

Foreign Education and The Earnings Gap Between Immigrants and Canadian-born Workers

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- ▶ Recent immigrants have not fared well in the Canadian labour market.
 - ▶ Immigrants arriving in 1990s earned around 30% less than Canadian-born workers.
 - ▶ Immigrants arriving in 1970s earned about the same as Canadian-born workers.
- ▶ Most suggested cause: Change in the country of Origin
 - ▶ Europe and US (1960s) vs. Asia, Africa, Central and South America (since the 1980s)
 - ▶ Foreign human capital not fully transferable [Green and Worswick (2004) - low return of foreign work experience]

- ▶ Information on where human capital was attained not usually available
- ▶ Human capital location infer based on: Age at immigration, years of education and **assumed** age at completion of studies [Friedberg (2000)]
- ▶ **This study:**
 1. Uses the 2006 Census information on the location where highest degree was attained.
 2. Improves the identification of foreign and Canadian human capital (education and work experience)
 3. Tries to better explain how the immigrant-native wage relates to different returns of Canadian and foreign human capital.

Data: 2006 Canadian Census

- ▶ 2006 Long-form Canadian Census (20% census): Interviews residents of private dwellings as of May 16, 2006 (reference day)
- ▶ Sample : 20-64 years old, full time workers with positive earnings and education levels higher than high school.
 - ▶ Non-permanent residents are not considered.
 - ▶ Further restriction - Only consider immigrants arriving between the ages of 15 and 29 years old.
- ▶ Dependent variable: Logarithm of average weekly wages.
 - ▶ Minimum weekly wage: 15 times the hourly wage of the province.

Data Description

- ▶ Source countries' importance shifted throughout the years (from UK and Europe to Asia).
- ▶ 56% of immigrants got their highest education in Canada.
- ▶ Immigrants cluster themselves in the top CMAs. Top five CMAs hold 75% of all foreign-born.
- ▶ Immigrants are relatively older and more educated than natives. Higher share above bachelor's degree (17% against 11%)
- ▶ Age at immigration is related to probabilities of continuing studies in Canada. Of Immigrants arriving at 19 years old 92% got their highest education in Canada. 29% in the case of foreign-born arriving at 29.

Immigrant's Top Countries of Origin by Year of Arrival

	Total	1956 to 1970	1971 to 1980	1981 to 1990	1991 to 2000	Above 2000
Top Ten countries						
India	9.3	3.9	7.3	6.7	11.3	16.6
UK	7.8	21.9	13.0	6.6	2.9	2.2
Philippines	7.6	2.5	7.5	7.0	9.5	8.1
China	5.9	2.7	3.2	3.1	8.2	12.5
Hong Kong	5.1	1.9	6.4	6.5	5.8	0.6
US	3.9	6.7	6.7	3.6	1.9	2.2
Poland	3.2	1.2	1.2	7.6	3.0	0.9
Jamaica	3.0	3.9	4.5	3.8	2.0	0.7
Vietnam	2.8	.	3.9	5.0	1.9	0.7
France	2.3	2.4	1.7	1.6	2.3	4.3
Two Extra Countries						
Pakistan	1.8	.	1.1	0.8	2.7	3.8
Romania	1.7	.	0.4	1.0	2.7	3.7
Rest of the World						
Africa	7.8	3.9	7.0	7.7	8.3	10.6
Rest of America	7.3	7.1	8.4	9.3	6.0	4.6
Rest Europe	7.1	25.9	9.2	6.2	2.7	2.2
East Europe	5.9	7.7	3.0	3.2	9.0	7.5
W. and C. Asia	5.2	1.5	2.7	6.5	6.7	6.3
South America	5.0	2.7	6.6	5.8	3.7	5.4
Rest Asia	4.4	1.1	2.5	4.0	7.0	4.6
South-East Asia	1.8	.	2.3	3.0	1.3	1.1
Oceania	1.3	1.6	1.4	1.2	1.2	1.4
Total	100	9.2	23.8	23.1	30.8	13.2

Note: A missing value "." indicates that the cell has less than 100 observations.

Immig. Top Locations of Study of Origin by Year of Arrival

	Total	1956 to 1970	1971-1980	1981-1990	1991-2000	Above 2000
Top Ten countries						
Canada	55.91	64.85	62.03	64.03	55.09	26.25
India	5.8	1.17	3.5	3.44	7.12	14.26
UK	5.24	10.83	8.95	4.57	2.29	2.69
Philippines	5.05	1.72	4.94	3.94	6.01	7.25
US	3.07	2.65	4.26	2.56	2.43	3.6
China	2.43	.	.	0.75	3.72	8.12
France	1.65	1.43	1.01	0.9	1.75	4.07
Poland	1.63	.	0.63	4.25	1.29	0.58
Romania	1.06	.	.	0.42	1.62	3.26
Pakistan	1.02	.	0.45	0.4	1.33	2.87
Rest of the World						
East Europe	3.23	3.55	1.65	1.92	4.55	5.08
Rest Europe	2.9	8.66	3.55	2.5	1.41	1.94
Africa	2.25	.	1.64	1.79	2.29	5.18
Rest Asia	2.16	0.94	1.92	2.13	2.63	2.4
Rest of America	1.99	1.35	1.6	2.29	1.8	3.05
W. and C. Asia	1.76	.	0.72	1.58	2.26	3.87
South America	1.47	.	1.41	1.21	1.15	3.53
Oceania	0.7	.	0.62	0.44	0.66	1.29
South-east Asia	0.7	.	0.8	0.9	0.6	0.7
Total	100.0	9.2	23.8	23.1	30.8	13.2

Note: A missing value "." indicates that the cell has less than 100 observations.

