



Canadian Labour Market and Skills Researcher Network

Working Paper No. 48

**Seeking Success in Canada and the United
States: the Determinants of Labour Market
Outcomes Among the Children of Immigrants**

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November 2009

CLSRN is supported by Human Resources and Social Development Canada (HRSDC) and the Social Sciences and Humanities Research Council of Canada (SSHRC).

All opinions are those of the authors and do not reflect the views of HRSDC or the SSHRC.

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Among the Children of Immigrants

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Prepared for
The Directorate of Employment, Labour and Social Affairs
The OECD

Presented at a European Commission-OECD joint conference on Labour Market
Outcomes Among the Children of Immigrants
Brussels, Belgium

Abstract

This paper reviews the recent research on labour market outcomes of the children of immigrants in Canada and the United States (i.e., the 2nd generation), and its determinants. The paper focuses on outcome gaps between the 2nd and third-and-higher generations, as well as the intergenerational transmission of earnings between immigrants (the first generation) and their children. Overall, in both Canada and the United States the labour market outcomes of the children of immigrants are positive. On average they have higher levels of education, and similar labour force participation rates and unemployment rates (no controls) as the third and higher generations (i.e. the children with native born parents). Furthermore, the children of immigrants tend to have higher earnings (unadjusted data). The 2nd generation is also more likely to be employed in professional occupations than the 3rd-and-higher generation, reflecting their higher average levels of education, particularly in Canada. However, after accounting for background characteristics, among racial minority groups in Canada the positive earnings gap turns negative. Regarding the determinants of aggregate outcomes, educational attainment may account for up to half of the (positive) earnings gap between the 2nd and third-and-higher generations. Other important determinants of the wage gap include location of residence and community size, ethnic group/source region background, the “degree of stickiness” in educational and earnings transmission between the 1st and 2nd generation, and “ethnic capital”. In both Canada and the United States there are large differences in outcomes by source region/ethnic group background. The U.S the sociological literature in particular focuses on possible “downward assimilation” among children of immigrants with Mexican and other Hispanic backgrounds. In Canada, after controls, the 2nd generation racial minority groups outperform the 3rd plus generation educationally, but the 2nd generation with European and American backgrounds do better in the labour market. Based on the trends in the composition of immigrants since the 1980s, and their correlation with 2nd generation outcomes, the educational and labour market gaps may move in different direction in the two countries in the future; becoming increasingly positive in Canada, and more negative in the U.S.

JEL code: J61, J15, and J11.

Keywords: Immigrants, Second Generation, Labour Market Outcomes, Canada and the United States.

Executive Summary

This paper reviews the recent research on labour market outcomes of the children of immigrants in Canada and the United States (i.e., the 2nd generation), and their determinants. The paper focuses on outcome gaps between the 2nd and third-and-higher generations, as well as the intergenerational transmission of earnings between immigrants (the first generation) and their children.

Overall, in both Canada and the United States, the labour market outcomes of the children of immigrants are positive. On average (with no controls) they have higher levels of education, and similar labour force participation rates and unemployment rates as the third and higher generations (i.e., the children with native born parents). Furthermore, the children of immigrants tend to have higher earnings. The 2nd generation is also more likely to be employed in professional occupations than the 3rd-and-higher generation, reflecting their higher average levels of education, particularly in Canada.

In Canada in particular most of the earnings advantage of the 2nd generation relates to their higher level of education, and their residential location, clustered as they are in large urban areas where wages are higher. Conditional on educational attainment and location of residence (and other variables), in Canada the 2nd generation has a negative wage gap relative to the third-and-higher generation. This negative wage gap (after controls) is observed primarily among visible minority groups, particularly the Black population. The 2nd generation racial minority population may have more difficulty converting education to earnings than the third-and-higher generation Whites. In the U.S., conditional on education and residential location, the positive wage gap between the children of immigrants and those of American born parents disappears, suggesting the these two factors account for the initial (unadjusted) positive gap between these groups.

Ethnic/source region group differences loom large in both countries. In the US, concern is focused on 2nd generation with Central and South America and Puerto Rican backgrounds. The “segmented assimilation” model in U.S. sociological research predicts poorer outcomes for these groups, driven by lower parental education, a higher share of single parent families, possible deviant lifestyles, discrimination and other factors. The children of immigrants from Mexico and other Central/South American countries have poorer labour market outcomes than the third-and-higher generation Whites, or other 2nd generation groups. These outcomes are in part accounted for by their much lower level of education, which is in turn partly driven by the lower levels of educational attainment among their immigrant parents, and a relatively low level of educational mobility between the Mexican immigrant parents and their children. But, *conditional on their socio-economic background*, including education, the 2nd generation Mexican-Americans register better outcomes than the 3rd plus generation with comparable background characteristics. Furthermore, the negative wage gap between Mexican-American workers and the third-and-higher generation Whites is reduced considerably from the 1st to 2nd generations. However, significant negative outcome

gaps persist between the children of many Hispanic immigrants and the 3rd plus generation.

There is also considerable variation in outcomes by ethnic group/source region background in Canada. Visible minority groups tend to have superior educational attainment outcomes. In particular, educational levels among 2nd generation children with Chinese, Indian, and African backgrounds are much above those of the 3rd plus generation. This is reflected in labour market outcomes. But, conditional on background characteristics, children whose parents came from developed European countries tend to do better in the labour market. In both Canada and the U.S., even after accounting for numerous socio-economic background variables, differences in outcomes among the 2nd generation ethnic/source region groups persist.

Regarding the determinants of aggregate outcomes, educational attainment may account for up to half of the positive unadjusted earnings gap between the 2nd and third-and-higher generations. Other important determinants of the wage gap include location of residence and community size, ethnic group/source region background, the “degree of stickiness” in educational and earnings transmission between the 1st and 2nd generation, and “ethnic capital”.

The gap in earnings outcomes between the 2nd and third-and-higher generations may be moving in different directions in the two countries. In the US, the observed decline in this positive gap may continue, driven largely by the shift in source regions of immigrants (and their associated educational attainment). In Canada, the positive gap in educational outcomes between the 2nd and 3rd plus generations, already fairly large, may increase. Such movement would be driven by the rapidly rising educational attainment of the immigrant parents since the 1980s, and the shift in source regions towards those that place a very high value on educational achievements and register high educational outcomes (even after controlling for education of parents). This in turn is likely to increase the (unadjusted) positive earnings gap between the 2nd and third-and-higher generations in the future.

There are at least three stages at which policy can be applied to influence the outcomes of the children of immigrants. The first is immigrant selection. Background characteristics of immigrants, such as education, language, ethnic capital and others are important determinants of 2nd generation outcomes. The points system in Canada, and the visa program in the U.S., are examples of such tools. The second stage is the degree of educational mobility between the 1st and 2nd generation. This is particularly important for immigrant groups with lower educational levels. Policy levers at this stage are often associated with the educational system. Topics such as whether schools are financed locally or at a higher level, the degree of immigrant “segregation” in the school system, the degree of aid available to immigrant groups in the school system, language programs, and the ability to operate schools effectively with a diverse student population become important. Conditional on the education level achieved, the third stage is the entry into the labour market. Key factors then are the availability to immigrant families and their children of job search networks, potential “statistical” or “preference”

discrimination in the case of some visible minority groups, and the variation in the returns to education.

In the aggregate, educational and labour market outcomes of the children of immigrants in Canada and the U.S. tend to be equal to or better than those of the 3rd plus generation. Some caveats to this overall conclusion have been noted. Economic integration may be a multi-generational process. In both countries the wage gap (after controls) of racial minorities with the third-and-higher generation Whites falls from the 1st generation (immigrants), to the 2nd generation (their children), and even to the third-and-higher generation in some cases.

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1. Introduction

It is difficult to overstate the importance of the outcomes for the children of immigrants in major immigrant receiving countries such as Canada and the United States. The second generation (i.e. the children of immigrants) is a sizeable component of total population in both countries. The success (or lack of it) of the second generation in the labour market reflects the long-term process of immigrant integration.

The size of the second generation population depends, of course, on first generation immigration levels. In absolute terms, the US receives more immigrants than any other nation, and in relative terms, the annual immigration rate has been higher in Canada than any other country in recent years.

In Canada, in 2006 one third of the population were immigrants or their children: one in five people were immigrants, and an additional 15% were second generation Canadians. These numbers are second only to those in Australia. And since immigration is highly geographically concentrated, the effect on some cities is considerable. In Toronto, Canada's largest city, three quarters of the population are immigrants or their children. Their economic outcomes are obviously of importance.

In the US, the proportions are somewhat lower because of lower immigration rates, but in absolute terms they are more significant. In 2006 12% of the population were immigrants, a number smaller only than that of Canada and Australia. An additional 11 % were second generation Americans; almost one-quarter of the US population were immigrants or their children.

Economic outcomes among first generation immigrants entering Canada and the US have been deteriorating over much of the period since the early 1980s (Aydemir and Skuterud 2005; Borjas 2000; Chiswick, Lee, and Miller 2005; Picot and Sweetman 2005). Obviously immigrant economic outcomes are important, but one could argue that it is the outcomes of their children that really matters. Improved economic and educational opportunities for their children are often a primary motive for immigration. And the long-term success or failure of a nation's immigration policy hinges to a considerable extent on the outcomes of the children.

1.1 Objectives

This paper reviews the labour market outcomes of the second generation in Canada and the US, and their determinants. Employment, unemployment and earnings outcomes are included. However, virtually all of the economic research on the determinants of the outcomes focuses on earnings, so we turn to this outcome variable to discuss determinants. Since the second generation's labour market outcomes depend to a considerable extent on their educational attainment, a review of the determinants of educational outcomes of immigrant's children is also included.

Labour market outcomes in Canada and the US are addressed separately, and from two perspectives. First, how do second generation (the children of immigrants) outcomes compare to those of the third-and-higher generation (i.e. the children of native-born parents), and what are the determinants of the earnings outcome gap between these two generations. The second perspective is intergenerational. How are the children of immigrants doing compared to their parents? This requires a longer perspective, often comparing the outcomes of the children (typically as young adults) to those of their parents twenty five years earlier. The paper employs results from both the sociological and economics literature to address these topics.

