

# Canada's Immigration Policy and Labour Shortages

Limitations of the Canadian Occupational Projection System  
Are there labour shortages in Canada?



# Shortages and immigration

- ⌘ Aging population creates demographic challenges: Provision of services, like health services, and the level and composition of the labour force
- ⌘ Proyections of a declining labour force have prompted discussions of labour shortages and whether immigration should be used to address such shortages
- ⌘ What is a shortage? Can shortages be anticipated?



# The elusive definition of a shortage

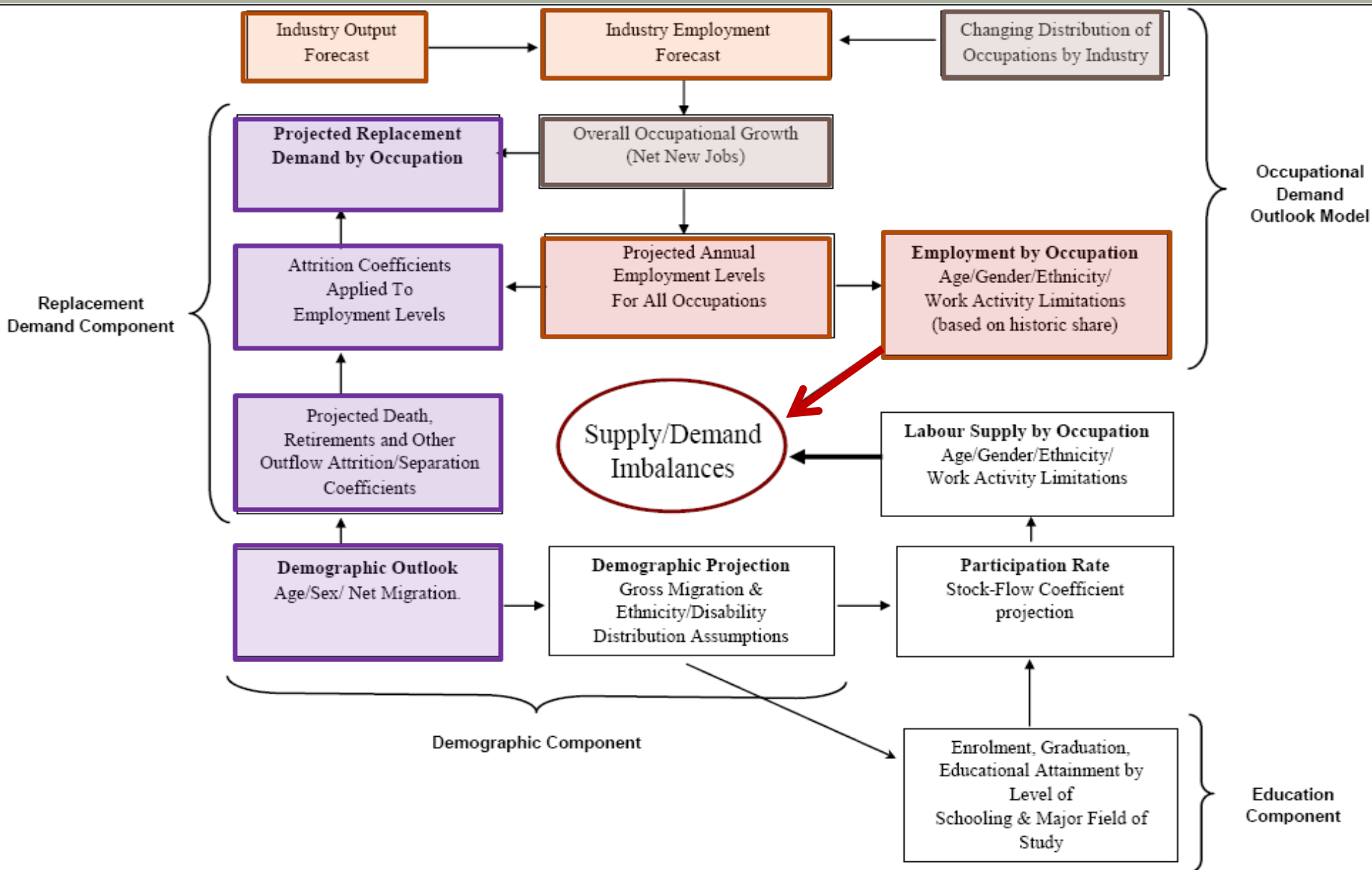
- ✎ Broadly speaking, labour shortages occur when the demand for workers exceeds the supply of workers who are qualified and/or available to do that job at the current wage
  - Aggregate labour shortage – that occurs when the economy is close to full employment and it is difficult to find workers to fill vacancies anywhere
  - Shortages due to labour market mismatches – that occur due to specific needs that cannot be fulfilled within a skill, industry, occupation or geographical area
  - Temporary or permanent?