CMAs of Residence

	Immigrant	Native	Total		Immigrant	Native	Total
Top 10 CMAs				Top 10 to 20 CMAs			
Toronto	40.9	11	14.1	Windsor	1	0.9	0.9
Vancouver	13	5.1	5.9	Oshawa	0.9	1.1	1.1
Montreal	12.4	12.9	12.9	Victoria	0.9	1.1	1.1
Calgary	4.7	4	4	St. Catharines–Niagara	0.8	1.1	1.1
Ottawa	4.1	4.5	4.4	Qubec	0.5	3.6	3.3
Edmonton	3.7	3.7	3.7	Abbotsford	0.5	0.4	0.4
Hamilton	2.2	2.1	2.1	Halifax	0.4	1.7	1.6
Winnipeg	2.1	2.3	2.2	Guelph	0.4	0.4	0.4
Kitchener	1.5	1.4	1.4	Barrie	0.3	0.6	0.6
London	1.1	1.5	1.5	Saskatoon	0.3	0.9	0.8
				Rest			
				Other CMAs	5.3	21.8	20.1
				Non-CMAs	3.2	18	16.4
				Total	100	10.3	89.7

Years of Education

Group	Assigned Yrs. of Educ.	Natives	Immigrants	Total
CEGEP (3 - 12 months) ^a	13	26.9	19.0	26.1
CEGEP (13 months - more than 2 years)	14	32.6	25.8	31.9
University certificate below bachelor level	15	6.6	12.0	7.1
Bachelor's degree	16	23.5	26.4	23.8
University certificate above bachelor level	17	3.4	4.3	3.5
Master's degree or Degree in medicine ^b	18	6.2	10.8	6.7
Earned doctorate degree	21	0.9	1.8	0.9
Total		100	100	100

^a It includes trades certificate, registered apprenticeship certificate and CEGEP (between 3 to 12 months).

^b It includes degrees in medicine, dentistry, veterinary and optometry as well as Master's degrees

Share of Immigrants with a Canadian Degree

Age at Immigration ^a	Foreign degree	Canadian degree	Total
19	8.4	91.7	100
20	20.6	79.4	100
21	30.3	69.7	100
22	42.7	57.3	100
23	47.5	52.5	100
24	53.3	46.7	100
25	57.6	42.4	100
26	61.9	38.1	100
27	64.7	35.4	100
28	67.0	33.0	100
29	71.3	28.7	100
Total	44.1	55.9	100

^a All immigrants who arrived at an age younger than 19 obtained their highest degree of education in Canada.

Summary Statistics

	Native	Immigrant		Native	Immigrant
Log. weekly wages	6.8 (0.65)	6.76 (0.67)	Yrs. Educ. AboveHS - CAN	2.45 (1.23)	1.27 (1.51)
Weeks worked	47.01 (10.42)	46.59 (10.72)	Yrs. Educ. AboveBACH - CAN	0.18 (0.63)	0.2 (0.74)
Age	40.37 (10.79)	42.37 (10.92)	Yrs. Educ. AboveHS - FOR	0.03 (0.29)	1.52 (1.73)
Age of Imm.		23.42 (4.04)	Yrs. Educ. AboveBACH - FOR	0.02 (0.26)	0.15 (0.56)
Year of Imm.		1986.92 (11.32)	Work Exp.	19.7 (10.89)	21.23 (11.23)
Years of Educ.	14.68 (1.59)	15.14 (1.74)	Work Exp. CAN	19.7 (10.89)	17.26 (11.18)
Years of Educ. (-12)	2.68 (1.59)	3.14 (1.74)	Work Exp. FOR		3.96 (3.01)
Canadian degree	98%	56%			
Observations	5'671,380	651,750	Observations	5'671,380	651,750

Estimations

$$w_{igol} = \alpha_C + \alpha_I I_i + X_i \beta + D_g \delta + G_o \theta + L_l \phi + \mu_{igol}$$

- ▶ w_{igol} : Logarithm of weekly wages for individual i , living in area g , from source country/area o and who finished highest education in country/area l .
- ▶ I_i : Dichotomous variable indicating whether person i is an immigrant.
- ▶ X_i : Education, work experience, gender, language skills.
- ▶ Importance of a better identification of Canadian and foreign human capital for the immigrant-native wage gap
- ▶ Relevance of the “location of study” for the immigrant-native wage gap

