Gauging Immigrants' Economic Integration

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Integration as a Ideal

Integration as a two-way process:

- “In Canada, integration is a two-way process of accommodation between newcomers and Canadians: It encourages immigrants to adapt to Canadian society without requiring them to abandon their cultures. It encourages people and institutions to respond in kind by respecting and reflecting the cultural differences newcomers bring to the country” (M. Dorais, 2002).
- The term “integration” implies a desirable outcome as newcomers become members of the receiving society and society receives newcomers

Integration as a benchmark

- It is used to gauge the success and failure of immigrants or the “quality” of immigrants
- The benchmark of integration is based on the extent to which immigrants converge to the average performance of native-born Canadians
- Economically speaking, to the extent that immigrants earn as much as native-born Canadians, they are deemed to be well integrated

Focus of Past of Economic Studies

- Compare the earning gap between immigrants and native-born Canadians
- Recent studies focus on comparing recent cohorts of immigrant to previous cohorts, in terms of earnings advantage or disadvantage relative to earnings of native-born Canadians
- Typically use a dummy variable to represent the earning difference between native-born and foreign born Canadians, while controlling for other variations

Blinder Oaxaca Method

- *Native-born*: $\log Y_c = B_c X_c$

- *Immigrants*: $\log Y_i = B_i X_i$

- $\log Y_c - \log Y_i = B_c X_c - B_i X_i$

$$= B_c X_c - B_i X_i - B_c X_i - + B_c X_i$$

$$= B_c X_c - B_c X_i + B_c X_i - B_i X_i$$

$$= B_c (X_c - X_i) + (B_c - B_i) X_i$$

$$= \%\ \text{explained} + \%\ \text{unexplained}$$

- $\log \bar{Y}_c - \log \bar{Y}_i = B_c(\bar{X}_c - \bar{X}_i) + (B_c - B_i)\bar{X}_i$

2006 Census

Number Canadians By Birth and Immigrants,		
by Sex, Aged 25-64, With Employment Income,		
Excluding Aboriginal Population		
	Number	%
Male Canadian by birth	5,279,522	40
Male immigrant	1,583,557	12
Female Canadian by birth	4,884,411	37
Female immigrant	1,441,783	11
Total	13,189,274	100
Source: 2006 Census, Analytical Individual File.		

Means

	Male Can.	Male	Female Can.	Female
Means	By birth	Immigrant	By birth	Immigrant
Employment earnings	55273.74	49614.17	34875.36	31982.37
Log earnings	10.5367	10.3694	10.0809	9.9598
Yrs of schooling	13.5764	14.3415	13.8523	14.2149
Yrs of Canadian experience	23.4406	16.9307	22.8273	16.8110
No. of weeks worked	46.83	46.15	45.24	43.91
Full time/part time	.9364	.9268	.7746	.7809
Ability to speak English	.8654	.9465	.8496	.9354
Ability to speak French	.3574	.1668	.3720	.1621
Reside in Montreal	.1171	.1183	.1219	.1084
Reside in Toronto	.1000	.3880	.1032	.3961
Reside in Vancouver	.0500	.1311	.0499	.1377
Reside in other CMA	.5162	.3186	.5227	.3140
Visible minority	.0242	.5676	.0248	.5817

Mean Differences

	Mean difference between (1) male Can. By birth and (2) male immigrant	Mean difference between (3) female Can. By birth and (4) female immigrant
Means		
Employment earnings	5659.57	2892.99
Log earnings	0.17	0.12
Yrs of schooling	-0.77	-0.36
Yrs of Canadian experience	6.51	6.02
No. of weeks worked	0.68	1.33
Full time/part time	0.01	-0.01
Ability to speak English	-0.08	-0.09
Ability to speak French	0.19	0.21
Reside in Montreal	0.00	0.01
Reside in Toronto	-0.29	-0.29
Reside in Vancouver	-0.08	-0.09
Reside in other CMA	0.20	0.21
Visible minority	-0.54	-0.56

Expected and Unexpected Earnings Differences

	Difference between	Difference between
	(1) male Can. By birth	(3) female Can. By birth
Means	and (2) male immigrant	and (4) female immigrant
Difference in employment earnings	5659.57	2892.99
Difference as % of Can. Earnings	10.24	8.30
Expected earnings differnece	-744.36	-1012.13
Unexpected earnings difference	6403.48	3904.55