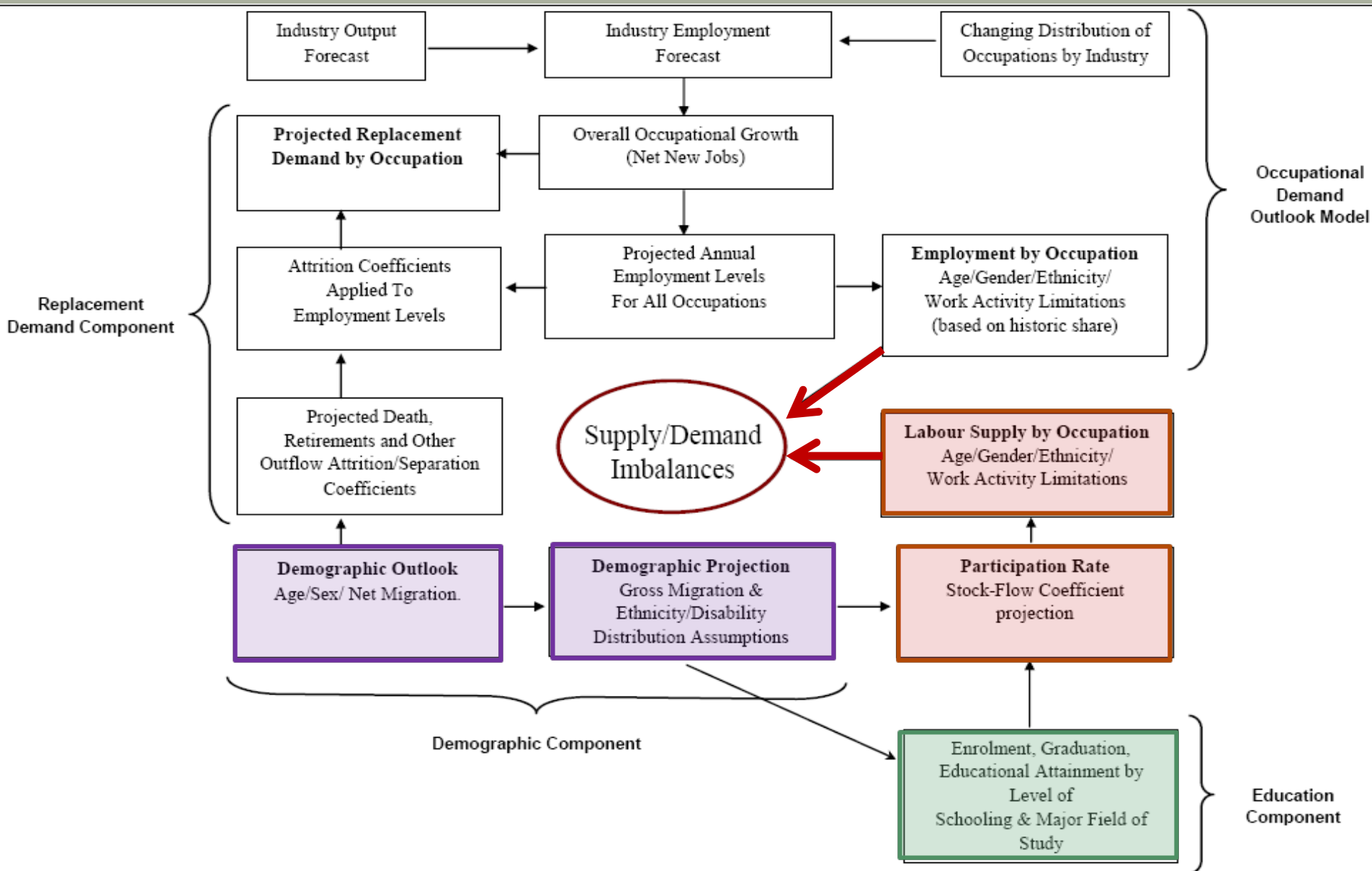
# The elusive definition of a shortage

- ∞ Broadly speaking, labour shortages occur when the demand for workers exceeds the supply of workers who are qualified or available to do that job at the current wage
- ∞ Two methods to identify current or future labour shortages:
  - Key Informant Interviews and Current Data on Labour Market Shortages
  - Forecasting Models of Occupational Demand and Supply of Labour  
([http://www2.warwick.ac.uk/fac/soc/ier/research/forecast/forecastingsymposium/agenda/draft\\_luke\\_ignaczak\\_warwick\\_cops.pdf](http://www2.warwick.ac.uk/fac/soc/ier/research/forecast/forecastingsymposium/agenda/draft_luke_ignaczak_warwick_cops.pdf))

