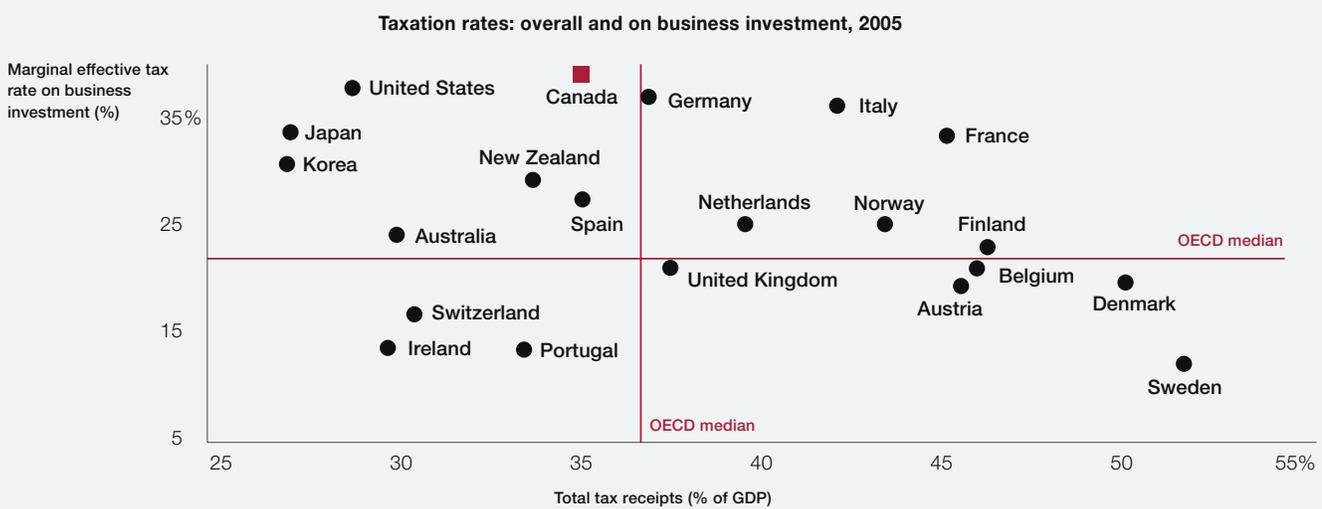
be; by its customers, who must pay higher prices; and by its stockholders, including individuals’ pension funds and mutual funds in their registered retirement savings plans (RRSPs). Eliminating corporate taxes has the potential to enhance prosperity by increasing wages, lowering prices, and increasing investment returns.

This is an unconventional solution and further research is required to assess the long-term impact on tax revenues, repatriation of earnings by foreign companies, and other issues. But we encourage governments in Canada to examine this approach further.

Lower perversely high marginal tax rates for individuals

A major weakness of our personal tax and benefit system is the high marginal tax rates it imposes on individuals and families trying to scale the economic ladder or to retire comfortably. In addition

Exhibit 18 Canada’s tax levels are about average, but the tax structure inhibits business investment



Source: Institute for Competitiveness & Prosperity based on OECD, *OECD in Figures*, 2004 edition, statistics on the member countries; Duanjie Chen, Jack M. Mintz, and Finn Poschmann, "Attention G-7 leaders: Investment taxes can harm your nations' health," C.D. Howe Institute, ebrief, September 20, 2005.

to statutory income tax rates, the marginal effective tax rate – the tax rate on the last dollar of income – is determined by tax credits and income-tested government transfers. Because of clawbacks of social benefits, the marginal rate can be very high at relatively low income levels.

Thus, while benefit programs provide valuable assistance to low-income families, an unintended consequence of clawbacks is that families progressing toward higher income levels can face dramatically higher marginal tax rates. In Ontario, for example, a single-earner family of four faces a marginal effective tax rate of 60 percent on income increases shortly after taxable income passes \$31,000. In other words, because of clawbacks, these families are keeping only 40 cents of each new dollar they earn. At \$36,000, the marginal rate climbs to an absurd 90 percent.³²

Seniors face marginal rates exceeding 70 percent on employment earnings between about \$4,800 and \$9,100 – largely because of the stiff clawback rates to the Guaranteed Income Supplement and Spouse Allowance. Any progressive tax and benefit system will have the feature of high marginal tax burdens at certain points of the income scale. The problem in Canada is that our system is characterized by plateaus, not by spikes. Lower income Canadians face the highest marginal effective tax burdens. We see several smart ways to redress this inequity.

- **Smooth marginal effective tax rates.**

Provinces, in collaboration with the federal government, can smooth the high marginal tax rates through closer integration of the tax and transfer systems to reduce the adverse incentives to persons at workforce entry levels.

- **Reduce the basic personal allowance and marginal rates.**

Currently, any income below the Basic Personal Allowance (BPA) is exempt from federal and provincial income tax. But the BPA benefits all taxpayers, not just low-income earners. Consequently, marginal tax rates are higher than they need to be, as governments must replace the tax revenue lost by the BPA. A better approach would be to lower – or scrap – the BPA, find more efficient ways to help low-income earners, and reduce marginal tax rates on all other taxpayers. That way, low-income earners would face lower tax rates not on the first dollar they earn, but on the last dollar, when most make decisions on how much more to work or to save and invest.

- **Reduce taxation on savings and personal investment income.**

The tax and clawback system affects seniors with low levels of employment income most. Reform is needed to promote savings and investment and to provide relief to low-income seniors. One option is to expand programs such as registered retirement savings plans even further – possibly eliminating contribution limits.³³

Consider breakthrough proposals

These options would be positive steps in making our taxation of individuals smarter. But we think Canadians should consider two breakthrough proposals: switching to a consumption-based tax system, or basing personal taxation on lifetime, not annual earnings.

Tax consumption, not investment or earnings

If the goal is to have more savings, investment, and work incentives, then governments should lower or eliminate the taxes on these activities. To replace lost revenue, they should focus taxation on consumption. Ultimately, individuals work and invest to generate income for consuming goods and services – so tax revenue opportunities will not be lost.

The newly elected federal government is committed to reducing the Goods and Services Tax (GST). But, instead, raising the GST and lowering taxes on investment would be a better approach. Provincial governments that have not yet done so would make their taxation systems smarter by converting their PST to a value-added tax and raising their rates above current values – accompanied by a reduction in taxes on investment. One way to achieve this is by adopting a harmonized sales tax (HST) following the lead of three of the Atlantic provinces.³⁴ While some are concerned that GSTs and HSTs are regressive, others contend that this criticism is misplaced.³⁵ And there are opportunities to provide offsetting tax relief to lower income Canadians.

³²Institute for Competitiveness & Prosperity, Working Paper 7, *Taxing smarter for prosperity*, March 2005, pp. 36-37.

³³However, this is not the best option for all individuals, because withdrawals from RRSP accounts are taxable, triggering clawbacks of income-tested transfer programs for seniors. Instead, some argue that Canada should introduce a "tax pre-paid" option for individuals. A tax pre-paid system would allow individuals to pay taxes on investment income earlier in life and eliminate taxation on subsequent withdrawals from these tax pre-paid savings accounts.

