



# Immigrants as Innovators:

## How Immigrants Enhance Organizational Productivity and Innovation

**Dr. Michael Bloom**

**Vice-President, Organizational Effectiveness and Learning  
The Conference Board of Canada**

*Improving Corporate Productivity and Innovation 2011  
February 24, 2011 (Montreal, QC)*

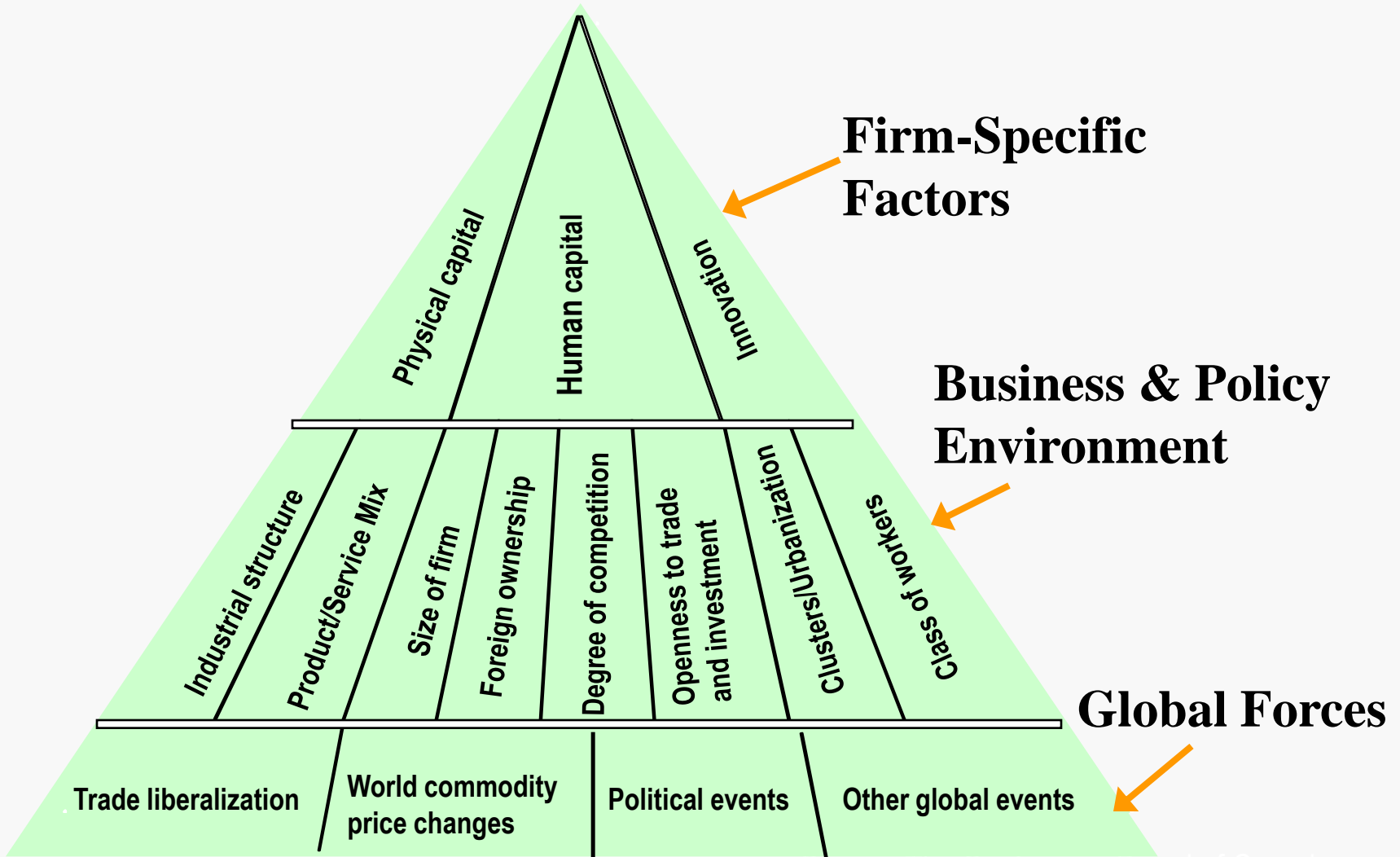


# Three Drivers of Organizational Productivity and Performance

- There are three key drivers of organization-level ('firm-level') productivity and performance:
  - Human capital
  - Innovation
  - *Physical* capital (machinery and equipment)



# Productivity Drivers



Source: The Conference Board of Canada

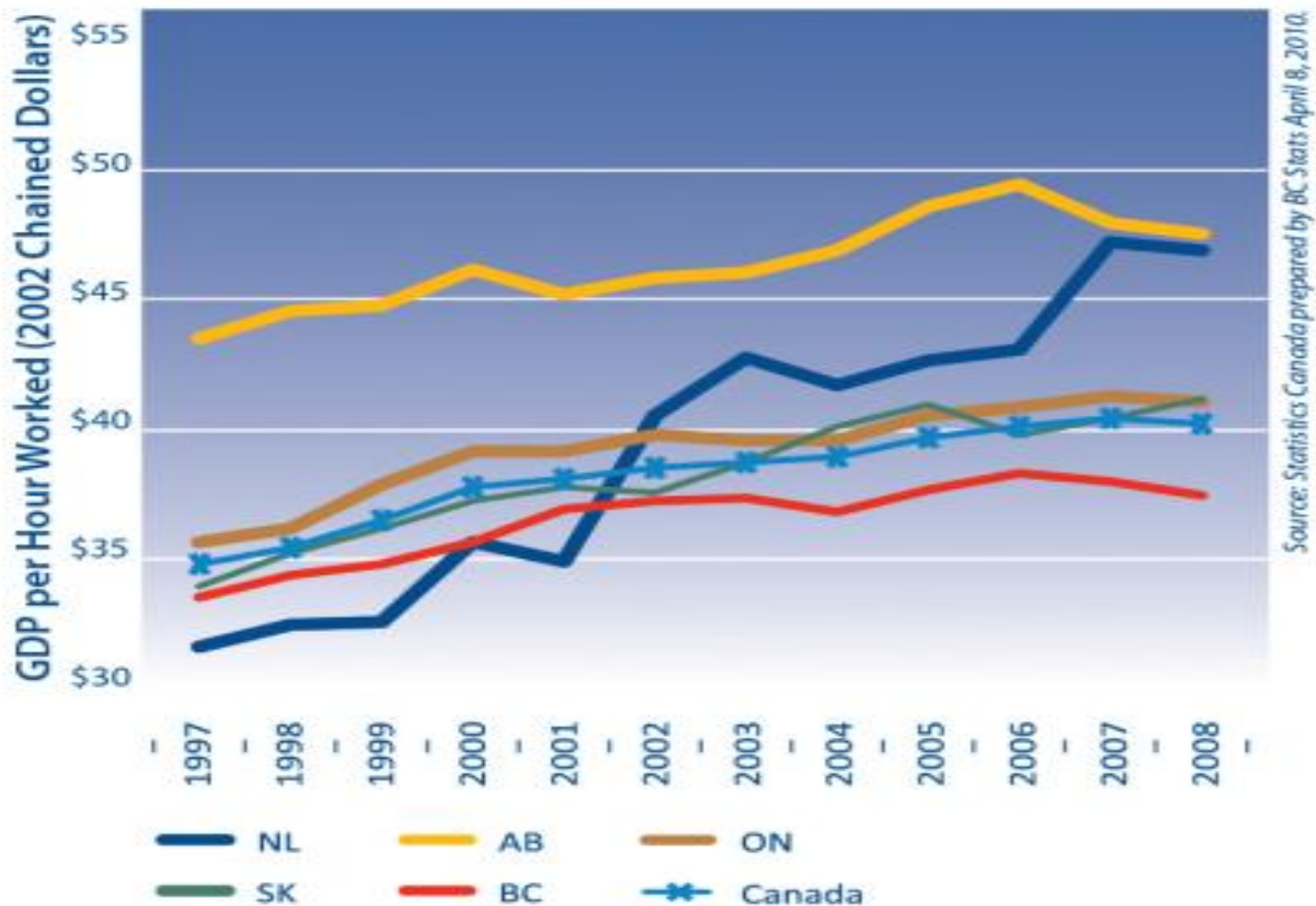


# Human Capital, Innovation & Productivity

- Canada's productivity is falling *relative* to other nations, partly due to labour and skills shortages, and partly due to our weak innovation performance—the two are inter-related.
- Using skills to bolster organization-level innovation is a vital component in future strategies to improve competitiveness.



# Improve Productivity for Growth



# Skills Shortages

- We face serious skills shortages in the post-recession era—due to a combination of gaps, mismatches and obsolescence, as sectors and nature of work change, and rising demands as the economy grows.
- Skills shortages are a major part of the productivity and performance challenges facing us in the medium- to long-term—solving them is a big part of the solution.



# Immigrants Offer Talent for Success

- Skilled immigrants and international talent are an important part of the skills solution for Ontario—and Canada.



# Immigrants' Importance

Immigrants and international talent have the potential to boost our economy:

- Add *skilled workers* to our labour force.
- Bring *advanced skills*, and a strong *desire to succeed*.
- Enrich our *global economic perspective*.
- Provide *connections to foreign markets*.
- **Stimulate *innovation and creativity***.



# Immigrants' Importance

“Newcomers to Canada bring skills, including language and cultural skills, knowledge and networks that can help us reach out to emerging economic giants like China and India, as well as emerging immigrant markets at home...”

Gord Nixon, President and CEO, RBC



# Business Impact of Diversity

Businesses with a strong commitment to diversity *outperform* their peers:

- Higher net profits, +2.7% per year.
- Higher median returns on equity, 2.5 - 6.0% per year.

(Source: Slater, Weigand & Zwirlein, “The Business Case for Commitment to Diversity.” *Business Horizons*, 2008, 51.)