# The Canadian Occupational Projection System Model



# The Canadian Occupational Projection System Model



# Occupation 311: Physicians, Dentists And Veterinarians (Specialist Physicians, GPs, Dentists, Veterinarians)

## Labour Demand Projections (2011-2020)

	Level	Share
Expansion Demand	29,284	51%
Retirements	20,634	36%
Other Replacement	5,214	9%
Emigration	2,463	4%
Projected Job Openings	57,594	100%

## Labour Supply Projections (2011-2020)

	Level	Share
School Leavers	25,312	54%
Immigration	7,095	15%
Other	14,159	30%
Projected Job Seekers	46,566	100%

## Information 2010

Employment	101,945.6
Median Age	45.6
Average Retirement	78

# Occupation 761: Trade Helpers and Labourers

## Labour Demand Projections (2011-2020)

	Level	Share
Expansion Demand	15,316	51%
Retirements	13,079	39%
Other Replacement	2,190	7%
Emigration	2,561	8%
Projected Job Openings	33,146	100%

## Labour Supply Projections (2011-2020)

	Level	Share
School Leavers	67,208	164%
Immigration	10,736	26%
Other	-37,039	-91%
Projected Job Seekers	40,905	100%

## Information 2010

Employment	114,396
Median Age	32.7
Average Retirement	63

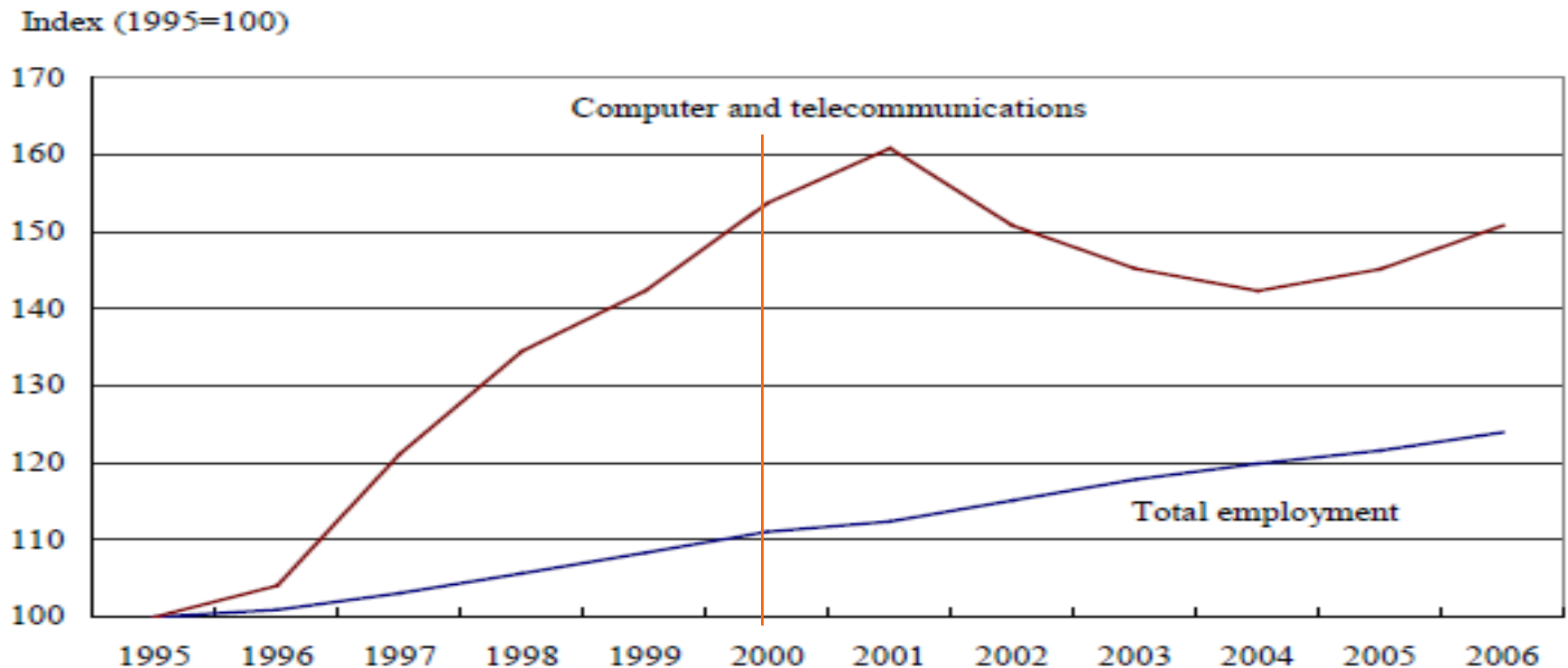


# Limitations of Occupational Forecasts

- ✎ Simplistic assumptions by necessity. There is no accounting for adjustments that may take place such as wage changes, changes in the mix of productive inputs, new technologies...
- ✎ Consequently, the model does a good job projecting supply and demand imbalances for aggregate occupations, or for specific occupations not susceptible to rapid technological change
- ✎ Freeman (2006) assessed that only  $\frac{1}{4}$  of the variation in employment growth was captured by forecast.
  - Globalization (offshoring, subcontracting, FDI can be used instead of domestic supply or immigration)
  - Change in the demand of IT in the 1990s

# Limitations of Occupational Forecasts

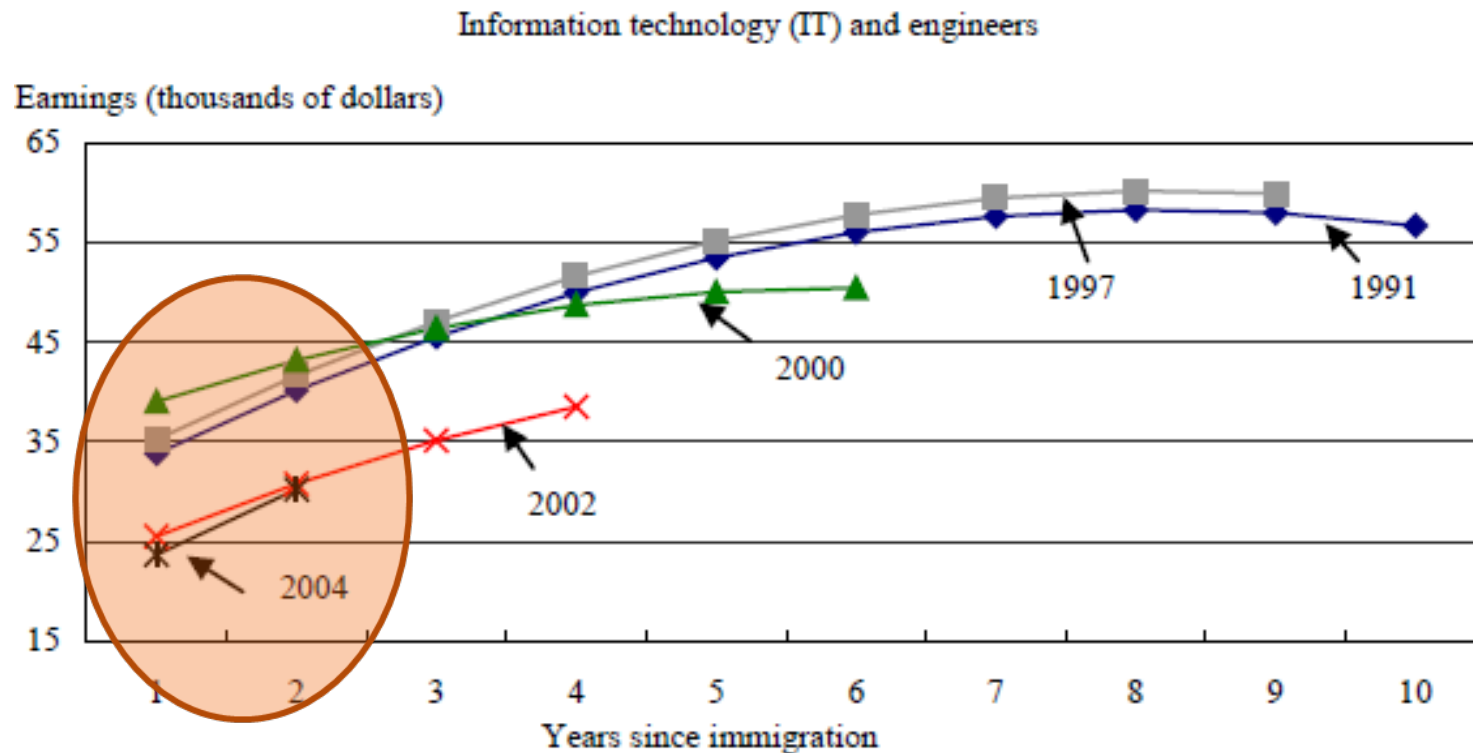
**Figure 3: Employment growth, Canada, 1995 to 2006**



