Closing the prosperity gap

First Annual Report, November 2002

Task Force on Competitiveness, Productivity and Economic Progress
The Task Force Mandate

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, Goldman Sachs
Lisa de Wilde
David Folk, Jefferson Partners
Suzanne Fortier, Queen’s University
Gordon Homer, Scotia Capital
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
Belinda Stronach, Magna International
Daniel Trefler, University of Toronto
Overview of Annual Report

• Closing the Prosperity Gap
• Productivity for Prosperity
• AIMS for Opportunities
• Actions for Productivity and Prosperity
Ontario Performs Well Internationally

GDP per Capita (2000) CDN$

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP per Capita (2000) CDN$</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$43,099</td>
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<tr>
<td>Ontario</td>
<td>$36,808</td>
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<tr>
<td>Norway</td>
<td>$36,501</td>
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<tr>
<td>Switzerland</td>
<td>$36,467</td>
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<tr>
<td>Ireland</td>
<td>$35,301</td>
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<tr>
<td>Denmark</td>
<td>$35,164</td>
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<tr>
<td>Canada</td>
<td>$33,878</td>
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<tr>
<td>Netherlands</td>
<td>$33,682</td>
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<td>Austria</td>
<td>$32,671</td>
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Source: OECD Main Accounts, National Data, Statistics Canada
Ontario Out-Performs the Four Motors

GDP per Capita (1999) CDN$

- **Ontario**: $35,173
- **Lombardia (Italy)**: $34,460
- **Baden-Württemberg (Germany)**: $30,351
- **Rhône-Alpes (France)**: $25,927
- **Cataluña (Spain)**: $25,452

Source: Statistics Canada; Eurostat
Ontario Ranks 14th Among Its Peer Group

GDP per Capita for Select States and Province (2000) CDN$

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

GDP per Capita (thousands)

Source: Statistics Canada; CANSIM 1; US Department of Commerce, BEA (June 2002); OECD PPP indices; Institute for Competitiveness & Prosperity analysis

November 5, 2002 © 2002 Institute for Competitiveness and Prosperity
The Prosperity Gap is Widening

GDP per Capita Constant CDNS (2000) vs 20-year change

- Leader (+50%)
- Median (+54%)
- Ontario (+36%)

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Ontario Rank</td>
<td>11th</td>
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<td>14th</td>
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<tr>
<td>Prosperity Gap</td>
<td>$841</td>
<td>$1,792</td>
<td>$2,782</td>
<td>$2,793</td>
<td>$5,905</td>
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</table>

Source: OECD; Statistics Canada; US Department of Commerce, BEA; Institute for Competitiveness & Prosperity analysis
The Four Elements of GDP Per Capita

GDP Per Capita = 

Profile

Potential labour force
Population

Utilization

Jobs
Potential labour force

Intensity

Hours Worked
Jobs

Productivity

GDP
Hours Worked

- Cluster mix
- Cluster content
- Urbanization
- Effectiveness

### Mix of Traded Clusters

#### Upstream Materials and Products
- Metals and Materials
  - Construction Materials
  - Metal Manufacturing
- Forest Products
  - Forest Products
- Petroleum/Chemicals
  - Oil and Gas
  - Chemical Products
  - Plastics
- Semiconductors/Computer
  - Information Technology

#### Industrial and Supporting Functions
- Multiple Business
  - Education and Knowledge Creation
  - Business Services
  - Heavy Machinery
  - Financial Services
  - Motor Driven Products
  - Prefabricated Enclosures
  - Production Technology
  - Analytical Instruments
  - Heavy Construction Services
- Transportation and Logistics
  - Automotive
  - Distribution Services
  - Transportation and Logistics
- Power
  - Power Generation
  - Power Transmission and Distribution
- Office
  - Publishing and Printing
- Telecommunications
  - Communications Equipment
- Defense
  - Aerospace Engines
  - Aerospace Vehicles and Defense

#### Final Consumption Goods and Services
- Food/Beverages
  - Agricultural Products
  - Processed Foods
  - Fishing and Fishing Products
- Housing/Household
  - Building Fixtures, Equipment & Services
  - Lighting and Electrical Equipment
  - Furniture
- Textiles/Apparel
  - Textiles
  - Apparel
  - Footwear
- Health Care
  - Medical Devices
  - Pharmaceuticals and Biotechnology
- Personal
  - Leather and Sporting Goods
  - Jewelry and Precious Metals
  - Tobacco
- Entertainment/Leisure
  - Entertainment
  - Hospitality and Tourism