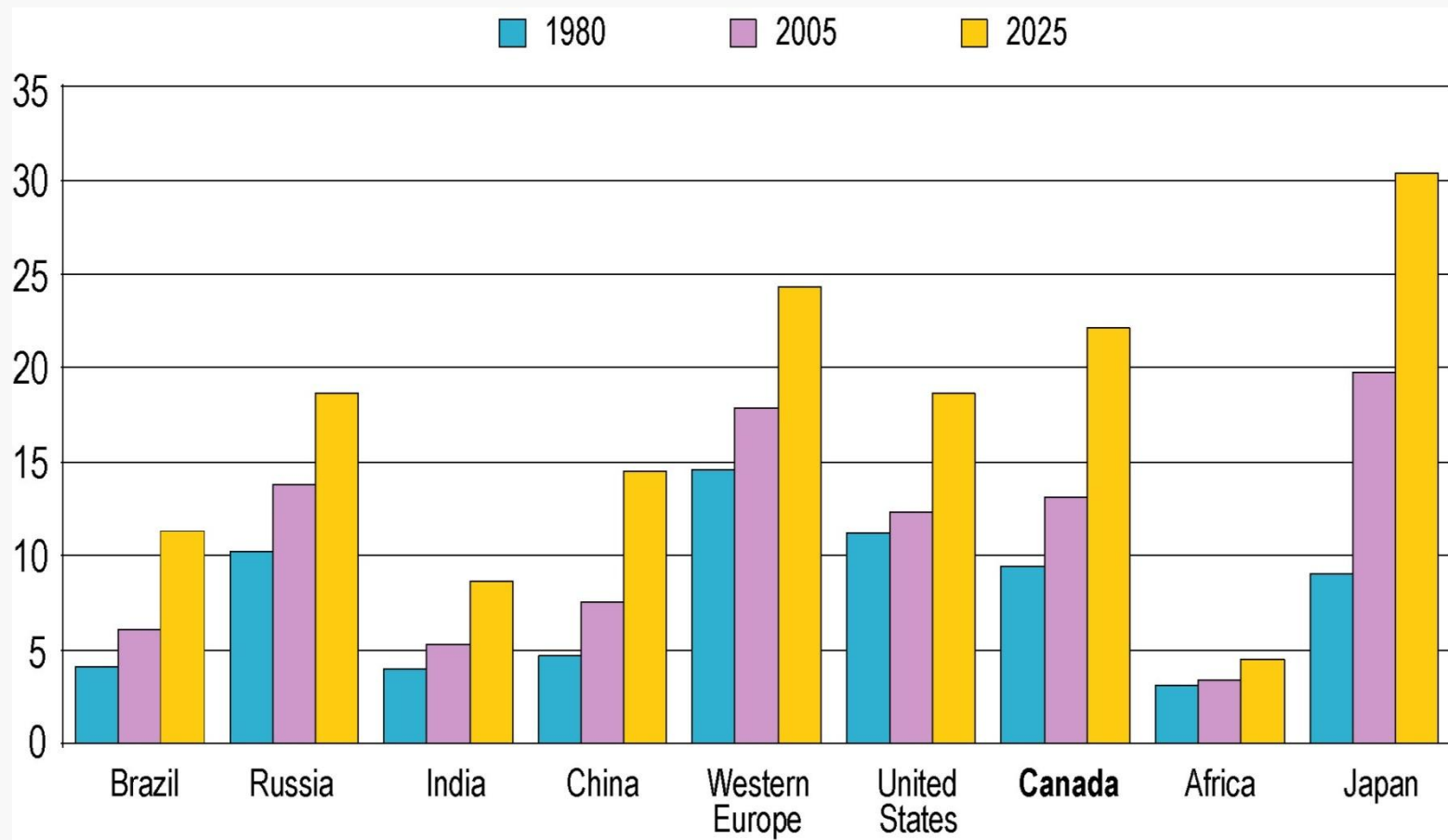
# Why Focus on Immigration?

We cannot afford not to....

- Aging population and impending skills shortages.
- Rapidly changing, ethno-culturally diverse population.
- Fierce global competition for talent.
- Rapid pace of scientific and technological change.



# Population, Aged 65 and Over (per cent, share of population)



Sources: United Nations; Statistics Canada; and The Conference Board of Canada.



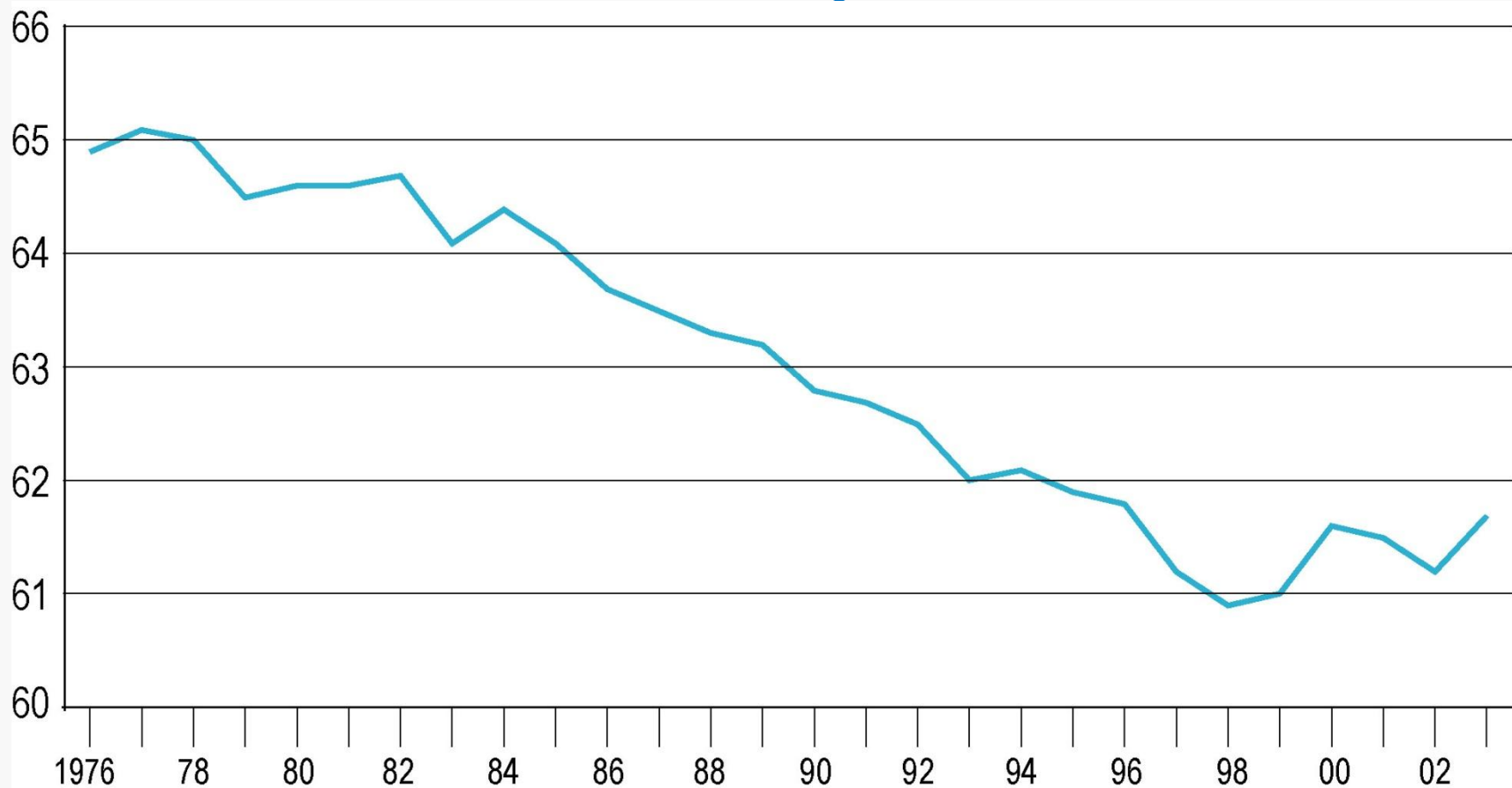
# Median Age: OECD

	1980	1990	2000	2010	2020	2050
Canada	29.2	32.8	36.8	40.0	41.6	42.6
United States	30.1	32.8	35.8	37.8	39.0	42.1
Japan	32.6	37.4	41.2	43.8	46.9	49.0
Germany	36.4	37.7	40.0	44.1	46.9	48.4
France	32.5	34.7	37.6	40.3	42.3	43.9
Italy	34.0	37.4	40.6	44.9	49.0	53.2
United Kingdom	34.6	36.1	38.2	41.2	42.7	44.5
Czech Republic	33.0	35.2	37.5	40.4	44.7	53.3
Greece	34.2	36.1	39.4	43.0	46.6	52.5
Portugal	29.1	34.5	37.3	40.5	44.5	50.0
Spain	30.3	33.9	37.9	42.3	46.9	54.3

Source: United Nations Population Division, *World Population Prospects: The 1998 Revision*



# Average Retirement Age, Canada (years)



Source: Statistics Canada.