³⁴An alternative route is the conversion of provincial sales taxes into provincial value added taxes, as in Quebec. This option provides the province full autonomy in setting the tax rate and base. See Michael Keen, "CVAT, VIVAT, and all that: New forms of value-added tax for federal tax systems," International Monetary Fund Working Paper WP/00/83 for a thorough discussion of these issues.

³⁵See sidebar "Value-added taxation can be fair" in *Taxing smarter for prosperity*, p. 34.

Base personal taxation on lifetime earnings

Much of the perversion in individual taxation that we have identified exists because we tax individuals on the basis of one-year slices of their life. Assessing income taxes on the basis of lifetime earnings, rather than annual earnings would potentially be far better for Canada's poor and enhance prosperity for all Canadians.

Our current system gives all taxpayers in Canada an annual basic personal exemption and taxes income above that at progressively higher rates. A lifetime approach would give each Canadian a lifetime exemption instead of an annual basic personal exemption. This exemption would be the equivalent of five to ten years of average income – say, \$250,000. Any income beyond this would be taxed at, say, 14 percent until the next level is reached, when rates would rise again, and so on. The exact rates and ranges would have to be massaged to achieve tax neutrality.

With a system based on lifetime earnings, poor Canadians would be dramatically better off and have better prospects for advancement. For years, and even decades, lower wage earners would face a zero marginal tax on work, savings, and investment, and they would have greater incentive and greater capacity to grow out of poverty. And even when they used up their lifetime tax exemption, they would face a lower marginal rate than currently, because the marginal tax rate would fall for all Canadians. Taxation of lifetime earnings would also make Canada a tax-attractive place for young Canadians.

This could work because the elimination of the annual basic personal exemption would save the federal tax revenue that is currently forgone because of the BPA. These savings can be applied to lowering the marginal tax rates for all and improving the prospects of the neediest. A critical element of lifetime earnings approach is to disentangle social benefits from the tax system, so that we provide assistance to those in need without complicating the income tax system and creating perversely high marginal tax rates for low-income people.

A lifetime earnings system represents a significant departure from the current taxation regime and a workable implementation plan will be complex. But we should not be deterred and accept the current counter-productive, complicated, and confusing system.

Governments should lead the way

In summary, governments should consider all options for smart taxation that will increase equity and efficiency. They should not shy away from exploring breakthrough approaches. These reforms may be complex to implement but merit further investigation because of their potential to contribute to higher prosperity for all.

Our research suggests two broad themes for taxing smarter to enhance Canada's competitiveness and prosperity:

- **On the business side**, we should shift away from taxing productivity-enhancing investment, through measures such as the elimination of the capital tax and sales taxes on

capital investment and even breakthrough options such as cash flow taxation or the elimination of corporate taxation. Revenue lost through these measures could be replaced by greater use of value-added taxes.

- **On the personal side**, our focus needs to be on removing the perversely high marginal tax burdens on those with lower incomes. To do this, we should consider several options to fix this, including the breakthrough option of taxing lifetime earnings.

A shift to a smart tax structure will promote job creation, higher physical and capital investments, more innovation, and the adoption of new technologies. This environment will enhance future economic growth, laying the foundation for a dynamic and prosperous economy and the strong government financial position necessary to fund the quality of public services and infrastructure that Canadians value.

Rebalancing market and governance structures

Businesses and governments need to rebalance their efforts to ensure that new technologies and products make their way to the Canadian marketplace and to fix fiscal federalism so that our transfer system raises prosperity across all the provinces.

MARKET AND GOVERNANCE STRUCTURES

are important components of AIMS, driving our capacity for innovation and upgrading to increase Canada's future prosperity. In our work, we have identified weaknesses in both areas. We face challenges in both our innovation and our fiscal federalism systems that hamper our ability to increase our prosperity. We need to strengthen our market structures to rebalance the pressure and support in our innovation system and fix fiscal federalism to redress the imbalance in the focus on consumption at the expense of investment for tomorrow's prosperity.

Strengthen our innovation system

A robust innovation system is a prerequisite for an environment that provides the support for research and development for new products and services and competitive pressure from consumers and business leaders to get innovative products and processes to market. Both pressure and support drive the three components of a vital innovation system (*Exhibit 19*):³⁶

- **Supply of innovation** – the activities and resources that increase the stock of innovation, usually including highly qualified researchers in universities, labs, and corporate R&D departments. Government funding is a major source of support, as is the training of master's and doctoral students. Beneficial pressure for upgrading innovation supply comes from peer reviews of research and sophisticated financiers.
- **Financing of innovation** – an important bridge between supply and demand, significant funding is usually required to commercialize new ideas and scientific breakthroughs. Favourable tax treatment and skilled investors provide support. Pressure comes from capital providers who insist on high returns and from competition among them.
- **Demand for innovation** – the requirement for innovative products and services. Support is provided when CEOs allocate corporate resources to generate and implement new ideas. Pressure comes from the rivalry of competing firms and from customer insistence on breakthrough products and processes.

³⁶Roger L. Martin and James B. Milway, "Commercialization and the Canadian Business Environment: A Systems Perspective," July 2005. Available online: <http://www.competeprosper.ca>

Pressure and support are essential in all three components to ensure the whole system performs to its full potential. An imposing strength in one element will not compensate for weakness in another. For example, significant expenditure on R&D without competitive pressure to use the results will not drive innovation.

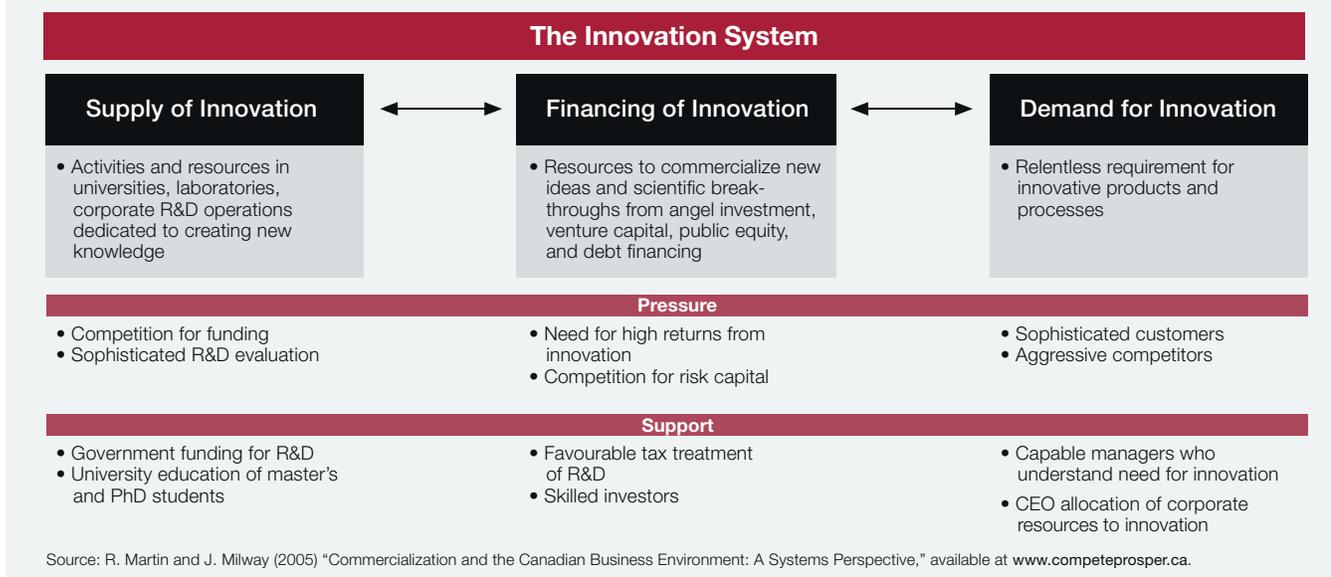
Canada has a significant innovation gap. While not a perfect measure, patenting is a good indication of the innovation gap between Canada and the United States. In both countries, patenting rates are strongest in traded industries, but Canada trails considerably.³⁷ Another measure of our gap is Canada's poor standing on the World Economic Forum's Innovative Capacity Index.³⁸ We look at all three components of the innovation system to explain why this gap exists and how we can close it.

