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**MEASURING POPULATION MOVEMENT AND INTEGRATION IN A GLOBALIZED  
WORLD**

**SESSION II: MIGRATION AND LABOUR MARKETS**

IMMIGRANT ECONOMIC AND SOCIAL INTEGRATION IN CANADA:  
RESEARCH, MEASUREMENT AND DATA DEVELOPMENT AT STATISTICS CANADA

Note by Statistics Canada<sup>1</sup>

**I. INTRODUCTION**

1. The economic and social integration of immigrants and their children is a major policy concern in Canada. There are many reasons for this. About one in five persons living in Canada is foreign born, a share that is second only to Australia. Furthermore, in 2005 Canada, the United States and Australia posted their highest immigration rates in 15 years. It is unlikely that these historically high immigration levels will decline in the near future. Driven by the belief that labour shortages are pending as a result of a slowdown in population growth and the retirements of the very large baby-boom generation, governments in these countries, including Canada, are expressing the desire for more highly skilled immigrants, not fewer.

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<sup>1</sup> This paper has been prepared at the invitation of the secretariat.

2. These high immigration levels have introduced a significant change in Canada's social and economic landscape. In Toronto, for example, almost half of the population (47.3%) is foreign born, the highest share for any major city in the developed world, including New York, Miami and Sydney. In Canada's three largest cities combined—Montréal, Vancouver and Toronto—there were only six neighbourhoods<sup>2</sup> in 1981 in which a single visible minority ethnic group accounted for over 30% of the population; by 2001, this had increased to 254 neighbourhoods, driven largely by the increase in immigration from regions such as China, India and Africa.

3. With this as background, research as early as the late 1980s suggested that the traditional pattern of immigrant economic integration was changing. During their first few years in Canada, immigrants have traditionally earned significantly less than their Canadian-born counterparts, but their earnings slowly caught up with and, in some cases, surpassed those of their Canadian-born colleagues as time in Canada increased. Research in the late 1980s and early 1990s indicated that the earnings gap at entry between immigrants and native-born counterparts was increasing, and that the traditional 'catch-up' was anything but certain. This uncertainty regarding economic outcomes, and the reasons for these changes, combined with increasing concern in many OECD countries with social integration of immigrants, raised the interest in economic and social integration issues in Canada.

4. Statistics Canada responded to the need for policy-relevant information on this important topic in a number of ways. First, increased resources were allocated to the analysis of immigrant-integration issues, not only describing immigrant outcomes but also trying to identify the factors behind the observed trends. Effective dissemination of the results was an important part of this activity. Second, new datasets, largely longitudinal, were developed to provide better data on issues that the research suggested were important, thereby allowing even more relevant analysis to be conducted. Finally, key variables were added to existing surveys that enabled us to address pressing questions.

5. During the past six years, some 64 research articles on immigration issues have been produced and released by Statistics Canada. The vast majority of these articles address integration issues of one sort or another. Roughly speaking, they can be classified into the following topics:

- |                                  |            |
|----------------------------------|------------|
| (a) Economic integration:        | 32 papers; |
| (b) Spatial integration:         | 11 papers; |
| (c) Social integration:          | 7 papers;  |
| (d) Demographic characteristics: | 7 papers;  |
| (e) Immigrant health outcomes:   | 7 papers.  |

6. This paper discusses measurement issues, summarizes some of the recent research on immigrant assimilation, reviews related data development activities, asks why 'social cohesion' has been little affected by rising immigration and provides concluding comments.

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<sup>2</sup> A neighbourhood is a census tract that has a population of from 3,000 to 5,000 people.