Economics of Traded Clusters

- Share of Employment:
  - Traded Clusters: 32%
  - Local Industries: 67%
  - Natural Resources: 1%

- Share of Income:
  - Traded Clusters: 43%
  - Local Industries: 56%
  - Natural Resources: 1%

- Average Wage ($US thousands):
  - Traded Clusters: $42
  - Local Industries: $31
  - Natural Resources: $26

- Patents per 10,000 employees:
  - Traded Clusters: 20.48
  - Local Industries: 1.38
  - Natural Resources: 6.40

Components of the Financial Services Cluster

- Related Services
- Printing Services
- Real Estate
  Investment
- Securities
  Services
- Risk Capital
  Providers
- Investment
  Funds
- Health Plans
- Leasing
- Information
  Providers
- Professional
  Services
- Insurance
  Products
- Risk Capital
  Providers
- Computer &
  Communication Services

Urbanization and Productivity

Per cent of Population in Urban Areas vs. Labour Productivity, 1997

Productivity Key to Prosperity Gap

Properity Gap
$5,905 or 13.8% of median GDP/capita

Profile
- $863
+ $125
+ $974

Utilization
- $405

Intensity
+ $998

Mix of Clusters

Urbanization
- $3,210

Effectiveness
- $3,524

Median GDP per capita
$42,713

Ontario's current GDP/capita (86.2% of median)
$36,808

Source: Institute for Competitiveness and Prosperity
Productivity and Wages

Wages vs. Productivity
Ontario and Selected North American Jurisdictions

Average Annual Wage (ooo's) (2000 Cdn$)

Relative Labour Productivity (Ontario = 100)


R² = 0.8808
AIMS for Opportunities

Factors driving innovation and upgrading to strengthen the elements and generate prosperity

- Attitudes
- Structures
- Investment
- Motivations
- Productivity
- Intensity
- Utilization
- Profile
- GDP/Capita

Source: Institute for Competitiveness and Prosperity
AIMS - Attitudes

Factors driving innovation and upgrading

- Aspirations
- Competitiveness
- Entrepreneurship
- Creativity

Source: Institute for Competitiveness and Prosperity
Aspirations, Competitiveness and Prosperity

Aspirations and Goals

- National competitiveness
- Sustainable advantage over local competition
- Primarily in home country
- Broad participation
- Serving most easily satisfied customers

Incompatible with Global Competitiveness
- Replication with low cost labour / raw materials
- Minimal R&D
- Weak branding

Compatible with Global Competitiveness
- Global competitiveness
- Sustainable advantage over global competition
- Globally in focused product niche
- Serving demanding customers at home and abroad
- Unique product/process
- High R&D
- Global distribution
- Branding

Where to Play

- Globally in focused product niche
- Serving demanding customers at home and abroad

How to Win

- Unique product/process
- High R&D
- Global distribution
- Branding
Key Florida/Gertler Results on Creativity

Ontario cities rank well on “melting pot/mosaic” and “bohemian” indices – compared to similar-sized US cities

Most Ontario cities rank near top in melting pot/mosaic index

Bohemian results vary more by city size:
- Toronto 4th; Ottawa-Hull near top quartile
- Kitchener, London in top quartile for their peer group
- Hamilton, St Catharines-Niagara, Oshawa closer to middle of pack
- Windsor, Thunder Bay, Sudbury below average for cities of their size

Task Force conclusion: Ontario has the creative class necessary to compete; but aspirations, entrepreneurship, and attitudes towards competitiveness may be holding us back
AIMS - Investments

Factors driving innovation and upgrading

- Education, particularly post secondary
- Machinery & equipment

Source: Institute for Competitiveness and Prosperity
Education Spending as % of GDP

Expenditure from all sources in Educational Institutions as Percentage of GDP
Ontario & US

Ontario

US

Primary School

Post-secondary Schools

% of GDP


Note: U.S. data for 1997-8 are preliminary data for public elementary and secondary schools and estimates for post secondary schools.