The determinants of the “gaps” in educational and labour market outcomes are important. Societies need to know why immigrant groups, and their children, are performing at levels above or below that of the domestic-born population, or of their parents. The degree of “integration” of immigrant families is typically measured in this way.

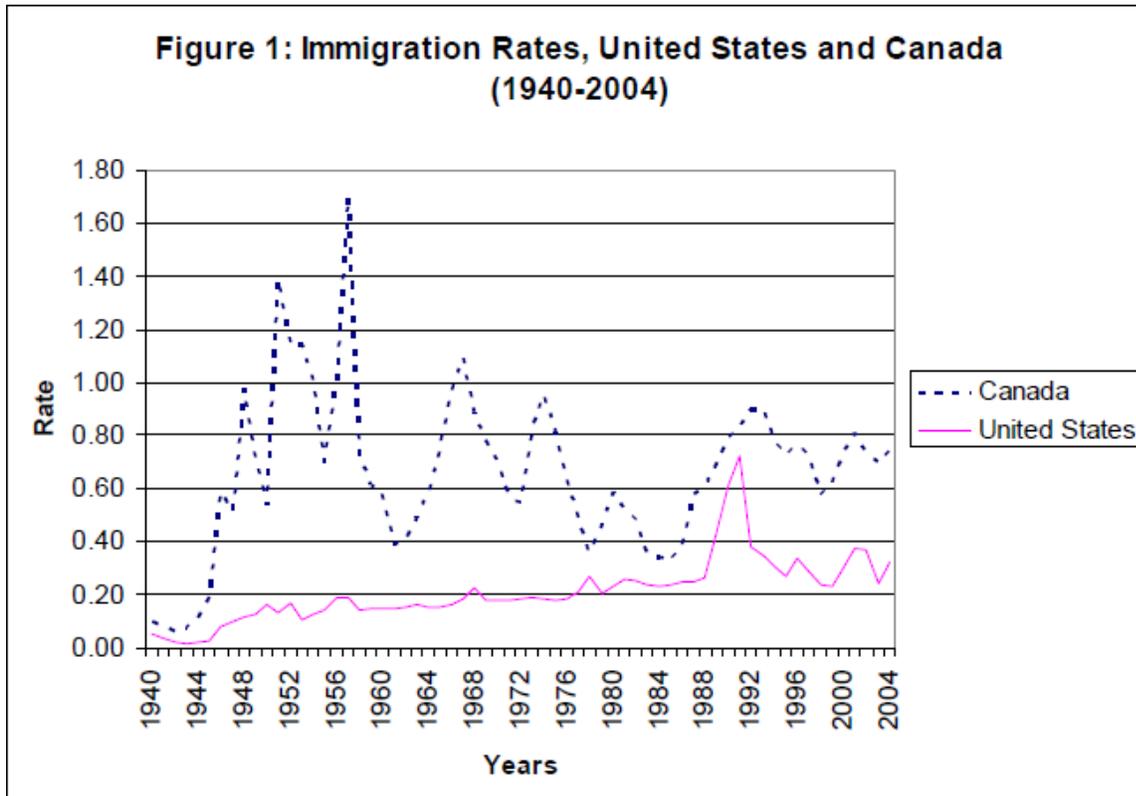
1.2 Contextual Differences between Canada and the US

Although both Canada and the US are major immigrant receiving countries, in recent decades, immigration patterns differed in many ways in the two countries, influencing outcomes for the second generation. Prior to the 1960s, both countries used country of origin as a primary determinant of immigrant selection, focusing on Western Europe. In the 1960s both countries altered their immigration policies, leading to what many researchers refer to as the “new” immigration (Green and Green 2004; Smith and Edmonston 1997). In Canada this meant many more immigrants from Asia and Africa, while in the US it meant a shift more towards Mexico and other Central/South American countries. The immigration rates from these “new” source countries increased particularly in the late 1970s and 1980s, and many children of these immigrants are just now entering the labour market. It is still early days regarding the evaluation of the labour market outcomes and their determinants for children of this “new” immigration. The children of immigrants entering during the 1970s would be under 40, and those of the 1980s immigrants under 30. And since most studies of 2nd generation outcomes are based on the population aged roughly 20 to 60, many of the “children” (as adults) included will stem from immigrants entering before the “new” immigration. As a result, there is more research on the determinants of educational outcomes of the children of the “new” immigration than of labour market outcomes (see an accompanying paper by Picot and Hou, 2009, summarizing educational outcomes).

Smith and Edmonston (1997), Green and Green (2004) provide overviews of immigration history for the US and Canada respectively. The historical differences are discussed in Aydemir and Sweetman (2008). There are four areas of difference in the “new” immigration that are important for second generation outcomes.

First, immigration rates have been higher in Canada than the US since the 1940s (Figure 1), and hence the 1st and 2nd generation populations are (relative to the total population) more significant in Canada than the US. Second, the distribution of immigration by source regions evolved very differently in the two countries. The US has always had a greater share of its immigration from Central and South America, including Mexico. As we will see, this is significant, since the 2nd

generation outcomes for these groups are often inferior to those of other groups such as the Asians, to which Canada turned for much of its “new” immigration”.



Source: Aydemir and Sweetman, 2006

Thirdly, the US has employed family reunification as the main immigration program, whereas Canada also employs a “skilled immigrant class” which is selected on a points system. About one-half of all immigrants to Canada now enter under this class. The result has been that in general, immigrants to Canada are now more highly educated than those entering the US. Finally, settlement policies may differ between the two countries and this could have a significant impact on second generation outcomes. Canada adopted a “multiculturalism” policy in the 1970s, which the US has not. This difference may result in a more welcoming environment in Canada to immigrants (and their children) from diverse cultures, but in reality the effect of this policy (if any) is difficult to judge.

There is a significant American *sociological* literature on 2nd generation assimilation, focusing not only on educational outcomes (but less often on labour market outcomes), but on crime, family formation and other outcomes. Much of this work is driven by the “segmented assimilation” theory. It states that a variety of factors may lead to successful assimilation, but that they can also lead to poorer 2nd generation outcomes and “downward” assimilation. Determinants such as family socio-economic status, the immigrant family type (particularly single parents), the social context within which immigrants are received, discrimination, and

deviant life-styles (drugs/gangs) can play a major role, particularly in “downward” assimilation. The theory predicts very different outcomes for different ethnic groups in the US. See Portes, Fernandez-Kelly and Haller (2009) for a recent overview. Other overview papers include Portes and Fernandez-Kelly (2008), Zhou (1997), Zhou et al. (2008). This theory is largely applicable to the US. It is rarely invoked to explain 2nd generation outcomes in Canada.

The *economics* literature turns to traditional determinants to explain gaps in labour market outcomes between the 1st, 2nd and third-and-higher generations. These include the educational attainment of the children of immigrants, which itself is driven by a number of determinants including the educational attainment of the immigrant parents, the degree of educational mobility between the 1st (the immigrants) and 2nd (their children) generations, the amount of “ethnic capital, and the value placed on education by the ethnic/source region group. Other determinants of the labour market outcomes of the 2nd generation include location of residence (educational and labour market outcomes are superior in large cities), source region or ethnicity, ethnic capital (the effect of characteristics of the ethnic group on outcomes beyond that of the family), parents’ expectations, and “visible minority” (racial minority) status and discrimination. The latter variable is rarely addressed directly in the economics literature literature, but is at times invoked as one of the reasons for a negative earnings gap between racial minorities and Whites. There is a substantial literature on discrimination from other disciplines, however (see Schroder, 2009).

The terms “visible minority” and “racial minority” are both used in this paper. In Canada, the term “visible minority” is widely employed in official government documents and in the research community. It refers to non-White and non-Aboriginal population groups collectively. It is rarely used in other countries, where the term “racial minority” is more common. When referring to Canadian research, the term “visible minority” will be used, and elsewhere, racial minority.

2. Labour Market Outcomes among the Children of Immigrants in Canada

2.1 A Brief Review of Educational Outcomes among the Children of Immigrants in Canada

Because educational attainment is such a strong predictor of earnings and other labour market outcomes, we begin with a brief review of the educational levels achieved by the children of immigrants in Canada (see Picot and Hou, 2009 for more detail).

Second generation Canadians have a significantly higher level of educational attainment than the third-and-higher generation. In the 2006 Canadian census data, 36% of the children of immigrants held degrees, compared with 24% of the third-and-higher generation. And children with two immigrant parents register a larger positive education gap than those with only one immigrant parent (Hum and Simpson, 2007; Aydemir and Sweetman, 2008). This higher level of achievement is most noticeable among the visible minority 2nd generation (Boyd, 2002; Aydemir and Sweetman, 2008). There is significant variation among ethnic groups/nationalities, with Chinese, Indian and African 2nd generation registering the highest educational attainment

(Abada, Hou and Ram, 2008). However, very few 2nd generation ethnic groups do not outperform the third-and-higher generation.

Immigrants to Canada are more highly educated than the population as a whole, and this higher parental education among the 2nd generation Canadians (as compared to the third-and-higher generation) accounts for perhaps one-half of the (positive) educational attainment gap between the 2nd and third-and-higher generation (Boyd, 2002; Aydemir and Sweetman, 2008). Location of residence is important, as the 2nd generation lives disproportionately in large urban areas where educational attainment is higher. “Ethnic capital” plays a role, accounting for perhaps a quarter of the gap (Abada et al, 2008). Parents’ expectations also play a role, often an important one (Finnie and Muelleur, 2009). But much of the gap persists even after adjusting the data for all of these effects, particularly among the higher achieving ethnic groups such as the 2nd generation with Chinese and Indian immigrant parents, two of the larger immigrant groups in Canada in recent decades.