## II. MEASURING ECONOMIC ASSIMILATION

7. The economic assimilation of immigrants can be addressed using a host of different metrics and time frames. One can focus on poverty, earnings, employment or unemployment, although any single indicator captures only one aspect of economic well-being. Earnings are the most commonly used measure in Canadian research but they ignore changes in employment rates. Employment rates capture changes in labour force involvement, but they tell us nothing about trends in earnings. Measures of low-income status are more comprehensive, because they incorporate change in all sources of income, but they focus on the bottom of the income distribution and fail to assess changes at the middle and the top. The process of labour market adaptation of immigrants varies across countries. Research by Antecol et al. (2006) shows that in Australia it is through employment adjustment that most assimilation occurs, whereas in the United States it is primarily earnings that adjust. The United States tends to have more flexible wages than Australia. The research suggests that Canada is somewhere between these two countries, with immigrant economic adjustment occurring through both employment and earnings.

8. In addition to employing *mean* earnings as the metric, more recent papers are focusing on the *distribution* of earnings of entering immigrants. They find that the earnings gap—between the native born and immigrants—is increasing more at the bottom than at the top of the earnings distribution, suggesting that a focus on low-income rates is desirable.

9. Beyond the metric used, the timeframe or segment of the immigrant assimilation trajectory selected also affects the findings. Much of the recent Canadian research has focused on earnings during the first few years in Canada. Other research has focused on the earnings trajectory over the life course to determine if a ‘catch-up’ to earlier cohorts is likely. Finally, some research foregoes research on the entering immigrants themselves, but focuses on their children. This research asks if ‘second generation’ immigrants are doing as well, economically, as their earlier counterparts, their parents or their Canadian-born colleagues. All of these time frames are important in order to assess changes in the economic assimilation patterns of immigrants.

## III. THE DECLINING ENTRY-LEVEL EARNINGS BETWEEN THE EARLY 1980s AND EARLY 2000s

10. Immigrants arriving in Canada through the 1990s and early 2000s were increasingly highly educated. In 2001, fully 42% of adult ‘recent’ immigrants (those arriving during the previous five years) had a university degree, and a historically high 54% entered under the ‘economic’ admissions class<sup>3</sup> (with only 31% in the family class). The situation was very different 20 or more years earlier. In 1981, only 19% of recent immigrants had degrees, and during the early 1980s, only 37% entered in the ‘economic’ class, with 43% in the family class. Immigrants of the late 1990s and early 2000 were increasingly selected because of their potential contribution to the Canadian economy. Hence the puzzle regarding the deteriorating earnings of successive entering immigrant cohorts.

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<sup>3</sup> Immigrants to Canada enter under a particular class. The main classes include (1) the skilled economic class, the only class where the immigrant selection rules are applied, (2) the family class, used for family reunification, (3) refugees, and (4) a business class, which includes a small number of entrepreneurs.

11. To address the puzzle, the majority of the Statistics Canada research has focused on entry-level earnings. There are a number of reasons why this metric is important. First, the significant decline in earnings at entry over the 1980s and early 1990s prompted a response on the part of the immigrant selection system to improve outcomes. Hence, it is reasonable to focus on entry earnings to assess the effects of the resulting change in immigrant characteristics. Second, recent Statistics Canada research on return migration suggests that the rate of out-migration of immigrants is large (up to 35%) and occurs primarily during the first couple of years following entry. Hence, economic outcomes during the initial years may be an important factor in determining the extent to which Canada retains its immigrants. Third, Canada is increasingly in competition with other countries, notably the United States and Australia, for highly skilled and educated immigrants. If relative economic outcomes at entry are poorer in Canada than elsewhere, such information will be shared through networks with potential immigrants and it will have a potentially negative impact on their decisions. Fourth, poverty studies indicate that most immigrants who enter poverty do so during their first full year in Canada (from 35% to 45% of immigrants enter poverty during their first year in Canada), and that this is followed by fairly high rates (around 20%) of longer term poverty. Poor entry-level earnings have, by and large, been followed by poor outcomes during at least the first decade or so.

12. In spite of the increasingly economic nature of immigration during the late 1990s, earnings among adult 'recent' immigrants declined, both in absolute terms and relative to their Canadian-born counterparts.