Focus R&D spending more on innovation demand

The innovation model policy makers currently adhere to focuses mainly on support for the supply of innovation to the detriment of the other components and pressures in the system. Governments tend to think about scientific and technical innovation in universities, hospitals, and research centres, rather than about business innovation. They have invested primarily in the supply of a scientific and technical labour force and funds for R&D through various federal innovation programs. The results are mixed.

Gross expenditure on R&D in business, higher education, and government is one measure of support for innovation supply. Our research shows that Canada has out performed the United States in higher education investment and trails in business investment (*Exhibit 20*).

Exhibit 19 An effective innovation system requires pressure and support across three components



³⁷Realizing Canada's prosperity potential, January 2005, p. 30.

³⁸Institute for Competitiveness & Prosperity, Working Paper 6, *Reinventing innovation and commercialization policy in Ontario*, October 2004, pp. 16-17.

Another measure of support for innovation supply is the level of education achieved by Canada's students. As we have seen in Exhibit 15, Canada graduates fewer students with master's and doctoral degrees. The federal government's spending commitments, announced in *The Economic and Fiscal Update 2005*, include \$2.2 billion in post secondary education financial assistance and \$550 million to extend access grants to 55,000 students from low-income families. This funding should contribute to closing the gap.

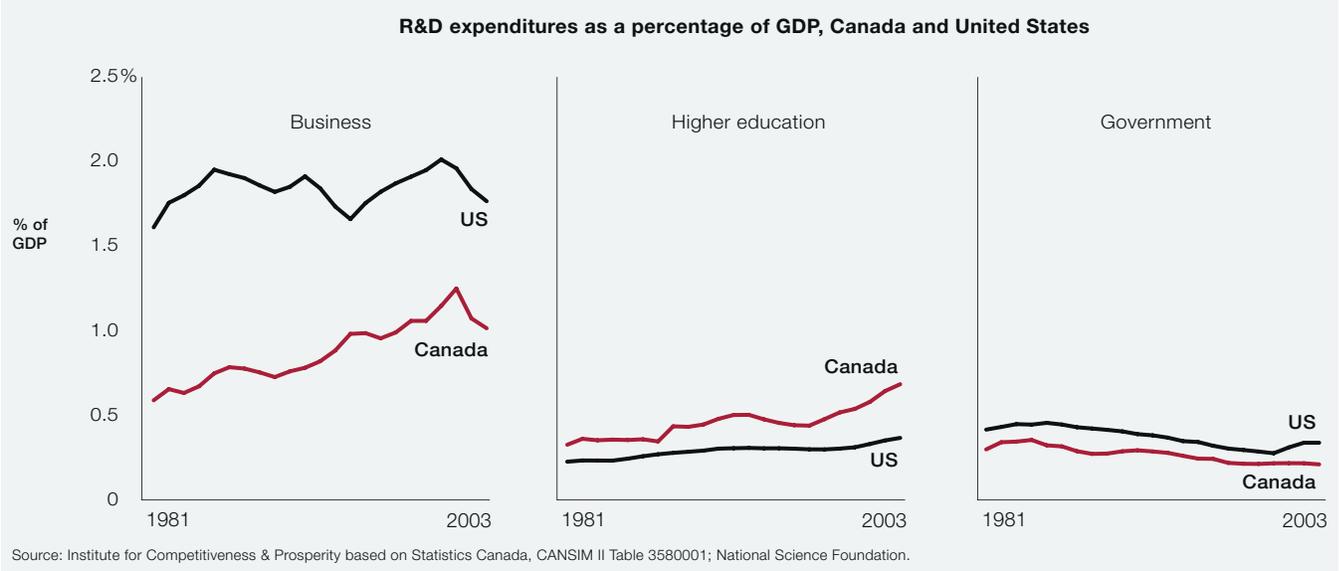
Direct more innovation financing toward the quality of funding

Governments have recognized the importance of innovation financing and have implemented several policies and programs that support funding. Specifically, several federal funding programs provide support for raising venture capital through generous tax credits, help for start-ups, technology partnerships, and networks of centers of excel-

lence. We have seen that the availability of venture capital in Canada is generally in line with US experience.³⁹ But weak venture capital returns in Canada suggest a problem of investment quality. Canadian returns for five-year horizons have been poor since 2001 – the first year of reliable data. US returns for the same horizon have been significantly higher except in 2004 when many of the dot-com investments made in 1999 had become worthless (*Exhibit 21*).

Several factors limit investment quality. The evidence shows that innovative firms in Canada are not benefiting as expected from the expertise and skills of venture capital firms to help drive innovation and commercialization. More difficult, it seems that adequate pressure to enhance funding quality is not forthcoming. To date, it has been individual investors that have been drawn to innovation financing, rather than larger, more sophisticated investors with expectations for higher returns – though

Exhibit 20 Canada trails the United States, especially in business R&D



³⁹ *Reinventing innovation and commercialization policy in Ontario*, p. 33.

recent changes in foreign holdings' regulation ought to increase investments from pension funds.

In addition, the Institute has also concluded that labour sponsored investment funds have succeeded in increasing the quantity of venture funds but not the quality.⁴⁰ Through generous tax incentives, labour sponsored funds have been successful in raising large amounts of venture capital. However, given the nature of investors – largely individuals, not sophisticated funds – and the geographic and time constraints placed on their investments, labour sponsored funds have earned poor returns. In addition, some research suggests that their presence has crowded out other funds.⁴¹ In 2005, the Ontario government indicated that it would be eliminating the preferential provincial tax treatment for labour sponsored funds, and the Institute supported this decision.

Canada's still young venture capital industry lacks the pressure of a long track record of good returns, consistently applied valuation standards, private equity products, and industry information. Breakthroughs in innovation financing need to come from broadening and strengthening the quality of support provided by venture capitalists to innovative start-up firms. And creating the environment for pension funds to invest in venture funds and ratcheting up the pressure to upgrade their quality will generate better results.

An important source of venture capital funding in Canada is US-based venture firms. In fact, venture funding from the United States accounted for about a quarter of total venture funding in Canada since 1999.⁴² The Institute engaged Thomson Macdonald, the authoritative source of information on Canada's venture capital industry, to

conduct interviews among some of the key US venture firms investing in Canada. These interviews and the actual investment data indicate that US venture firms that had invested in Canada were originally attracted to opportunities in Ottawa's information and communications industries. They have begun to expand to other industries and cities. US venture firms are also attracted by Canada's good technology, skilled workforce, and the lower cost of doing business. The interviewees tended to see Canada's proximity as an advantage and reported having access to adequate information on the markets here.