Canadian graduates increased by 15% , entering engineers and IT immigrants increased by 147% (Picott and Hou, 2010 *CLSRN working paper*)

# Limitations of Occupational Forecasts

- ∞ The COPS models did not predict the sudden boom in IT, neither could they predict the bust



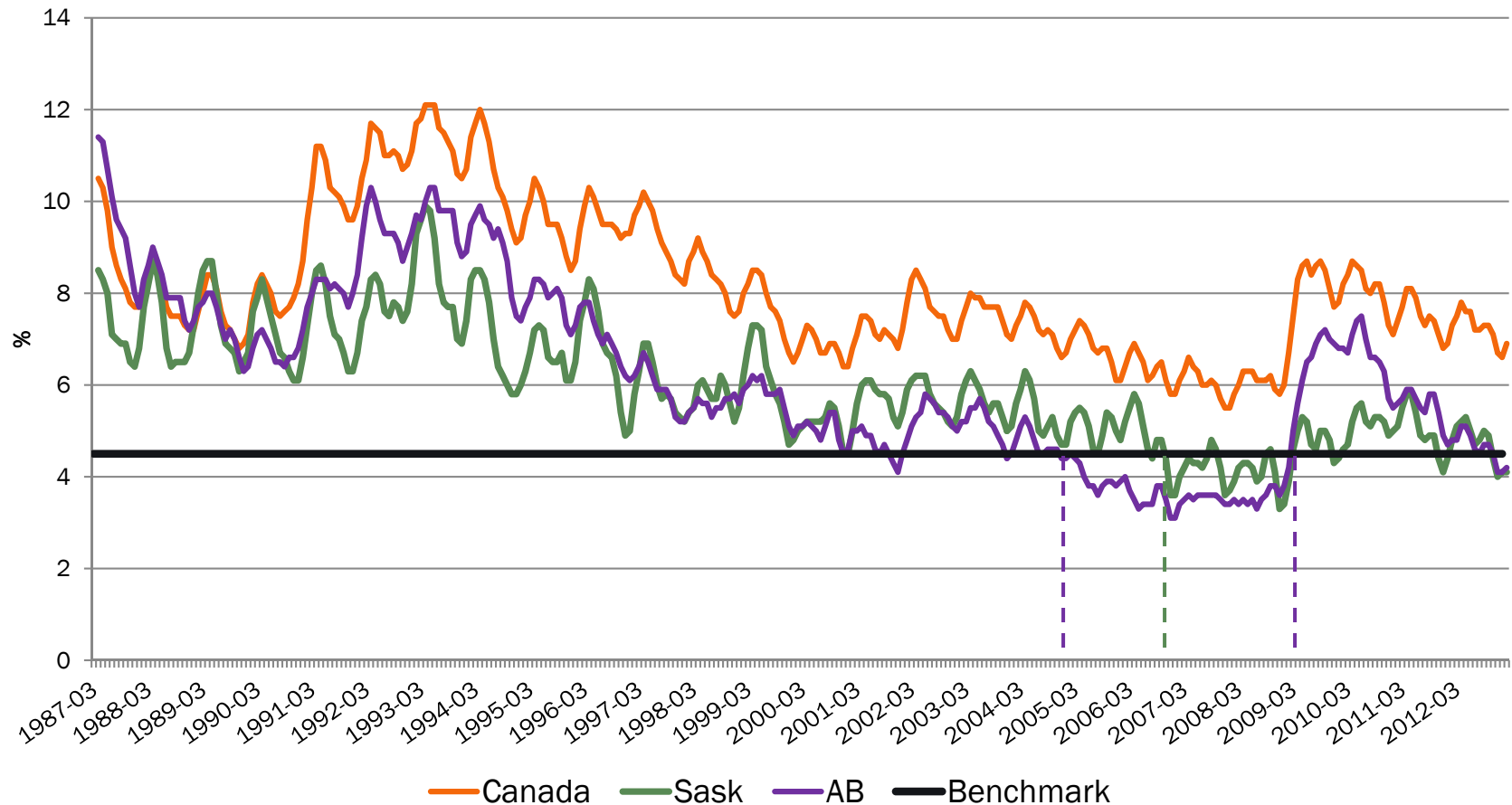
The economic outcomes of these immigrants deteriorated rapidly with the bust (Picott and Hou, 2010 *CLSRN working paper*)