The effect of parent’s education on the educational attainment of the children is weaker among families with immigrant rather than Canadian born parents (Hum and Simpson, 2007). That is, educational mobility between the 1st and 2nd generation is greater among families with immigrant rather than Canadian born parents. This fact appears to be driven primarily by the observation that children from less educated immigrant families are more likely to achieve a higher level of education than are their Canadian born counterparts from families with similar levels of education (Bonikowska, 2008). The intergenerational persistence in years of schooling between the 1st and 2nd generation is rather weak between immigrants and their Canadian born children, only about one-third as strong as among families with Canadian born parents. And immigrant family income has little to do with this intergenerational educational tie (Aydemir, Chen and Corak, 2008).

2.2 Employment, Unemployment and Occupational Outcomes

The authors found little literature on the employment, unemployment and occupational outcomes of the children of immigrants¹ that focused on determinants. In the absence of such work, following are data for 25 to 54 year olds (prime age workers) for May, 2006, generated by the authors from the 2006 Canadian census.

Employment rates are virtually identical among the children of immigrants and those of Canadian born parents, both for men and for women (Table 1). There is some variation by educational attainment. University educated 2nd generation men and women are somewhat less likely to be employed than their third-and-higher generation counterparts (85% vs. 90%), while the less educated 2nd generation are more likely to be employed. This same pattern is observed in the US. Some of this difference could be related to the fact that the 2nd generation achieve much higher levels of schooling (particularly in Canada), and hence more 2nd generation 25 to 30 year olds may still be in school.

¹ The one paper that incorporated employment and unemployment outcomes used 2001 census data, and found that employment rates in the census reference week were higher among the 2nd generation than either the 1st or third-and-higher, and unemployment rates roughly the same for the 2nd and third-and-higher generations (Aydemir, Chen and Corak, 2005).

Overall, unemployment rates are, if anything, lower among the children of immigrants than their counterparts with Canadian born parents (4.4% vs. 4.9%, Table 1). However, this pattern is not evident for all groups. The unemployment rate “advantage” is observed only among the 2nd generation Whites. Among visible minority groups (Blacks, Asians and others), unemployment rates are higher among the 2nd than the third-and-higher generation. Perhaps more importantly, the unemployment rates among the 2nd generation Canadians of Asian descent are higher than those of the third-and-higher generation Whites (5.4% vs. 4.9%), even though Asians have significantly higher educational attainment. Unemployment rate data suggest visible minority 2nd generation are not doing as well as one might expect, given their educational backgrounds.

Table 1 Employment and unemployment rates of the second and the third-and-higher generation Canadians aged 25 to 54, May 2006

	Total		Men		Women	
	Second generation	Third-and-higher generation	Second generation	Third-and-higher generation	Second generation	Third-and-higher generation
Employment rates						
Total	82.8	82.9	87.0	86.9	78.7	79.0
Education attainment						
Less than a high school diploma	69.9	66.9	76.4	74.7	60.3	56.8
High school graduates	81.5	82.4	86.4	87.1	75.6	76.9
Some post secondary education	85.1	87.2	89.4	90.7	81.7	84.6
University degree	85.3	89.9	89.0	92.9	82.1	87.4
Visible minority status						
Whites	84.1	82.9	88.4	87.0	79.9	79.0
Blacks	75.6	73.7	77.9	78.5	73.3	69.5
Asians	76.1	82.8	79.5	86.0	72.7	79.5
Other visible minorities	72.2	77.1	76.5	79.0	67.8	75.5
Unemployment rates						
Total	4.4	4.9	4.2	5.0	4.7	4.8
Education attainment						
Less than a high school diploma	7.3	9.0	6.8	8.9	8.2	9.3
High school graduates	4.9	5.3	4.7	5.4	5.2	5.3
Some post secondary education	4.1	3.9	3.7	3.8	4.4	4.0
University degree	3.5	2.8	3.1	2.5	3.9	3.1
Visible minority status						
Whites	4.1	4.9	3.8	5.0	4.3	4.7
Blacks	9.2	8.6	9.0	8.8	9.3	8.5
Asians	5.4	4.6	5.1	5.0	5.7	4.1
Other visible minorities	8.6	4.5	8.4	4.7	8.8	4.4

Source: Statistics Canada 2006 census

The occupations of the children of immigrants reflect their educational attainment. They are much more likely than the third-and-higher generation to be in professional and related

occupations², and much less likely to be in “blue collar” occupations such as trades, transportation, manufacturing and primary industry jobs. This is particularly true for the second generation of Asian descent, where educational attainment levels are the highest (Table 2).

Table 2 Occupational distribution of the employed second and third-and-higher generation Canadians aged 25 to 54, May 2006

	Second generation			Third-and-higher generation		
	Total	Men	Women	Total	Men	Women
Total	100	100	100	100	100	100
Management	12.9	15.5	10.2	10.8	12.8	8.6
Business, finance and administrative occupations	20.9	11.6	31.0	19.1	9.3	29.6
Professional and related occupations	29.7	25.7	34.1	25.4	19.6	31.7
Sales and service occupations	17.5	15.2	20.0	18.6	14.7	22.7
Trades, transport, and blue collar occupations	19.0	32.0	4.8	26.1	43.6	7.4
Whites	100	100	100	100	100	100
Management	13.5	16.2	10.6	10.8	12.8	8.6
Business, finance and administrative occupations	20.6	10.8	31.3	19.1	9.3	29.6
Professional and related occupations	28.8	24.3	33.8	25.4	19.6	31.7
Sales and service occupations	16.9	14.7	19.4	18.5	14.7	22.6
Trades, transport, and blue collar occupations	20.2	34.0	5.0	26.2	43.6	7.4
Blacks	100	100	100	100	100	100
Management	7.1	7.3	6.9	7.6	8.0	7.2
Business, finance and administrative occupations	26.3	19.2	33.5	19.7	10.1	29.4
Professional and related occupations	30.1	26.4	33.9	21.2	16.3	26.1
Sales and service occupations	20.8	20.7	20.9	27.4	24.2	30.5
Trades, transport, and blue collar occupations	15.8	26.5	4.8	24.1	41.4	6.7
Asians	100	100	100	100	100	100
Management	10.4	12.7	8.0	13.8	17.3	9.7
Business, finance and administrative occupations	21.6	16.3	27.3	21.6	13.5	31.0
Professional and related occupations	37.3	37.6	36.9	32.7	29.4	36.4
Sales and service occupations	21.1	17.5	24.9	16.6	14.8	18.7
Trades, transport, and blue collar occupations	9.6	16.0	3.0	15.3	25.0	4.3
Other visible minorities	100	100	100	100	100	100
Management	7.6	7.8	7.4	8.8	10.2	7.6
Business, finance and administrative occupations	21.5	15.1	29.0	19.1	10.8	26.8
Professional and related occupations	30.6	28.0	33.5	23.7	18.1	28.8
Sales and service occupations	20.4	17.5	23.8	24.8	19.0	30.2
Trades, transport, and blue collar occupations	19.9	31.7	6.3	23.6	41.9	6.7

Source: Statistics Canada 2006 census

Overall, about 30% of the children of immigrants (when they are aged 25 to 54) were in professional occupations, compared to 26% of the children with Canadian born parents. And this

² This includes natural and applied sciences and related occupations, health occupations, occupations in social science, education, government services, and occupations in art, culture, recreation and sport.

difference held for each of the four ethnic groups examined in Table 2, including Blacks, where 30% of the 2nd generation were in professional and related occupations, which is larger than the share among third-and-higher generation Whites. Fully 37% of 2nd generation Canadians of Asian descents were in the professions.

Involvement in blue collar occupations was much less, as 19% were in such jobs, compared to 26% among the third-and-higher generation. Interestingly, a larger share of 2nd generation Whites held blue collar jobs (20%) than did Blacks or Asians (16% and 10%).

Overall, there is little difference between the 2nd and third-and-higher generation in employment and unemployment rates. However, these data show greater employment difficulties among the 2nd generation visible minorities, in spite of their higher educational levels. The occupational data (once employed) do reflect the 2nd generation's educational attainment, as they are more likely to be in professional and less likely to be in blue collar occupations than the third-and-higher generation.

No research was found that focused on the determinants of these outcomes. However, Hum and Simpson (2007) do find that after controlling for variables such as age, region, community size, union status, firm size and industry, annual hours worked are not significantly different between the 2nd and third-and-higher generations.³

2.3 The Earnings Gap between the 2nd and third-and-higher Generations

The remarkable educational outcomes of the 2nd generation in Canada, particularly among the visible minority population, should set the groundwork for potentially successful earnings outcomes. And this is largely the case. But it is difficult to focus the research on the children of the “new” post 1970 immigration, which was largely from developing countries such as China and India. The children of immigrants entering during the 1970s will be under aged 40, those of the 1980s immigrants under 30. Hence, many of the “children” in the studies, which typically refer to the population aged roughly 20 to 60, will be from pre 1970s immigrant families. Nonetheless, recent papers are beginning to provide a picture of outcomes. The 2001 Canadian census for the first time after the 1971 census included a question on the birthplace of parents, allowing the 2nd generation to be accurately identified.

With no controls (or controlling only for age), the second generation have earnings above those of the third-and-higher generation. For example, Aydemir and Sweetman (2008), using 2001 census data for 20 to 64 year olds⁴, show average annual earnings among male 2nd generation Canadians⁵ that are 13% above that of third-and-higher generation Whites, and 22% higher among women. Aydemir, Chen, and Corak (2005) report similar results across a wider range of

3. They find weak evidence that 2nd generation women work marginally fewer hours than the third-and-higher generation. They have a pooled sample of 2nd and third-and-higher plus generation Canadians aged 25 to 70 from the 1999 Survey of Labour and Income Dynamics. This data source provides relatively small samples which precludes an analysis by ethnic group or source region.

4. Including all persons age 20 to 64 in the labour force whether they have earnings or not. That is, they include the unemployed with zero earnings by assigning 1 dollar in annual earnings.

5. Where both parents were immigrants.

indicators. Including individuals aged 16 to 65 and with positive earnings, they find the 2nd generation have mean annual earnings 9% above those of the third-and-higher generation⁶ in the 2001 census. Hum and Simpson (2007), using the 1999 Survey of Labour and Income Dynamics find similar results showing that the 2nd generation have a 10% advantage in both hourly wages and annual earnings (unadjusted).

