Realizing our prosperity potential →

Third Annual Report, November 2004
Task Force on Competitiveness, Productivity and Economic Progress
Task Force Mandate

To measure and monitor Ontario’s competitiveness, productivity and economic progress compared to other provinces and the US states and to report to the public on a regular basis.
Task Force Members

Roger L. Martin, Chairman
James L. Balsillie, Research in Motion
Timothy D. Dattels, Newbridge Capital
Lisa de Wilde
David Folk, Jefferson Partners
Suzanne Fortier, Queen’s University
Gordon Homer
David Johnston, University of Waterloo
David Keddie, National Compressed Air and National Drilling Systems
Mark Mullins, MSG Hedge Corporation
William Orovan, McMaster Medical School
Timothy H. Penner, Procter & Gamble
Daniel Trefler, University of Toronto
Realizing Our Prosperity Potential

I. Productivity and the Prosperity Gap

II. Under Investment and the Prosperity Gap

III. Inappropriate Motivations and Investments

IV. Strengthened Market Structures and Investment

V. Recommendations for Action in Realizing our Prosperity Potential
Productivity and the prosperity gap
Ontario Performs Well Internationally

GDP per capita C$ (2003)

United States $45,681
Ontario $40,317
Canada $38,495
Switzerland $36,442
Austria $36,183
Netherlands $35,507
Australia $35,182
Belgium $34,281
Japan $33,998

Source: World Economic Forum, Institute for Competitiveness & Prosperity
Ontario Performs Well Internationally

GDP per capita C$ (2001)

- Ontario: $38,068
- Lombardia: $35,191
- Baden-Württemberg: $30,609
- Rhône-Alpes: $28,596
- Cataluña: $26,978

Source: Statistics Canada, Eurostat
Ontario Ranks 13th Among 16 in Its Peer Group

GDP per capita for Peer States and Provinces C$ (2003)

Massachusetts
New York
New Jersey
California
Illinois
Virginia
Georgia
Texas
Median
North Carolina
Pennsylvania
Ohio
Michigan
Ontario
Indiana
Florida
Quebec

Note: Estimated 2003 peer state and median GDP per capita; actual 2003 Ontario and Quebec GDP per capita used.
Source: Statistics Canada; US Department of Commerce – Bureau of Economic Analysis; OECD PPP indices; Institute for Competitiveness & Prosperity analysis
The Prosperity Gap Has Narrowed

<table>
<thead>
<tr>
<th>Year</th>
<th>'81</th>
<th>'83</th>
<th>'88</th>
<th>'93</th>
<th>'98</th>
<th>'99</th>
<th>'00</th>
<th>'01</th>
<th>'02</th>
<th>'03 est</th>
<th>'03 est</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario Rank</td>
<td>8th</td>
<td>9th</td>
<td>14th</td>
<td>14th</td>
<td>13th</td>
<td>14th</td>
<td>13th</td>
<td>11th</td>
<td>13th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosperity Lead/Gap</td>
<td>$228</td>
<td>$2</td>
<td>$3,225</td>
<td>$3,430</td>
<td>$3,291</td>
<td>$3,061</td>
<td>$3,785</td>
<td>$4,811</td>
<td>$2,280</td>
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</tbody>
</table>

Source: Institute for Competitiveness & Prosperity based on Statistics Canada; Bureau of Economic Analysis, Regional Accounts; OECD PPP indices
### Elements of GDP per capita

<table>
<thead>
<tr>
<th>Prosperity</th>
<th>Profile</th>
<th>Utilization</th>
<th>Intensity</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita</td>
<td>Potential labour force</td>
<td>Jobs</td>
<td>Hours Worked</td>
<td>GDP</td>
</tr>
<tr>
<td>=</td>
<td>Population</td>
<td>Potential labour force</td>
<td>Jobs</td>
<td>Hours Worked</td>
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<td></td>
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</tr>
</tbody>
</table>

- **Prosperity**
  - Potential labour force
  - Population

- **Profile**
  - Participation
  - Employment

- **Utilization**
  - Jobs

- **Intensity**
  - Hours Worked

- **Productivity**
  - Cluster mix
  - Cluster content
  - Cluster strength
  - Urbanization
  - Education
  - Capital investment
  - Effectiveness

Productivity Still Drives Ontario’s Prosperity Gap

Elements of GDP per capita C$ (2003)

$43,378 $987 $1,321 $145 $1,906 $489 $1,748 $3,765 $907 $808 $428 $40,317

$2,200

Prosperity Gap
$3,061 or 7.1% of median GDP per capita

$-5,261

Note: median of 16 peer jurisdictions
Source: Statistics Canada; Bureau of Economic Analysis; Institute for Competitiveness & Prosperity analysis
Under investment and the prosperity gap →
AIMS Drives Innovation and Upgrading For Prosperity

Source: Institute for Competitiveness & Prosperity
Ontarians Have Positive Attitudes

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”