13. Over the past 15 years, immigrants have become more highly educated than the Canadian born. Hence, most research compares recent immigrants with 'like' Canadian-born, those who are similar along dimensions such as age, education, visible minority status, marital status and region of employment (including major city). This is typically done within a regression format that computes the log of the ratio of the earnings of immigrants to those of the Canadian born.<sup>4</sup> The results of such an analysis are given in Chart 1.

14. The earnings gap has been increasing significantly with each successive cohort, both at entry and after many years in Canada. Among males, the log earnings ratio at entry declined from .83 among the late 1970s cohort to .55 among the early 1990s cohort. There was a minor improvement in the earnings gap at entry between the cohorts of the early and late 1990s (log earnings ratio increased from .55 to .60).

15. The traditional 'economic assimilation' story among immigrants, where they earn less at entry but catch up after a number of years in Canada, was last observed among cohorts entering in the late 1970s. Among more recent cohorts, elimination of the earnings gap will be more difficult. For the early 1990s cohort, they earned roughly 70%<sup>5</sup> of Canadians after 6 to 10 years in Canada and it is not clear if they will catch up after 20 years in the country. Granted, the rate of improvement in earnings (i.e., the slope of the line in Chart 1) was much greater among the

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<sup>4</sup> The log earnings ratio is an approximation of the earnings of immigrants as a proportion of those of comparable Canadian born when the differences are small (say 10% to 20%), but when they become large (say 40% to 50%) the log (earnings ratio) over-estimates the percentage difference.

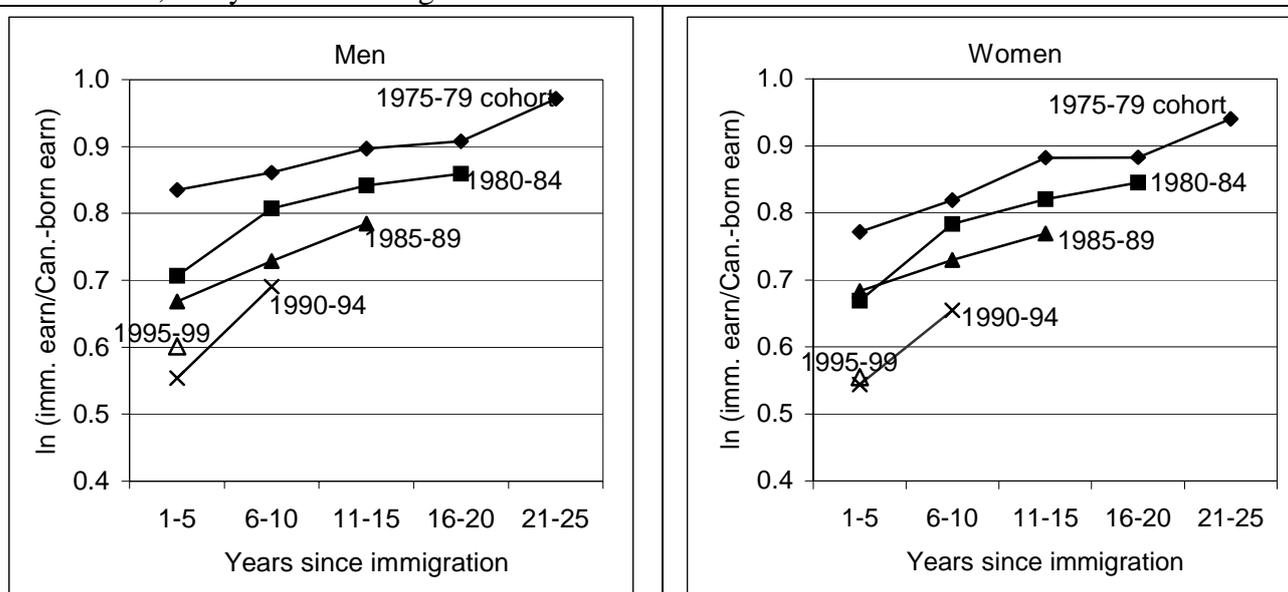
<sup>5</sup> That is, log earnings ratio of 0.7.