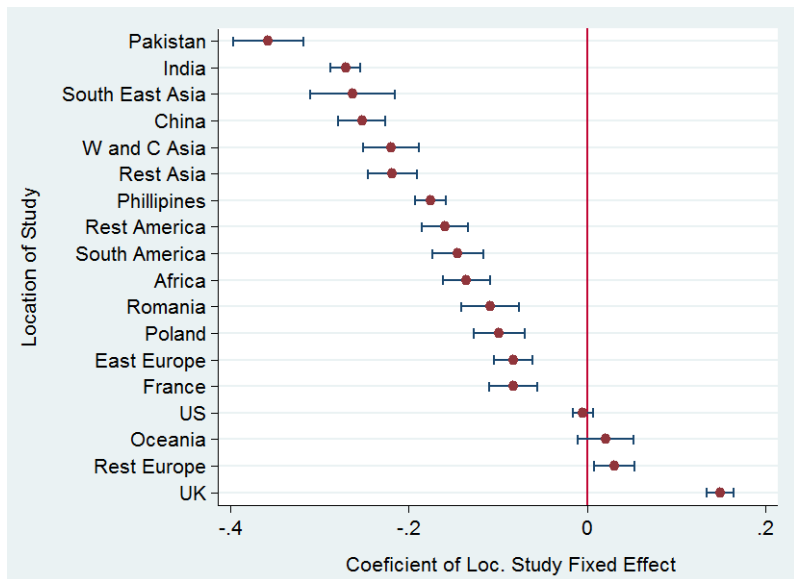
Estimation 1

	(1)	(2)	(3)	(4)	(5)	(6)
Immigrant	-0.1096 (0.002)***	-0.0580 (0.0025)***	-0.1180 (0.002)***	-0.0657 (0.0025)***		
Below Bachelor	0.1652 (0.0014)***	0.1653 (0.0014)***				
Bachelor	0.4456 (0.0017)***	0.4494 (0.0017)***				
Above Bachelor	0.5906 (0.0022)***	0.5908 (0.0022)***				
Yrs. of Educ. (-12)			0.1233 (0.0004)***	0.1242 (0.0004)***	0.1243 (0.0004)***	0.1246 (0.0004)***
Work Exp.	0.0518 (0.0002)***	0.052 (0.0002)***	0.051 (0.0002)***	0.0512 (0.0002)***	0.0512 (0.0002)***	0.0513 (0.0002)***
Work Exp. Square (/100)	-0.0879 (0.0005)***	-0.0889 (0.0005)***	-0.0873 (0.0005)***	-0.0882 (0.0005)***	-0.0877 (0.0005)***	-0.0884 (0.0005)***
Gender	0.2922 (0.0012)***	0.2918 (0.0012)***	0.286 (0.0011)***	0.2859 (0.0011)***	0.2865 (0.0011)***	0.2862 (0.0011)***
Age of Imm. 15-19					-0.0266 (0.0042)***	-0.0261 (0.0042)***
Age of Imm. 20-24					-0.0800 (0.0033)***	-0.0491 (0.0036)***
Age of Imm. 25-29					-0.1863 (0.0029)***	-0.1227 (0.0038)***
Loc. of study F.E.	No	Yes	No	Yes	No	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125	6'323,125	6'323,125
R ²	0.2137	0.2167	0.2115	0.2143	0.2126	0.2147

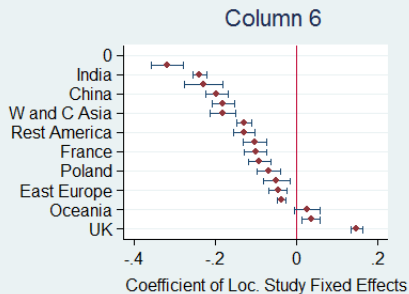
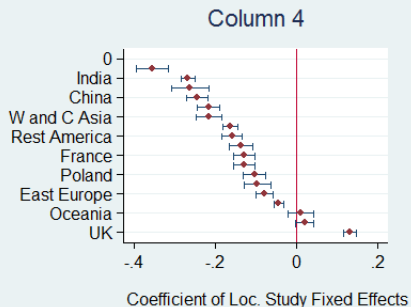
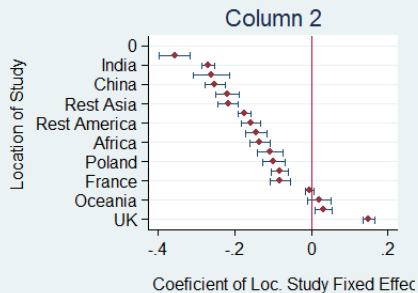
Notes: *, ** and *** denote significance at 10%, 5% and 1% levels respectively. Robust standard errors are in parenthesis.

The omitted category in the location of study fixed effects is Canada.

Location of Study Fixed Effects - Column 2



Location of Study Fixed Effects - Columns 2, 4 and 6



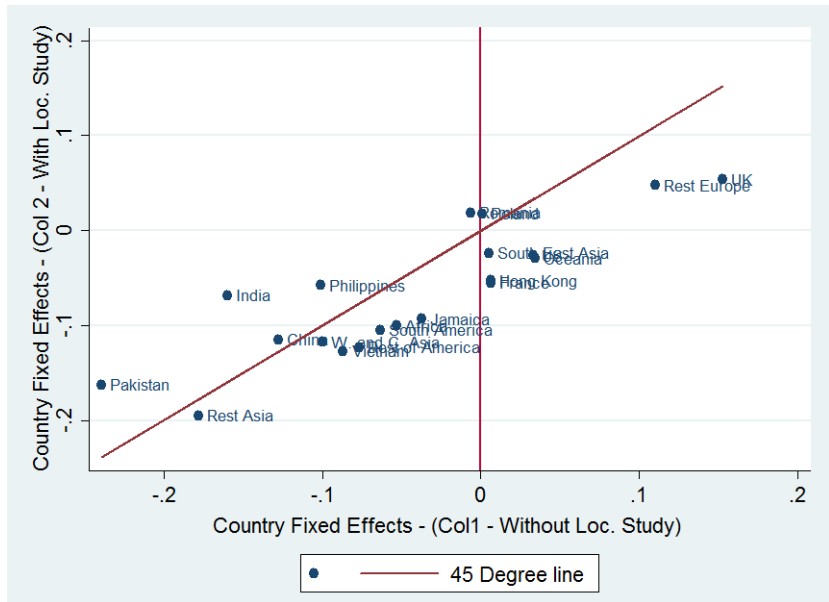
Estimation 1 + All Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)
Immigrant	-0.1118 (0.0081)***	-0.0414 (0.0108)***	-0.1203 (0.0081)***	-0.0528 (0.0108)***		
Below Bachelor	0.1452 (0.0014)***	0.1455 (0.0014)***				
Bachelor	0.4108 (0.0017)***	0.4135 (0.0017)***				
Above Bachelor	0.5535 (0.0022)***	0.5549 (0.0022)***				
Yrs. of Educ. (- 12)			0.116 (0.0004)***	0.1169 (0.0004)***	0.1166 (0.0004)***	0.1172 (0.0004)***
Work Exp.	0.0526 (0.0002)***	0.0527 (0.0002)***	0.0519 (0.0002)***	0.0519 (0.0002)***	0.0521 (0.0002)***	0.052 (0.0002)***
Work Exp. Square (/100)	-0.0898 (0.0005)***	-0.0899 (0.0005)***	-0.0892 (0.0005)***	-0.0892 (0.0005)***	-0.0894 (0.0005)***	-0.0894 (0.0005)***
Gender	0.287 (0.0011)***	0.287 (0.0011)***	0.2823 (0.0011)***	0.2825 (0.0011)***	0.2827 (0.0011)***	0.2827 (0.0011)***
Age of Imm. 15-19					-0.0349 (0.009)***	-0.0221 (0.0112)**
Age of Imm. 20-24					-0.0897 (0.0085)***	-0.0429 (0.0111)***
Age of Imm. 25-29					-0.1712 (0.0083)***	-0.1012 (0.0111)***
Loc. of study F.E.	No	Yes	No	Yes	No	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125	6'323,125	6'323,125
R^2	0.2455	0.2469	0.2445	0.2459	0.2452	0.2461

Notes: *, ** and *** denote significance at 10%, 5% and 1% levels respectively. Robust standard errors are in parenthesis.