Ontario’s Education Spending Lags US Levels


<table>
<thead>
<tr>
<th>Grade</th>
<th>Education Per Capita</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12</td>
<td>86</td>
<td>49</td>
</tr>
<tr>
<td>College</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>K-12</td>
<td>85</td>
<td>57</td>
</tr>
<tr>
<td>College</td>
<td></td>
<td>68</td>
</tr>
<tr>
<td>University</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ontario Graduates Fewer Master’s and PhDs

Degrees Conferred per Thousand Population, 1999-2000

- Total: Ontario 5.69, US 6.23
- Bachelor’s: Ontario 4.75, US 4.43
- Master’s: Ontario 0.82, US 1.64
- PhD: Ontario 0.12, US 0.16

Source: Statistics Canada Educational Databases; CANISM II; US Department of Education, National Center for Education Statistics
Ontario Under Invests in Machinery, Equipment and Software

Private Sector Machinery, Equipment and Software Investment

Source: Statistics Canada; US Department of Commerce, Bureau of Economic Analysis
Governments in Ontario Have Shifted from Investment to Consumption

**Consumption and Investment Expenditures per capita C$ (2002)**

- **1992**
  - Investment: **8,000 C$**
  - Consumption: **6,000 C$**
  - Investment/Consumption Ratio: 0.53
  - Change: -19%

- **2002**
  - Investment: **6,000 C$**
  - Consumption: **8,000 C$**
  - Investment/Consumption Ratio: 0.46
  - Change: +28%

- **1992**
  - Investment: **5,000 C$**
  - Consumption: **3,000 C$**
  - Investment/Consumption Ratio: 0.52
  - Change: +20%

- **2002**
  - Investment: **3,000 C$**
  - Consumption: **5,000 C$**
  - Investment/Consumption Ratio: 0.55
  - Change: +28%

Inappropriate motivations and investment
Ontario’s Tax Disadvantage Persisted in 2004

Marginal Effective Tax Burdens on Large Corporations

<table>
<thead>
<tr>
<th></th>
<th>5 State Median</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital 2003</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Capital 2004</td>
<td>15.0</td>
<td>31.0</td>
</tr>
<tr>
<td>Capital 2003</td>
<td>16.1</td>
<td>27.9</td>
</tr>
<tr>
<td>Capital 2004</td>
<td>15.9</td>
<td>28.3</td>
</tr>
<tr>
<td>Labour 2003</td>
<td>16.1</td>
<td>27.9</td>
</tr>
<tr>
<td>Labour 2004</td>
<td>15.9</td>
<td>28.3</td>
</tr>
</tbody>
</table>

Note: US ranges are as follows: Tax on Capital, 2003: 13.3%-17.5%; 2004: 13.3%-17.5%; Taxes on Labour, 2003: 15.1%-19.6%; 2004: 14.6%-19.3%
Ontario Families Face High Marginal Tax Burdens

Marginal Effective Tax Rates for a Single Earner Couple* in Ontario, 2003

*Two Children Under Seven (Allowing for GST and Other Refundable Credits; Ontario Tax Reduction and Sales Tax Credit)

Strengthened market structures and investment
Ontario’s Under Performance Worsens in High Wage Clusters

Ontario vs. US Peer Median

Ontario wages exceed peer states

Ontario wages trail peer states

Source: Institute for Competitiveness & Prosperity, Institute for Strategy and Competitiveness, Statistics Canada
Effectiveness, Not Mix, Accounts for Ontario’s Under Performance in Traded Clusters

Average wages in traded clusters (C$)

US Peers, 2001: $56,790
Ontario's cluster mix advantage: +$1,145
Ontario's cluster effectiveness disadvantage: -$13,529
Ontario Actual, 2000: $44,406

Source: Institute for Competitiveness & Prosperity analysis, Institute for Strategy and Competitiveness, Statistics Canada
Ontario Performs Close to Median R&D, but has Lagged on Business Expenditure

Gross Expenditures on R&D as a % of GDP by Performing Sectors, 1997-2000

- Michigan
- Massachusetts
- California
- New Jersey
- Pennsylvania
- Quebec
- Illinois
- Ohio
- Median
- Virginia
- Ontario
- North Carolina
- New York
- Indiana
- Texas
- Florida
- Georgia

Source: Statistics Canada - Science, Innovation and Electronic Information Division; National Science Foundation
Ontario Clusters Trail in Patents Because of Effectiveness

US Patents per 10,000 Employees in Traded Clusters

- US Peers (Median): 17.73
- Ontario's cluster mix disadvantage: -0.32
- Ontario's cluster effectiveness disadvantage: -9.49
- Ontario Actual: 7.92

Structure of Pressure and Support Drives Firm Actions

Operations and strategies of firms

Cluster / Industry
“Heavy Machinery”
Firm Actions

Cluster / Industry
“Financial Services”
Firm Actions

Cluster / Industry
“Transportation & Logistics”
Firm Actions

Cluster / Industry
“Education & Knowledge Creation”
Firm Actions

Cluster / Industry
“Biopharmaceuticals”
Firm Actions

Cluster or industry-specific support and pressure

Specialized Support  ➔  Competitive Pressure

General Support
Canada Outperforms US on “General Support”