1990-to-1994 cohort than the 1980s cohorts, but they have a much larger gap to overcome. The pattern is similar for women.

16. The situation has not changed markedly in more recent years. Administrative taxation data provide very large samples, allowing more recent estimates of the entry-earnings gap beyond what is available from the census. Following some recovery in the late 1990s, entry-level earnings again declined for cohorts entering up to 2005. The 1996 immigrant entering cohort earned about 51% of that of the Canadian born during their first full year in Canada. Among the 1999 entering cohort this had improved to about 60%, but for the 2004 cohort it had fallen back to around 50% (Picot and Hou 2008). Furthermore, this research indicated that the reasons for the decline—to be discussed shortly—differed during the post-2000 period from those of the 1980s and 1990s.<sup>6</sup>

**Chart 1: Log earnings\* ratio\*\*: Earnings of immigrants compared with those of comparable Canadian born**

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



Source: Census of Population.

\* Predicted values based on a model controlling for education, estimated work experience, visible minority status, marital status and regions (including the major cities).

\*\* The ln (immigrant earnings/Canadian-born earnings). For small differences in earnings (10% to 20%), the ln earnings ratio is an approximation of the earnings of immigrants as a proportion of those of Canadian-born. For large differences (e.g., 40% to 50%), the log earnings ratio tends to overestimate the percentage difference.

Source: Frenette and Morissette 2003.

<sup>6</sup> Very large samples are required for the analysis of the earnings patterns of successive cohorts of entering immigrants. Hence, the Census of Population is usually the data source of choice for such studies. The last available observation from the census is for the year 2000, and given the high level of interest in this topic, it was necessary to turn to other data sources. Very recently the necessary data source was created by linking selected information from the landing records of immigrants to a longitudinal file of a 20% sample of taxation records of Canadians (an already existing file). This new administrative data file provided both the sample sizes necessary, and the income and characteristics information needed to assess what was happening to entering immigrant cohorts post 2000.

#### IV. WHY THE DECLINE IN RELATIVE ENTRY-LEVEL EARNINGS AMONG RECENT IMMIGRANTS?

17. While we do not fully understand the mechanisms by which earnings have fallen, several recent Statistics Canada (and others') studies are in broad agreement that some issues have sizeable impacts, while other issues are less important.

##### A. The changing source countries of entering immigrants and related changing characteristics

18. Immigrants are now entering Canada from very different countries than was the case in, say the 1970s. From 1981 to 2001, the share of immigrants from Eastern Europe, South Asia (India, Pakistan), East Asia (China, Korea, Japan), Western Asia (Iraq, Iran, Afghanistan) and Africa increased from 35% to 72%. The human capital of immigrants from more recent source regions may initially be less transferable because of potential issues of language, cultural differences, education quality and possible discrimination.

19. Fewer entering immigrants have a home language and mother tongue that is either English or French. Language and communication skills are related to productivity, and hence the wages of workers. Studies such as Frenette and Morissette (2003) and Aydemir and Skuterud (2004, 2005)<sup>7</sup> suggest that perhaps one third of the decline in entry-level earnings is associated with these changing characteristics, particularly source regions and home language. This is an important amalgam of factors—one that is difficult to disentangle, given the highly interrelated nature of language ability, visible minority status, culture and source country.

##### B. The credentialism issue

20. Researchers studying 'credentialism' ask, after accounting for years of schooling, how much is the fact of having the university credential (i.e., degree) itself worth to an immigrant. This is referred to as the 'sheepskin' effect. Is the earnings advantage of having a university degree (relative to not having it) changing? To contribute significantly to the *decline* in entry-level earnings, the advantage of having a degree (relative to, say, high school) would have to have fallen.

21. Ferrer and Riddell's research finds that at least up to 2000, having a degree increased immigrants' earnings significantly (relative to not having a degree) and that this effect was at least as strong or stronger for immigrants than it was for the native born. They conclude that this credential advantage has changed little since the early 1980s for immigrants, at least up to 2000. There is some evidence to suggest it may have declined since 2000.