The estimation incorporates dummies for English and French as well as fixed effects for country of origin, CMA/Province and location of study. Eastern Europe is the base case for country of origin fixed effects; Toronto and Ontario are the omitted categories for CMA and province of residence, respectively; and Canada is the base case in the location of studies fixed effects.

Country Fixed Effects: Col. 1 vs Col 2

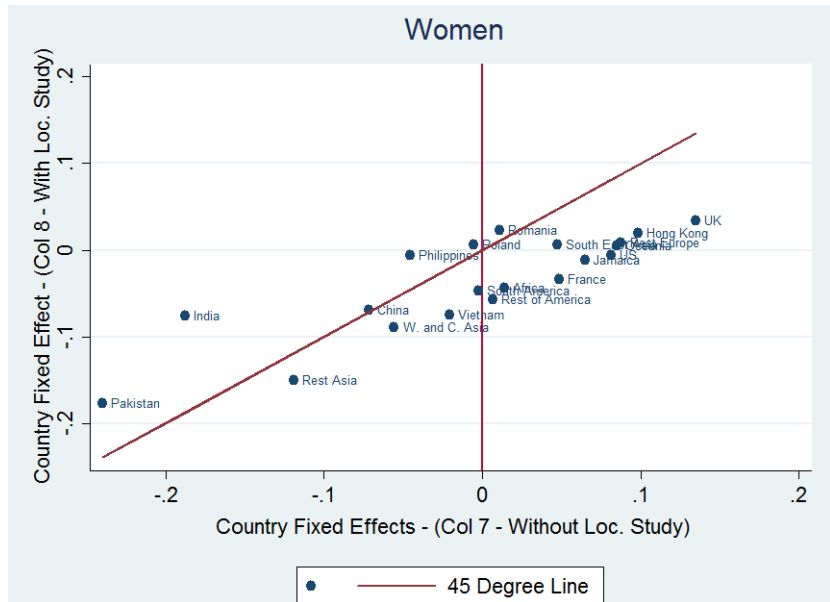


Males vs. Females

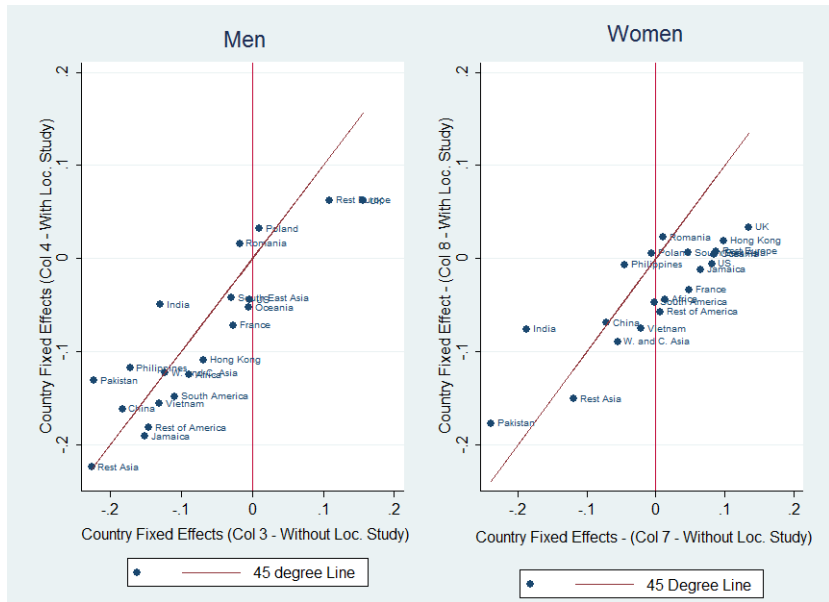
	Men				Women			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Immigrant	-0.1184 (0.0029)***	-0.0839 (0.0036)***	-0.0757 (0.0119)***	-0.0248 (0.0159)	-0.0933 (0.0028)***	-0.0202 (0.0033)***	-0.1533 (0.0109)***	-0.0588 (0.0143)***
Below Bachelor	0.1212 (0.0019)***	0.121 (0.0019)***	0.1012 (0.0019)***	0.1012 (0.0019)***	0.2508 (0.0021)***	0.2519 (0.0021)***	0.2334 (0.0021)***	0.2345 (0.0021)***
Bachelor	0.3677 (0.0024)***	0.3711 (0.0024)***	0.3362 (0.0024)***	0.3382 (0.0024)***	0.5589 (0.0024)***	0.5639 (0.0024)***	0.5229 (0.0024)***	0.5268 (0.0024)***
Above Bachelor	0.5041 (0.0032)***	0.5016 (0.0033)***	0.4742 (0.0032)***	0.4742 (0.0032)***	0.7167 (0.003)***	0.7209 (0.003)***	0.6741 (0.0029)***	0.6777 (0.003)***
Work Exp.	0.0578 (0.0003)***	0.0581 (0.0003)***	0.0586 (0.0003)***	0.0586 (0.0003)***	0.0469 (0.0003)***	0.047 (0.0003)***	0.0479 (0.0003)***	0.0479 (0.0003)***
Work Exp. Square (/100)	-0.0981 (0.0007)***	-0.0995 (0.0007)***	-1.001 (0.0007)***	-1.003 (0.0007)***	-0.805 (0.0007)***	-0.811 (0.0007)***	-0.825 (0.0007)***	-0.825 (0.0007)***
Eng. or Fren. Mother Tongue	No	No	Yes	Yes	No	No	Yes	Yes
CMA/Province F.E.	No	No	Yes	Yes	No	No	Yes	Yes
Country/area of Origin F.E.	No	No	Yes	Yes	No	No	Yes	Yes
Loc. of study F.E.	No	Yes	No	Yes	No	Yes	No	Yes
Obs.	3'413,975	3'413,975	3'413,975	3'413,975	2'909,155	2'909,155	2'909,155	2'909,155
R ²	0.1628	0.1658	0.2013	0.2025	0.2077	0.2118	0.2406	0.243