Air transport infrastructure quality
Overall infrastructure quality
Extent of bureaucratic red tape
Administrative burden for startups
Reliability of police services
Port infrastructure quality
Internet users per 10,000 people (2002)
Cell phones per 100 people (2002)
Quality of electricity supply
Efficiency of legal framework
Telephone/fax infrastructure quality
Railroad infrastructure development
Quality of math and science education
Judicial independence
Quality of public schools
Quality of the educational system

US Advantage

Canada Advantage

Source: Institute for Competitiveness & Prosperity analysis based on World Economic Forum
Canada Trails in "Specialized Support"

- Utility patents
- Venture capital availability
- Local availability of process machinery
- Quality of scientific research institutions
- Extent of collaboration among clusters
- Local supplier quantity
- Local availability of components and parts
- Local availability of specialized research and training services
- Quality of management schools
- University/industry research collaboration
- Ease of access to loans
- State of cluster development
- Local supplier quality
- Financial market sophistication
- Local equity market access
- Availability of scientists and engineers

Source: Institute for Competitiveness & Prosperity analysis based on World Economic Forum
Canada Trails in “Competitive Pressure”

Decentralization of corporate activity
Government procurement of advanced technology products
Sophistication of local buyers' products and processes
Effectiveness of antitrust policy
Intensity of local competition
Favouritism in decisions of government officials
Intellectual property protection
Prevalence of mergers and acquisitions
Laws relating to ICT
Extent of locally based competitors
Buyer sophistication
Cooperation in labour-employer relations
Foreign ownership restrictions
Business costs of corruption
Protection of minority shareholders' interests
Presence of demanding regulatory standards
Efficacy of corporate boards
Hidden trade barriers
Effectiveness of bankruptcy law
Cost of importing foreign equipment
Regulation of securities exchanges
Centralization of economic policymaking
Stringency of environmental regulations

US Advantage

Canada Advantage

Source: Institute for Competitiveness & Prosperity analysis based on World Economic Forum
Canada Trails in “Company Operations and Strategy”

- Extent of branding
- Value chain presence
- Nature of competitive advantage
- Breadth of international markets
- Company spending on research development
- Capacity for innovation
- Extent of marketing
- Extent of staff training
- Production process sophistication
- Control of international distribution
- Extent of incentive compensation
- Willingness to delegate authority
- Degree of customer orientation
- Reliance on professional management
- Prevalence of foreign technology licensing
- Extent of regional sales

US Advantage
Canada Advantage

Source: Institute for Competitiveness & Prosperity analysis based on World Economic Forum
Under Performance in Specialized Support, Pressure, and Firm Actions

Firm Actions
Canada under performs US by 38%

Specialized Support
Canada under performs US by 38%

Competitive Pressure
Canada under performs US by 22%

General Support
Canada out performs US by 32%

Recommendations for action in building our capacity for innovation and upgrading
Cycle For Prosperity Can Be Virtuous or Vicious

- Attitudes
- Motivations
- Structures

Investment for Competitiveness

Investment capacity

Prosperity

Productivity
Summary of Recommendations - Governments

• Engage Ontarians in an ongoing dialogue about competitiveness
  – Annual message by Premier

• Increase commitment to investments
  – Achieve Investment: Consumption ratio of 55 cents by 2012

• Invest in upgrading Ontarians’ capabilities
  – Collaborate with federal government to integrate qualified immigrants
  – Match peer state per student college and university funding by 2012
  – Halve Ontario’s shortfall in graduate degrees granted by 2012
  – Halve Ontario’s shortfall in business degrees granted by 2012

• Reduce taxes that hinder motivations to invest in machinery, equipment and software
  – Eliminate gap in marginal effective tax burden on capital by 2012

• Strengthen structures of competitive pressure
  – Match peer state competitive intensity in at least 15 of 20 highest-employment clusters by 2012
  – Strengthen procurement practices by Ontario Government, its agencies, and ten largest municipalities

• Ensure policies are driven by facts
  – Central agencies to put procedures in place
Summary of Recommendations- Businesses

• Increase investments for productivity and innovative capacity
  – Major business groups, such as Ontario Chamber of Commerce to set capital investment as priority for membership communication and policy proposals

• Raise investment in human capital
  – Major business groups, such as Ontario Chamber of Commerce to establish significance of managerial educational achievement
  – Professional standards and accreditation organizations improve processes

• Collaborate to strengthen structures of specialized support locally
  – Local business and academic leaders to implement initiatives for identifying needs for localized specialized support in skills and R&D

• Seek out the most sophisticated customers
  – Major business groups, such as Ontario Chamber of Commerce to support and encourage businesses to seek out sophisticated customers
Summary of Recommendations - Individuals

• Invest more in education
  – Match peer states’ attitudes towards educational achievement advice for young people
  – Halve the gap versus peer states in donations per capita to educational institutions

• Be more demanding and sophisticated consumers
  – Institute for Competitiveness & Prosperity to develop measurement approach
All Stakeholders Have a Role in Realizing Our Prosperity Potential