# Ave. Retirement Age, Canada, (yrs.)

Year	Private Sector	Public Sector	All (incl. self-employed, home workers)
2003	61.9	59.3	61.7
2004	61.6	59.1	61.8
2005	62.0	59.2	61.4
2006	61.8	59.5	61.5
2007	62.0	59.3	61.6
2008	62.0	59.6	61.4
2009	62.4	60.1	61.9
2010	62.8	60.1	62.1
<b>Overall rise</b>	<b>0.9</b>	<b>0.8</b>	<b>0.4</b>



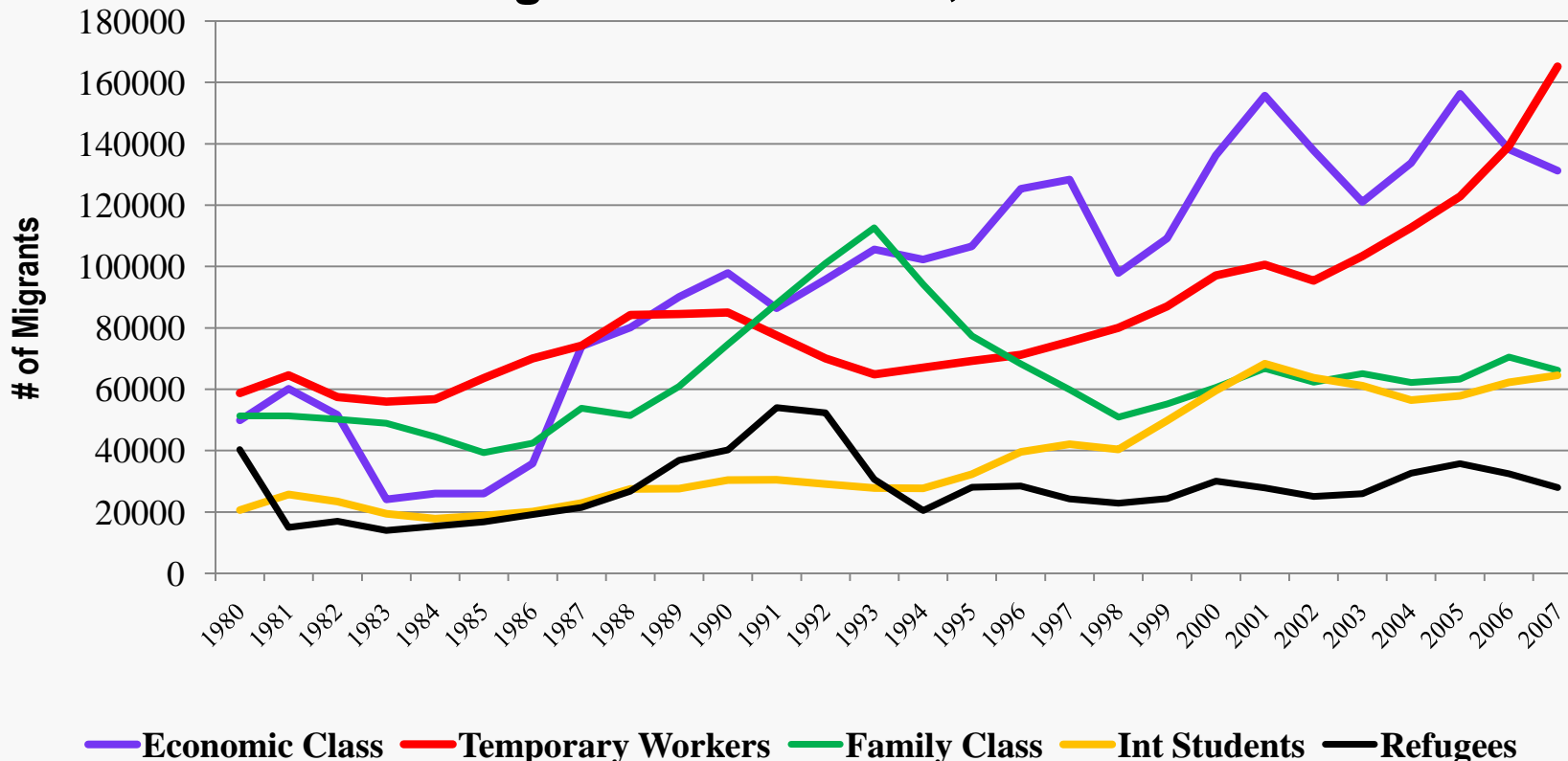
# Will Immigration Come to the Rescue?

- Forecast: assumes over 300,000 immigrants into Canada annually after 2014.
- Immigration will peak at about 353,000 by 2025.
- Immigration more focused on job skills, education and ability to invest.
- But: Canada will have to compete with other countries for immigrants.