Notes: *, ** and *** denote significance at 10%, 5% and 1% levels respectively. Robust standard errors are in parenthesis. The estimation incorporates dummies for English and French as well as fixed effects for country of origin, CMA/Province and location of study. Eastern Europe is the base case for country of origin fixed effects; Toronto and Ontario are the omitted categories for CMA and province of residence, respectively; and Canada is the base case in the location of studies fixed effects.

Country Fixed Effects for Women - Columns 7 vs 8



Country Fixed Effects for Men and Women



Estimation 2: Specification 1 + All Fixed Effects

	(1)	(2)	(3)	(4)
Immigrant	-.1203 (0.0081)***	-.0528 (0.0108)***	-.1132 (0.0081)***	-.0454 (0.0108)***
Yrs. of Educ. (- 12)	0.116 (0.0004)***	0.1169 (0.0004)***		
Yrs. of Educ Above HS			0.139 (0.0005)***	0.1401 (0.0005)***
Yrs. of Educ Above BACH			0.0677 (0.001)***	0.0674 (0.001)***
Work Exp.	0.0519 (0.0002)***	0.0519 (0.0002)***	0.0524 (0.0002)***	0.0525 (0.0002)***
Work Exp. Square (/100)	-.0892 (0.0005)***	-.0892 (0.0005)***	-.0896 (0.0005)***	-.0897 (0.0005)***
Gender	0.2823 (0.0011)***	0.2825 (0.0011)***	0.2879 (0.0011)***	0.288 (0.0011)***
Loc. of study F.E.	No	Yes	No	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125
R^2	0.2445	0.2459	0.2473	0.2488

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

Notes: Robust standard errors are in parenthesis. The estimation incorporates dummies for English and French as well as fixed effects for area of origin, CMA/Province and location of study. Eastern Europe is the base case for area of origin fixed effects, Toronto and Ontario are the omitted categories for CMA and province of residence, respectively. Canada is the base case in the location of studies fixed effects.

Estimation 2: Specification 2 + All Fixed Effects

	(1)	(2)	(3)	(4)
Immigrant	-0.0637 (0.0083)***	-0.0400 (0.0108)***	-0.0146 (0.0088)*	0.0025 (0.0111)
Yrs. of Educ Above HS - CAN	0.1408 (0.0005)***	0.1405 (0.0005)***	0.1406 (0.0005)***	0.1403 (0.0005)***
Yrs. of Educ Above BACH - CAN	0.0724 (0.001)***	0.0703 (0.001)***	0.0719 (0.001)***	0.0699 (0.001)***
Yrs. of Educ Above HS - FOR	0.1133 (0.0012)***	0.1277 (0.0016)***	0.1191 (0.0012)***	0.1331 (0.0016)***
Yrs. of Educ Above BACH - FOR	0.0558 (0.0021)***	0.0533 (0.0024)***	0.054 (0.0021)***	0.0546 (0.0024)***
Work Exp.	0.0524 (0.0002)***	0.0525 (0.0002)***		
Work Exp. Square (/100)	-0.0895 (0.0005)***	-0.0897 (0.0005)***		
Work Exp. - CAN			0.0524 (0.0002)***	0.0524 (0.0002)***
Work Exp. Square (/100) - CAN			-0.0908 (0.0005)***	-0.0909 (0.0005)***
Work Exp. - FOR			0.006 (0.002)***	0.0106 (0.002)***
Work Exp. Square (/100) - FOR			-0.0032 (0.0208)	-0.0363 (0.0209)*
Gender	0.2886 (0.0011)***	0.2882 (0.0011)***	0.2886 (0.0011)***	0.2882 (0.0011)***
Loc. of study F.E.	No	Yes	No	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125
R ²	0.248	0.2489	0.2485	0.2492

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

Notes: Robust standard errors are in parenthesis. The estimation incorporates dummies for English and French as well as fixed effects for area of origin, CMA/Province and location of study. Eastern Europe is the base case for area of origin fixed effects, Toronto and Ontario are the omitted categories for CMA and province of residence, respectively. Canada is the base case in the location of studies fixed effects.

Estimation 3: Specification 1 + All Fixed Effects

	(1)	(2)	(3)	(4)
Immigrant	-0.1118 (0.0081)***	-0.0414 (0.0108)***	-0.0758 (0.0082)***	-0.0410 (0.0108)***
Below Bachelor	0.1452 (0.0014)***	0.1455 (0.0014)***	0.1471 (0.0014)***	0.1466 (0.0014)***
Bachelor	0.4108 (0.0017)***	0.4135 (0.0017)***	0.419 (0.0017)***	0.4186 (0.0017)***
Above Bachelor	0.5535 (0.0022)***	0.5549 (0.0022)***	0.5622 (0.0023)***	0.5613 (0.0023)***
Trade - FOR			-0.0017 (0.0069)	-0.0676 (0.0152)***
Below Bachelor - FOR			-0.0564 (0.005)***	-0.1168 (0.0148)***
Bachelor - FOR			-0.1315 (0.0054)***	-0.1868 (0.015)***
Above Bachelor - FOR			-0.0817 (0.0056)***	-0.1774 (0.015)***
Work Exp.	0.0526 (0.0002)***	0.0527 (0.0002)***	0.0526 (0.0002)***	0.0527 (0.0002)***
Work Exp.Square(/100)	-0.0898 (0.0005)***	-0.0900 (0.0005)***	-0.0898 (0.0005)***	-0.0901 (0.0005)***
Gender	0.2875 (0.0011)***	0.2875 (0.0011)***	0.2881 (0.0011)***	0.2876 (0.0011)***
Loc. of study F.E.	No	Yes	No	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125
R^2	0.2455	0.2469	0.2462	0.2471

