
Immigrant Economic Outcomes Over the Past Quarter Century: Trends and Explanations

by

Garnett Picot

Statistics Canada
University of Toronto

March 20, 2009

Introduction

- Issue of economic integration of immigrants not new, but seems pressing in many OECD countries because:
 - 1) Recently high levels of immigration in many countries
 - 2) Economic integration more problematic during 80s/90s in many OECD countries
 - 3) Many OECD countries looking to increase immigration: perceived labour shortages and declining working age population
 - 4) If immigrants unable to convert their skills to productive use, expectations of both host country and immigrants remain unmet

Objective of talk

- Review economic outcomes (mainly earnings/poverty) of entering immigrants up to 2005 (last census point)
 - » Vast literature: Chiswick (78) and Borjas (85). In Canada, Green and Worswick; Aydemir and Skuterud; Reitz; Grant; Sweetman; Baker and Benjamin, Picot and Hou; many other
- Explanations for decline through 80s/early 90s/early 2000s
- Focus on outcomes for university educated immigrants in Canada/U.S.
- Basic findings re: 2nd generation economic outcomes and immigrants perceptions of life in Canada

Primary source documents for talk

- 2008, Picot and Hou: **The Effect of Immigrant Selection and IT Bust on Immigrant Entry Earnings**
- 2008, Bonikowska, Hou and Picot: **A Canada-US Comparison of Labour Market Outcomes Among Highly Educated Immigrants**
- 2006, Picot, Hou and Coulombe: **Chronic Poverty and Poverty Dynamics Among Immigrant**
- 2005, Picot and Sweetman: **Overview of Economic Integration of Immigrants**
- 2003, Picot and Hou: **The Rise in Low-Income Rates Among Immigrants in Canada**

Plus many papers by other researchers, which are referenced

Two major data sources

- Need large samples: census and taxation data

1) Census data

» Quasi longitudinal data

E.g., focus on cohort entering between 1986 to 1990 (late 80s cohort)

In 1991 census, in Canada 1-5 years

In 1996 census, in Canada 6-10 years

In 2001 census, in Canada 11-15 years

In 2006 census, in Canada 16-20 years

Know

- Earnings
- Source region
- Language
- Age
- Education
- Occupation
- Years in Canada

- Track economic progress as a particular cohort ages in Canada

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- Can compare to other entering cohorts
E.g., late 70s, late 90s, early 2000
 - Can compare to Canadian-born

Problem

- » The same immigrants are not in the sample each census... some leave the country... not true longitudinal panel data
 - » May be overestimating slope of earnings trajectory, if immigrants with poorer outcomes leave (i.e., selection bias, U.S. research)
- Can only track cohort as a whole, not individual respondents. Produce summary statistics for groups, but cannot deal with events (and their correlates) occurring individuals such as movement into poverty and its correlates, duration in poverty, S.A. dynamics, etc.