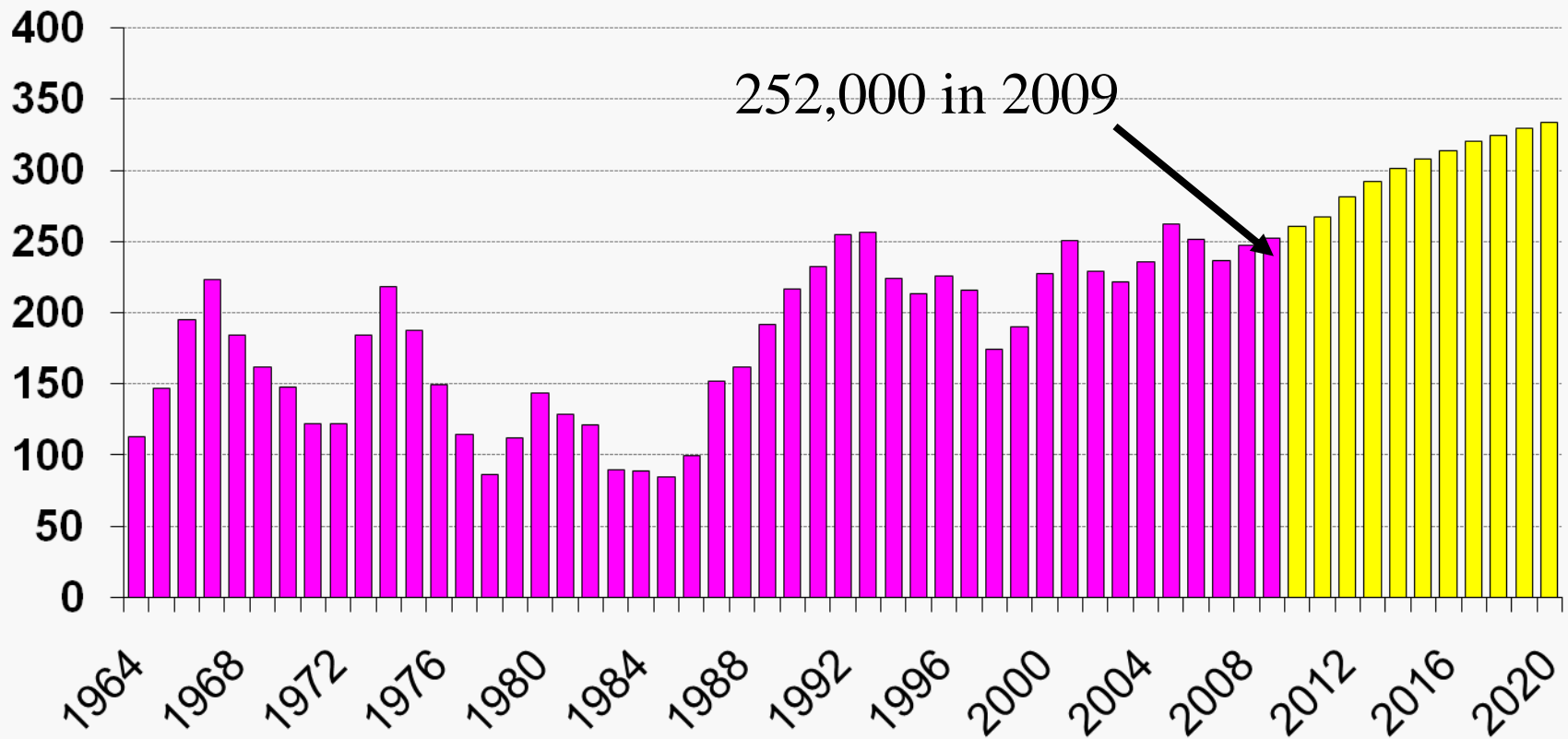
# Shifting Immigration Trends

## Main Components of Permanent and Temporary Migration to Canada, 1980 - 2007



# International Immigration

## Canada 1964–2020 (000s)



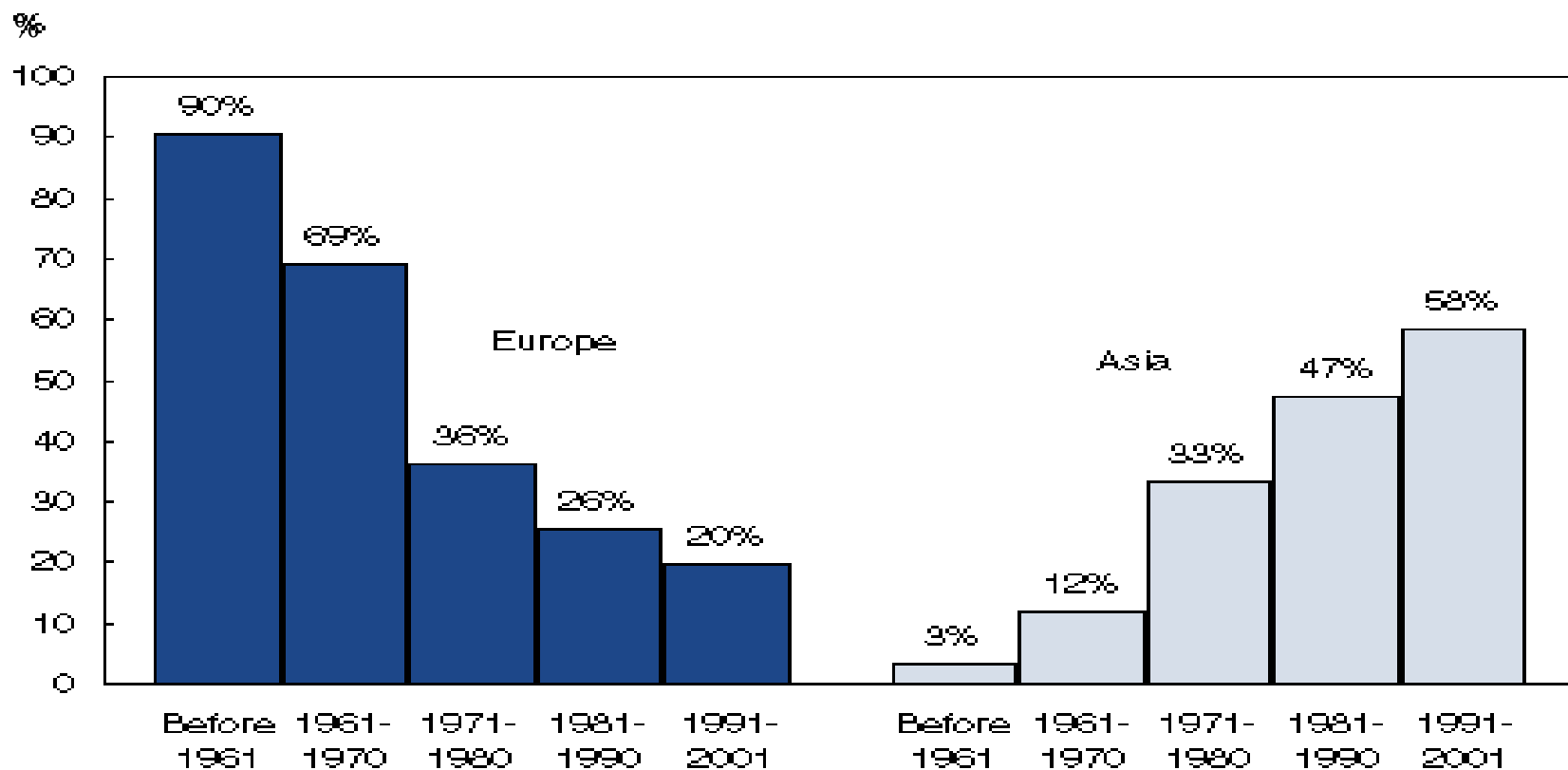
# Key Facts about Immigrants

- 250K annually (over 350K by 2025)
- 2001-09 immigration was over 60% of Canada's pop. growth (46% in 1990-95).
- By 2030 it will account for 100 per cent of *net* growth.
- Asia has replaced Europe as main source: top five countries: China, India, Philippines, Pakistan, Korea.



# Immigrants Born in Europe & Asia, by Period of Immigration

Source: Census 2001, Statistics Canada



# Immigrants in Canada's Workforce

- 18 per cent of employees in 2009 were new Canadians.

(Conference Board, Learning and Development Outlook, 2009)

- 65 per cent of HR professionals indicated their org. had increased efforts to recruit and retain immigrants and foreign workers.

(Society for Human Resource Management and the Canadian Council of Human Resources, 2007)



# Recruiting Students as Employees and Immigrants

- 24 per cent of organizations attempted to recruit international students pursuing degrees in Canada.

(Society for Human Resource Management; Canadian Council of Human Resources, 2007)



# Immigration is Important in Closing the Skills Gap. Yet...

- Canadian organizations continue to *underutilize* the skills and talents of immigrants.
- About 60 per cent of immigrants do *not* work in occupational field they worked in before entry to Canada.



# Immigration is Important. Yet...

- In 2006, the unemployment rate among recent immigrants was 11.5%. It was 4.9% for the Canadian-born population

(Grant & Yang, 2009)

- In 2005, recent immigrant males earned \$0.63 for every \$1.00 earned by Canadian-born males, down from \$0.85 in 1980

(Hawthorne, 2008; Statistics Canada, 2006)



# Qualification & Credential Recognition

- In 2001, the est. economic cost to Canada of not recognizing the credentials and skills of Canadians (notably immigrants) was between \$4.1 - \$5.9 billion annually.
  - Conference Board, *Brain Drain* Report.
- The credential and income gaps continue – immigrants are not ‘catching up’ as they used to.



# Untapped Capacity: Immigrants as Innovators



# Worldwide Focus on Innovation



# Innovation

The Conference Board defines innovation as:

- *A process through which economic or social value is extracted from knowledge—through the creation, diffusion and transformation of ideas—to produce new or improved products or processes.*



# Four Types of Innovation

	<b>Incremental Improvement</b>	<b>Breakthrough Change</b>
<b>Products and Services</b>	Incremental improvements to products and services.	Breakthrough changes resulting in new products and services.
<b>Processes</b>	Incremental improvements to processes.	Breakthrough process changes resulting in new or fundamentally changed process and practices, usually resulting in major improvements in efficiency and effectiveness.



# Type 1: Breakthrough Change to Products and Services

- Originates from R&D or other forms of formal creative activity; can be in response to unarticulated, unmet customer needs.
- Often, but not exclusively, based on ideas for a new product or service stemming from research discoveries or other sources, leading through a development process to eventual commercialization of a *new or radically different product or service*.



# Examples of Breakthrough Changes to Products and Services

- Breakthrough products:
  - car; penicillin; Polaroid camera; laptop computer; Windows operating system; ATM machines; iPad.
- Breakthrough services:
  - Dentists (prof.), Internet, IBM one-stop tech service model; online shopping.



# Type 2: Breakthrough Change to Processes

- Based on fundamentally new (revolutionary) *methods* to produce, distribute and market products and services.
- They are comparatively rare—but can radically change *how* companies operate.
- Often ignored in assessments of corporate and national innovation performance.



# Examples of Breakthrough Changes to Processes

- Examples:
  - Assembly line automobile production; Lean Manufacturing, a process for greatly reducing waste; Six Sigma, a process for radically reducing error rates.



# Type 3: Incremental Improvement to Products or Services

- Adding value by improving existing products and services without fundamentally alteration.
- Incremental changes can be in response to evolving customer needs, or from ideas coming out of labs or elsewhere.
- *Most* product or service innovation is incremental in nature.



# Examples: Incremental Improvements to Prod. & Services

- Products: Microsoft's Windows 7; Apple's 2<sup>nd</sup> generation iPad; niche food products - e.g. ten kinds of tomato sauce.
- Services: online registration systems for PSE courses; 'spa' as a one-stop source of beauty care; same-day dry cleaning.



# Type 4: Incremental Improvement to Processes

- Based on improving existing business and management processes, including manufacturing production, marketing and administration, supply chains, communications, to achieve efficiency and performance gains.
- Most process improvements are incremental in nature.



# Examples: Incremental Improvements to Processes

- Incremental process improvements:
  - Adding technology to replace people in a part of the production cycle; reducing water usage in the production of food; ‘de-layering’ management levels to bring decision-makers closer to operations and customers; streamlined manufacturing process that reduce the number of steps.



# *Immigrants as Innovators: Boosting Canada's Global Competitiveness*

- CBoC research report, October, 2010
- Tests the proposition that immigrants are making Canada more competitive.
- Specifically, tests whether immigrants are enhancing competitiveness by increasing Canada's innovative capacity.



# Immigrants and Innovators



Immigrants tend to be:

- Risk takers;
- Entrepreneurial;
- Innovative thinkers;
- They bring new skills, knowledge and contacts.



# *Innovators* Research Objectives

1. Determine the extent to which immigrants are recognized as “individual” innovators.
2. Demonstrate the value of immigrant talent to Canadian businesses.
3. Understand the relationship between immigration and innovation at a national level.
4. Test whether the relationship is universal (i.e. across countries).