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

Notes: Robust standard errors are in parenthesis. The estimation incorporates dummies for English and French as well as fixed effects for area of origin, CMA/Province and location of study. Eastern Europe is the base case for area of origin fixed effects, Toronto and Ontario are the omitted categories for CMA and province of residence, respectively. Canada is the base case in the location of studies fixed effects.

Estimation 3: Specification 2 + All Fixed Effects

	(1)	(2)	(3)	(4)
Immigrant	-0.0376 (0.0088)***	0.0029 (0.0112)	-0.0207 (0.0088)**	0.0045 (0.0102)
Below Bachelor	0.145 (0.0014)***	0.1452 (0.0014)***	0.146 (0.0014)***	0.1457 (0.0014)***
Bachelor	0.4116 (0.0017)***	0.4136 (0.0017)***	0.4174 (0.0017)***	0.4171 (0.0017)***
Above Bachelor	0.5535 (0.0022)***	0.5549 (0.0022)***	0.5612 (0.0023)***	0.5603 (0.0023)***
Trade - FOR			-0.0125 (0.0069)*	-0.0791 (0.0152)***
Below Bachelor - FOR			-0.0470 (0.0051)***	-0.1088 (0.0148)***
Bachelor - FOR			-0.1050 (0.0055)***	-0.1638 (0.015)***
Above Bachelor - FOR			-0.0751 (0.0056)***	-0.1658 (0.015)***
Work Exp. - CAN	0.0527 (0.0002)***	0.0526 (0.0002)***	0.0526 (0.0002)***	0.0526 (0.0002)***
Work Exp.Square(/100) - CAN	-0.0914 (0.0005)***	-0.0911 (0.0005)***	-0.0911 (0.0005)***	-0.0911 (0.0005)***
Work Exp. - FOR	-0.0059 (0.0019)***	0.0095 (0.002)***	0.0043 (0.002)**	0.0103 (0.002)***
Work Exp.Square(/100) - FOR	0.1316 (0.0198)***	-0.0154 (0.0205)	0.0249 (0.0203)	-0.0332 (0.0205)
Gender	0.2885 (0.0012)***	0.2885 (0.0012)***	0.289 (0.0012)***	0.2886 (0.0012)***
Loc.of study F.E.	No	Yes	No	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125
R ²	0.2462	0.2472	0.2467	0.2474

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

Notes: Robust standard errors are in parenthesis. The estimation incorporates dummies for English and French as well as fixed effects for area of origin, CMA/Province and location of study. Eastern Europe is the base case for area of origin fixed effects, Toronto and Ontario are the omitted categories for CMA and province of residence, respectively. Canada is the base case in the location of studies fixed effects.

Conclusions

- ▶ A large fraction (30 to 80 percent) of the earnings gap between immigrants and natives can be accounted for by the location of study.
- ▶ Immigrants who studied in Canada or other "comparable" countries (UK, US, Western Europe) tend to do much better than those who did not.
- ▶ The role of foreign schooling in the earnings gap is particularly important for women and immigrants who came to Canada after age 25.
- ▶ Consistent with other evidence suggesting that foreign schooling is not as valuable in the Canadian labour market as Canadian education (e.g. Ferrer, Green and Riddell)

Estimation 4: Interact. Education + Loc. Study

	(1)	(2)	(3)	(4)
Immigrant	-0.1016 (0.0028)***	-0.0757 (0.0041)***	-0.0402 (0.0108)***	0.0055 (0.0112)
Below Bachelor	0.1465 (0.0014)***	0.1457 (0.0014)***	0.1466 (0.0014)***	0.1457 (0.0014)***
Bachelor	0.4189 (0.0017)***	0.4176 (0.0017)***	0.4186 (0.0017)***	0.4171 (0.0017)***
Above Bachelor	0.5618 (0.0023)***	0.5612 (0.0023)***	0.5613 (0.0023)***	0.5602 (0.0023)***
Work Exp.	0.0525 (0.0002)***		0.0527 (0.0002)***	
Work Exp.Square(/100)	-0.0894 (0.0005)***		-0.0900 (0.0005)***	
Work Exp. - CAN		0.0525 (0.0002)***		0.0525 (0.0002)***
Work Exp.Square(/100) - CAN		-0.0906 (0.0005)***		-0.0909 (0.0005)***
Work Exp. - FOR		0.0117 (0.002)***		0.0108 (0.002)***
Work Exp.Square(/100) - FOR		-0.0570 (0.0206)***		-0.0427 (0.0206)**
Gender	0.2868 (0.0011)***	0.287 (0.0011)***	0.2869 (0.0011)***	0.2869 (0.0011)***
Eng. or Fren. Mother Tongue	Yes	Yes	Yes	Yes
CMA/Province F.E.	Yes	Yes	Yes	Yes
Country/area of origin F.E.	No	No	Yes	Yes
Obs.	6'323,125	6'323,125	6'323,125	6'323,125