The LAD, true longitudinal panel data

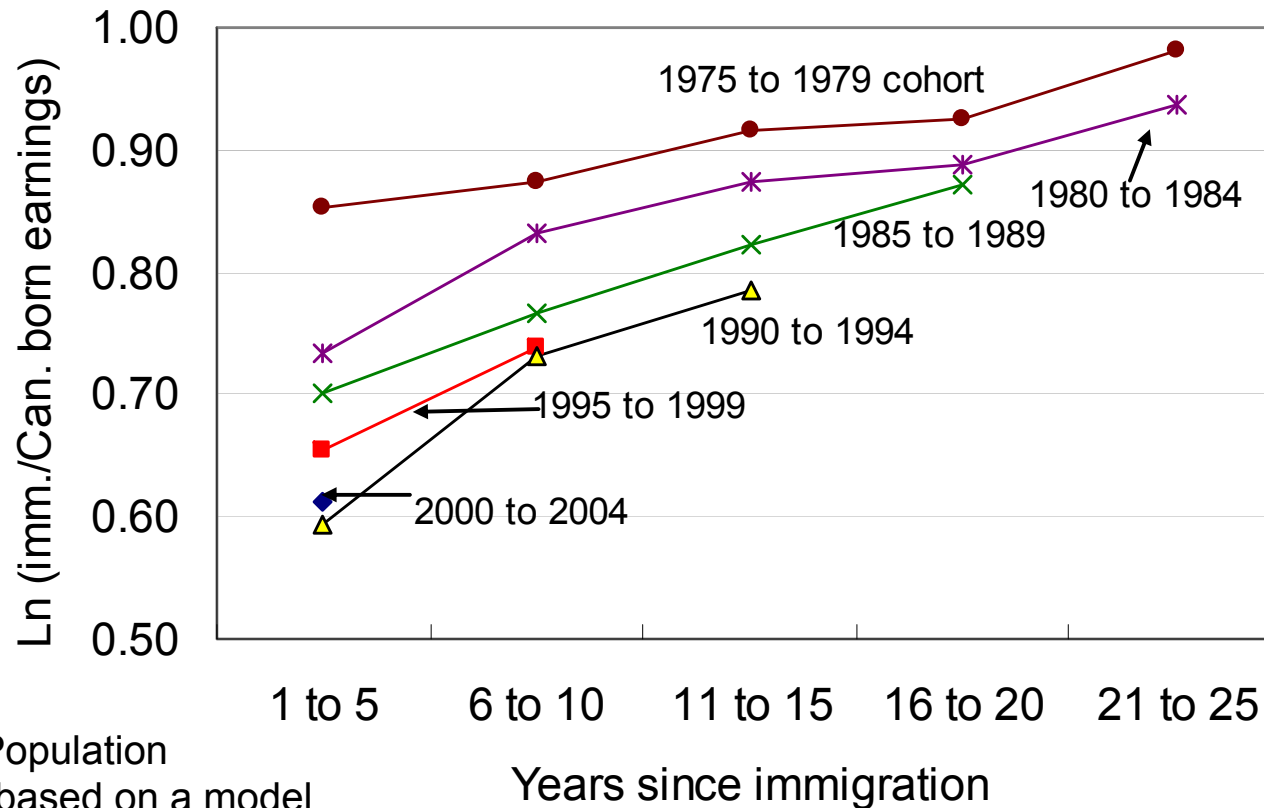
- » Developed by linking taxation data for same person through time; 1982 to 2006
- » Added immigrant flag, data from immigrant landing records
- » Have data for 10% sample of population – all entering immigrant cohorts since the early 1980s
- » Create true longitudinal panel data – track same individual (unit of analysis)
- » Form families so that family income can be attached to each individuals records
- » From taxation data and landing records, for immigrants we know
 - Earnings
 - Social assistance use, EI use, other transfers
 - Family income
 - Education at landing
 - Age
 - Source country
 - Intended occupation
 - Family type
 - Etc.

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- » Reliable income data at bottom of income distribution since early 1990s
 - » Restricted to tax files, but population coverage of working age population in 90% to 95% range
 - » Have some longitudinal information on Canadian-born... can make comparisons
 - » But missing education and occupation for Canadian-born
 - » Used to look at
 - Earnings changes
 - Poverty dynamics
 - S.A. dynamics
 - Etc.

Deteriorating earnings outcomes

Earnings* of immigrants compared with those of comparable Canadian-born
- Log earnings ratio** -