Modified Method for Calculating Individual Economic Integration Score

- *Native-born*: $\log Y_c = B_c X_c$

- *Immigrants*: $\log Y_i = B_i X_i$

- $\log \bar{Y}_c - \log \bar{Y}_i = B_c(\bar{X}_c - \bar{X}_i) + (B_c - B_i)\bar{X}_i$

Decomposing individual immigrant's log earnings gap:

- $\log \bar{Y}_c - \log Y_i = B_c(\bar{X}_c - X_i) + (B_c - B_i)X_i$

Total Index = Explained Index + Unexplained Index

Log Earnings of Native Born and Immigrants

Regression Coefficients: DV - Log employment earnings				
	Male Can.	Male	Female Can.	Female
Means	By birth	Immigrant	By birth	Immigrant
Intercept	6.251	6.307	5.608	5.997
Yrs of schooling	.105	.083	.136	.097
Yrs of Canadian experience	.009	.014	.009	.015
No. of weeks worked	.032	.034	.035	.034
Full time/part time	1.066	.914	.733	.699
Ability to speak English	.091	.159	.133	.153
Ability to speak French	-.045	.029	.005	.086
Reside in Montreal	.088	-.052	.133	-.023
Reside in Toronto	.210	.167	.283	.217
Reside in Vancouver	.163	.132	.223	.183
Reside in other CMA	.110	.184	.108	.135
Visible minority	-.167	-.162	-.049	-.047

Explaining Log Earnings Difference

Unexpected Mean Log Earnings for Visible Minority Status, Period of Immigration, and Region Where Credential was Obtained				
	Male Immigrant		Female Immigrant	
Visible minority status	Gross	Adjusted	Gross	Adjusted
ImVM, Chinese	.04231	.02114	.04110	.01843
ImVM, SAsian	.03909	.01205	.03098	.01290
ImVM, Black	.00520	-.00459	.00470	-.00460
ImVM, Filipino	.02781	-.00696	.05233	-.00113
ImVM, L Am	.01364	-.00502	.00986	-.01476
ImVM, SE Asian	-.01817	-.00229	-.02181	-.00022
ImVM, Arab	.04351	.00067	.04839	.00632
ImVM, W Asian	.04334	.00087	.06446	.00595
ImVM, Korean	.06071	.01383	.05700	.01081
ImVM, Japanese	.00496	-.00706	.02742	-.01891
ImVM, nie	.00085	.00170	.00212	.00525
Im Non-VM	-.03877	-.00965	-.04107	-.00926

Explaining Log Earnings Difference (cont'd)

Unexpected Mean Log Earnings for Visible Minority Status, Period of Immigration, and Region Where Credential was Obtained (cont'd)				
	Male Immigrant		Female Immigrant	
Period of immigration	Gross	Adjusted	Gross	Adjusted
2001-2005	.10868	.09640	.11947	.09797
1996-2000	.07196	.06274	.08258	.06858
1991-1995	.03127	.03122	.03623	.03464
1986-1990	.00361	.00694	.00837	.00865
1981-1985	-.02229	-.01842	-.02531	-.01987
1976-1980	-.04537	-.04187	-.04927	-.04366
1971-1975	-.06312	-.06079	-.07371	-.06735
Before 1971	-.11249	-.10159	-.13092	-.10846
Region Where Credential Obtained				
Can post-sec	-.00455	.02530	.02248	.04764
US post-sec	.05057	.04123	.06903	.06796
W Europe post-sec	-.00380	.00527	.01075	.01562
Australia,N Zealand post-sec	.03131	.00797	.06334	.04372
Africa post-sec	.07774	.02917	.08330	.03676
Asia post-sec	.08685	.02597	.11110	.05240
Other region post-sec	.06092	.03026	.09219	.05846
Below post-sec	-.06459	-.05571	-.11534	-.10278
R squared		0.491		0.633

Summary

- Research uses summary statistics to measure income gap between native born and immigrants
- Blinder Oaxaca method allows for group decomposition
- Extension to individual log income distance
- Constructed index can be used as dependent variable for further research to explain why some immigrants have less gap than others (thus more integrated)
- Policy application: unexplained portion represents difference not explained by levels (productivity), and changing this difference requires policy change beyond selection.