But given the significant educational advantage that most of the 2nd generation holds over the third-and-higher generation these results should not be surprising.

The annual earnings advantage of the 2nd generation over the third-and-higher generation is significantly reduced when years of schooling is controlled for, and becomes a negative with the introduction of other variables (Aydemir and Sweetman, 2008, Table 3). For males whose both parents were immigrants, their earning advantage falls from 18.9% to 8.7% after controlling for years of schooling, and when marital status, ethnicity and urban/rural and city location are added, it becomes negative, -5.5%. This last effect is related largely to the location variable: urban dwellers have higher earnings, and the 2nd generation is more likely to live in large cities.

Table 3 Percentage difference in annual earnings between the second and third-and-higher generation, Canada 2000, population aged 25 to 65

	No controls	Add years of schooling	Add marital status ethnicity, urban/rural location
Males			
2 nd generation, Mom immigrant	0.133	0.059	-0.045
2 nd generation, Dad immigrant	0.077	0.009†	-0.082
2 nd generation, both immigrants	0.189	0.087	-0.055
Females			
2 nd generation, Mom immigrant	0.095	0.021†	-0.073
2 nd generation, Dad immigrant	0.110	0.039	-0.055
2 nd generation, both immigrants	0.299	0.186	0.016

† Not significant at p<0.05. Other numbers are significant at p<0.05.

Source: Aydemir and Sweetman (2008). The original data are from Statistics Canada 2001 census.

Note: the table is based on coefficients from ordinary least square regression with log annual earnings as the dependent variable.

But these results assume that the returns to years of schooling are identical for immigrants, the 2nd generation and the third-and-higher generation. In another model specification, they relax this (and other) assumptions. They find lower returns to schooling for the 2nd and the third-and-higher generation (9.8% vs. 11.5% return for each additional year of schooling for males, 12.6% vs. 16.7% for females).

Hum and Simpson (2007) also conclude that the wage and earnings advantage of the 2nd generation is overstated if education is ignored. They find that the observed wage advantage (in

6. Including both Whites and visible minorities.

relatively few cases) of the 2nd over the 3rd plus generation (with controls for a number of variables such as community size, region, age, experience, industry, union status, firm size, but not education) tends to disappear when the education variable is introduced.

Research done by this paper's authors based on the 2006 census suggests a more subtle picture. The larger sample in the census can support a more detailed analysis. We focus on 2nd generation men. Consistent with the above mentioned research, the second generation has weekly earnings about 6% higher than the third-and-higher generation (controls for age only). But this positive wage gap is driven entirely by second generation Whites, which has a 9% lead. Among visible minority males, the gap is -5%, in spite of the fact that they have higher educational attainment than the 2nd and third-and-higher generation Whites. And there is huge variation among visible minority groups, with the largest gap registered by Blacks (-21%), and a small positive gap among the Chinese (Table 4).

Controlling for education increases the (negative) gap between 2nd generation visible minority groups and the third-and-higher generation Whites, given the visible minorities' higher levels of education. Controlling for location also results in a larger negative gap; second generation visible minorities are more likely to live in urban centres, where wages are higher. Once working time and other controls for language and marital status are added, the wage gap decreases to between -5% and -14% among the visible minority groups, and about zero among second generation Whites.

The story for women is very similar, except that the initial gaps are positive everywhere because of very high levels of education achieved by second generation females, particularly the visible minorities. Location is a very important variable, accounting for much of the positive wage gap, along with education.

This more recent work suggests that the unadjusted (except for age) second generation positive wage gap is associated primarily with White men, and women. Among the visible minority populations, it is due largely to their very high levels of education, and their location. After accounting for these differences, negative wage gaps with the third-and-higher generation Whites develop. Among male visible minority groups, negative wage gaps are evident even in the unadjusted data, and the gaps increase after accounting for differences in education and location.

We found no other papers that addressed the determinants of the 2nd generation labour market outcomes in Canada. However, there is a significant body of research asking if there is a wage gap between visible minorities and Whites in Canada. For a review of this research, see Hou and Coulombe (2009). Results have been mixed; some papers find a wage gap between visible minorities and Whites (Baker and Benjamin 1994; Pendakur and Pendakur 1998; Stelcner 2000), while others find no wage gap among men, or one restricted to the Black population (Hum and Simpson 1999; Pendakur and Woodcock 2008). However, the largest samples from the census data suggest that there is indeed a negative wage gap between visible minorities and Whites, even in the raw data. This is consistent with the research reported above on 2nd and third-and-higher generation earnings gaps, and the important role played by visible minority status.

Table 4 Gap in weekly wages between the second generation and third-and-higher generation Whites, 2005, Canada

	Controlling for:					
	(1)	(2)	(3)	(4)	(5)	(6)
	Age, age ²	(1) plus education	(2) plus location	(3) plus language marital status	(4) plus part/full time status	(5) plus occupation, industry
Coefficient x 100 = percent						
Men						
2 nd generation (all)	0.056	0.006	-0.054	-0.030	-0.016	-0.011
2 nd generation white	0.085	0.043	-0.018	-0.004	0.001	0.005
2 nd generation visible minority	-0.049	-0.130	-0.198	-0.122	-0.095	-0.086
Black	-0.212	-0.241	-0.297	-0.254	-0.177	-0.135
Chinese	0.041	-0.079	-0.157	-0.095	-0.045	-0.049
South Asians	0.008	-0.092	-0.169	-0.126	-0.067	-0.086
Other V.M.	-0.086	-0.142	-0.202	-0.157	-0.107	-0.087
Women						
2 nd generation (all)	0.141	0.069	-0.016	-0.005	0.009	0.004
2 nd generation white	0.137	0.077	-0.003	0.007	0.017	0.017
2 nd generation visible minority	0.158	0.044	-0.071	-0.057	-0.027	-0.052
Black	0.061	-0.010	-0.130	-0.126	-0.079	-0.100
Chinese	0.247	0.088	-0.031	-0.007	0.011	-0.023
South Asians	0.190	0.047	-0.069	-0.049	-0.023	-0.057
Other V.M.	0.113	0.038	-0.068	-0.052	-0.024	-0.035

Source: Statistics Canada 2006 Census

Note: coefficients from Ordinary Least Square regression with log weekly wages as the dependent variable.

Other work based on ethnic groups who have received their education in Canada⁷ suggests that not only do the levels of educational attainment vary significantly among ethnic groups, as noted earlier, but there is also large variation in the economic returns to an additional year of schooling among ethnic groups (Sweetman and Dicks, 1999). Both of these factors would influence earnings outcomes among ethnic groups, but more importantly, even after controlling for education and other variables, differing returns to education would contribute to difference wage levels among ethnic groups.

Economic integration among visible minorities in Canada may be a multi-generational process. Skuterud and Hou (2008), using data from the 2001 and 2006 censuses, focus on the weekly earnings gap across generations. They find, after including a number of controls, that the earnings gap between visible minority groups and the third-and-higher generation Whites (the

⁷ This includes the 1.5 generation (immigrated to Canada before the age of 15) plus the 2nd and higher generation Canadians.

earnings disadvantage among visible minority groups) diminishes from the 1.5 generation (those who came to Canada before age 12), to the second, and to the third-and-higher generation of visible minorities. More specifically for our purposes, they find that after conditioning on a large number of variables including educational attainment⁸, 2nd generation males in all visible minority groups earned less than the third-and-higher generation Whites. In 2005, the weekly earnings gap ranged from -.14 log points (roughly -14%) among Blacks to -.033 among the Chinese⁹.

2.4 The Intergenerational Transmission of Earnings among Immigrant Families

The extent to which earnings are transmitted between immigrants and their children is a concern in Canada. If the degree of transmission (correlation) is strong (whatever the mechanism), it would hold serious implications for the outcomes of future cohorts of the children of immigrants, given the significant downturn in economic outcomes of entering immigrants (the parents) since the 1980s. But not surprisingly, earnings transmission is closely tied to the degree of intergenerational transmission of education.

The educational attainment of the 2nd generation is perhaps the most important determinant of their labour market outcomes. It in turn is driven to a considerable extent by first, the educational attainment of the immigrant parents, and second, the educational mobility between the immigrant parents and the children. Ideally, children from immigrant families with less educated parents (or low incomes) would display considerable intergenerational mobility (little intergenerational transmission of education), achieving higher levels of education.

Aydemir, Chen and Corak (2005) concentrate on the earning mobility between the 1st and 2nd generation in Canada. They find that on average, the 2nd generation earned more than their immigrant parents at comparable points in the life cycle. However, the fathers' earnings are correlated with that of the sons; the son's earnings are about 2.7% higher for each 10% increase in the father's earnings (an intergenerational income elasticity of .27). But put in a comparative perspective, earnings mobility between the 1st and 2nd generations is higher in Canada than in the US, where this correlation is about twice as large. And the extent to which the sons' earnings are correlated with the fathers is about the same for immigrant families as for the Canadian-born. By international standards this is a fairly high degree of earnings mobility (comparable to that in the Nordic countries, and well above that in the US or UK). The fathers' earnings are less of a predictor of the sons in Canada than in most countries, among both immigrant and Canadian born families.

As noted, educational attainment of the children is the most obvious mechanism for intergenerational mobility. Aydemir et al. (2005) ask to what extent the higher educational

8. More specifically, potential labour market experience, years of schooling, highest educational credential, part-time/full-time job status, marital status, language, location of residence, city/province, detailed occupation and industry.

9. While negative, these gaps are significantly smaller than reported by Aydemir and Sweetman (2008). However, the fact that the Skuterud and Hou paper did not allow returns to education to vary across generations, and they have many more detailed controls, may account for some of the difference.

attainment of the 2nd generation drove the degree of intergenerational earnings mobility observed. They find that for Canada, education of the children is not the main pathway driving the intergenerational elasticities. They find returns to education of the 2nd generation are low, and the relationship between fathers' income and sons' educational attainment is fairly weak. This is consistent with earlier findings reported above. In particular, the superior educational attainment outcomes of the 2nd generation were driven largely by the high educational attainment (relative to the Canadian born) obtained by children of poorer immigrant families.