Full-time, full-year workers aged from 16 to 64, males



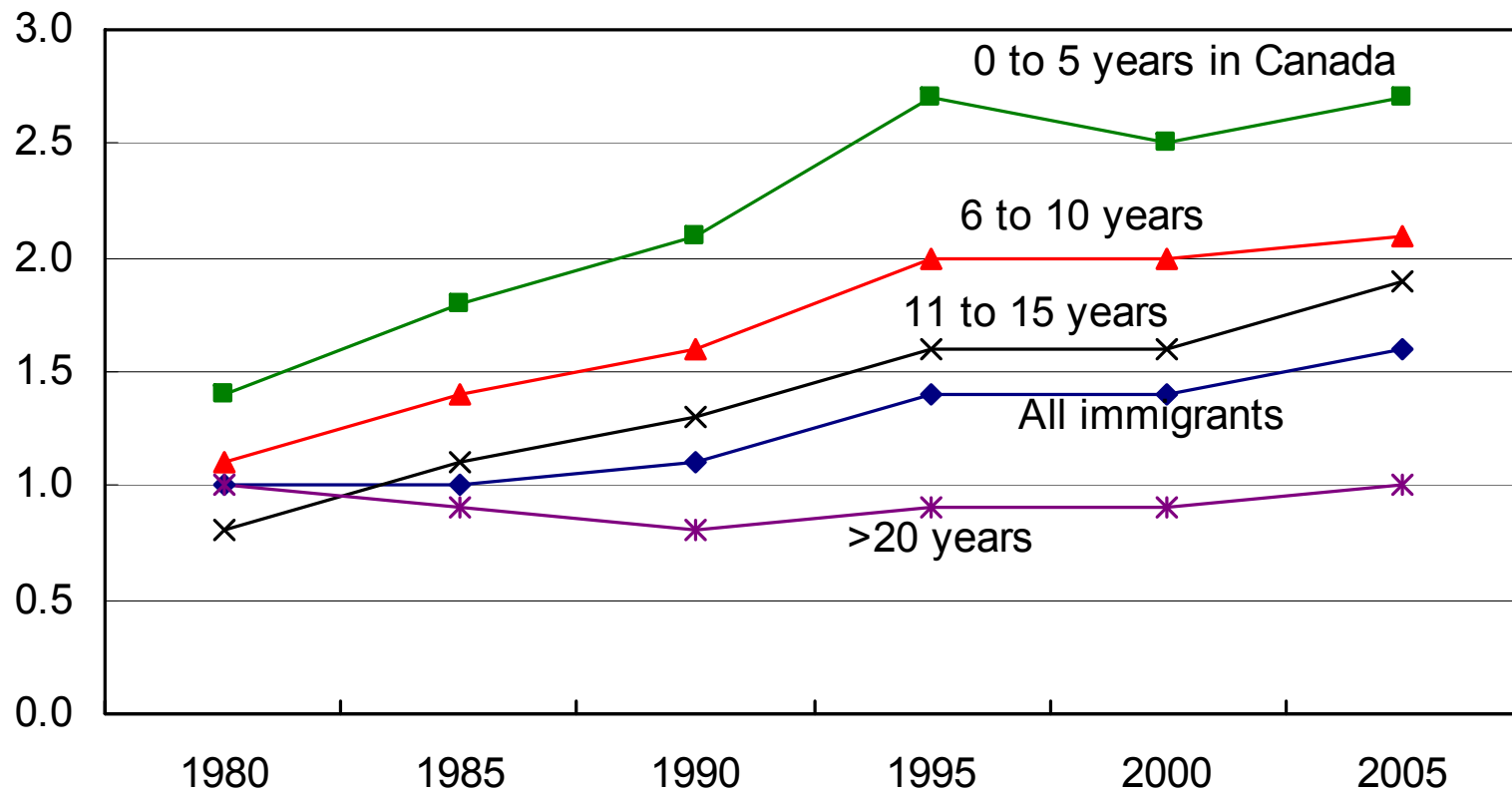
Source: Census of Population

* Predicted values based on a model

** The \ln (immigrant earnings/Canadian-born earnings)

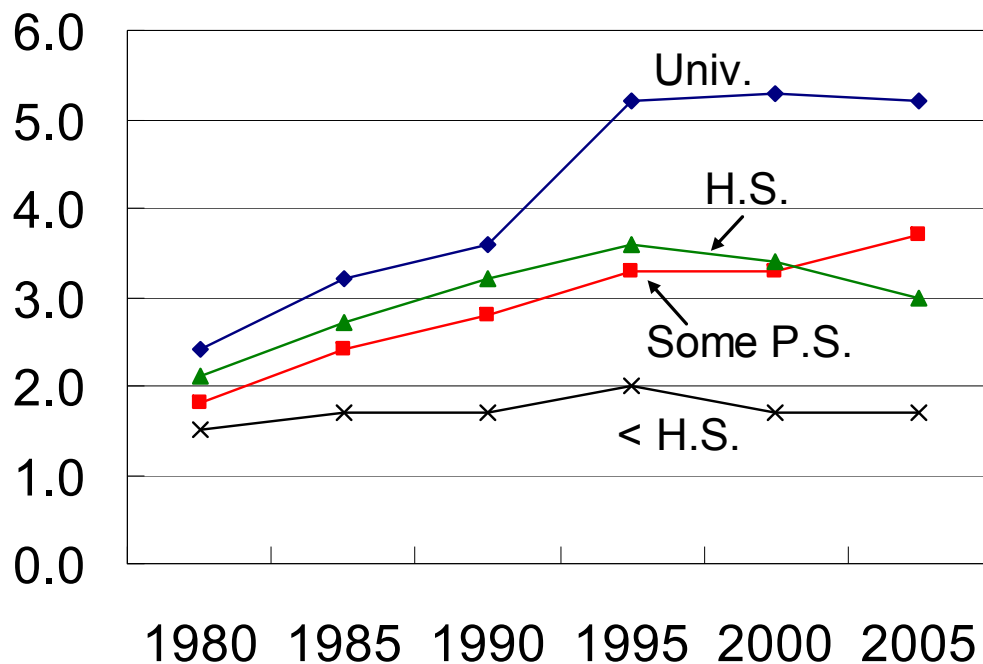
Deteriorating poverty rates

Relative poverty rates



Rising relative low-income rates most evident among university educated

Relative* low-income rates among “recent” immigrants, aged 25 to 59



● Similar trends among “all” immigrants. Trends not restricted to those in Canada 5 years or less