# As Individuals, how Innovative are Immigrants?

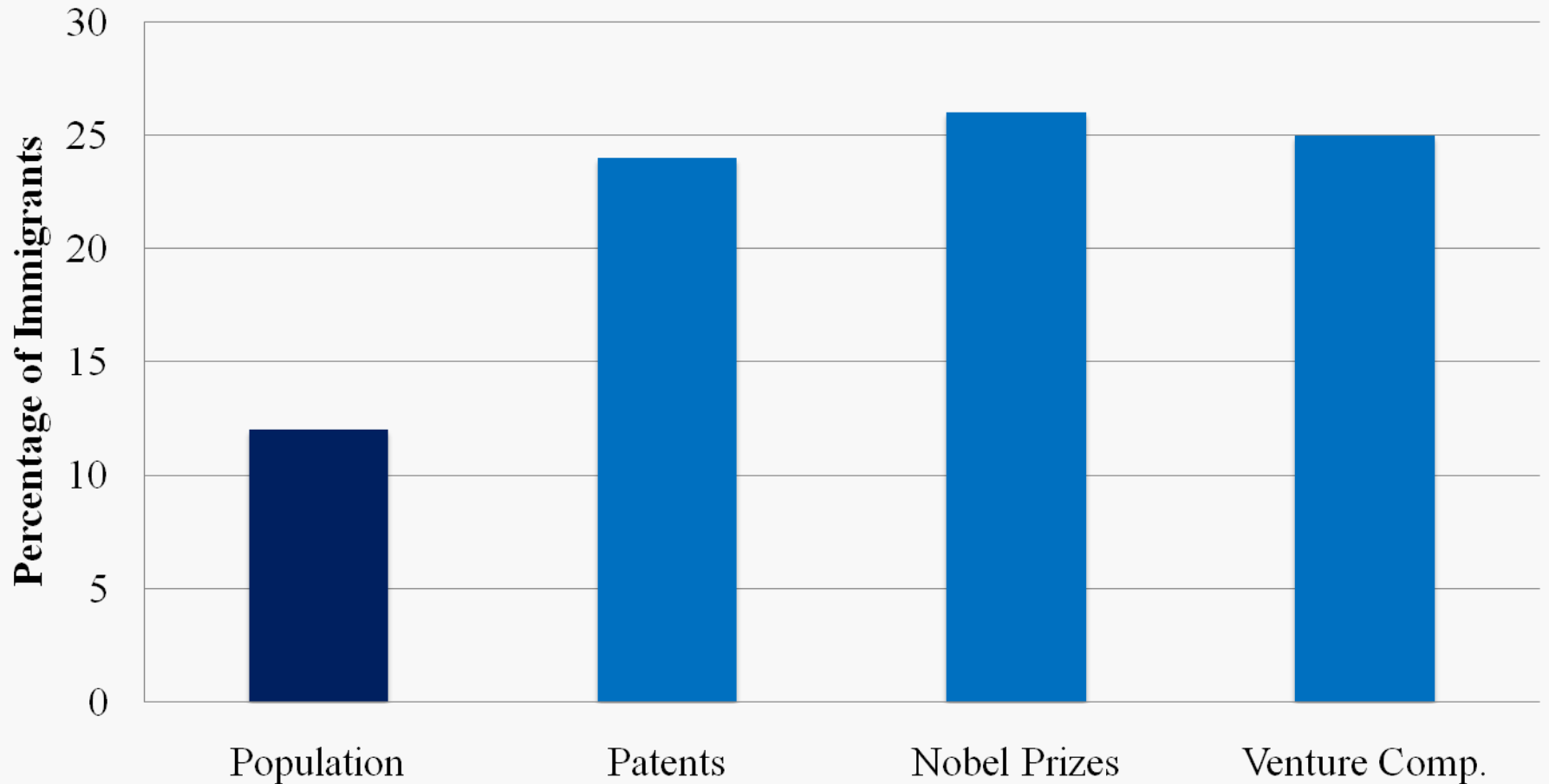


# Personal Qualities of Immigrants

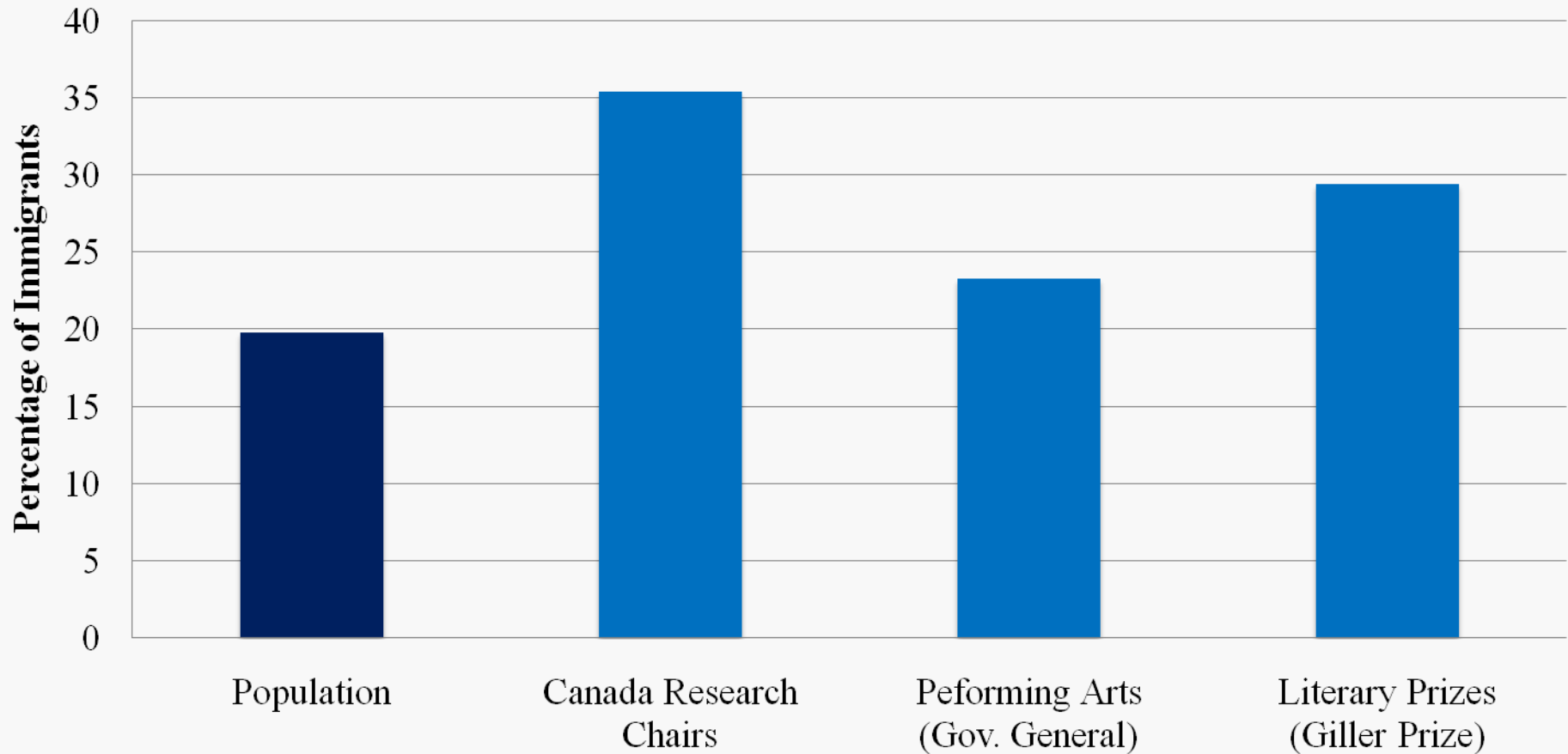
- High on *achievement* motivation—tend to innovate to achieve impact.
- High on *power* motivation—seek power and influence, take risk to achieve.
- A source of “*minority dissent*”—valuable because it reduces consensus-oriented ‘groupthink’ and enriches decisions to invest in innovation.



# Individual Achievements: S&T (U.S.)



# Individual Achievements Canada



# Innovation & the Creative Economy

- **Soft Innovation:** innovation in goods and services that primarily impact sensory perception, aesthetic or intellectual appeal.
- **Value to Canada:**
  - Culture sector is worth \$84.6 billion (7.4 per cent of GDP).
  - Directly or indirectly employs 1.1 million people.





# Do Immigrants Make Canadian Businesses More Innovative?



# Diversity Enriches Business Thinking

“Diversity is related to business success because it allows companies to “think outside the box” by *bringing previously excluded groups inside the box.*”

--Cedric Herring, 2009



# Case Study:

## Steam Whistle Brewing

- Toronto-based independent micro-brewery
- Founded 1998; by 2009: 126 employees and \$20 M+ annual sales
- Over half of management team and many employees are immigrants
- Need their high skills (e.g. brewmaster), knowledge of international tastes, expertise in techniques that enhance products, understanding of diverse tastes of Cdn. market.



# Case Study: Xerox Canada

- Toronto-based, U.S. owned sub with 3,800 workers, revenues of \$1.2 billion.
- Workforce diversity is a core value and ‘sustained pursuit’ as diversity is seen as essential to business success.
- Xerox Research Centre – 50 per cent of staff are immigrants from 35 countries.



# Xerox Canada

- Immigrants provide insights into markets and peoples' needs globally.
- Knowledge of local conditions helps refine products to operate in special circumstances (e.g. regular power failures).
- Xerox view: immigrants can add 'cost-effective, worldly design and marketing process'.



# Impact of Teams

## Positive Effects:

- Increased cooperation among workgroups
- Increased creativity
- Increased innovation

## Negative Effects:

- Decreased commitment to the organization
- More absenteeism and turnover
- Decreased employee satisfaction



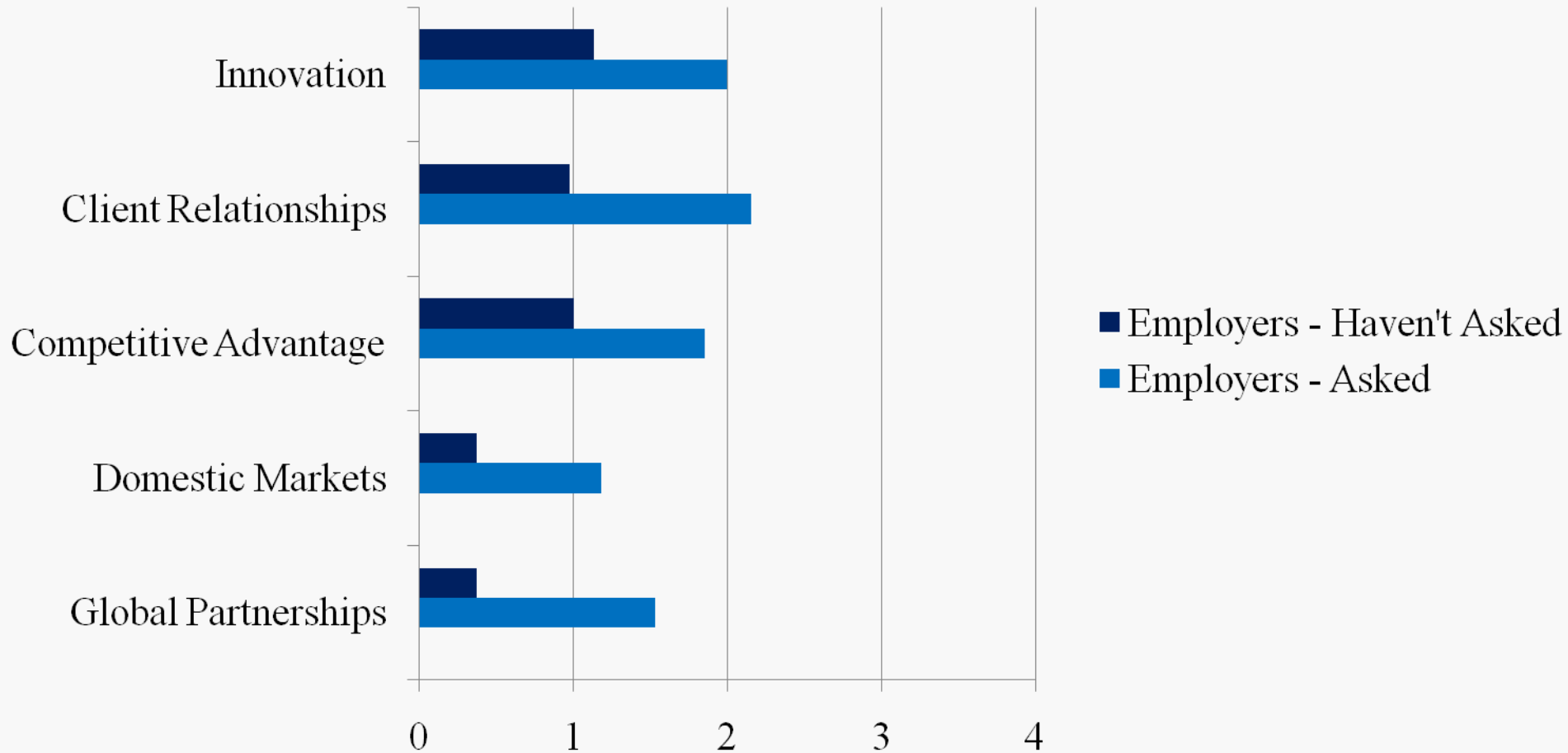
# Implications

- When *used to best effect*, immigrants are strong team performance enhancers.
- Diverse teams that *use* their variety of perspectives *outperform* non-diverse teams.
- However, diverse teams that *do not use* their diversity *perform worse* than non-diverse groups.