22. The 'credentialism' issue appears not to have worsened over the past two decades, and hence it likely contributes little to the decline in entry earnings. Credentialism is no doubt an important issue at any point in time, but it seems to have contributed little to the decline in immigrant earnings, at least up to 2000, the period covered by this research.

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<sup>7</sup> Note that the first of these is more detailed, but focuses only on males, whereas the subsequent paper addresses outcomes for both sexes.

### **C. Declining returns to foreign labour market experience**

23. Human capital consists largely of education, training and the skills developed through work experience. One typically expects some return to this human capital when entering employment, but immigrants from non-traditional source countries receive close to zero economic benefits from pre-Canadian labour market experience.

24. A number of recent studies indicate that the foreign work experience of entering immigrants is increasingly discounted in the Canadian labour market (Schaafsman and Sweetman 2001, Green and Worswick 2002, Frenette and Morissette 2003, Aydemir and Skuterud 2004, 2005). Older immigrants entering Canada, who in the late 1970s or early 1980s earned significantly more than their younger counterparts, now have much less of an advantage. Their foreign work experience appears to be more heavily discounted now than it was 20 years ago. This is particularly true for immigrants from the non-traditional source regions such as Asia and Africa. Immigrants from Western Europe and the United States do not experience this effect.

25. Green and Worswick (2002), Aydemir and Skuterud (2004, 2005) and Frenette and Morissette (2003) concluded that during the 1980s and 1990s the declining returns to experience was one of the major factors, if not the most important, associated with the decline in earnings among recent immigrants. Aydemir and Skuterud conclude that, among recent immigrants, the decline in the return to foreign experience accounted for roughly one third of the decline in entry level earnings reported earlier.

### **D. Deteriorating labour market outcomes for new labour market entrants in general, of which immigrants are a part**

26. Labour market outcomes for young labour market entrants, particularly males, have been deteriorating in Canada through the 1980s and 1990s (Picot 1998, Beaudry and Green 2000). Entering immigrants are themselves new labour market entrants and it may be that whatever is causing the decline in earnings of the young in general (not well understood) may also be affecting the earnings of recent immigrants. Green and Worswick, Frenette and Morissette, and Aydemir and Skuterud find that, for recent-immigrant men, this may have accounted for 40% of the decline in entry-level earnings. They find, however, that this effect was concentrated in the 1980s and was less important in the 1990s.

### **E. Strong competition from the increasingly highly educated Canadian born**

27. The supply of highly educated workers in Canada has been increasing at a very rapid pace. The number of women in the labour force with a university degree quadrupled over just 20 years, while the number of men with degrees more than doubled.

28. Reitz (2001) argues that in spite of the rising educational levels of immigrants, their *relative* advantage in educational levels has declined as a result of the more rapidly rising levels of education among the Canadian born. He also argues that immigrants did not benefit to the same extent as the Canadian born from increases in education, perhaps for the reason noted above.

## **F. A different explanation for the decline in earnings of entering cohorts post-2000**

29. Immigrant cohorts entering Canada from 2000 to 2005 continued to experience declining earnings at entry. The determinants of this decline are likely very different than those identified in the research focusing on the 1980s and 1990s.<sup>8</sup>

30. Picot and Hou (2008) find that much of the decline in entry earnings (perhaps two thirds) was concentrated among entering immigrants intending to practice in IT or engineering occupations. This coincides with the IT downturn in Canada, which appears to have significantly affected outcomes for these immigrants, particularly men. Compared with the Canadian born, entering immigrants were disproportionately in IT and engineering occupations. Hence, the effect of the IT downturn was more dramatic among immigrants. Following the very significant response by the immigration selection system to the call for more high tech workers in the late 1990s, resulting in a rapidly increasing supply through immigration, the large numbers of entering immigrants were faced with the IT downturn.