# Are there labour shortages in Canada ?

1. Population projections anticipate negative natural population growth by 2030, leading to 5-9% reduction in labour force participation
  - Localized effects in occupations employing older workers (**managerial**) or with long and costly training (**health and education**)
  - Although COPS does not disaggregate by province, it is expected that locations with an aging population and low immigration rates might suffer more (**The Maritimes**)
2. Sharp increase in world prices of oil and gas has driven investment in exploitation of natural resources
  - Labour demand in skilled trades (construction) and skilled labour (“experienced”) in Western provinces has risen substantially

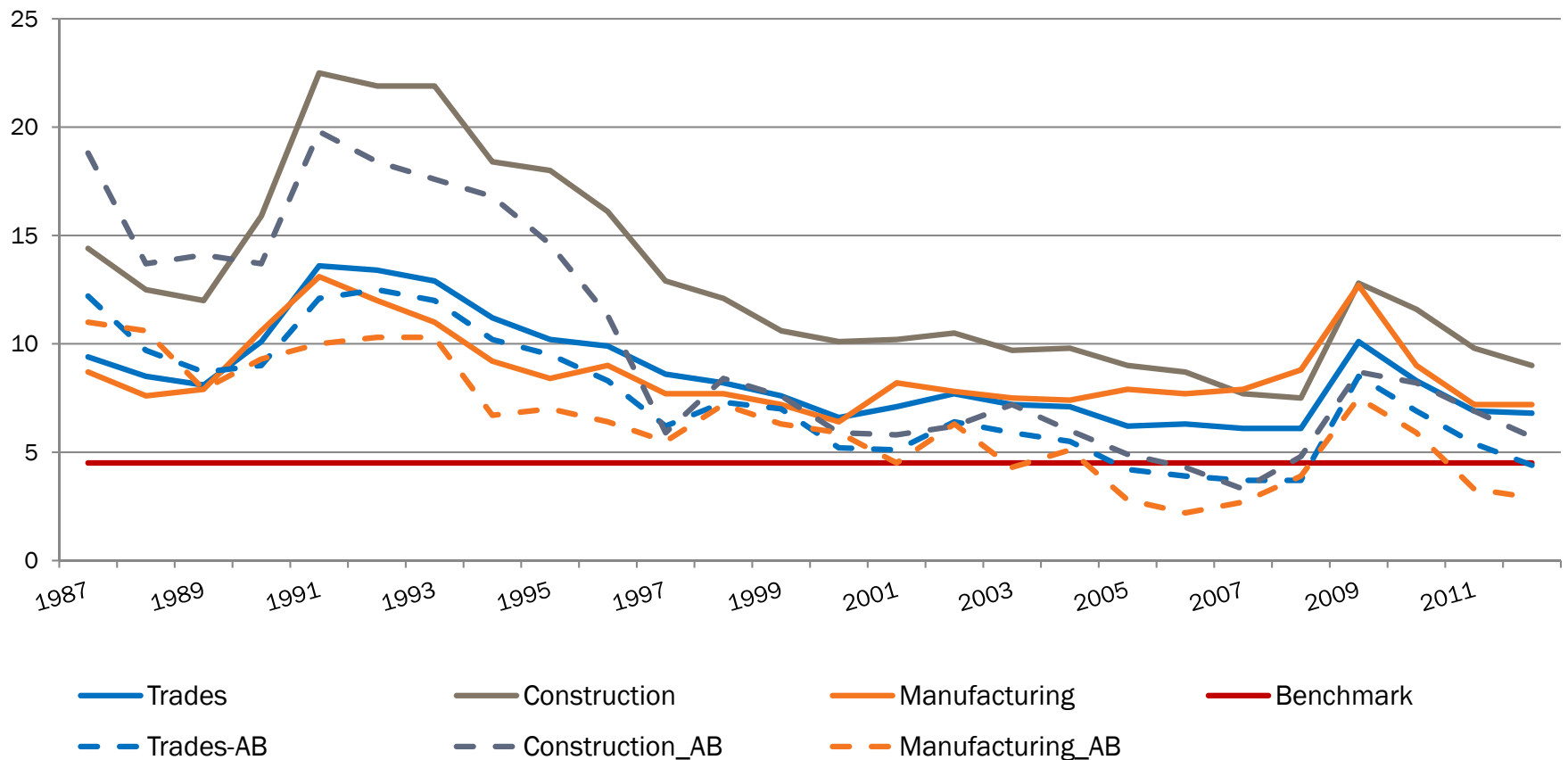
# Are there labour shortages in Canada ?