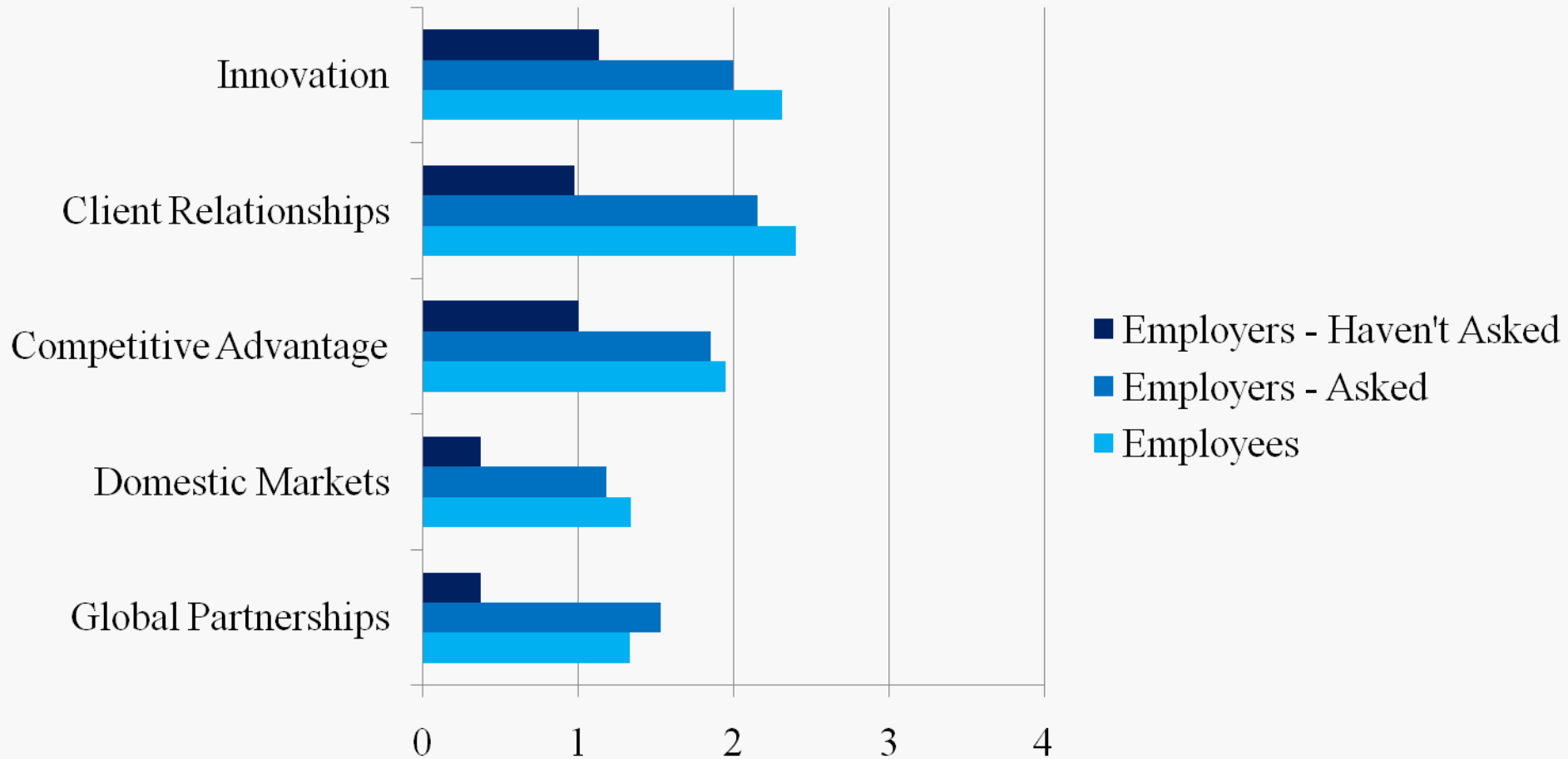
# Immigrants and Innovation

## Employers' Perspective

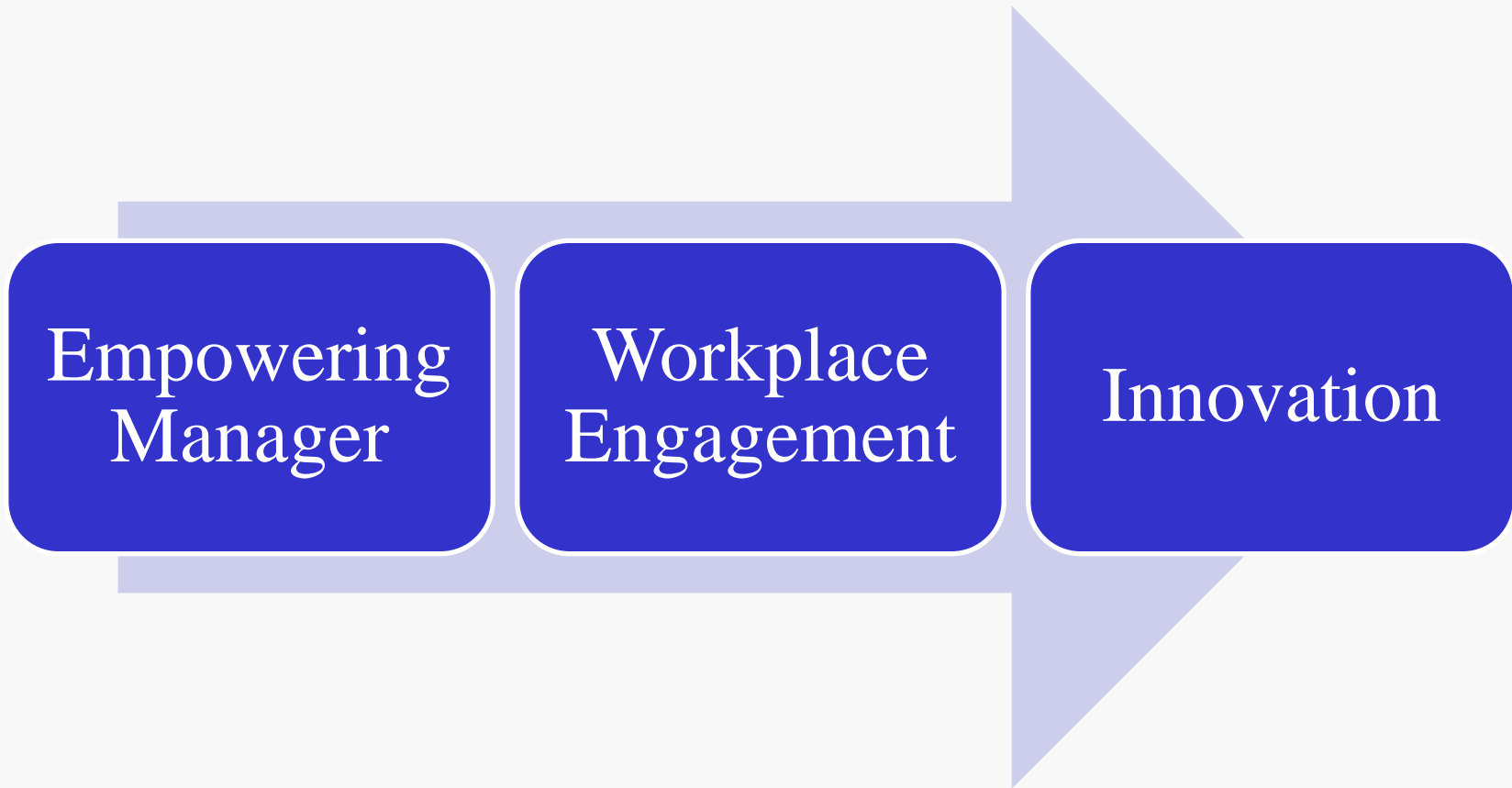


# Immigrants and Innovation

## Immigrant Employees' Perspective



# Employees' Perceptions



# Immigrants and Innovation

1. Create new businesses and employment opportunities in a region.
2. Adapt or market existing sales and services to a wider, diverse audience.
3. Market products internationally—linking to cultural interests etc.
4. Create new product packages for key markets, niche customer groups.



# How can Managers be Empowering?

1. Provide employees with avenues to ask questions and raise ideas.
2. Probe for talents, interests and connections.
3. Offer employees win-win choices.
4. Provide a rationale when issuing directives.



# How can Employers Maximize their Diversity Advantage?

- **Value Diversity**

Once diversity is seen as a valued characteristic in organizations, employees will begin to identify with each other not because of what they have in common, but because of their differences.



# How can Employers Maximize their Diversity Advantage?

- **Hire Immigrants at Every Level of the Organization**
- If employees believe their organization is committed to *promoting* immigrants they are more likely to respond positively to leadership and express more commitment and satisfaction in the organization.