Turning to the issue of "ethnic capital" introduced by Borjas (1992), Aydemir et al. (2005) find that the average level of paternal education in the immigrant community is important. They hypothesize that more educated communities are able to steer their children through the barriers they may face in broader society in a way that gives them an advantage.

They find that the intergenerational correlation (i.e. stickiness in wages) that does exist is largely observed at the top of the earnings distribution; it is the son's from higher income families who become the high income earners in adulthood. However, much of this outcome is driven by the high average parental educational attainment of the (wealthier) community. That is, "ethnic capital" is an important determinant of the intergenerational transmission of earnings. When this is controlled for, the outcome is reversed; it is the children of the poorer immigrant families who become the above average earners. That is, conditional on the educational attainment of the parents in the community, children of the poorer immigrant families do very well.

2.5 Summary of the Canadian Labour Market Outcomes

One would expect labour market outcomes to reflect the significant educational advantage held by the 2nd generation over the third-and-higher generation in Canada, and in the aggregate they do. Overall, unadjusted (raw) employment, unemployment and earnings data suggest that, on average, the children of immigrants are doing as well as or better than the children of Canadian born parents. Employment rates are similar, unemployment rates lower, and earnings higher among the children of immigrants than the third-and-higher generation. However, these raw aggregate data mask important differences between the generations.

Employment and unemployment data suggest greater employment difficulties among the 2nd generation visible minorities. The occupational data reflect the 2nd generation's educational attainment, and among those employed, they are more likely to be in professional and less likely to be in blue collar occupations than the third-and-higher generation.

Among those employed average earnings of 2nd generation Canadians surpass those of the children of Canadian born parents, with no controls. Educational attainment accounts for more than half of the earnings advantage, and when location of residence is added, the positive gap turns negative. Immigrants and their children tend to live in large urban centres where wages are higher. The 2nd generation's very high level of educational attainment, and the fact they live in large urban centres, allow them to achieve earnings levels (unadjusted) equal to or above that of the third-and-higher generation.

However, this story does not apply to 2nd generation male visible minorities in particular. They earn less than the third-and-higher generation Whites in spite of the fact that they are more likely to live in large centres, and have higher levels of educational attainment. After accounting for these differences (and the fact that they are less likely to work in full-time jobs and controlling for other demographic and work characteristics), their wage gap is in the -5% to -14% range.

After accounting for education, the visible minority 2nd generation earns less than the third-and-higher generation in part because their returns to education appear to be lower. Considerable research on the wage gap between Canadian born visible minorities and Canadian born Whites also suggests a negative wage gap.

It may be that economic integration is a multi-generational process. The earnings gap for visible minorities (relative to third-and-higher generation Whites) is reduced across generations; it is the greatest among the 1st generation, decreases with the second, and falls even more among the third. This may be related to a very long term acculturation process.

There is considerable intergenerational earnings mobility between the 1st and 2nd generations. Intergenerational earnings mobility is about the same among immigrant families as among Canadian born families, and greater than among immigrants or the American born in the US. Ethnic capital is an important determinant of this process in Canada. It not only accounts for part of the educational outcomes of that generation, but is an important factor in the transmission of earnings from the 1st to the 2nd generation (above and beyond its effect on the education of the 2nd generation).

3 Labour Market Outcomes among the Children of Immigrants in the US

3.1 A Brief Summary of Educational Outcomes

Since educational attainment is such an important variable regarding labour market outcomes, following is a brief summary of 2nd generation educational outcomes from a review paper by Picot and Hou (2009).

American children with immigrant parents have (unadjusted) educational attainment levels roughly equal to, or marginally higher than, the children of American born parents (Card, Dinardo and Estes, 2000; Chiswick and Deburman, 2004). The difference may be more significant among the 25 to 54 year olds, with 38% of second generation Americans holding degrees, compared to 30% of the third-and-higher generation (Mosisa, 2006). It is clear that after accounting for differences in parents educational attainment, location, family status and other variables, the 2nd generation is seen to outperform the third-and-higher generation educationally (Card et al, 2000; OECD, 2006).

But as in Canada, there are significant ethnic group/nationality differences. In the US, Americans whose parents were immigrants from Mexico or other Central/South American countries have significantly fewer years of schooling than the third-and-higher generation Whites, while those

from Europe, Asia and Africa register more. Much of this inter-ethnic group difference is related to differences in the educational attainment of the parents.

The sociological literature finds that parents' education and socio-economic status are important, but even after accounting for these factors differences in educational outcomes among ethnic groups persist, as they do in Canada (e.g. Rumbaut, 2005). Parental expectations regarding educational attainment may play a major role, and so does family structure: 2nd generation children from intact families are seen to have superior outcomes. The incidence of lone parenthood is greater among some ethnic groups than others.

The degree of "stickiness" between the educational attainment of the immigrant parents, and that of their children (the intergenerational transmission of education) is greater in the US than in Canada (Card et al, 2000; Card, 2005). There may be dimensions of the Canadian education system that result in higher levels of educational mobility between generations. More is said of this later. Encouragingly, as in the Canadian case, some research suggests that the major gains of the 2nd generation over the 3rd-and-higher generation are made by children whose parents have very low levels of education. And also as seen in Canada, it is the fathers' education, not income that is the primary determinant of educational outcomes of the children.

Much of the concern regarding educational outcomes in the US focuses on the Mexican and Hispanic immigrant communities. However, significant gains in relative educational attainment are made by these groups across generation from the immigrants (1st generation), to their children, and even to the third-and-higher generation (Smith, 2003). Blau and Kahn (2004) found significant intergenerational gains in educational attainment between the 1st and 2nd Mexican generations, but not beyond. Fry and Lowell (2005) also conclude that assimilation progress among Mexicans appears to stall after the 2nd generation. Little evidence of "downward assimilation" is observed in this research, however, at least regarding educational attainment outcomes (Smith 2003). Nonetheless, given the low levels of educational attainment among Hispanic and Mexican immigrants, educational gaps (with the third-and-higher generation Whites) may well persist among the 2nd generation in these ethnic groups, in spite of the gains that they are making.

3.2 Participation Rates, Unemployment Rates and Occupational Outcomes

As in Canada, little work was found focusing on the determinants of employment, unemployment and occupational outcomes among the children of immigrants. Mosisa (2006) produced some descriptive results based on data from March, 2005 Current Population Survey.

Among 25 to 54 years olds, labour force participation rates are about the same for the children of immigrants as among the third-and-higher generation of Americans, at around 80% (Table 5). There are some ethnic group differences. Second generation Asians and Blacks had rates around 80%, while Hispanics and Latinos had somewhat higher rates at 83% and Whites at 85%. Unemployment rates were also very similar between the 2nd and third-and-higher generations (at 4.6%), although there was some variation by gender. Among males, the 2nd generation had higher rates, while among women their rates were lower.

Table 5 Employment and unemployment rates of the second and the third-and-higher generation Americans aged 25 to 54, March 2005

	Total		Men		Women	
	Second generation	Third-and-higher generation	Second generation	Third-and-higher generation	Second generation	Third-and-higher generation
Labour force participation rates						
Total	79.6	79.2	84.9	84.7	74.0	74.0
Education attainment						
Less than a high school diploma	68.9	63.6	77.0	72.2	59.0	53.8
High school graduates	79.1	80.5	86.7	86.9	69.6	73.6
Some post secondary education	85.5	84.4	92.4	90.5	78.6	79.5
University degree	87.6	89.4	93.1	95.3	82.4	84.1
Race and Hispanic or Latino ethnicity						
White non-Hispanic or Latino	84.5	84.2	90.9	90.9	77.7	77.7
Blacks	79.9	78.7	85.1	79.7	74.9	77.9
Asians	80.9	80.3	84.1	87.2	77.0	73.7
Hispanic or Latino	82.8	78.8	90.5	85.5	75.2	72.5
Unemployment rates						
Total	4.6	4.6	5.5	4.9	3.6	4.2
Education attainment						
Less than a high school diploma	8.3	11.9	6.5	10.7	11.2	13.8
High school graduates	6.4	5.8	8.4	6.2	3.3	5.2
Some post secondary education	4.6	4.3	6.4	4.5	2.5	4.2
University degree	3.1	2.2	2.7	2.4	3.5	2.0

Source: Mosisa 2006

The marginally higher educational attainment of the 2nd generation as a whole in the US is reflected in the occupational outcomes (Table 6). Overall, the children of immigrants aged 25 to 54 were more likely to be in professional occupations than the third-and-higher generation (27% compared to 23%). But there was considerable difference by ethnic group, again reflecting to some extent educational attainment. Among the children of immigrants, Asians had the highest proportion in professional occupations, at 36%, followed by Whites and Blacks, where around 30% were in professional occupations in 2005. The children of Black immigrant families were much more likely to be in the professions than their third-and-higher generation counterparts (at 17%), likely because their educational attainment was much higher. Thirty-seven percent of second generation Blacks held degrees, compared to only 18% of third-and-higher generation. Second generation Americans of Latino or Hispanic origin were least likely to be in professional occupations, at around 19%. They also had the smallest share holding degrees, at around 21%.