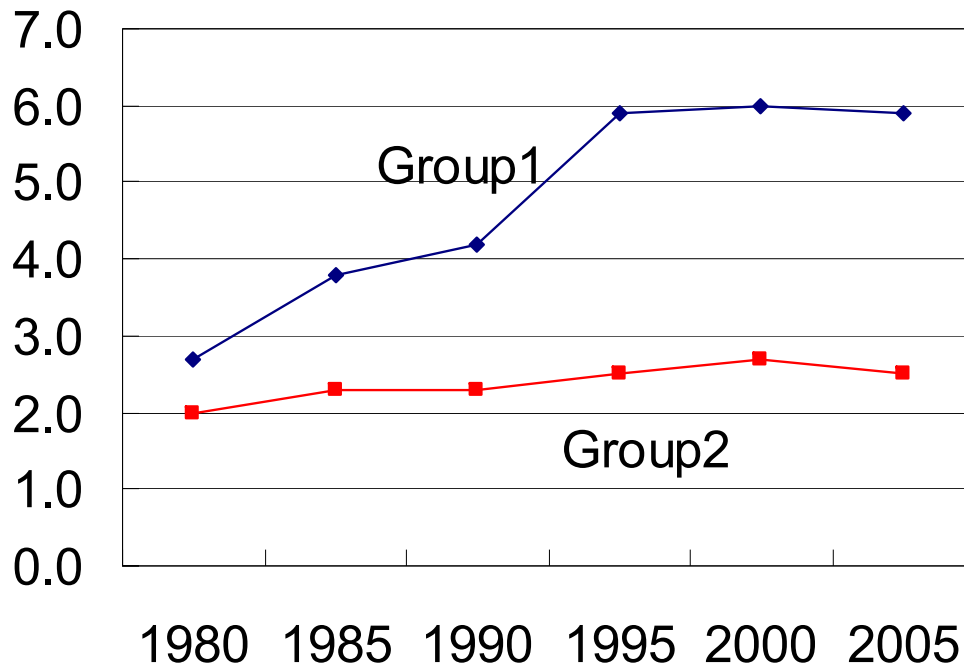
Low-income rates in 2005, “recent” immigrants, aged 25-59

<H.S.	40.6%
H.S.	36.8%
Some P.S.	31.8%
Univ.	29.7%

* Relative to the Canadian-born with the same level of education

The increase was particularly evident among university educated immigrants from Africa, Asia and Eastern Europe

Relative* low-income rates among “recent” immigrants, aged 25 to 59



- Group1: Africa, South Asia (India, Pakistan), East Asia (China, Korean), West Asia (Iran, Iraq), Eastern Europe
- Group2: U.S., Europe (Excluding Eastern Europe), Australia, N.Z, Southeast Asia (Philippines)
- Similar trends among “all” immigrants. Trends not restricted to those in Canada 5 years or less

* Relative to Canadian-born university graduates

* Share of university educated recent immigrants in group1 rose from 34% to 72%, 1980 to 2005

Poverty dynamics

- From 35% to 45% of immigrants enter poverty during 1st year in Canada... probability of entering poverty falls dramatically in 2nd and subsequent year
- From 16% to 20% of entering immigrants find themselves in “chronic” poverty, compared to around 8% of Canadian-born

Why the deterioration in entry earnings during 1980s, early 90s

- (1) **The changing characteristics of entering immigrants 1981-2001... mainly source region and related characteristics**
- Immigrants from traditional sources 65% → 25%; newer source regions 35% → 75%
 - Human capital less transferable initially due to language, culture, education quality, discrimination issues?
 - Accounts for perhaps one-third of decline (Baker & Benjamin, 1994; Frenette & Morissette, 2003; Aydemir & Skuterud, 2005). Similar results from poverty analysis; Picot & Hou, 2003
 - But little change in source region related characteristics since 80s; not an important determinant recently

(2) Declining returns to foreign labour market experience

- Potential foreign work experience was increasingly discounted through 80s, 90s (Schaafsma & Sweetman, 2001; Green & Worswick, 2002; Frenette & Morissette, 2003; Aydemir & Skuterud, 2005)
- Little earning decline among very young “recent” immigrants, concentrated among those over 30
- The decline in returns to experience concentrated among immigrants from newer source countries
- Why... not really understood
- Accounted for $\frac{1}{3}$ of decline in entry level earnings (Aydemir & Skuterud, 2005)

(3) Deteriorating labour market outcomes for new labour market entrants in general

- Labour market outcomes (earning) of young entrants, particularly male, deteriorating through 80s, early 90s
- Green & Worswick found this to be very important in 1980s (40% of decline), but less so in 90s
- Some recovery in earnings of labour market entrants in late 90s, 2000s
- Not likely an important determinant since 1980s