# How can Employers Maximize their Diversity Advantage?

- **Match the Organization to the Clientele**
- 20 per cent of the Canadian population is foreign-born. As their purchasing power increases, businesses that can anticipate their needs and reactions to new products and services stand to profit.



# Are Immigrants helping Canada to become more Innovative?



# Immigration and Trade

Preference for  
Home-country  
Products

- Imports

Information &  
Contacts

- Imports
- Exports



# Trade Model: Key Variables



# Impact of Immigrants on Imports

Country	Immigrants	Imports	Per Capita
	1.00%	0.20%	
U.S.	2 505	\$444 Million	\$177,000
China	4 669	\$69 Million	\$15,000
Mexico	499	\$32 Million	\$65,000
Bhutan	1	\$51	\$51
Guinea-Bissau	1	\$6	\$6

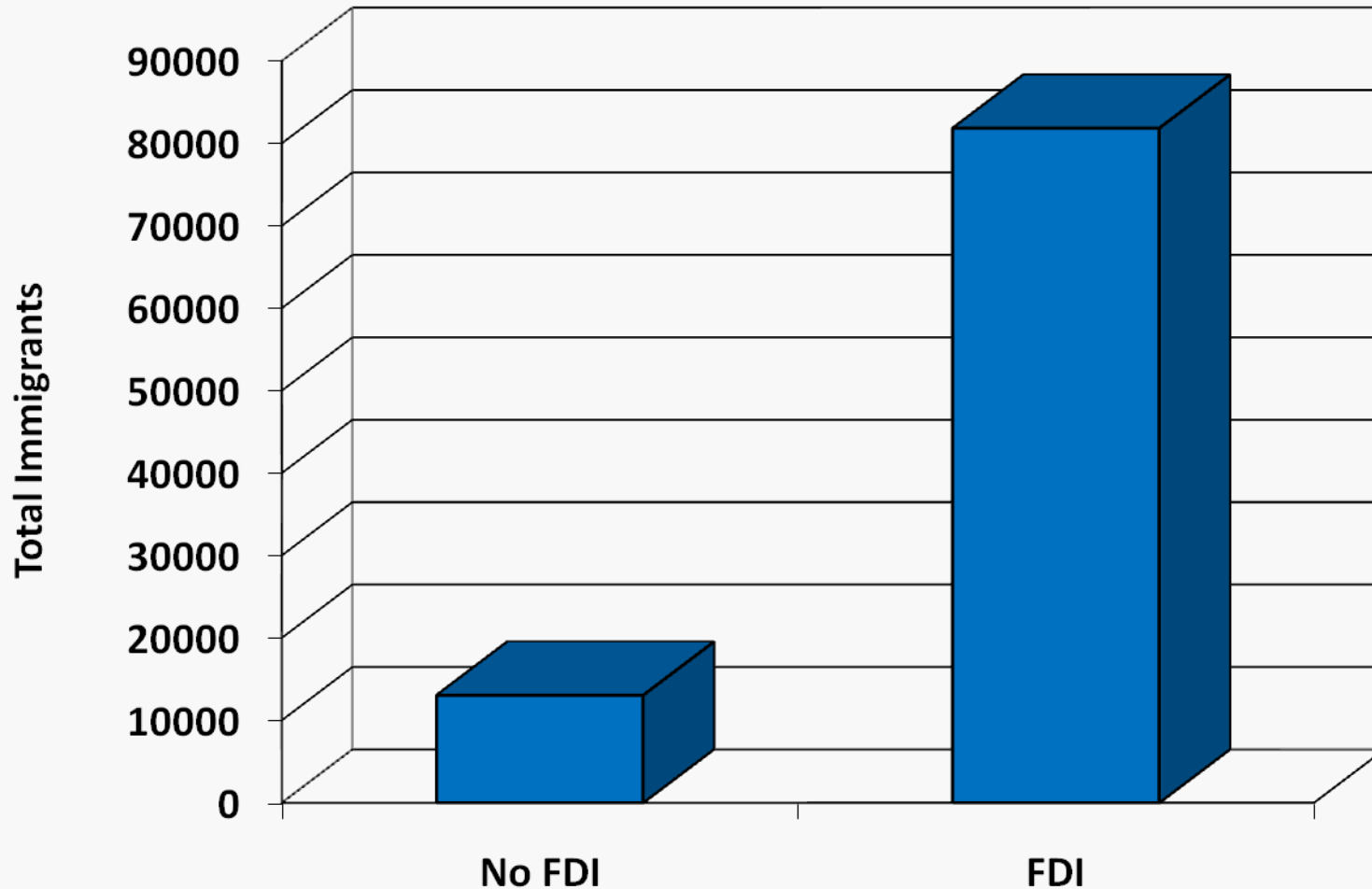


# Impact of Immigrants on Exports

Country	Immigrants	Exports	Per Capita
	1.00%	0.11%	
United States	2,505	\$393 Million	\$157,000
United Kingdom	5,796	\$11 Million	\$2,000
Japan	217	\$10 Million	\$48,000
Guinea-Bissau	1	\$300	\$300
Lesotho	1	\$300	\$300



# Immigration and Foreign Direct Investment



# Do Immigrants Increase Innovation Globally?



# Innovation Globally

(Boston Consulting Group, 2007)

Highest Ranked		Other Noteworthy		Lowest Ranked	
1	Singapore	8	United States	106	Benin
2	South Korea	9	Japan	107	Cameroon
3	Switzerland	<b>14</b>	<b>Canada</b>	108	Venezuela
4	Iceland	15	United Kingdom	109	Burundi
5	Ireland	19	Germany	110	Zimbabwe



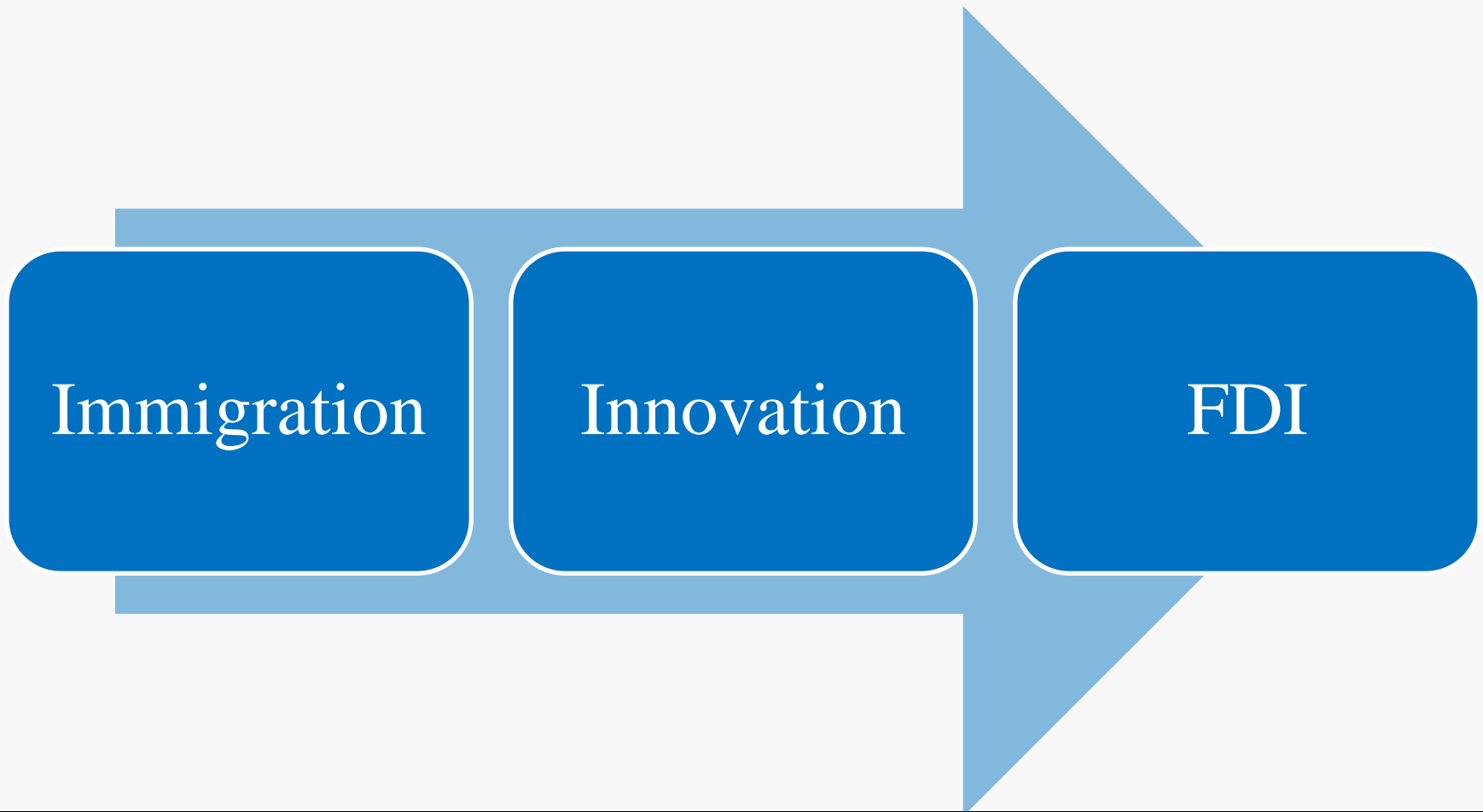
# Immigration and Innovation Globally

Immigration

Innovation



# Pathway to Increase FDI



# Conclusions

- Immigrants are associated with innovation at every level of analysis.
- Immigration is strongly associated with:
  - High individual achievements
  - Innovation in business
  - Increasing Canada's trade levels
  - Increasing Canada's FDI
  - More global innovation
  - Increasing global FDI



# Implications and Actions

- Immigrants can help to open Canada and Canadian businesses up to new ideas, products and services, processes and new markets.
- Immigrants have the knowledge, skills and drive to be successful in any context.