Table 6 Occupational distribution of the employed second and third-and-higher generation Americans aged 25 to 54, March 2005

	Second generation			Third-and-higher generation		
	Total	Men	Women	Total	Men	Women
Total	100	100	100	100	100	100
Management, business, and financial operations	17.6	16.7	18.8	16.3	17.2	15.4
Professional and related occupations	27.1	22.4	32.8	22.8	17.7	28.3
Sales and service occupations	37.0	30.8	44.4	37.8	27.0	49.4
Blue Collar:construction/transport/production,etc.	18.2	30.1	4.0	23.1	38.2	6.9
White non-Hispanic or Latino	100	100	100	100	100	100
Management, business, and financial operations	20.8	21.2	20.2	17.5	18.7	16.2
Professional and related occupations	30.0	23.7	37.7	24.0	18.7	29.9
Sales and service occupations	32.3	26.9	38.8	36.0	25.6	47.8
Blue Collar:construction/transport/production,etc.	16.8	28.2	3.3	22.5	37.0	6.3
Blacks	100	100	100	100	100	100
Management, business, and financial operations	12.1	8.2	15.9	10.6	8.5	12.3
Professional and related occupations	30.3	30.0	30.6	17.4	11.6	22.1
Sales and service occupations	44.8	36.3	53.3	45.9	34.7	54.9
Blue Collar:construction/transport/production,etc.	12.8	25.6	0.3	26.1	45.3	10.7
Asians	100	100	100	100	100	100
Management, business, and financial operations	19.0	14.3	25.3	19.2	19.9	18.4
Professional and related occupations	36.7	37.9	35.1	31.1	26.6	35.8
Sales and service occupations	32.9	30.5	36.2	39.7	38.1	41.4
Blue collar:construction/transport/production,etc.	11.4	17.3	3.4	10.0	15.4	4.3
Hispanic or Latino ethnicity	100	100	100	100	100	100
Management, business, and financial operations	12.3	10.5	14.4	12.7	12.5	12.9
Professional and related occupations	19.2	13.7	25.7	16.5	12.7	20.8
Sales and service occupations	45.2	37.6	54.2	45.6	33.4	59.3
Blue Collar:construction/transport/production,etc.	23.3	38.2	5.7	25.2	41.5	7.0

Source: Mosisa 2006

In spite of their higher levels of education, and higher proportion in professional occupations, the median annual earnings of 2nd generation *males* were about the same as the third-and-higher generation (\$44,000 and \$43,000 respectively). The unadjusted (raw) data suggested that second generation women earned more than their third-and-higher counterparts. Not surprisingly, here too there were significant differences by ethnic groups. Second generation Asians earned the most (at \$47,000), followed by Whites, Blacks and Hispanic/Latinos (the latter at \$33,000). This in part reflects education and occupation differences. Notably, second generation Blacks earned significantly more than their third-and-higher generation counterparts (\$40,000 vs. \$30,000).

3.3 The Earnings Gap Between the 2nd and Third-and-higher Generations

As noted above, absent any controls, the labour market outcomes of 2nd generation Americans at any point in time are very similar to those of the third-and-higher generation Whites, and superior to those of the third-and-higher generation racial minorities. Using data from the early 2000s, Aydemir and Sweetman (2008) find employment and unemployment rates and earnings that are very similar between the 2nd and third-and-higher generation (Table 7).¹⁰ After controlling for age, 2nd generation immigrants earn more than their third-and-higher generation counterparts. Card (2005) finds that after controlling for age, second generation immigrants have an 8% higher wages. Borjas (2006) finds a 7% to 9% gap in 2000.

Table 7 Labour market outcomes of 2nd and third-and-higher generation Americans, 1998 to 2004, no controls, population age 25 to 65

	Immigrant		2 nd generation			Third-and-higher generation	
	Age at immigration ≥12 years	Age at immigration ≤11 year	Father only	Mother only	Both	White	Other
Males							
Employed (%)	85.4	86.2	81.4	84.9	82.5	84.6	74.6
Unemployed (%)	4.6	4.4	3.4	4.1	3.8	3.3	6.2
Annual earnings (\$)	32.3K	36.9K	43.6K	44.5K	40.8K	42.1K	27.5K
Females							
Employed (%)	58.2	71.4	69.9	74.6	69.9	71.5	68.5
Unemployed (%)	4.3	3.1	2.7	3	3.3	2.3	4.8
Annual earnings (\$)	14.5K	22.2K	22.3K	23.0K	21.5K	21.2K	18.4K

Source: Aydemir and Sweetman (2008) with data from Current Population Survey

But as noted in much of the literature, source region of the parent (immigrant) is an important determinant of these wage differentials. In 2000, second generation members with parents from Mexico, Nicaragua, Haiti, El Salvador and the Dominican Republic had wage gaps in the order of -4% to -19% (age adjusted, compared to third-and-higher generation as a whole), while those whose parents were from countries like Canada, Germany, Greece, India, Poland, and the UK had large positive gaps in the range of 17% to 27% (Borjas 2006). This is important because of the increase in the share of immigrants from Mexico and other Central and South America.

The overall relative wage advantage of the 2nd generation has been declining through time in the US. Borjas (2006) shows that the wage advantage of 2nd generation males over their third-and-higher counterparts (age adjusted only) has declined from 18% in 1940, to 15% in 1970, and just 6% in 2000. Just as relative earnings among immigrants has been declining, certainly since the

10. They compute estimates for various types of 2nd and third-and-higher generation Americans. See Table 11 to 13 in their paper.

late 1970s, so too have relative wages among the children of immigrants. Changing source regions (and factors correlated with it, such as educational attainment, language, education quality, discrimination, etc.) is a large part of the explanation for the decline in *immigrant* earnings in both Canada and the US, and that may be the case among the 2nd generation as well.

Borjas (2006) finds that controlling for both education and age reduces the gap to 3% from 6%. Card (2005) controls for region of residence (the 2nd generation are more likely to live in large urban area, where wages are higher) reduces the gap to around 3% (Table 8). Adding controls for education reduces it yet again, to around 1.5 %. Hence, most of the wage gap between 2nd and third-and-higher generations at a point in time can be accounted for by where they live and their higher educational attainment. These two variables significantly influenced the wage gap in Canada as well. Location of residence seems to be particularly important. However, these specifications assume identical returns to education for 2nd and third-and-higher generations, and some Canadian research (and US research shown below) suggests lower returns for 2nd generation visible minorities in particular.

Table 8 Hourly wage gap between second and third-and-higher generation Americans 1995 to 2002, population aged 21 to 64

	Coefficients X 100 = (roughly % differences)			
	Controls for:			
	(1)	(2)	(3)	(4)
	age	(1) plus region/urban	(2) plus education	(3) plus race/ethnicity
Men	8.0	3.6	1.5	2.3
Women	8.3	3.0	1.2	1.9

Source: Card (2005). Original data are from Current Population Survey.

Note: Virtually all coefficients are statistically significant

The research of Aydemir and Sweetman (2008) (and others) suggest that educational attainment reduces the gap (Table 9). However, as with the Canadian case, they find some evidence that the returns to education are lower among 2nd generation Americans than the third-and-higher generation. Returns to years of schooling are seen to be 14.0% for each additional year among third-and-higher generation, and 12.6% among 2nd generation males. Similar differences are observed for females, although the rates of return are higher than for males. While the differences in the rates of return are not statistically significant, they are of the same order of magnitude as in the Canadian case, where they are statistically significant due to the larger sample.

Table 9 Percentage differences in annual earnings between 2nd and third-and-higher generation, the United States, 1998 to 2004, population aged 25 to 64

	(1) No controls	(2) (1) plus years of schooling	(3) (2) plus add marital status ethnicity, urban/geographic location
Males			
2 nd generation, Mom immigrant	0.014	-0.015	0.004
2 nd generation, Dad immigrant	-0.026	-0.068	-0.068
2 nd generation, both immigrants	0.021	-0.009	0.001
Females			
2 nd generation, Mom immigrant	0.077	0.055	0.006
2 nd generation, Dad immigrant	0.023	-0.019	-0.072
2 nd generation, both immigrants	0.088*	0.077	-0.026

* Statistically significant

Source: Aydemir and Sweetman (2006). Original data are from Current Population Survey.

Note: the table is based on coefficients from ordinary least square regression with log annual earnings as the dependent variable.

3.4 The Intergenerational Transmission of Wages among Immigrant Families

As in Canada, there is concern in the US about the intergenerational transmission of earnings, given that earnings have declined among entering immigrants since the 1980s. If intergenerational transmission between immigrants and their children is strong, then wage declines among immigrant parents in the 1980s and 1990s may be passed on to future generations of their children.

Borjas (2006) focuses on the intergenerational transmission of earnings, and factors affecting it. Wages of the 2nd generation are seen to be 5 to 10 percent higher than that of the first generation parents. Rising intergenerational educational attainment levels appear to be responsible for much of the intergenerational wage gain, since the intergenerational wage gain largely disappears once the data are adjusted for differences in educational attainment between generations. He estimates an intergenerational wage correlation (controlling for age) of around .56 for men over the 1970 to 2000 period, and .28 for women. That is, in the case of men, about half of the wage advantage (or disadvantage) of the parent is passed on to the offspring. These correlations are higher than in Canada, suggesting intergenerational wage mobility among immigrant families is greater in Canada than in the US.

Once again, education appears to account for much of this “stickiness” in wages between generations in the US. After controlling for both age and education, these intergenerational correlations decline by about half, to .25 for men, for example. Much of the intergenerational transmission of wages reflects intergenerational transmission of education. The estimate of the (age adjusted) intergenerational wage correlation .56 for men, for example, is higher than that typically observed among the US population as a whole (between .2 and .4). Thus, wage “stickiness” between immigrants and their children is relatively high.

Borjas (2006) argues that this greater degree of intergenerational stickiness is associated with “ethnic capital”. That is, children’s outcomes depend not only on their parents’ socio-economic status and activities, but also on the ethnic environment in which the child is raised. An advantaged environment, where most parents have a university education, for example, provides the children with valuable characteristics that improve their outcomes later in life, independent of family effects. Environment where most members are high school drop-outs may have the opposite effect. Borjas points to a number of studies that suggest “ethnic capital” can have such an effect (Borjas 1995; Cutler et al. 2005). Canadian research also suggests that “ethnic capital” is an important component of the intergenerational transmission of wages (Aydemir, Chen and Corak, 2005).

The concern regarding wage stickiness seems related largely to the low wages (and educational levels) among immigrants with Hispanic (notably Mexican) backgrounds. Will these lower levels be passed on to their children? Smith (2003) addresses the issue of intergenerational educational attainment and wage transmission for Hispanics (including Mexican) father-son pairs. He finds rapid decreases in the wage gap with the third-and-higher generation from the 1st to 2nd generations. For example, Mexican *immigrants* born between 1940 and 1944 had a wage gap (deficit) of 35% with the third-and-higher generation Whites (age adjusted). Among their sons, the gap was reduced to 18%.