Ontario Lagging in Master’s Degrees

Degrees Per 1,000 Population (1997-8)

Per 1,000 population

- Ontario: 5.72
- US: 6.20
- Bachelor’s: 4.80
- Master’s: 4.42
- PhD: 0.13

Ontario Lagging in Business Degrees

BA, MA and PhD Degrees per Thousand Population
(Average 1990-1998)

Number of Degrees

<table>
<thead>
<tr>
<th>Field</th>
<th>Ontario</th>
<th>US</th>
<th>Science and Technology</th>
<th>All Other</th>
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</thead>
<tbody>
<tr>
<td>Business</td>
<td>0.60</td>
<td>1.25</td>
<td>1.52</td>
<td>3.60</td>
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<tr>
<td>Science and Technology</td>
<td>1.63</td>
<td></td>
<td>1.63</td>
<td>3.32</td>
</tr>
<tr>
<td>All Other</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Notes: US data based on the IPEDS "Completions" survey; Business includes "Business management and administrative services", "Marketing Operations/Marketing and Distribution" and "Consumer and Personal Services". The Canadian data include "Business", "Commerce" and "Management".

Spending per Capita Lagging US Peer Group

Per Capita Investments in Post-Secondary Education from all sources

Note: Ontario data is for all Universities and Colleges and is for total expenditure. The US data is calculated on the nearest equivalent, which is total current fund expenditure plus expenditure on additions to physical plant value.

Machinery & Equipment Investments Trail US

Investment Spending: Machinery & Equipment as % of GDP

Source: Statistics Canada, CANSIM II Table 384-00002, National Accounts; U.S. Bureau of Economic Analysis, National Accounts data; Institute for Competitiveness and Prosperity.
AIMS - Motivations

Factors driving innovation and upgrading

- Attitudes
- Structures
- Investment
- Motivations

• Tax rates
• Government policies and programs

Source: Institute for Competitiveness and Prosperity
Ontario’s Tax Rates Exceed Peer Group States

Average Marginal Effective Tax Rate on Labour

- Ontario: 59%
- Michigan: 59%
- Georgia: 57%
- Illinois: 55%
- California: 53%
- Massachusetts: 52%

Effective Rate

Average Marginal Effective Tax Rate on Capital

- Ontario: 31%
- Massachusetts: 26%
- California: 17%
- Illinois: 17%
- Michigan: 17%
- Georgia: 16%

Effective Rate

Note: Tax as a percentage of After Tax Labour Costs and Pre-Tax Capital Costs; all rates are net of subsidies such as healthcare, education, infrastructure, and R&D.

Source: Unpublished research by Jack Mintz and Sergio Traviza for the Institute for Competitiveness and Prosperity.
AIMS - Structures

Factors driving innovation and upgrading

- Healthy market structures, as evidenced by vibrant clusters of traded industries
- Other supporting structures

Source: Institute for Competitiveness and Prosperity
Four Sets of Recommendations

1) Heighten aspirations across Ontario

2) Increase productivity-enhancing investments for future prosperity

3) Adopt tax reforms that strengthen motivations

4) Strengthen market structures
Heighten Aspirations Across Ontario

Aspire to move from laggard to leader – achieving median prosperity by 2012 as first step:

- Individuals – aspirations for personal upgrading
- Firms – aspirations for global competitiveness
- Governments – aspirations to invigorate environment to encourage individuals and firms
- All – celebrate winners who set and meet high aspirations
Increase Productivity-Enhancing Investments

All stakeholders should increase productivity-enhancing investments, particularly post-secondary education:

- **Individuals** – commit to life-long learning, contribute to alma mater, support unfreezing of tuition
- **Firms** – continue partnerships with employees in formal training and education, support educational institutions financially
- **Provincial government** – long-term strategy for sustainable funding taking into account roles of individuals, firms, and other private institutions

Further study into role of business education and prosperity
Adopt Tax Reforms that Strengthen Motivations

- Provincial and federal governments to collaborate to explore breakthrough tax reform

- Assess how government spending promotes economic prosperity
Government Share of the Economy and Prosperity

GDP and Government Receipts, 1999

GDP per Capita

Government Revenue as % of GDP
Strengthen Market Structures

- Ontario government to continue work in exploring ways to strengthen Ontario cities

- Local governments and stakeholders to collaborate on revitalizing urban cores and attracting and retaining knowledge workers
Proposed Research Plan

**Attitudes:**
- Measure aspiration on global competitiveness and strength of entrepreneurship (Ontario versus Peer Group)
- Follow-up on Florida/Gertler work

**Investments:**
- Consumption/investment trade-offs
- Continue post-secondary research; expand into primary and secondary

**Motivations:**
- Regulatory processes

**Structures:**
- Intra-cluster assessment – “Hollowing out”
- Peer group best practices on urban governance
- Optimal size of government; spending structure choices of peer group