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

	(1)	(2)	(3)	(4)
Trade - IND	-0.0512 (0.0339)	-0.0274 (0.0345)	-0.0418 (0.0349)	-0.0222 (0.0354)
Below Bachelor-IND	-0.1850 (0.0144)***	-0.1574 (0.0145)***	-0.1792 (0.0167)***	-0.1543 (0.0167)***
Bachelor - IND	-0.3286 (0.0123)***	-0.2915 (0.0124)***	-0.3249 (0.015)***	-0.2895 (0.015)***
Above Bachelor - IND	-0.3996 (0.0169)***	-0.3775 (0.017)***	-0.3976 (0.019)***	-0.3762 (0.0191)***
Trade - UK	0.1535 (0.0165)***	0.0899 (0.0165)***	0.074 (0.0173)***	0.0324 (0.0173)*
Below Bachelor - UK	0.1191 (0.0113)***	0.0772 (0.0112)***	0.044 (0.0126)***	0.0235 (0.0125)*
Bachelor - UK	0.1292 (0.0201)***	0.1267 (0.0202)***	0.0738 (0.0205)***	0.0868 (0.0206)***
above-bachelor-UK	0.073 (0.0149)***	0.0704 (0.0149)***	0.0553 (0.015)***	0.0576 (0.015)***
Trade - FR	-0.0321 (0.029)	-0.0437 (0.0297)	-0.0460 (0.0312)	-0.0754 (0.0319)**
Below Bachelor - FR	-0.0220 (0.0257)	0.0197 (0.0262)	-0.0272 (0.0282)	-0.0052 (0.0287)
Bachelor - FR	-0.0667 (0.0374)*	-0.0194 (0.0377)	-0.0709 (0.0399)*	-0.0420 (0.0403)
Above Bachelor - FR	0.0158 (0.0202)	0.0373 (0.0201)*	0.0138 (0.022)	0.0224 (0.0219)
Trade - PHIL	-0.0722 (0.0274)***	-0.0579 (0.0278)**	-0.0798 (0.0292)***	-0.0659 (0.0297)**
Below Bachelor - PHIL	-0.1147 (0.014)***	-0.0932 (0.0138)***	-0.1237 (0.0168)***	-0.1025 (0.0168)***
Bachelor - PHIL	-0.2012 (0.012)***	-0.1781 (0.0121)***	-0.2102 (0.0155)***	-0.1867 (0.0156)***
Above Bachelor - PHIL	-0.3464 (0.0294)***	-0.3298 (0.0294)***	-0.3545 (0.0309)***	-0.3370 (0.0309)***

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

	(1)	(2)	(3)	(4)
Trade - US	-0.0054 (0.0199)	-0.0067 (0.02)	-0.0074 (0.02)	-0.0072 (0.0201)
Below Bachelor - US	-0.0240 (0.0131)*	-0.0259 (0.0131)**	-0.0273 (0.0132)**	-0.0271 (0.0132)**
Bachelor - US	-0.0540 (0.0103)***	-0.0539 (0.0103)***	-0.0560 (0.0104)***	-0.0547 (0.0104)***
Above Bachelor - US	-0.0220 (0.0082)***	-0.0230 (0.0082)***	-0.0214 (0.0082)***	-0.0223 (0.0082)***
Trade - CHI	-0.3229 (0.0664)***	-0.2635 (0.0638)***	-0.2721 (0.068)***	-0.2490 (0.0653)***
Below Bachelor - CHI	-0.2580 (0.0232)***	-0.1545 (0.0229)***	-0.2085 (0.0251)***	-0.1444 (0.0248)***
Bachelor - CHI	-0.2619 (0.0173)***	-0.1578 (0.0174)***	-0.2125 (0.0197)***	-0.1477 (0.0198)***
Above Bachelor - CHI	-0.1883 (0.039)***	-0.1274 (0.0387)***	-0.1400 (0.0406)***	-0.1167 (0.0402)***
Trade - POL	0.0348 (0.0333)	0.032 (0.0332)	-0.0446 (0.0351)	-0.0557 (0.035)
Below Bachelor - POL	-0.0682 (0.0184)***	-0.0684 (0.0183)***	-0.1512 (0.0221)***	-0.1581 (0.022)***
Bachelor - POL	-0.2331 (0.0557)***	-0.2339 (0.0554)***	-0.3155 (0.0571)***	-0.3219 (0.0568)***
Above Bachelor - POL	-0.2360 (0.0292)***	-0.2440 (0.0291)***	-0.3184 (0.0317)***	-0.3312 (0.0316)***
Trade - PAK	-0.1933 (0.0713)***	-0.1884 (0.0668)***	-0.1229 (0.0702)*	-0.1391 (0.0663)**
Below Bachelor - PAK	-0.2986 (0.0368)***	-0.2600 (0.0363)***	-0.2143 (0.0395)***	-0.2004 (0.0391)***
Bachelor - PAK	-0.3640 (0.0322)***	-0.3106 (0.0319)***	-0.2767 (0.0362)***	-0.2478 (0.036)***
Above Bachelor - PAK	-0.5022 (0.0359)***	-0.4575 (0.036)***	-0.4147 (0.0402)***	-0.3935 (0.0403)***