31. In summary, research focusing on the 1980s and 1990s found that virtually all of the decline in entry earnings could be accounted for by the shift in source regions and language, the declining returns to foreign experience and the general deterioration in outcomes for labour market entrants in general. More recent research, focusing on the early 2000s, suggest that the high tech downturn, combined with the increasing concentration of immigrants in IT and engineering professions, accounted for much of the recent decline.

## **V. DID CHANGING THE IMMIGRANT SELECTION RULES IMPROVE ECONOMIC OUTCOMES?**

32. As a result of some of the early research on declining outcomes, and to move to a stronger 'human capital' model of immigration, Citizenship and Immigration Canada introduced significant changes to the selection rules in 1993. The changes were very successfully implemented, and the educational attainment and economic nature of immigrants rose dramatically. Furthermore, the share of 'economic' immigrants in IT and engineering occupations rose significantly. This occurred during the high tech boom of the late 1990s in Canada.

33. But did these positive—from a labour market perspective—changes in immigrant characteristics significantly improve economic outcomes during the first few years in Canada? The Statistics Canada research focused on both chronic low-income and earnings levels. The changing characteristics did little to improve chronic low-income rates or the probability of

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<sup>8</sup> More specifically, declining returns to foreign experience were no longer a compelling explanation as such returns had already fallen to zero (for immigrants from non-traditional source countries) and would have had to become significantly negative to further affect immigrants earnings in the years after arrival. Likewise, the shift in the source countries from which immigrants arrived was no longer a convincing explanation, as this shift occurred mainly in the 1970s and 1980s and changed little in more recent years. The overall decline in labour market outcomes for new entrants was no longer a possible explanation, as the experiences of new entrants in the late 1990s and early 2000s were generally positive. Hence, one has to look elsewhere for possible causes on the decline in entry earnings.

entering low income among entering immigrants. The research suggested that this was largely because the highly educated immigrants at the bottom of the earnings distribution were unable to convert their education into higher earnings.

34. There are a host of possibilities as to why many highly educated entering immigrants experienced almost zero relative returns to their university education—relative to the high school educated—and found themselves at the bottom of the earnings distribution in spite of their education. The possibilities include:

(a) The inability of the labour market to absorb such a large increase in the supply of highly educated workers, resulting in downward pressure on relative wages. This was certainly the case among those with IT or engineering backgrounds intending to work in the IT sector post 2000;

(b) Potentially poorer quality education—relative to North American higher education—held by many entering immigrants from the non-traditional source regions; and

(c) Possible language issues that prevent the higher education held by many new immigrants from having the expected positive effect on earnings. There is some evidence to support this view,<sup>9</sup> and language issues may play an important role in the poor economic assimilation of the highly educated.

35. Further research suggested that the improved economic characteristics of immigrants did have a significant positive effect on the earnings of entering immigrants at the middle and top of the earnings distribution.

## **VI. EDUCATIONAL AND ECONOMIC OUTCOMES FOR SECOND-GENERATION CANADIANS: THE CHILDREN OF IMMIGRANTS**

36. One can assess economic assimilation by focusing on the outcomes of second-generation immigrants, rather than those of entering immigrants themselves. Many immigrants indicate that they come to Canada to provide opportunities for their children and subsequent generations. Using such a timeframe results in much more positive outcomes than those reported in the previous section.

37. Second-generation Canadians are a significant proportion of the adult population, with about 15% of Canadians having at least one parent born in another country. Analysis based on

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<sup>9</sup> Green and Riddell, along with co-authors Ferrer (2003) and Bonikowski (2008), observed that immigrants have lower levels of literacy in English or French (the most common languages of work in Canada) than do the Canadian born. Furthermore, they found that the returns to any given level of literacy were no lower among immigrants than among the Canadian born. That is, given the levels of literacy skills observed among immigrants, they were not earning less than one would expect. These results were observed for all levels of education. These results suggested that half or more of the gap in earnings between immigrants and the Canadian born could be accounted for by differences in literacy skills in English or French. Another recent paper by Chiswick and Miller (2002) found that in the United States immigrants earned 7% more for each additional year of education if they were fluent in English, but only 1% if they were not. In other words, in the absence of English language fluency, additional education provided little in the way of additional earnings over a less educated immigrant.