But the interviewees reported that cross-border tax treatment is an important barrier to investing in Canada. According to the interviewees, the Canada Revenue Agency does not allow Limited Liability Corporations to qualify for the preferential tax treatment in the *Canada-US Tax Treaty*. This interpretation reduces the potential

Exhibit 21 Venture capital returns in Canada have been weak



⁴⁰*Ibid.*, p. 35.

⁴¹Douglas J. Cumming, Jeffrey G. MacIntosh, "Crowding Out Private Equity: Canadian Evidence," University of Alberta Working Paper, 2002.

⁴²Thomson Macdonald, *The Activity of American Venture Capital Funds in the Ontario Market: Issues, Trends and Prospects*, A report prepared for the Institute for Competitiveness & Prosperity, November 2005, p.8. Available at www.competeprosper.ca

financial return from capital gains and from interest and dividend payouts to US investors. Canadian companies receiving US venture investments often must restructure themselves for tax efficiency. According to the Thomson Macdonald report, reactions from interviewees ranged from the tax issues being irritants to being “a very serious challenge to their continued activity in the Canadian market.”⁴³ We encourage the Canadian venture industry to take the lead in raising these issues with the appropriate tax authorities to determine opportunities for revisiting the interpretations of the existing tax treaty.

This is an important opportunity, because US venture firms can help raise the quality of financing of innovation in Canada. These firms can bring experience and expertise gained in their home market to add significant value to Canada's fledgling innovative firms.

The interviews also suggested that Canada's innovative firms require greater entrepreneurial management talent. Some interviewees indicated they would not invest in companies without adequate management talent; others were prepared to draw on non-resident managers to develop the required range of management talent.⁴⁴ We discuss the challenge of strengthening management in our innovative firms below.

Some of the interviewees cited difficulties in finding appropriate venture firms or individuals as partners. They reported too much personnel turnover in venture fund management; they found instances of a “conservative propensity” among some funds leading to smaller deal sizes leading to the potential for slower time to market of the innovative firms; and they complained that

the lack of common documentation in Canada slowed the turnaround of required investment information.⁴⁵ Finally, interviewees perceived that US venture firms were not generally aware of investment opportunities in Canada and suggested greater dissemination of the advantages of investing here.

Encourage demand for innovation through appropriate support and adequate pressure

Public policy has aimed at strengthening support for innovation demand. But the evidence shows that tax policies are not effective. Nor is management being pressured by demanding customers and capable rivals to provide more innovative products and services.

Through several programs, Canada has a generous plan of R&D tax credits. Unfortunately, compared with other nations, Canada still fares poorly in R&D investments as a proportion of GDP,⁴⁶ especially in business investment. One explanation is that the tax credits only give companies a tax break for research they were planning to do anyway. Another explanation is that our high marginal tax burdens have a negative effect on companies' motivation to invest in innovation, even with attractive R&D tax credits.

Canada also lacks the support of highly trained managers.⁴⁷ Our managers have lower overall educational attainment than US managers and tend to have less formal business education at the graduate level. The more educated managers are, the more they are likely to think innovatively and to operate more effectively. Our lower level of management education means that we are less able to compete in

⁴³ *Ibid.*, p. 31.

⁴⁴ *Ibid.*, pp. 31-32.

⁴⁵ For example, some interviewees pointed to the lack of a common “term sheet” in Canada while the US industry has created a standard form. See Thomson Macdonald Report, p. 33 for more detail.

⁴⁶ *Reinventing innovation and commercialization policy in Ontario*, p. 25.

⁴⁷ *Realizing Canada's prosperity potential*, January 2005, p. 19.

a technology-based economy and to serve sophisticated and demanding customers in a global market place.

Earlier in the report we noted Canada's deficit in the stock of highly educated individuals and the flow of degrees conferred. The data also indicate a significant lag in the degrees conferred in business disciplines. Overall, Canada produced 15 percent fewer university degrees at all levels in 2002/03 (see *Exhibit 14*). But with the public policy emphasis, Canada produces more science and engineering degrees per thousand population than the United States. Capable people with training in science & engineering and in business are critical to a country's innovation success. However, in the business

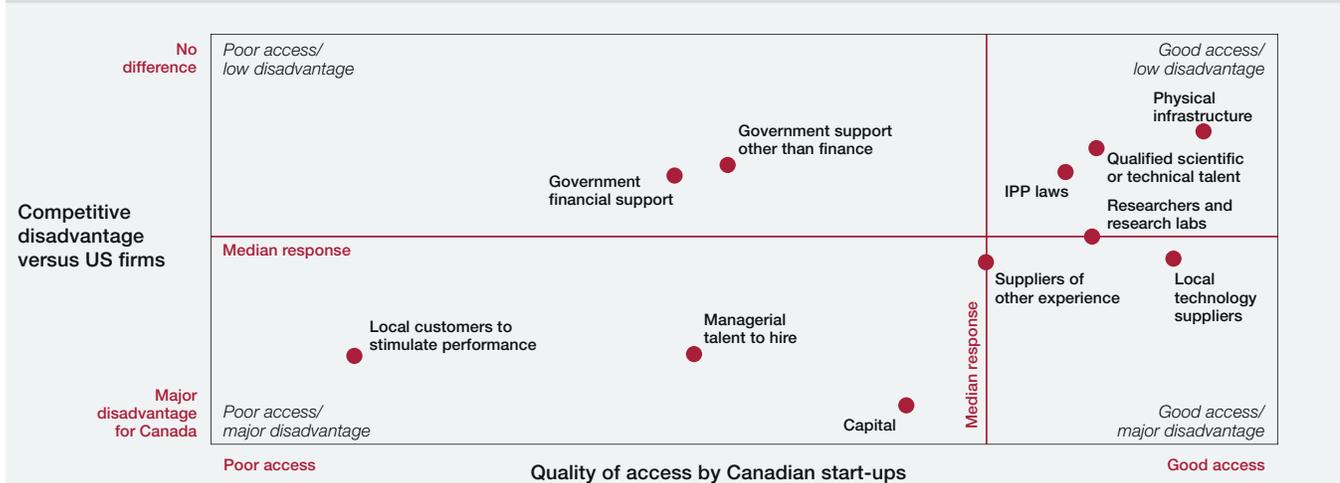
discipline, Canada produces 41 percent fewer degrees. Data indicate that we need to rebalance our investments to open up more spaces to students wishing to pursue business degrees in Canada.⁴⁸

Research conducted for the Institute among successful innovative firms in Ontario supports this finding.⁴⁹ One of the most significant challenges they said they faced in their development was in gaining access to "managerial talent to hire." By contrast, they cited good access to "qualified scientific or technical talent." Importantly, this challenge was perceived to be a significant disadvantage versus their most important competitor, typically a US-based firm (*Exhibit 22*).

A larger hurdle is to increase the pressure for management to demand more and more winning innovations. If CEOs are not pressured to choose strategies that require much innovation, they will tend to seek only modest innovations rather than breakthroughs. In such an environment of low expectations, there will not be market pressure for greater supply of innovation capacity or for higher quality of financing support.