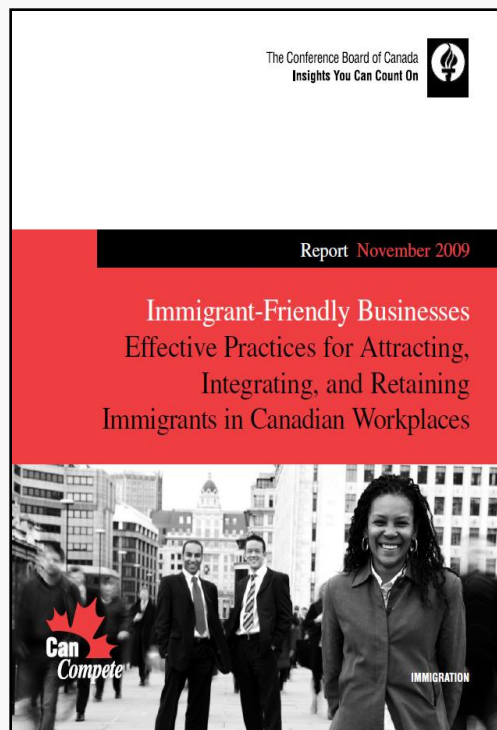


# Implications and Actions

- Therefore, deliberately bringing immigrants into a country or organization to be innovators is an important element of an innovation strategy.



# *Immigrant-Friendly Businesses*



1. IDs the benefits & challenges of attracting, integrating, retaining immigrants and ITWs in Canadian workplaces.
2. IDs effective practices and keys to success for making Canadian workplaces more “immigrant-friendly.”



# Systemic Barriers to Integrating Immigrants into the Workplace

- Lack of Canadian work experience
- Discrepancies in recognizing foreign qualifications and experience
- Language barriers



# Systemic Barriers to Integrating Immigrants into the Workplace

- Differences in workplace cultures
- Lack of workplace integration and diversity programs
- Discrimination



# Challenges That *Businesses* Face:

1. Connecting with immigrants and internationally-trained workers (ITWs).
2. Assessing immigrants and ITWs skills, credentials, language, competencies and experience.
3. Integrating and retaining immigrants and ITWs.

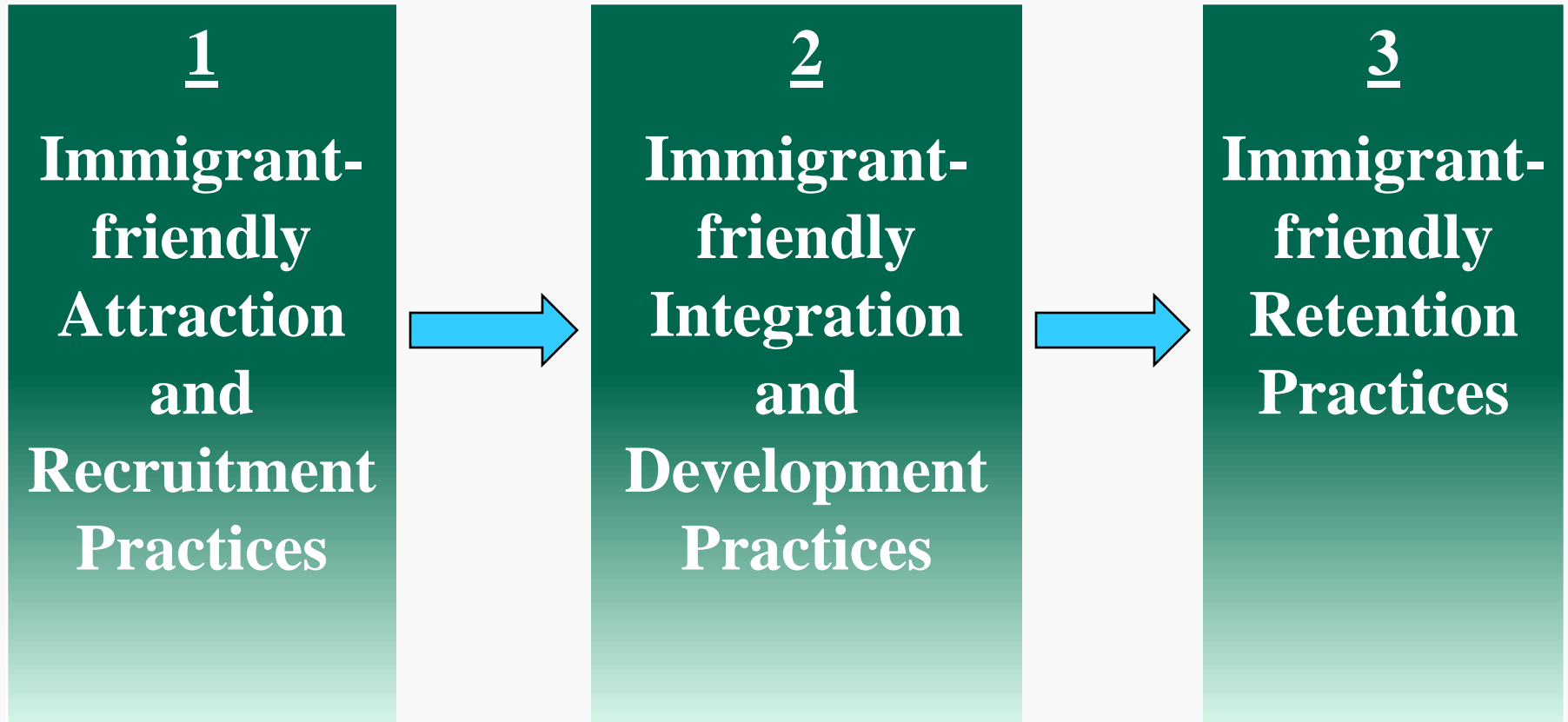


# Challenges That *Immigrants* Face:

1. Connecting with employers.
2. Getting skills, competencies and experience recognized by employers.
3. Integrating in the workplace and finding the right “fit” with an employer.



# Immigrant-Friendly Businesses: Three Step Process



Renewing Immigration  
Towards a Convergence and  
Consolidation of Canada's  
Immigration Policies and Systems

*Renewing  
Immigration*

Looks at ways in which immigration policies, programs and systems are changing to better address the needs of the economy and immigrants.



# Conclusions

- Businesses that attract, integrate, develop and retain international talent benefit from an expanded knowledge and skills base.
- Cultural diversity is no longer only a matter of employment equity. It is an opportunity improve a company's bottom line.



# Conclusions

- There is no “cookie-cutter” approach to being an immigrant-friendly business: must adjust for sectoral, geographical and firm-size differences.
- Some Canadian businesses have made progress in the recruitment, integration and retention of immigrants and ITWs—but much more remains to be done.



# Conclusions

- There are opportunities to learn from the *approaches* of others, while adapting programs and practices to meet your own needs.
- Exhortation to employers: don't wait for others—use workplace learning and education, recognition and integration strategies to get the most benefit from immigrants—they are your future!



# Five Keys to IFB Success

## 1. Expand **recruiting** methods.

*Why? Provides access to an expanded pool of qualified applicants.*

## 2. Implement culturally sensitive recruitment and screening practices.

*Why? Sensitizes recruiters to cross-cultural differences. This will help find the best employees, and improve interaction with clients, customers, and supply-chain providers.*



# Five Keys to IFB Success – cont'd

3. Provide meaningful training opportunities for immigrant and ITW employees.

*Why? Maximizes employee productivity, improves workplace communications, team work, etc.*



# Five Keys to IFB Success – cont'd

4. Recognize qualifications and experience, and support ongoing learning.

*Why? Helps retain talent by demonstrating the company's commitment to assisting staff.*



# Five Keys to IFB Success – cont'd

5. Make organization 'culturally inclusive.'

*Why? Helps to create a welcoming workplace for culturally diverse employees. Opens up organization to different ideas.*



# Future Progress

1. Grow skills-based migration to address *labour market needs*.
2. Continue to maintain commitment to humanitarian-based immigration while expanding skills-based migration. There does not have to be an ‘either/or’ choice.
3. Further convergence and consolidation of immigration system to be streamlined, coordinated, and well managed.



# Future Progress

4. Use more TFWs to fill labour market gaps.
5. Create or improve pathways from TFW to permanent residency.
6. Stimulate employers' interest in immigrants, foreign workers, and international students as sources of employees.
  - The rapid expansion of the TFW Program and the PNP demonstrates interest and involvement, but there is room for greater engagement.



# Future Progress

6. Rapid increase in size, diversity of immigrant communities requires improved credential recognition, language training, and opportunities to gain work experience.
7. Link immigration to innovation and other strategies to achieve social, economic, and environmental objectives.
  - (e.g., regional economic development, environment, health).



# Conclusion - 1

- Immigrants are steadily more important to our private and public workplaces—as employees and, increasingly, as leaders.
- Global competition makes it harder to attract ‘top’ immigrants – we need to work through targeted programs such as PNP and TFW.



## Conclusion - 2

- Immigrants make a disproportionately large contribution to innovation in Canada across a broad range of sectors, private and public.
- Broader recognition of their innovation contribution will stimulate business to hire more and seek to optimize their contribution.



# Conclusion - 3

- Government has an important role to play—through immigration, innovation and productivity and other strategies—to:
  - make business more aware of immigrants’ high potential *as innovators*;
  - continue to attract *highly talented* immigrants to our economy and society;
  - provide settlement and integration that gives immigrants a *full opportunity* to contribute.



# Contact

**Dr. Michael Bloom**

Vice-President, Organizational Effectiveness  
and Learning

The Conference Board of Canada

E-mail: [bloom@conferenceboard.ca](mailto:bloom@conferenceboard.ca)

Tel: 613-526-3090 ext. 229