(4) Strong competition from increasingly highly educated Canadian-born population

(Reitz 2001)

- Although educated attainment of immigrants rising, it was rising more quickly among Canadian-born
- True for 1980s, early 90s, but not since mid 1990s
- Explanation not applicable to more recent past

Some deterioration in relative earnings outcomes in Australia in 1980s, but not 1990s

- As in Canada, recent migrants to Australia during 1980, had lower wages than non-migrants, and relative (to Native-born) earnings fell about 10% between 81 and 91. Only marginal deterioration during 90s (Garnaut, 2003)

Resulting changes to immigrant selection in Canada and Australia

- In Australia in early/middle 90s
 - Introduced selection measures to maximize short-term labour market outcomes
 - Increased share of “skilled economic” migrants
 - Skilled migrants must have qualifications formally assessed before application
 - Not eligible for social security for 2 years
 - Mandatory English language test before application
 - More focus on selecting prime age (25-44) skilled applicants
 - Higher proportion of “foreign students”
 - More points if in occupations in demand
- Relative (to native-born) outcomes for Australia “economic class” immigrants improved significantly during 1990s (Hawthorn, 2006)

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- In Canada, 1993 changes to skilled economic immigrant selection
 - Increased points for university degree
 - Increased share of “skilled” economic immigrants
 - More “human capital” approach to selection

 - Changes since 1993, but not directly relevant to this analysis
 - 2003 - introduced Immigrant and Refugee Protection Act (IRPA)
 - Introduced English/French language tests
 - Altered scores for education, age, occupations
 - Evaluation of these changes on I.m. outcomes currently underway

 - 2008 - introduced requirement to be in one of 38 occupations (a filter)

Changes in selection rules had significant effect on characteristics of entering immigrants

<u>Entering cohort</u>	<u>% with university degree</u>	<u>% in skilled economic class</u>	<u>% of skilled principle applicants in IT/engineering occupations</u>
1991	17.7	33.0	5.2 (2 thousand)
2000	44.0	52.1	42.9 (25 thousand)
2005	45.8	49.7	30.6 (19 thousand)

Large improvements in educ and skills class characteristics had small effect on poverty outcomes

- Over the 1990s, rising educational attainment and “skilled class” level:
 - » Reduced probability of entering low-income from around 40% to 37.5%
 - » Had no effect on probability of exit, and
 - » Reduced probability of being in chronic low-income from about 20% to 18%

But they did improve mean earnings between 1991 and 2000 entering cohorts

Regression decomposition results for immigrant population at mean value

Changes in log entry¹ earnings, men, 1991 to 2000 cohorts
- OLS regressions evaluated at mean -

(1)	(2)	(3)	(4)
Raw data	Holding education & immigrant class fixed	(2) plus control for unemployment rate	Earnings growth accounted for by changing education & class distribution
0.27	0.12	0.03	0.15

¹ Earnings during first 2 full years in Canada

Selection rule changes (i.e. changing characteristics) improve economic outcomes during 1990s at middle and top, but not bottom of earnings distribution

Change in log entry earnings during first two full-years in Canada (Dinardo, Fortin, Lemieux decomposition)			
Males			
Change between 1991 and 2000 entering cohorts	Raw data	Change due to changing education and immigrant class distribution	% of increase due to changing education/class
At 15 th percentile	+0.16	+0.0	0
At 50 th percentile	+0.23	+0.10	43%
At 90 th percentile	+0.36	+0.24	67%

- Improving economic conditions also contributed to rising entry earnings

Distribution of entering immigrant by education level (first two years in Canada)				
	1991	2000	2004	Change 1991-2000
Bottom quartile of earnings distribution	24%	55%	60%	+29pp
Top quartile of earnings distribution	39%	75%	68%	+36pp

Difference in earnings between immigrant with university degree and grades 11 or 12 during first 10 years in Canada (from quantile regressions, controlling for other characteristics)	
	Bachelors degree
15th percentile	3.7%
50th percentile	11.8%
90th percentile	20.2%

Why deterioration in outcomes post-2000 in spite of significant changes in characteristics