The evidence from the World Economic Forum's Business Competitiveness Index reinforces our view that Canadian businesses are not facing high levels of pressure from competitors or sophisticated customers and are not benefiting from local specialized support. The result is that companies are not being

Exhibit 22 Access to management talent is a key weakness for Canadian innovative start-ups relative to US competitors



Q for X-Axis: "Thinking specifically of your company, and of your local situation, I'd like you to think about access to various resources. Please rate your company's access to each of the following resources as either excellent, very good, average, poor or very poor."

Q for Y-Axis: "Now I'd like you to think about your most important competitor and how their access to the same list of resources compares to you own. Please tell me whether their access to each resource represents a significant competitive advantage for them, somewhat of an advantage for them, neither an advantage nor a disadvantage, somewhat of an advantage for you, or a significant advantage for you over your competitor." Note: Re-percentage to exclude "Not Applicable."

Source: The Strategic Counsel, *Assessing the Experience of Successful Innovative Firms in Ontario*, September 2004, a report sponsored by the Institute for Competitiveness & Prosperity, available at <http://www.competeprosper.ca/research/InnovationInterviewStudyRep.pdf>

⁴⁸For more detail, see *Reinventing innovation and commercialization policy in Ontario*, p.30-31 and Roger Martin, "Don't ask voodoo to solve our productivity problem," Web exclusive comment GlobeandMail.com; available at www.competeprosper.ca/institute/news090106.html
⁴⁹The Strategic Counsel, *Assessing the Experience of Successful Innovative Firms in Ontario*, September 2004. Research conducted for the Institute for Competitiveness & Prosperity. Available online: www.competeprosper.ca

driven to develop and implement strategies that rely on innovation. Often our firms' strategies do not focus on building innovative capacity and do not depend on company research and development.⁵⁰

Rebalance policies

We conclude that public policy on innovation is unbalanced. It focuses too much in areas that support innovation supply and its financing. And it has not adequately encouraged initiatives that provide pressure across all the innovation system components, especially in areas that pressure business leaders to demand more innovation.

Governments, businesses, and individuals need to think about how they can make the innovation system more effective, so that both support and pressure are embedded in the innovation supply, financing, and demand system. Based on these findings, we have identified some policy prescriptions for strengthening our innovation system:

- On *innovation supply*, in addition to technology-based innovation, public policy needs to widen its focus to include the less technical aspects of innovation. Many of these lead to commercial breakthroughs in process improvements, goods production, and service delivery as well as in innovative business strategies.
- On *innovation finance*, the federal government should identify opportunities to raise the quality of venture capital, perhaps by attracting venture capital leaders and managers to Canada. Both foreign venture firms with funds and expertise or returning Canadians who have been successful venture capitalists abroad would

raise the potential for high-quality investment. As our research has indicated, there may be opportunity for increasing these investments by revisiting interpretations of the *Canada-US Tax Treaty*.

- On *innovation demand*, the federal government should scrap the R&D tax credit in favour of more fundamental tax reform that lowers the taxes on business investment in Canada; encourage individuals in business to attain higher degrees and more formal management training to increase managerial capability; and identify opportunities for eliminating regulations that reduce competitive pressure.

It is not enough to address one element. Individuals, businesses, and governments must work to rebalance approaches to the entire innovation system.

Fix fiscal federalism

Through a well-functioning fiscal federalism system – the system that governs how federal funds are raised and spent – Canadians have created significant opportunities for building long-term competitiveness and prosperity across the country. The system ought to reduce the regional differences in today's living standards and, through increased productivity in the have-not regions, reduce the differences in future living standards.

But today, we see that, while some regional disparities are narrowing under the current fiscal federalism system, on critical economic indicators, such as investment and unemployment, convergence is much slower. We also see that on these measures, Canada is

⁵⁰Strengthening structures, July 2004, pp.31-41.

disadvantaged versus the United States. In addition, surprise budget surpluses and the Employment Insurance (EI) program have contributed to inadequacies in the fiscal federalism system.

Rethink fiscal federalism to narrow regional disparities in GDP per capita

In a successful fiscal federalism program, the resources transferred from the have to the have-not provinces would lead to higher productivity and competitiveness in the recipient provinces. In the long-term, we would then see a shift to higher investment in these jurisdictions. This would justify diverting resources from higher productivity jurisdictions to those with lower productivity to drive faster economic growth than would occur without the transfers.

It is also important to assess the impact of fiscal federalism on the consumption and investment balance. We measure

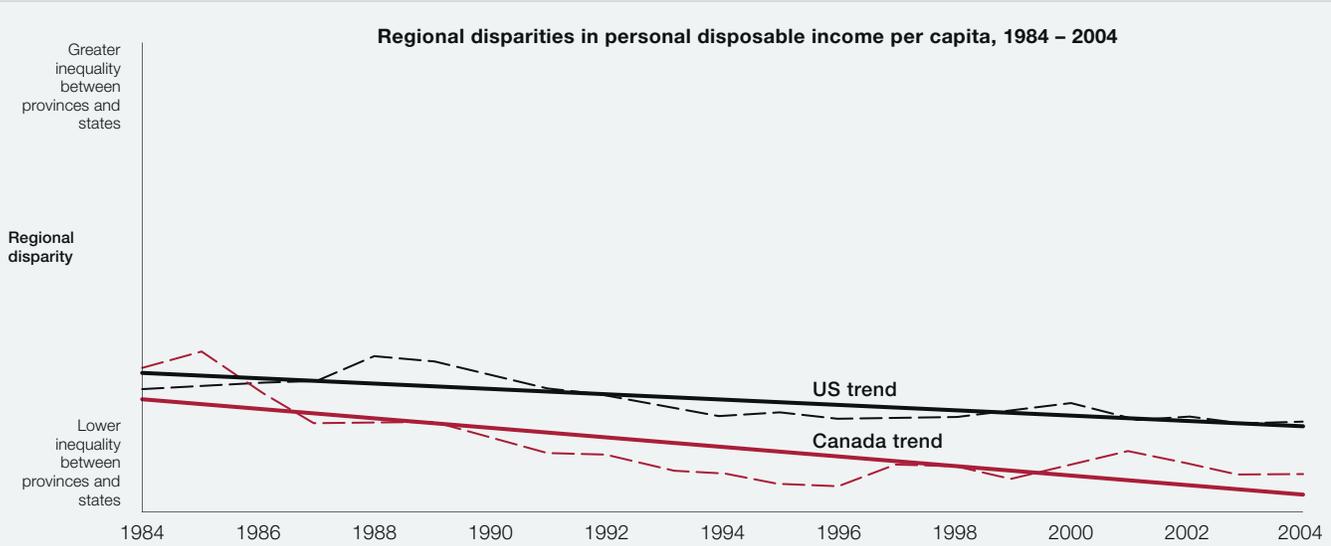
the consumption side of the equation by personal disposable income – the after tax income that flows to individuals – or the ability of individuals to consume current income. The investment side is captured by GDP per capita – the value created by converting human, physical, and capital resources into goods and services and building future prosperity.

Over the last two decades, the positive story is that disparities in personal disposable income across the provinces have narrowed. We see that Canada's interprovincial disparities have been below interstate disparities since 1987 (Exhibit 23). In addition, Canada's trend line is going down faster, a sign that regional inequalities are falling more quickly in Canada than the United States. Canada has also achieved more equality in personal disposable income across the provinces than the United States has experienced across its states over the same period.