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

	(1)	(2)	(3)	(4)
Trade - ROMAN	0.0229 (0.0533)	0.0916 (0.0527)*	-.0570 (0.0561)	-.0286 (0.0554)
Below Bachelor - ROMAN	-.0292 (0.0371)	0.0605 (0.0364)*	-.1089 (0.0417)***	-.0595 (0.0409)
Bachelor - ROMAN	-.1401 (0.0245)***	-.0355 (0.0241)	-.2225 (0.032)***	-.1587 (0.0315)***
Above Bachelor - ROMAN	-.0514 (0.0268)*	-.0031 (0.0268)	-.1327 (0.0338)***	-.1242 (0.0335)***
Trade - SOUTH-AMER	-.0803 (0.0326)**	-.0877 (0.0329)***	-.0461 (0.034)	-.0479 (0.0343)
Below Bachelor - SOUTH-AMER	-.1117 (0.0215)***	-.1012 (0.0215)***	-.0759 (0.0230)***	-.0578 (0.0230)**
Bachelor - SOUTH-AMER	-.1831 (0.0263)***	-.1152 (0.0271)***	-.1474 (0.0277)***	-.0698 (0.0285)**
Above Bachelor - SOUTH-AMER	-.2443 (0.0384)***	-.2037 (0.0386)***	-.2097 (0.0393)***	-.1591 (0.0395)***
Trade - REST-AMER	-.1200 (0.0185)***	-.1200 (0.0186)***	-.0713 (0.0193)***	-.0592 (0.0193)***
Below Bachelor - REST-AMER	-.1344 (0.0202)***	-.1191 (0.0202)***	-.0843 (0.0207)***	-.0567 (0.0208)***
Bachelor - REST-AMER	-.2830 (0.0297)***	-.2170 (0.0298)***	-.2354 (0.03)***	-.1561 (0.0302)***
Above Bachelor - REST-AMER	-.2648 (0.0414)***	-.2338 (0.042)***	-.2222 (0.0414)***	-.1794 (0.0421)***
Trade - EAST-EUR	0.0982 (0.02)***	0.0751 (0.02)***	0.0323 (0.0217)	-.0034 (0.0217)
Below Bachelor - EAST-EUR	-.0525 (0.0207)**	-.0397 (0.0204)*	-.1170 (0.0227)***	-.1192 (0.0225)***
Bachelor - EAST-EUR	-.1599 (0.0219)***	-.0994 (0.0219)***	-.2223 (0.0239)***	-.1755 (0.0239)***
Above Bachelor - EAST-EUR	-.1668 (0.0201)***	-.1327 (0.0199)***	-.2265 (0.0223)***	-.2060 (0.0221)***

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

	(1)	(2)	(3)	(4)
Trade - REST-EUR	0.1166 (0.0174)***	0.0597 (0.0173)***	0.0271 (0.0184)	-0.0037 (0.0183)
Below Bachelor - REST-EUR	0.0618 (0.018)***	0.0321 (0.0179)*	-.0212 (0.0189)	-.0259 (0.0189)
Bachelor - REST-EUR	-.0669 (0.0422)	-.0680 (0.0425)	-.1341 (0.0424)***	-.1144 (0.0426)***
Above Bachelor - REST-EUR	-.0322 (0.0265)	-.0253 (0.0263)	-.0659 (0.0265)**	-.0495 (0.0264)*
Trade - AFRICA	-.0401 (0.0283)	-.0069 (0.0284)	-.0089 (0.0293)	0.001 (0.0293)
Below Bachelor - AFRICA	-.1273 (0.0183)***	-.0777 (0.0185)***	-.0966 (0.0198)***	-.0696 (0.0199)***
Bachelor - AFRICA	-.1626 (0.0234)***	-.1136 (0.0233)***	-.1312 (0.0246)***	-.1036 (0.0244)***
Above Bachelor - AFRICA	-.0353 (0.0421)	-.0057 (0.0419)	-.0062 (0.0427)	0.0036 (0.0424)
Trade - WESTASIA	-.1480 (0.0372)***	-.1187 (0.0366)***	-.1107 (0.0377)***	-.0956 (0.0372)**
Below Bachelor - WESTASIA	-.1923 (0.0254)***	-.1561 (0.0258)***	-.1565 (0.0264)***	-.1345 (0.0268)***
Bachelor - WESTASIA	-.2432 (0.0259)***	-.1807 (0.026)***	-.2040 (0.0273)***	-.1561 (0.0273)***
Above Bachelor - WESTASIA	-.1917 (0.0396)***	-.1571 (0.0394)***	-.1543 (0.0406)***	-.1324 (0.0404)***
Trade - SOUTHEASTASIA	-.1106 (0.0433)**	-.1246 (0.0426)***	-.0882 (0.043)**	-.0957 (0.0422)**
Below Bachelor - SOUTHEASTASIA	-.1962 (0.0334)***	-.1888 (0.0336)***	-.1874 (0.0336)***	-.1734 (0.0337)***
Bachelor - SOUTHEASTASIA	-.4380 (0.0462)***	-.4229 (0.0465)***	-.4236 (0.0464)***	-.4008 (0.0466)***
Above Bachelor - SOUTHEASTASIA	-.3767 (0.088)***	-.3814 (0.0885)***	-.3665 (0.0897)***	-.3729 (0.0899)***

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.

	(1)	(2)	(3)	(4)
Trade - REST-ASIA	-0.1181 (0.0321)***	-0.1150 (0.0313)***	-0.0527 (0.0327)	-0.0684 (0.0319)**
Below Bachelor - REST-ASIA	-0.1515 (0.0196)***	-0.1404 (0.0196)***	-0.0781 (0.0205)***	-0.0859 (0.0205)***
Bachelor - REST-ASIA	-0.3187 (0.0234)***	-0.2989 (0.0233)***	-0.2227 (0.0243)***	-0.2246 (0.0243)***
Above Bachelor - REST-ASIA	-0.4439 (0.0498)***	-0.4239 (0.0495)***	-0.3569 (0.0496)***	-0.3562 (0.0496)***
Trade - OCEANIA	0.09 (0.0399)**	0.0935 (0.0415)**	0.077 (0.0417)*	0.0774 (0.0431)*
Below Bachelor - OCEANIA	0.0611 (0.0318)*	0.0685 (0.0317)**	0.0481 (0.0339)	0.0529 (0.0337)
Bachelor - OCEANIA	-0.008 (0.0306)	0.0247 (0.0308)	-0.0055 (0.0312)	0.0178 (0.0313)
Above Bachelor - OCEANIA	-0.0895 (0.0253)***	-0.0894 (0.0254)***	-0.0902 (0.0252)***	-0.0911 (0.0253)***

*, ** and *** denote significance at 10%, 5% and 1% levels respectively.