Unemployment rates



# Are there labour shortages in Canada ?

Unemployment rate in Selected occupations



# Selecting immigrants to cover shortages?

- ⌘ Difficulties in obtaining reliable information on occupational imbalances, either in the short or long run.
- ⌘ Difficulties in selecting the number of immigrants desired in each

Immigrant selection policy should be  
based on trend, not cycle

significant barriers to work in intended occupations.

- ⌘ Difficulties in reacting in a timely manner. Even if short-term shortages could be identified, it was difficult to bring in immigrants quickly to fill them, due to long backlog of applicants.

# Selecting immigrants to cover shortages?

- ✎ Immigrant selection policies has become more flexible to overcome these difficulties:
  - Provincial Nominee Program
  - Care giver Program
  - Temporary Foreign worker
- ✎ Significant challenges remain, particularly the distortion of market signals (prices)



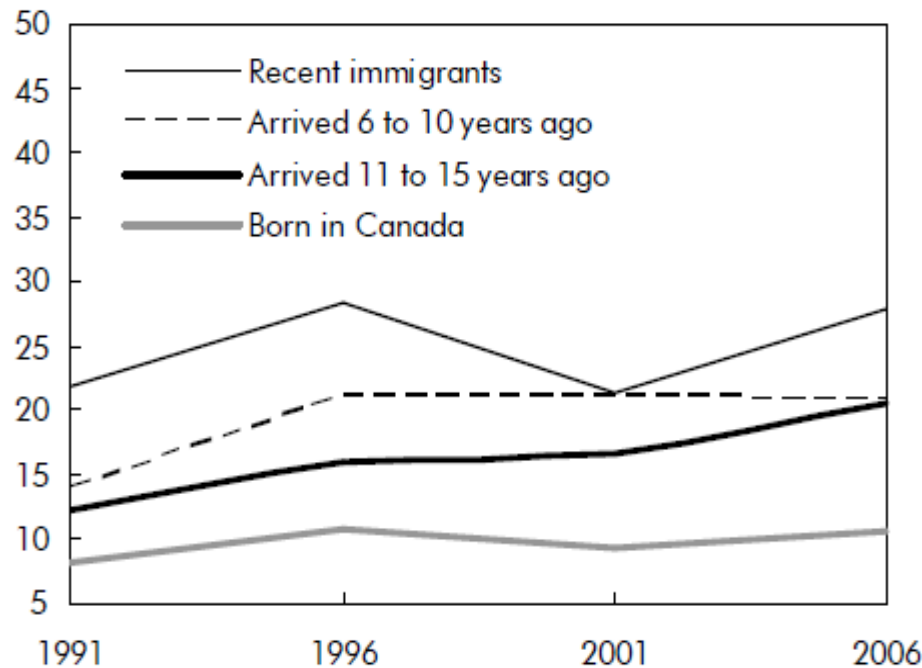
# Integration: the cost of underuse of resources

- ✂ At a time when AB Employers were complaining of hiring difficulties
  - 49 % of skilled immigrants in Alberta reported that they were overqualified,
  - 45 % were working in the fields which are not related to what they studied,
  - 64% found there was no consideration for their foreign education and/ or for work experience
- ✂ The majority of immigrants to Canada work in skill level jobs well below that of their pre-immigration jobs