It is hard to imagine that federal transfers have not contributed to that success. But we are concerned that a significant portion of the shifted resources has been aimed at consuming current prosperity – through equalization payments, health and social transfers to provinces, transfers to individuals, and employment insurance benefits. Much less has been aimed at investment in future prosperity.

On the less positive side, over the same period, regional disparities in GDP per capita have stayed higher in Canada than in the United States (Exhibit 24). In seventeen of the past twenty years, the United States has had lower levels of inequality in regional GDP per capita than Canada. The parallel trend lines indicate that, without a change in course, Canada will never match US convergence performance. We also see that the rankings of have and have-not provinces have changed little, with the same provinces remaining stuck at

Exhibit 23 Regional income inequality has narrowed more in Canada than in the United States



Source: Statistics Canada, *Provincial Economic Accounts*, CANSIM II Table 510001, US Bureau of Economic Analysis, *Regional Economic Accounts*; Institute for Competitiveness & Prosperity analysis.

the bottom of the rankings of regional economic performance. In the United States, there has been more fluidity among the states, with more up and down shifts in the rankings.

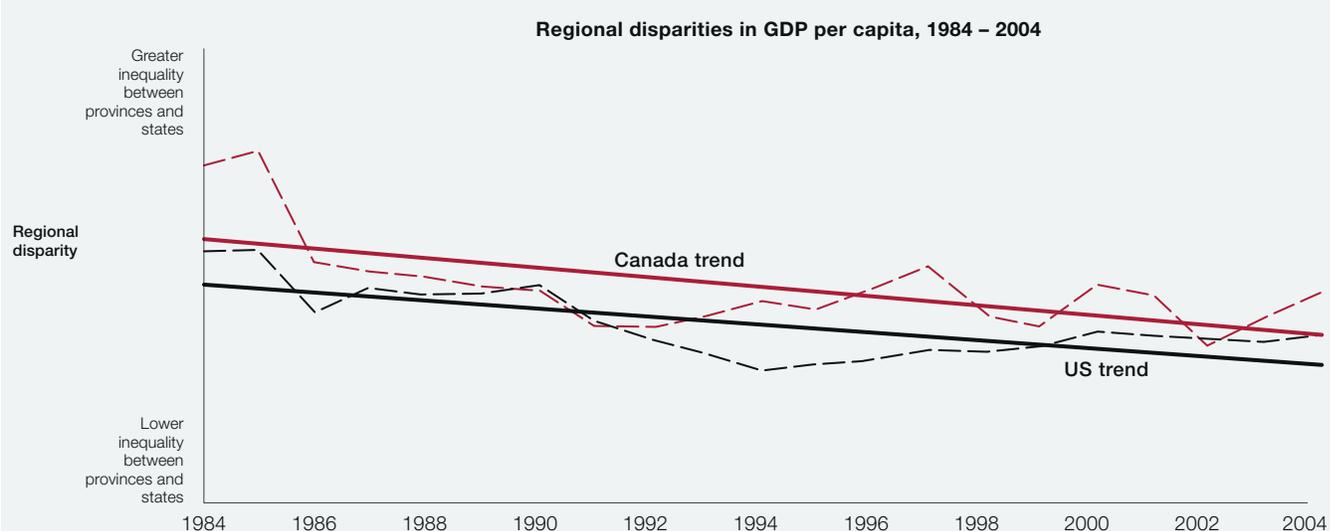
Our more detailed research shows that Canada has also achieved less convergence than the United States in the elements that drive prosperity growth, as measured by GDP per capita – profile, utilization, intensity, and productivity (see *Exhibit 9*). The levels of regional inequalities over the past two decades were higher for almost all the elements among the provinces than they were among the US states. And these levels of inequalities were not narrowing any faster in Canada than in the United States.

On profile, the inequalities between the US states were shrinking faster than among Canadian provinces. Utilization rates among the provinces were converging faster, but regional

differences remained higher than in the United States. Employment differences across the provinces were not decreasing, while they were decreasing across US states. On the productivity element, the performance differences across the provinces were actually increasing unlike in the United States where state differences were decreasing. Closing the prosperity gap between provinces and with the United States would require a major turnaround of most of these convergence trends in Canada.

We conclude that fiscal federalism is missing opportunities for increasing Canada's prosperity potential. The structure of the system is the main reason it is not working as well as it should. A truly effective fiscal federalism system would lead to greater and faster convergence, a more effective balance between consumption and investment, and greater competitiveness and prosperity. More targeted investment in the

Exhibit 24 Regional GDP inequality has stayed higher in Canada than in the United States



Source: Statistics Canada, *Provincial Economic Accounts*, CANSIM II Table 510001, US Bureau of Economic Analysis, *Regional Economic Accounts*; Institute for Competitiveness & Prosperity analysis.

have-not provinces would create more jobs and improve productivity. In turn, this would boost the potential for long-term prosperity and reduce the need for interprovincial transfers. That has not happened. Overall, fiscal federalism has transferred resources from high- to low-productivity regions, lowering Canada's absolute level of prosperity.

Spend surplus surprises to raise productivity

Since fiscal year 1997/98, the federal government has generated surpluses every year, accumulating more than \$61 billion in the surplus account. This is the positive result of the determined battle to eliminate deficits through a variety of expenditure controls, including reduced transfers to provinces, begun in 1994/95. But, when the government consistently under forecasts the size of the annual surplus, the result has been unplanned spending and continuing growth in transfers to provincial governments – and these are not always good for prosperity growth.

This is one effect of the fact that the federal government does not have to undergo the rigorous discipline and public debate that accompany the budget process and spends these unplanned surpluses mainly on current consumption. The result is that, over the last decade, the government spent \$39.2 billion through in-year policy initiatives. Of this spending, \$23.4 billion was for consumption of current prosperity – primarily on health care and social spending. This was divided evenly between transfers to the provinces through the Canada Health and Social Transfer and direct spending on consumption by the federal government. Investment in future prosperity

– expenditures on research and development and post secondary education – amounted to \$7.2 billion. The rest of the unplanned spending – \$8.6 billion – was for protection and international relations, government administration, and the environment. Taken together, this means that, for every dollar the federal government spent on current consumption, it invested only 31 cents on future prosperity. This use of federal budget surplus surprises has contributed to the consumption/investment imbalance.

For the future, the growing budget surpluses – planned and unplanned – have allowed the federal government to commit to increases in transfers and equalization. Federal transfers to the provinces for health care are set to increase from \$18.5 billion in 2004/05 to \$30.5 billion in 2013/14 – an annual growth rate of 5.9 percent over the next nine years.⁵¹ In addition, the federal government has concluded several ad hoc deals with individual provinces that do not fit within a disciplined framework.⁵² This is the result of ongoing demands by premiers.

What is surprising is that the have provinces are among those demanding higher levels of transfers, even though every dollar of per capita transfers costs taxpayers in Ontario \$1.16 and in Alberta \$1.19. A more logical approach for the have provinces would be to call for the federal government to reduce its tax rates in specific areas. This would allow each provincial government to determine if it should replace the reduced federal taxes with higher provincial taxes or not to replace the federal taxes and effect a lower overall tax rate for the province.

Overall, both planned and unplanned federal spending are dramatically biased toward consumption of current prosperity rather than investment for future prosperity. And the federal government, with its significant increase in equalization payments, is signaling that it does not hope to reduce the requirement for these payments.