Some traditional explanations

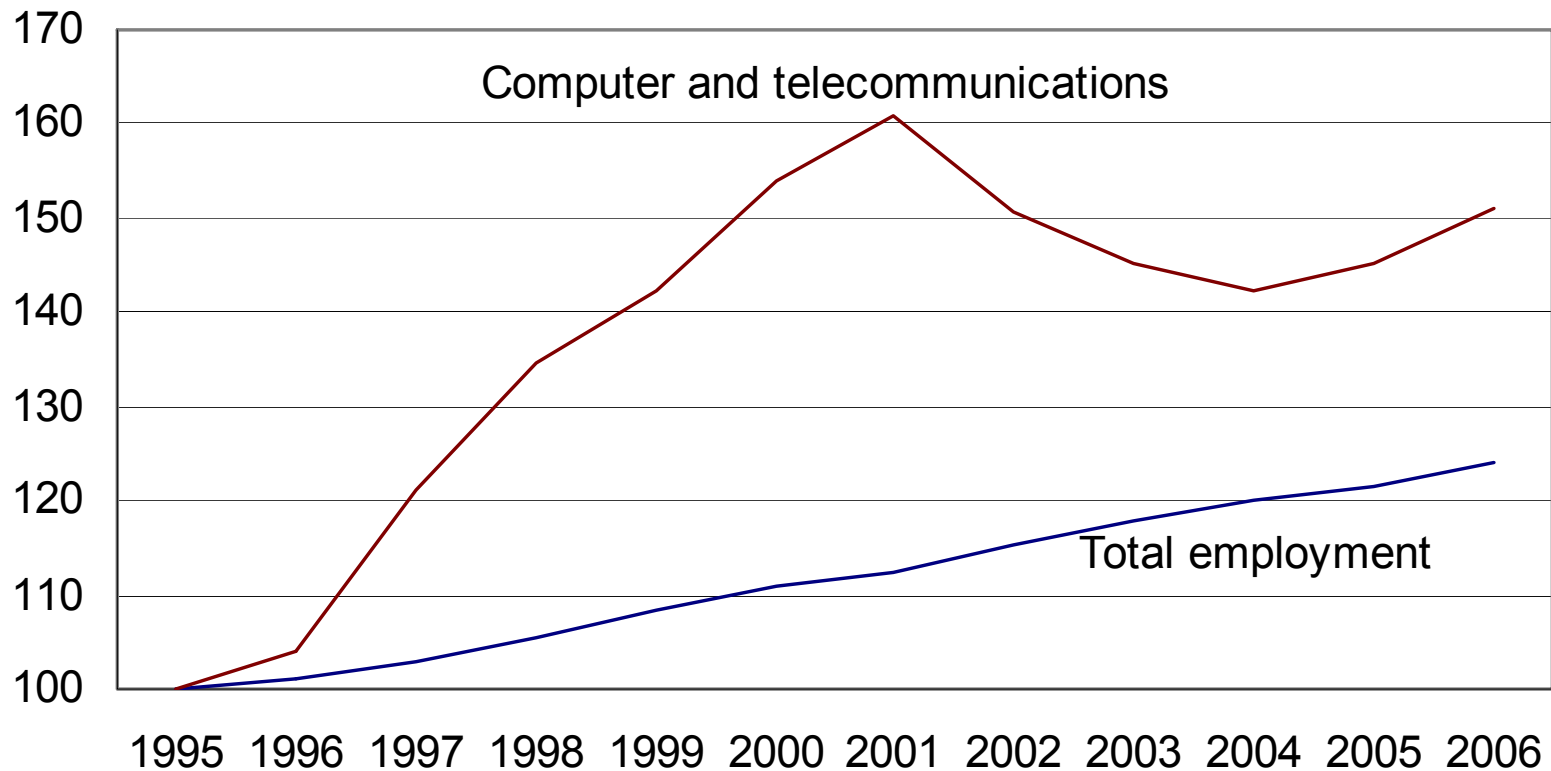
- Explanations prior to 2000
- » Declining returns to foreign experience
 - » Deteriorating outcomes for all labour market entrants
 - » Changing source regions (and related language, culture, school quality?)
 - » Strong competition from increasingly highly educated Canadian-born population

Other possibilities

- » IT downturn

Since the late 1990s, economy has improved in general, but significant IT boom-bust