Much of this wage gap is due to the fact that the educational attainment among Mexicans, no matter which generation, is less than among the third-and-higher generation Whites. Hence, one would expect them to earn less. Focusing on the gap between the 3rd generation Mexicans and third-and-higher generation Whites, Smith (2003) concludes that these differences in educational attainment account for a little less than half of the gap. It falls from 17% to 10% when adjusted for educational attainment. Hence, while educational attainment counts for some of the wage gap, much remains after adjusting for that factor.

Fry and Lowell (2005) come to a similar conclusion when focusing on the wage gap between 2nd generation Latino (Mexican, Puerto Ricans and Central/South Americans) workers and third-and-higher generation Whites. They find that more than half of the negative wage gap is accounted for by the lower educational attainment and potential experience of the 2nd generation Latino Americans.

Smith (2003) finds intergenerational transmission elasticity of .46 between the 1st and 2nd generation Mexicans, somewhat on the high side compared to estimates for non-immigrant populations in the US, which tend to be in the .2 to .4 range. There is a considerable degree of “stickiness” in the intergenerational transmission of wages among Mexicans. As noted above, this stickiness was noted by Borjas (2006), who argues that “ethnic capital” may be responsible. Hence, although there are intergenerational gains made by the Mexican population, the regression to the mean wage is slower among this group than the non-immigrant populations. The disadvantages apparent among the immigrant parents are passed on to a greater extent than for non-immigrant families.

3.5 Summary of Labour Market Outcomes in the US

Participation rates and unemployment rates among the children of immigrants and those of American born parents are roughly the same. Reflecting their somewhat higher level of education, a larger share of 2nd generation Americans are in the professions than is the case for the third-and-higher generation. Particularly high levels of concentration in professional occupations are evident among the children of immigrants of Asian background. Second generation Blacks also have a relatively high share in the professions, equal to 2nd generation Whites, and much above third-and-higher generation Blacks.

Second generation Americans earn, on average, about the same or somewhat more than their third-and-higher generation counterparts (age adjusted). But this positive wage gap has declined significantly over the past few decades, just as the negative wage gap between immigrants and the third-and-higher generation has increased. Both trends are driven to some extent by the change in composition of immigrants by source region.

There is significant variation in the 2nd/3rd generation gap by ethnic group/nationality. Children of immigrants parents from Mexico and other Central/South American countries earn significantly less than the third-and-higher generation (as a whole), while those with parents from Canada and Western and Northern Europe earn more. And the share of immigrants (and hence 2nd generation) from the former countries has been rising over time.

Much of the economics research in the US focuses on the intergenerational transmission of wages between immigrants and their children. The children do experience higher average wages than their immigrant parents, largely because of higher educational attainment. But the intergenerational transmission of wages is stickier among immigrant families than the US population as a whole.

Immigrant ethnic groups with a wage advantage pass this on to their children more than is the case for American families as a whole, and those with a wage disadvantage also pass this on to a considerable extent (and more than among Canadians, immigrants or not). Intergenerational transmission of educational attainment is also relatively “sticky” among immigrant families in the US, and some of the stickiness in wages reflects this stickiness in educational attainment. Much of it also likely reflects the effect of “ethnic capital”, part of which is the educational attainment of the community as a whole.

This intergenerational transmission process could be detrimental for Hispanics and Mexicans, as noted in the “segmented assimilation” literature. Lower parental educational attainment, a greater share of single parent families, discrimination and deviant lifestyles (drugs, gangs) are seen to result in poorer assimilation outcomes for these ethnic groups, among others.

However, the economics literature suggests that there is positive assimilation (along the wage dimension) among Hispanics and Mexicans in the US. Wages are higher among 2nd generation children than among their immigrant parents. Perhaps more importantly, the negative wage gap with the third-and-higher generation Whites is large among immigrants in these ethnic groups, but narrows considerably among the 2nd generation (their children), and is even smaller among

the third generation. This progression is partly related to higher levels of education among successive generations.

Assimilation is seen to be a multi-generational process in the US as in Canada. Nonetheless, even though there are on average intergenerational gains in relative wages, even among Hispanics and Mexicans, the low levels of educational attainment and wages among the immigrant parents, and relatively sticky intergenerational processes, does mean lower wages among the 2nd plus generation, even with positive assimilation. And the share of immigrants and 2nd generation American in these groups has risen over the past 30 years.

4. A Summary of the Determinants

The research reviewed above suggests that the determinants of *earnings* outcomes (notably earnings gaps) for the 2nd generation include:

- **Years of Schooling**

An important determinant of wages in any wage model, this variable accounts for one half to two thirds of the positive wage gap between the 2nd and third-and-higher generation in Canada, and perhaps all of the gain in wages between the 1st and 2nd generation in the US. But some research suggests that the 2nd generation visible minority population have lower returns to education than the third-and-higher generation, reducing the effect of this variable on the earnings of the 2nd generation.

- **Location**

This is an important determinant of the wage gaps. Wages tend to be higher in large urban areas than elsewhere, and it is here that immigrants and their children (as adults) tend to cluster. This variable accounts for almost as much of the difference in the 2nd and third-and-higher generation wage gap as does years of schooling, although as strictly a determinant of wages it is likely much less important.

- **Ethnic group/Source Region**

Even after controlling for variables such as those mentioned above, ethnic group differences in earnings among the 2nd generation persist. In Canada, Blacks tend to earn less, the Chinese more than other visible minority groups. And there are significant differences in the economic returns to education across ethnic groups educated in Canada which will influence earnings outcomes.

- **The “stickiness” of wages between the 1st and 2nd plus generation**

Since first generation immigrants in many ethnic groups find themselves with very low wages (relative to the third-and-higher generation), wage mobility between these immigrants and their children (as adults) is important. Generally speaking, wage mobility is greater among immigrant families in Canada than in the US, just as it is among the population as a whole. Much of the higher level of “stickiness” is a reflection of the higher intergenerational stickiness of educational outcomes also observed in the US. In the US, intergenerational

wage transmission is particularly sticky among Mexicans, although the Mexican 2nd generation does, on average, outperform their immigrant parents.

- Ethnic Capital

This variable is seen to play a major role in the intergenerational transmission of wages (from the 1st to the 2nd generations). In Canada, the average level of educational attainment of the ethnic community is an important determinant of the wages of the 2nd plus generation, which generally plays a very positive role given the generally high level of educational attainment among immigrants. In the US, the lower intergenerational wage mobility is seen to be in part due to a lack of “ethnic capital” among some groups, notably Mexican immigrant communities.

5. Conclusion and Discussion

Overall, the children of immigrants in both Canada and the United States, along with Australia and to a lesser extent the U.K., register very positive educational and labour market outcomes. In the aggregate, employment and unemployment rates are equal to or better than those of the 3rd plus generation, and among those employed, earnings are superior. And reflecting their high levels of education, the 2nd generation are more likely to be in professional occupations than their 3rd plus generation counterparts. Generally speaking, such evidence does not suggest a need for a significant active policy response.

There are a couple of caveats regarding this overall positive picture, and possible future outcomes.

First, there are significant differences in outcomes among ethnic/source region groups. Basically, second generation *Canadians* whose parents originate from developing nations such as China, India and Africa have superior educational outcomes, but those with backgrounds from developed nations such as Europe, the US and Australia have superior economic and labour market outcomes. Evidence is emerging to suggest that although the 2nd generation visible minority population do very well economically (in large part because of their very high education levels), as well as or better than the 3rd plus generation, they may have more difficulty converting education to earnings than other 2nd generation groups, or the third-and-higher generation. Evidence on this point remains preliminary, so at the very least more research is required. In Canada, the focus of this issue is really on the Black population, where negative wage gaps with the third-and-higher generation Whites are the largest (around 10% to 15% after controlling for socio-economic differences). The Black population is a relatively small population in Canada, only 6.7% of immigrants, 3.2% of the second generation, and 1.1% of the third-and-higher generation were Black in 2006.

In the *United States*, concerns in the sociological literature regarding “downward assimilation” focus on the outcomes of the children of Mexican and South American immigrants. This “segmented assimilation” literature suggests that deviant lifestyles, low-educational attainment among the parents, and larger number of single parent families combine to produce poor outcomes for the Hispanic/Latino 2nd generation. It is important to recall that the economics literature suggests that, on average at least, there are significant improvements

intergenerationally among Mexican and Hispanic immigrant families. The children from Mexican immigrant families, for example, outperform the 3rd plus generation with similar family characteristics. But the educational attainment of the parents is very low, and hence, even with this higher level of performance, outcomes among the children remain an issue. The lower level of intergenerational educational and earnings mobility observed among the Mexican immigrant families also plays a role.

Of course, discrimination, either statistical¹¹ or preference/taste-based¹², cannot be ruled out as contributing to this issue. Most laboratory experiments and field experiments suggest that some form of discrimination against racial minority groups is evident in labour market processes (see Schroder, 2009 for a review). But these are mostly European or US based studies, where this issue is more salient, since second generation outcomes among racial minorities are less positive than in Canada. In a randomized Canadian field experiment, Oreopoulos (2009) did find that job applicants with English sounding names and Canadian experience were much more likely to be called for an interview (all other job and personal characteristics identical) than those with Asian sounding names, and foreign experience. But whether this points to discrimination or employers' concerns regarding language (among immigrants) and other traits is not known.

The second caveat to the generally positive results relates to the direction in which educational and labour market outcomes of the second generation may move in the future. The results reported are derived primarily from the children of immigrants who entered North America before the 1980s. The economic conditions of entering immigrants deteriorated significantly through the 1980s and 1990s. It is too early to tell if poorer economic integration among the immigrant parents will influence the educational and labour market outcomes of their children in the years to come.