Ensure employment insurance is the right program

Canada's Employment Insurance (EI) program has created excessive surpluses and the wrong kinds of transfers. Every year since 1993, the federal government has collected more EI revenue than it has paid out, accumulating a surplus of \$67.2 billion by 2002. Effectively, EI is a tax on labour, rather than a true insurance program.

On top of that, its design perpetuates regional inequalities. First, it interferes with the labour supply by providing higher benefits after shorter qualifying periods for unemployed workers in regions with higher unemployment. In effect, it creates disincentives to work in the regions with the highest and most persistent unemployment rates. Second, it creates perverse incentives for employers, allowing firms to avoid the natural consequences of high rates of layoffs and closures. The system encourages firms with seasonal fluctuations to lay off workers rather than bear the costs of retaining them during the off season.

In a study of the incidence of EI at the firm level, Miles Corak and Wen-Hao Chen found that only 6 percent of firms were "always subsidized."⁵³ In other words, EI premiums collected from these firms and their employees

⁵¹ Department of Finance Canada, *The Fiscal Balance in Canada: The Facts*, available online: http://www.fin.gc.ca/facts/fbcfacts9_e.html.

⁵² Working Paper 8, *Fixing fiscal federalism*, p.39.

⁵³ Miles Corak and Wen-Hao Chen, "Who Benefits from Unemployment Insurance in Canada: Regions, Industries, or Individual Firms?" SRDC Working Paper Series 03-07, Social Research and Demonstration Corporation, November 2003.

were exceeded by EI benefits paid to employees in every year over the 1986–96 period. These firms accounted for 6 percent of jobs but 28 percent of benefits and only 4 percent of premiums. At the other extreme, 22 percent of firms were “never subsidized.” They accounted for 48 percent of jobs, but only 28 percent of benefits paid out and 60 percent of the premiums. The EI benefits claims for “always subsidized firms” were mostly for temporary layoffs – 71.5 percent of claims versus an all-firm average of 47.8 percent.

Overall, the EI system plays havoc with both the supply of and demand for employment. And it perpetuates regional inequalities.

Revise fiscal federalism to raise Canada's prosperity

The current structures of fiscal federalism have been successful in narrowing regional disparities in personal disposable income across Canada. But they have not matched that success with the elimination of differences in GDP per capita. Nor have they achieved a better balance of consumption and investment for our future prosperity, since most of the transferred funds are spent on current consumption.

We are worried that the design of the current system and the programs that support it will perpetuate and perhaps exacerbate regional disparities. Instead, we should rethink fiscal federalism to build in obsolescence through reduced regional disparities.

Canada's prosperity is hindered by inadequate market and governance structures. We need to rebalance our market structures to increase competitive pressure throughout the innovation system. We also need to rebalance fiscal federalism to strengthen investment for sustainable prosperity in all regions.

Recommendations for Canada's prosperity

The clear choice is to rebalance priorities to put Canada on an investment path to future prosperity

THROUGHOUT THIS REPORT AND IN OUR previous reports, we have set out recommendations for all stakeholders – individuals, businesses, and governments – to invest more in Canada's future prosperity. With higher investment today, we will all enjoy greater prosperity. That will enable us to consume more, as well as to sustain investment for future prosperity. But to achieve this, there is a need for a fundamental rebalancing of our consumption and investment priorities.

Most Canadians agree on what we want from our economy. We want to increase our standard of living through a variety of opportunities; we want jobs that exercise our skills and pay good wages; and we want to live in a healthy and safe environment, with a strong education system, excellent health care, and extensive social safety nets.

However, there is less agreement on how we can achieve these aims. Many will concur that prosperity is necessary to achieve these aims and that prosperity can only come from investing more for tomorrow rather than consuming today. But we conclude that there is no widespread

agreement to pursue the investment instead of the consumption path. What we need, therefore, is a significant cultural shift that will re-direct us onto an investment path.

Where people agree on the goals but not the means, leadership is essential to set out the way forward for Canada. We need our governments to set an agenda for prosperity that shifts public spending priorities, commits to smarter taxation, and redesigns fiscal federalism for prosperity across all our provinces and territories. We need business leaders who have the foresight and energy to invest in skills and capital. And we need all citizens to be heavily involved in augmenting their education, skills, and training.

On our current path, we risk falling into the vicious circle where a lower level of investment will put us further and further behind our potential prosperity. Unrealized prosperity can cause concerns and doubts about competitiveness and innovation, rather than commitment to and optimism toward them. These less than positive attitudes will not be conducive to investment opportunities, and eventually prosperity

will recede. Unrealized economic potential means tax revenues will not meet fiscal needs and, in turn, lead governments to raise tax burdens thereby reducing motivation for investments even more. And reduced economic activity will create fewer nodes of specialized support and less openness to the public policies that result in more competition.

Instead, we are urging a fundamental shift in the path we are following. The investment path will lead us to future prosperity, creating a virtuous circle that, in turn, will provide the high quality of life we want for ourselves and our children for many years to come.

We recommend a shift in the course of our current economic path so that we are investing for future generations. To close the prosperity gap, we need to:

- Raise Investment by individuals, governments, and businesses in our human capital, particularly through post secondary education. As well, we need to increase investment in machinery, equipment, and software.
- Tax smarter to encourage Motivation to invest for long-term prosperity. This will promote job creation, higher physical and capital investment, more innovation, and the adoption of new technology.
- Strengthen market Structures to provide a balance of pressure and support that will drive innovation and upgrading in Canada. This will shift the focus from support for the supply of innovation to demand for more innovation and higher quality commercialization capital.
- Fix the Structure of fiscal federalism to improve the prosperity potential of all regions in Canada. The goal is to increase the potential for productivity-enhancing investments in all provinces.

The choice is clear. The time is now.