Employment growth, 1995=100



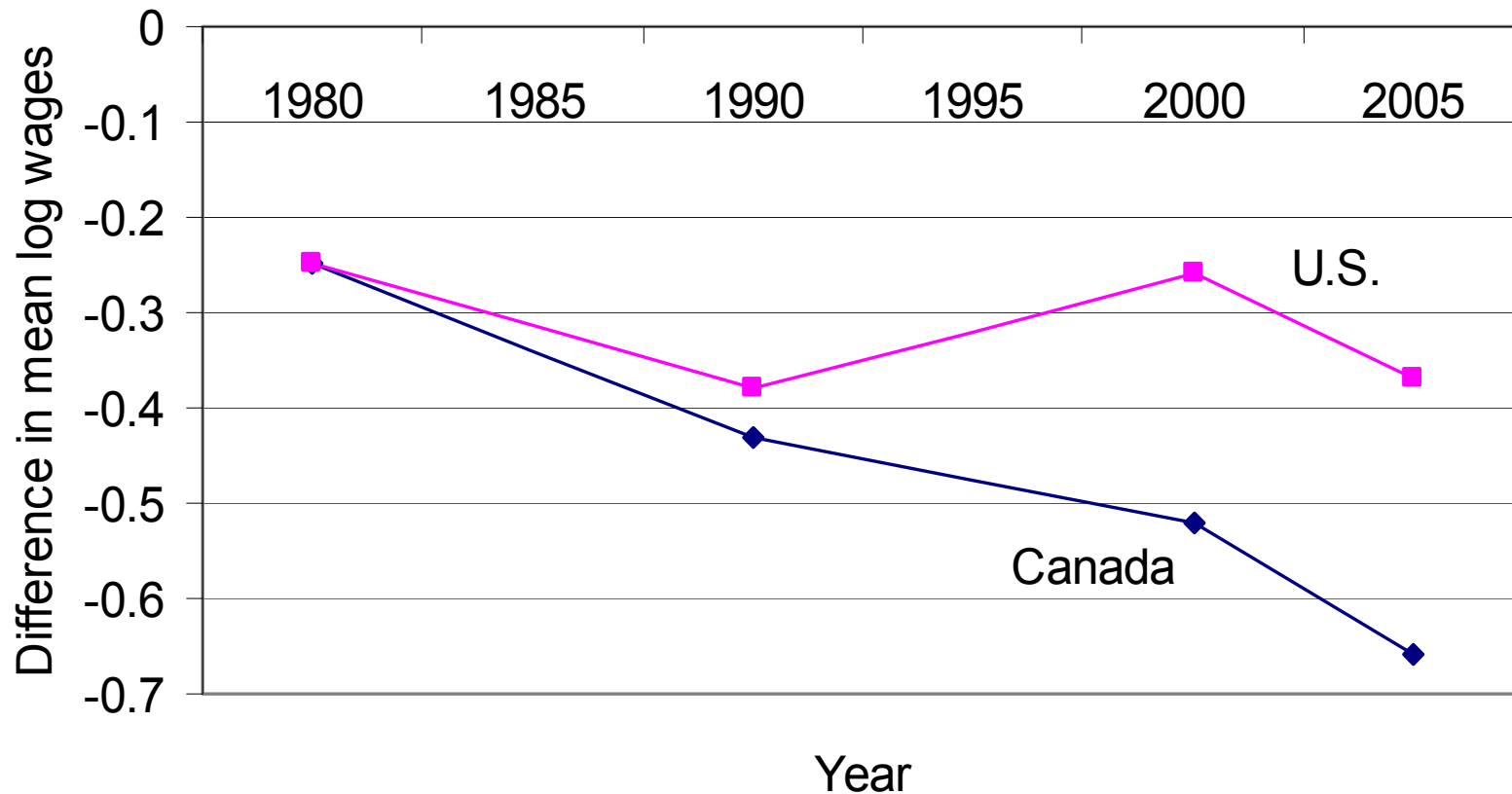
Excluding IT and engineering skilled principle applicants accounts for two-thirds of decline post 2000

Change in log entry earnings, difference between 2000 and 2004 cohorts

<u>Men</u>	Raw data	With controls
All immigrants	-17%	-12%
No IT/Eng (skilled)	-4%	-4%
<u>Women</u>		
All immigrants	-9%	-8%
No IT/Eng (skilled)	-5%	-4%

Did the university educated entering immigrants to the U.S. experience a similar deterioration in outcomes over past 25 years?

Log wages of university-educated 'new' immigrants relative to domestic born (men)



Composition of entering immigrant population changed more in Canada than the U.S., 1980-2005, aged 25-54

	Canada		U.S.	
	1980	2005	1980	2005
University educated as % of all new immigrants	26.2	59.7	33.0	35.0
% from source region:				
North America & Europe	44.5	19.8	25.1	21.0
South and Central America	4.1	5.9	8.7	18.3
South Asia (India, Pakistan)	10.9	21.7	10.6	19.3
East Asia (China, Korea)	10.0	24.4	20.7	19.3
Southeast Asia (Philippines, Vietnam)	13.1	7.2	12.3	7.3
West Asia (middle east)	5.0	7.8	8.8	4.0
Africa	8.9	11.2	6.7	6.8
% not speaking English or French at home	40.4	84.8	82.4	86.6