But there are reasons to believe 2nd generation outcomes in Canada and the US will move in different directions in the future. These reasons relate to the changing composition of the immigrant population since the 1980s. We focus on *Canada* first. Because of changes in the selection process for skilled economic immigrants, the educational attainment of entering immigrants rose dramatically. Various authors¹³ have commented on the positive effect on the second generation educational outcomes of selecting highly educated immigrants in the first generation. This positive effect will probably increase in the future. In 1981, one-quarter of recently entering male immigrants¹⁴ had a university degree; by 2006 it was almost 60%. The trend is similar among women, but the proportions somewhat lower (appendix table 1). The educational attainment of the parents is an important determinant of educational, and hence labour market, outcomes of the children. Rising educational attainment of immigrants should

¹¹ Where information on the productivity or language ability of the individual is difficult to obtain, and hence decisions regarding hiring, for example, are made based on the employers notion (real or perceived, correct or incorrect) of the characteristics such as language or productivity of the group to which the individual belongs, rather those of the individual.

¹² Where employers, customers or colleagues prefer people of one group over that of another, independent of any considerations regarding productivity, work ethic, etc.

¹³ e.g. Boyd, 2002; Aydemir and Sweetman; 2008 Hum and Simpson, 2007

¹⁴ Aged 25 to 54 and entered during the previous five years

have a strong positive effect on the outcomes (particularly the educational attainment outcomes) of the children of immigrants in the future.

Second, Canada displays considerable mobility in the intergenerational transmission of education and labour market outcomes among immigrants. Coming from a less educated immigrant family (or a poor one) does not dictate that the children will have poor educational or labour market outcomes. The “stickiness” in the intergenerational transmission of education is much lower among immigrant than Canadian born families, and lower among Canadian families than American ones, immigrant or not. A child from a less educated immigrant family is more likely to achieve a higher level of education than that from a similarly educated family with Canadian born parents. And declining incomes among the more highly educated families may have little effect, since educational outcomes of the children are driven more by the educational attainment of the parents than their incomes.

Third, through the 1970s and 1980s increasing numbers of Canadian immigrants came from China, India, and other Asian countries that place a very high value on educational and labour market success for their children, and have very high levels of “ethnic capital”. The share of male entering immigrants aged 25 to 54 from South and East Asia (mainly China and India) rose from 16% in the late 1970s to 40% in the early 2000s. Similar trends hold for women (appendix table 1). These groups register very high level educational outcomes in particular.

Because of these three factors, the already positive educational attainment gap between the 2nd and 3rd plus generation in Canada is likely to increase in the future, also affecting future labour market outcomes.

It is not clear that similar movement can be expected in the *United States*. First, the educational attainment of entering immigrants did not improve over the 1980s and 1990s in the US as it did in Canada (appendix table 1). The share of entering immigrants with a university degree changed little, from 33% to 35%, between the late 1970s and the early 2000s. Hence, the relative (to the American born population) educational attainment of immigrants has been falling. The lack of a points system for selecting skilled economic immigrants, and the fact that most immigrants to the US enter through “family reunification”, makes it more difficult in that country to alter characteristics such as educational attainment. This will likely have a significant effect on the outcomes of the children.

Second, the shift in immigrant source regions toward Mexico, and other South and Central American countries in recent decades could significantly affect aggregate outcomes of the 2nd generation in the US. Among new male adult immigrants who entered the US in the late 1970s, about one quarter of the immigrants were from South and Central America; by the early 2000s entering cohort this had risen to one half (appendix table 1).

Hence, gazing into the future to assess broad trends in the outcomes of the children of immigrants entering during the 1980s and 1990s, it seems likely that outcomes in Canada, already quite positive, are likely to become even more so. In the US the (positive) earnings gap between the 2nd and 3rd plus generations has declined over the past few decades, and may continue to do so, possibly turning negative.

Such a prognosis does not take into account possible actions that could alter, positively, such outcomes. Second generation outcomes are the result of a number of stages, each of which is affected by policy choices. First there is immigrant selection. The educational, source region, language and other characteristics of immigrants affect the outcomes of the children. The points system in Canada and Australia provides a policy lever unavailable in some other countries. Of course, selection is also affected by factors such as physical proximity (Mexico to the US for example), over which there is less policy control. Furthermore, immigrants select host nations as much as the nations select immigrants, and this could affect future selection outcomes as nations increasingly compete for the highly skilled in particular. Nonetheless, policy levers do exist to influence selection through points systems, or visa programs such as exist in the US.

Conditional on the characteristics of immigrants selected, the second stage that affects 2nd generation outcomes is the degree of intergenerational education mobility between immigrants and their children, particularly among children from immigrant families with lower educational attainment. This can be affected by a host of factors, some of which were mentioned in this paper, such as ethnic capital and parenting style¹⁵. But the important factors with policy levers attached often relate to the educational system.

Some important differences exist between Canada and the US. While American youth are, overall, more likely to attend university than Canadians, if one is from a family in the bottom income quartile, university attendance is more likely in Canada¹⁶. This is consistent with the higher level of intergenerational educational mobility observed in Canada, particularly from the bottom of the distribution. There may be a number of reasons for this outcome. The elementary-secondary school system is likely more homogeneous regarding school quality in Canada than the US. Which school you attend will have less effect on the likelihood of getting into university in Canada. School funding also plays a role, since schools are funded provincially in Canada, and each receives roughly the same (per capita) resources, whether in a rich or poor neighbourhood. School funding is often local in the US, so schools in poorer (often immigrant) neighbourhoods have fewer resources available.

There is considerable concern in Europe regarding educational mobility among immigrant families, since so many have very low levels of education. European policy analysts are concerned with school and mobility related issues such as the ways to avoid segregation of immigrants in the school system, the resources available to assist children of immigrant families,

¹⁵ American sociologists asked why some 2nd generation children in the Mexican-American community succeeded in achieving upward mobility while others were less successful, and concluded that one of the important differences was parenting styles. Families with more authoritarian (less liberal) styles focused on achieving upward mobility and preventing the children from entering deviant life styles were seen to be more successful. (Portes et al, 2009)

¹⁶ Access to post-secondary education is more equitable in Canada than in the US. In Canada, children from bottom and second income quartiles are equally likely to attend university, and top quartile students twice as likely as those from the bottom quartile. In the US, second quartile students are twice as likely to attend, and top quartile children 4 times as likely, as those from the bottom income quartile (Frenette, 2005)

reducing the negative impact of ability grouping, and ensuring high quality teaching and learning environments in schools with considerable ethnic diversity (Nusche, 2009)

Conditional on the educational attainment achieved, the third stage is the entry into the labour market. A number of factors can potentially influence the experience of the children of immigrants at this stage. Networking may be an issue. Some immigrant groups may have more limited networks than those available to native born families, in part because of their limited time in the country. Mentoring programs for immigrants and their children appear to have some success in overcoming this potential shortcoming. Among visible minority groups, discrimination, either statistical or preference based, may play a role in obtaining a first interview, or the job. Statistical discrimination in particular may play a role in obtaining an interview, as employers may use names as signals for unknown characteristics, such as language skills. Potentially lower returns to education among visible minorities, discussed earlier in the paper, may also play a role, as may cultural differences in approaching the job search and acquisition process.

It is important to stress that, overall, both Canada and the US have experienced generally positive results regarding the educational and labour market outcomes of the children of immigrants. Some important caveats to this general conclusion have been noted.

Appendix 1 Source regions composition and educational attainment of new immigrants in the US and Canada, age 25 to 54

	Men				Women			
	1980	1990	2000	2005	1980	1990	2000	2005
USA	Percent							
Source region								
North America	2.6	2.0	2.6	1.8	2.8	2.1	2.8	2.1
Caribbean	7.0	7.2	6.9	5.1	7.6	7.7	7.8	6.2
South & Central America	25.1	32.2	40.6	49.3	24.8	30.9	36.6	40.9
Northern Europe	4.4	3.9	3.3	2.6	4.4	3.5	2.7	2.1
Western Europe	2.7	2.5	3.0	2.2	3.4	2.9	2.9	2.0
Southern Europe	4.5	1.9	1.7	1.3	3.8	1.5	1.6	1.2
Eastern Europe	6.0	6.2	7.7	5.5	6.0	5.8	8.7	7.0
Africa	3.9	3.9	5.8	5.9	2.1	2.3	5.0	5.5
South Asia	5.4	5.6	8.7	8.5	4.1	4.1	7.1	7.2
Southeast Asia	13.4	9.3	5.6	5.2	16.2	13.7	8.4	9.4
East Asia	12.8	15.6	10.4	9.1	14.4	17.2	12.9	12.7
West Asia	6.4	4.4	2.9	2.5	4.8	3.7	2.6	2.6
Oceania & other	5.8	5.2	0.9	1.0	5.6	4.6	1.0	1.1
With a university degree	33.0	33.9	36.3	35.0	19.7	26.0	32.3	36.0
Canada								
Source region								
North America	6.9	2.4	1.6	1.9	7.9	3.5	2.1	2.4
Caribbean	6.8	4.5	3.0	2.9	7.2	6.0	3.6	3.2
South & Central America	6.4	8.8	4.4	7.2	6.6	9.2	5.2	7.7
Northern Europe	17.3	4.7	2.6	3.0	15.0	4.9	2.0	2.1
Western Europe	5.7	2.5	3.6	3.4	5.6	2.7	3.2	2.7
Southern Europe	7.9	5.3	5.3	2.4	7.2	4.3	4.8	2.1
Eastern Europe	5.7	12.9	10.3	9.9	5.5	11.3	11.0	10.8
Africa	6.5	8.6	9.6	12.7	5.4	5.8	7.4	9.7
South Asia	6.2	9.8	18.7	20.3	6.9	7.3	15.1	17.8
Southeast Asia	14.9	11.2	6.5	7.2	15.6	15.7	9.9	10.5
East Asia	10.0	19.2	25.1	20.4	11.9	21.4	27.9	23.1
West Asia	4.4	9.3	8.6	8.0	3.6	7.1	7.3	7.2
Oceania & other	1.5	0.7	0.6	0.8	1.5	0.7	0.5	0.6
With a university degree	26.2	28.2	52.9	59.7	16.4	21.1	41.7	51.1

Note: New immigrants include those who immigrated to Canada within the previous 5 years.
Source: Bonikowska, Hou, and Picot (2009).

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