References

- Abdi, Tahir A. (2004) "Machinery & Equipment Investment and Growth: Evidence from the Canadian Manufacturing Sector." Department of Finance Canada: Working Paper.
- Baldwin, John R., Jean-Pierre Maynard, Marc Tanguay, Fanny Wong, and Beiling Yan, *A Comparison of Canadian and U.S. Productivity Levels: An Exploration of Measurement Issues*, Statistics Canada. Catalogue no. 11F0027 No. 28, January 2005.
- Brouwer, Andrew. "Immigrants need not apply," Caledon Institute of Social Policy, October 1999
- Canada, Department of Finance (2005) *The Economic and Fiscal Update 2005*, November 2005. Available online: www.fin.gc.ca/budtoce/2005/ec05_e.html
- Canada, Department of Finance (2005) "Taxation and Economic Efficiency: Results from a General Equilibrium Analysis," in *Tax Expenditures and Evaluations 2004*. Available online: www.fin.gc.ca/toce/2004/taxexp04_e.html
- Canada, Department of Finance (2004) "The Fiscal Balance in Canada: The Facts, October 2004." Available online: http://www.fin.gc.ca/facts/fbcfacts9_e.html
- Canadian Venture Capital Association (2005) "Industry Statistics." Available online: www.cvca.ca
- Chen, Duanjie, Jack M. Mintz, and Finn Poschmann (2005) "Attention G-7 leaders: Investment taxes can harm your nations' health," C.D. Howe Institute. Available online: www.cdhowe.org/pdf/ebrief_18.pdf
- Corak, Miles and Wen-Hao Chen (2003), "Who Benefits from Unemployment Insurance in Canada: Regions, Industries, or Individual Firms?" Working Paper, Social Research and Demonstration Corporation, SRDC Series 03-07.
- Cumming, Douglas J. and Jeffrey G. MacIntosh, (2002) "Crowding Out Private Equity: Canadian Evidence," University of Alberta Working Paper. Available online: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=323821
- De Long, J. Bradford and Lawrence H. Summers, "Equipment Investment and Economic Growth," 1990. Available online: www.j-bradford-delong.net/pdf_files/QJE_Equipment.pdf
- Dungan, Peter, Steve Murphy, and Thomas Wilson (1994) "The Sources of the Recession in Canada: 1989-1992," *Canadian Business Economics*, Issue 2 (2).
- Erenburg, Sharon J. (1994) "Linking Public Capital to Economic Performance, Public Capital: The Missing Link Between investment and Economic Growth," The Levy Institute Public Policy Brief No 14.
- Goss Gilroy Consultants, Retention and Integration of Immigrants, p. 11 May 2005. Available online: www.hrle.gov.nl.ca/hrle/immigration/pdf/ImmigrationStudyFinal.pdf
- Institute for Competitiveness & Prosperity:
- Working Paper No. 1 – *A View of Ontario: Ontario's Clusters of Innovation* – April 2002
 - Working Paper No. 4 – *Striking similarities: Attitudes and Ontario's prosperity gap* – June 2003
 - Working Paper No. 5 – *Strengthening structures: Upgrading specialized support and competitive pressure*, July 2004
 - Working Paper No. 6 – *Reinventing innovation and commercialization policy in Ontario* – October 2004
 - Working Paper No. 7 – *Taxing smarter for prosperity*, March 2005
 - Working Paper No. 8 – *Fixing fiscal federalism* – October 2005
 - *Partnering for investment in Canada's prosperity*, Report on Canada 2004 – January 2004
 - *Realizing Canada's prosperity potential*, Report on Canada 2005 – January 2005
- Jorgensen, Dale W. and Kun-Young Yun (1991) "The Excess Burden of Taxation in the United States," *Journal of Accounting, Auditing & Finance* 6, pp. 487-508.
- Keen, Michael "CVAT, VIVAT, and all that: New forms of value-added tax for federal tax systems," *International Monetary Fund Working Paper WP/00/83* .

- Kneller, R., M.F. Bleaney, and N. Gemmell (1999) "Fiscal Policy and Growth: Evidence from OECD Countries" *Journal of Public Economics* 74, pp. 171–90.
- Martin, Roger L. and James B. Milway, (2005) "Commercialization and the Canadian Business Environment: A Systems Perspective," Institute for Competitiveness & Prosperity. Available online: www.competeprosper.ca
- National Survey of Student Engagement (2004) <http://nsse.iub.edu/index.cfm>
- OECD (2005) *PPPs for GDP- Historical Series* Paris: OECD
- (2005) *National Accounts of OECD Countries*. Paris: OECD
 - (2004) *OECD in Figures*. Paris: OECD
 - (2004) *OECD Economic Surveys: Canada*. Paris: OECD
 - (1997) *OECD Economic Surveys 1996-97: Canada*. Paris: OECD
- Sharpe, Andrew (2003) "Why Are Americans More Productive Than Canadians?" Centre for the Study of Living Standards. Available online: www.csls.ca
- Statistics Canada:
- (2005) *Spending Patterns in Canada 2003*. Catalogue no. 62-202-XIE.
 - (2005) CANSIM II: Table 0510001 (Population)
 - (2005) CANSIM II: Table 3850001 (Revenue & Expenditures)
 - (2004) CANSIM II: Table 3840012 (Personal Income)
 - (2004) CANSIM II: Table 3840002 (GDP – Expenditure-based at current prices)
 - (2004) CANSIM II: Table 3830010 (SNA Average number of hours worked)
 - (2004) CANSIM II: Table 4780014 (Total public and private elementary school expenditure)
 - (2004) CANSIM II: Table 4780008 (Total university expenditure)
 - (2004) CANSIM II: V3840163 (GDP)
 - (2004) CANSIM II: V2366442 (Canadian Labour force Survey)
 - (2004) CANSIM II: V2533321 (Average hours worked)
 - (2001) CANSIM II: Table 4780004 (Postsecondary non-university education expenditure)
 - (2001) CANSIM II: Table 4780007 (Total university expenditure)
- The Strategic Counsel (2004) *Assessing the Experience of Successful Innovative Firms in Ontario*, Research conducted for the Institute for Competitiveness & Prosperity. Available online: www.competeprosper.ca
- Task Force on Competitiveness, Productivity and Economic Progress:
- First Annual Report, *Closing the prosperity gap*, November 2002
 - Second Annual Report, *Investing for prosperity*, November 2003
 - Third Annual Report, *Realizing our prosperity potential*, November 2004
 - Fourth Annual Report, *Rebalancing priorities for prosperity*, November 2005 Toronto: Institute for Competitiveness & Prosperity Available online: www.competeprosper.ca
- Thomson Financial Venture Economics (2005) "Statistics" Available online: www.ventureeconomics.com
- Thomson Macdonald (2005), "The Activity of American Venture Capital Funds in the Ontario Market: Issues, Trends and Prospects," a report prepared for the Institute for Competitiveness and Prosperity. Available online: www.competeprosper.ca
- United States, Department of Commerce, Bureau of Economic Analysis (2005) *Regional Economic Accounts*. Available online: www.bea.gov
- United States, Department of Commerce, Census Bureau (2004) *Statistical Abstract of the United States*. Available online : www.census.gov
- United States, Department of Education (2004) *Digest of Education Statistics 1995-2004*. Available online: www.nces.ed.gov
- United States, Department of Labor, Bureau of Labor Statistics (2005) *Current Population Survey, and Occupational Employment Statistics*. Available online : www.bls.gov

Previous publications

Institute for Competitiveness & Prosperity

Working Papers

Working Paper 1 – *A View of Ontario: Ontario's Clusters of Innovation*, April 2002

Working Paper 2 – *Measuring Ontario's Prosperity: Developing an Economic Indicator System*, August 2002

Working Paper 3 – *Missing opportunities: Ontario's urban prosperity gap*, June 2003

Working Paper 4 – *Striking similarities: Attitudes and Ontario's prosperity gap*, September 2003

Working Paper 5 – *Strengthening Structures: Upgrading specialized support and competitive pressure*, July 2004

Working Paper 6 – *Reinventing innovation and commercialization policy in Ontario*, October 2004

Working Paper 7 – *Taxing smarter for prosperity*, March 2005

Working Paper 8 – *Fixing fiscal federalism*, October 2005

Reports on Canada

Partnering for investment in Canada's prosperity, January 2004

Realizing Canada's prosperity potential, January 2005

Task Force on Competitiveness, Productivity and Economic Progress

First Annual Report – *Closing the prosperity gap*, November 2002

Second Annual Report – *Investing for prosperity*, November 2003

Third Annual Report – *Realizing our prosperity potential*, November 2004

Fourth Annual Report – *Rebalancing priorities for prosperity*, November 2005

Should you wish to obtain a copy of one of the previous publications, please visit www.competeprospers.ca for an electronic version or contact the Institute for Competitiveness & Prosperity directly for a hard copy.