Relative (to domestic born) mean log wages of university educated “new” immigrants (men)

	CANADA			U.S.		
	Raw data	With controls	Due to compositional shifts	Raw data	With controls	Due to compositional shifts
1980	-0.25	-0.40	--	-0.25	-0.34	--
2005	-0.66	-0.61	--	-0.37	-0.37	--
<u>Change</u> 1980-05	-0.41	-0.21	-0.20	-0.12	-0.03	-0.09

- Effect of compositional shifts in Canada concentrated in 1980s
- Outcome variable: ln (weekly wages); controls: age, years, language, source region, region of residence

After 11-15 years since arrivals, outcomes better in the U.S. than in Canada for highly educated

	Canada	U.S.
Immigrant arrival cohort		
1966-1970	0.90	1.01
1976-1980	0.93	0.96
1986-1990	0.74	0.84
1991-1995	0.71	0.88
% change, late 60s to early 90s...	-21%	-13%

Possible explanations for observed difference in Canada/U.S. trends re: outcomes for university educated

- More rapid increase in supply of highly educated immigrants in Canada
- More dramatic change in language ability among new immigrants to Canada
- Changes in unobserved characteristics across immigrant cohorts (self-selection)
- Changes in the quality of university degrees held by successive immigrant cohorts and/or credentialism
- And others...

Entering immigrants perspective on life in Canada

- **Longitudinal survey of immigrants**
 - » 2000 entering immigrant cohort
 - » Tracked for four years, 12,000 respondents
- **Some dissatisfaction with economic experiences...** lack of employment opportunities one of aspects disliked the most
 - » But 84% to 92% indicated they liked quality of life
- **Freedom, rights, safety, security and prospects for future** liked the most
- **Material well-being** better than before?
 - Economic class: $\frac{1}{3}$ better, $\frac{1}{3}$ same, $\frac{1}{3}$ worse; family class: 58% better
- **Three quarters would come to Canada if had to make decision again**
- 70% of immigrants **initiated citizenship process** after four years, additional 22% intend to

Outcomes for second generation Canadian: the children of immigrants

- Economic outcomes remain largely positive
- Educational attainment typically better than among Canadian-born youth (Boyd, 2002; Aydemir, Chen and Corak, 2008; Hou, 2008)

	<u>2nd generation</u>				<u>Canadian-born</u>
	<u>China</u>	<u>India</u>	<u>Philippines</u>	<u>Caribbean</u>	
% of 25-34 year olds with degree:	62%	50%	33%	28%	24%

- Rates of employment/unemployment and use of government transfers similar to Canadian-born (Aydemir, Chen and Corak, 2008)

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- Earnings equal to or higher than among Canadian-born (Aydemir, Chen, Corak; 2008)
 - Studies by necessity focus on early outcomes of children of immigrant arriving prior to 1980
 - After controlling for educational attainment, earnings lower among many groups of 2nd generation immigrants
 - Lower earnings compared to Canadian-born associated with VM status as well
 - Earnings of second generation immigrants, evaluated in their late 20s, early 30s; relative outcomes may change

Summary

- “Recent” immigrants experienced decline in relative and real earnings through 1980s, early 90s; improvement in late 90s, deterioration in early 2000s
- During 1980s/early 90s research points to
 - » Changing source regions
 - » Declining return to foreign experience
 - » Deteriorating outcomes for all new labour market entrants
 - » Rapidly increasing supply of highly educated domestic workers
- Post 2000, decline accounted for largely by IT workers/engineers
 - » Rapid increase in supply of IT workers/engineering during IT boom
 - » Downturn in IT sector
 - » Business cycle effects

Summary (cont'd)

- Similar stories re declining outcomes in Australia and U.S. during 1980s
- Both Canada and Australia altered selection criteria in early 1990s; Australia more dramatically, resulting in some improvement
- In Canada, selection rule changes very successfully implemented... tended to improve outcomes at middle and top of distribution; did little to improve poverty outcomes
- Many university educated immigrants could not convert education to earnings; lower literacy levels may have played a role; other factors (Bonikowska, Green, Riddell, 2008; Chiswick, 2003)

Summary (cont'd)

- Countries seek highly educated immigrants; economic outcomes during first few years important; immigrants highly mobile
- Relative economic outcomes of university-educated immigrants better in the U.S. than in Canada
- In spite of economic difficulties, $\frac{3}{4}$ of immigrants in Canada after 4 years seem satisfied with choice
- Educational and economic outcomes for 2nd generation immigrants (children) remain very positive, largely because of their very high levels of educational attainment. Some evidence outcomes lower than Canadian-born when controlling for education, particularly among V.M. groups