# Integration: the cost of underuse of resources

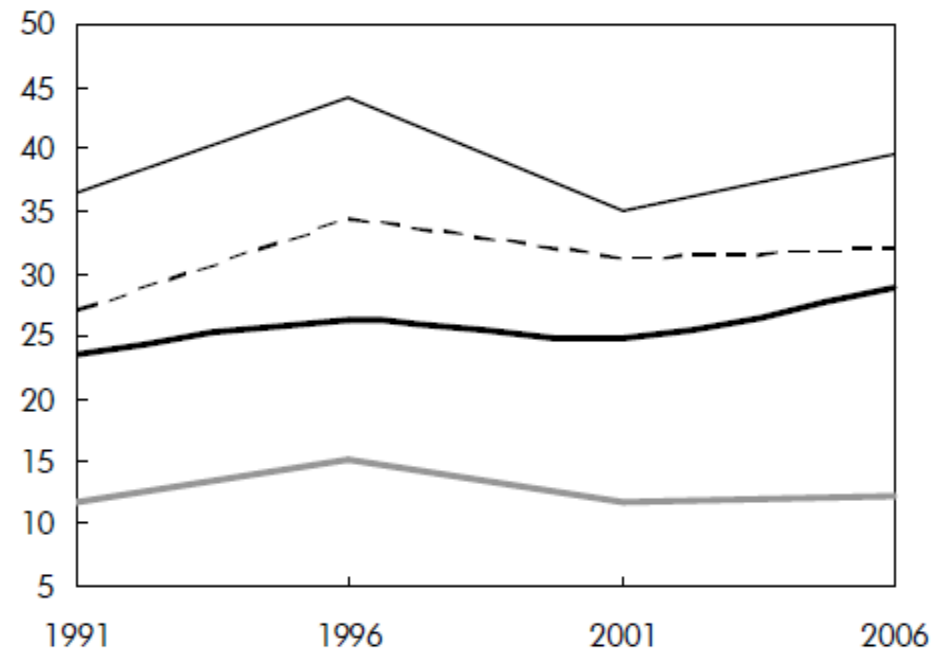
Low-skill job (%)

**Men**



Low-skill job (%)

**Women**



Galarneau and Morissette, 2008

# Integration: the cost of underuse of resources

**Table 4 University graduates from fields of study leading to regulated occupations in jobs with low education levels**

	Canadian born			Immigrants					
				Established			Recent		
	1991	2001	2006 <sup>1</sup>	1991	2001	2006 <sup>1</sup>	1991	2001	2006 <sup>1</sup>
	%								
<b>Men</b>									
Law	2	3	4*	18	25	21	28	35	40*
Accounting	6	6	5	17	24	20*	31	33	34*
Engineering	4	4	5*	7	11	18*	17	17	25*
Medicine	0	1	0	1	1	13*	10	19	16*
Nursing	6	6	6	..	..	..	..	..	..
<b>Women</b>									
Law	3	5	6*	9	11	26*	43	33	36
Accounting	12	9	8	32	30	31	49	47	48
Engineering	5	6	7*	9	18	19*	24	26	34*
Medicine	1	1	1	8	4	14*	15	15	24*
Nursing	4	4	3	7	22	21*	30	46	23

\* The gap between the 1991 and 2006 rates is statistically significant at a threshold of 5%.

1. Between 2001 and 2006, the field of study classification changed. Statistics Canada will conduct empirical matching between the 2001 and 2006 classifications by coding all of the fields of study of 2006 respondents according to the old classification. This empirical matching could provide slightly different results.

Source: Statistics Canada, Census of Population.

# Integration: the cost of underuse of resources

- ✎ Most of the increase in the share of highly educated immigrants in low skilled occupations has to do with language skills, non-recognition of credentials, education or foreign experience (Green and Worswick, 2010; Picot and Sweetman, 2005, Ferrer et al. 2006) and arriving during a recession (Oreopolous et al. , 2008) .

**Loss for the Canadian Economy from underuse of Immigrant Skills estimated btw \$2 - \$6 billion annually**



# Other actions to address labour shortages

- ∞ Ensure market forces are able to promote adjustment
  - Barriers to entry/mobility (2010 NWTPA; initiatives like Red Seal Interprovincial Standards Program;)
  - Alternative programs to attract immigrants (PNP; CEC))
  - Missing financial markets for human capital investment (for immigrants → Immigrant Access Fund)
  - Lack of labour market information and/or training/education systems that are not responsive to labour market needs (use COPS to guide schools/students)

# Actions to address economic shortages

- ✂ Make better use of potential labour supply: engage under-employed, and lower participating, demographic groups
  - Women, older workers and the disabled:
    - Need to look at workplace supports, transportation supports and social policies like childcare and elder care (Evidence on the provision of Family Friendly Benefits suggests not enough widespread; Ferrer and Gagne, 2008)
  - Young males (15-24)
    - High unemployment, low post-secondary participation → Facilitate mobility from vocational to academic programs and programs to return to school