new information from the 2001 Census suggested that the education attainments and labour market outcomes of second-generation Canadians are no worse, and in many ways better, than those of similar young people whose parents were born in Canada (Aydemir; Chen and Corak 2005). Second-generation Canadians (children of immigrants) are much more likely to have a university degree: their incidence of reliance on government transfer payments and rates of employment and unemployment are no different; and their average earnings are higher than those of young adults born to Canadian parents.

38. The analysis also focused on a group of young adults whose parents were immigrants and examined the strength of the tie between their earnings from the 2001 Census and the earnings of those immigrants in the 1981 Census who were potentially their fathers. On average, second-generation children of immigrants earn more than their parents did at a similar point in the life cycle. However, there is some correlation between father and son outcomes, suggesting that the son's earnings will likely tend to be lower than someone whose father earned more. This correlation is lower than that observed in the U.S. That is, there is more intergenerational earnings mobility among immigrants in Canada than in the United States. This is consistent with the findings for the populations as a whole in the two countries. In general, intergenerational earnings mobility is higher in Canada than in the United States. The degree of such mobility among immigrants to Canada is high by international standards. The study found no statistically significant relationship at all between (immigrant) fathers and daughters. A daughters earnings (as an adult) are independent of whether the immigrant father had high or low earnings.

39. Overall, relative earnings advantages and disadvantages among the first generation of immigrants to Canada are only weakly passed on to the second generation, suggesting that in the past there has been a rapid integration of the children of immigrants into the mainstream of the Canadian labour market. Overall, the children of immigrants, when they are young adults, have outcomes that are comparable to or better than those of the children of the Canadian born at similar ages. This is to a considerable extent due to the very high level of educational attainment achieved by children of immigrants to Canada.

40. But it should be stressed that, by the very nature of the analysis, these results refer to a group of young Canadians whose parents came to Canada before 1980, and who came of age in the context of the education system of the 1980s and the labour market of the 1990s. Hence, the research, by necessity, focused on the children of immigrants who entered Canada prior to the significant economic deterioration discussed in the previous section. The extent to which these patterns will continue to hold into the future is unknown.<sup>10</sup>

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<sup>10</sup> However, more recent immigrant cohorts are very highly educated, and we know that education levels of children are determined to a considerable extent by the education of the parents. It is likely, therefore, that the educational attainment of second generation Canadians will remain high in the future. We can hope that such educational qualifications, if achieved, will be converted into continued successful economic outcomes for second generation Canadians.

## **VII. ENTERING IMMIGRANTS' PERSPECTIVES ON LIFE IN CANADA, AND SOCIAL INTEGRATION**

41. Given the, at times, difficult economic outcomes described above, it is important to understand immigrants' perceptions of life in Canada. Have their expectations been met in social and economic areas? What do they like and dislike about living in Canada?

42. Such questions were answered by using the Longitudinal Survey of Immigrants (LSIC), which followed the entering immigrant cohort of 2000 for four years. There was some attrition in this survey, with a loss of about 4,300 of the original 12,000 respondents after four years. Some of this attrition is no doubt related to emigration of immigrants, since up to one third of immigrants leave Canada in the year following entry (Aydemir and Robinson 2006). Part of the attrition will also be related to non-response, and training problems.

### **A. What new immigrants like and dislike about Canada**

43. Four years after arriving in Canada, LSIC respondents indicated that freedom, rights, safety and security, and prospects for the future were among the things they liked most, while lack of employment opportunities was one of the things that they disliked most (Maheux and Schellenberg 2007). Many immigrants identified the social and political environment in Canada as what they liked most about this country.

44. Those individuals who said that they planned to settle permanently in Canada were asked about their reasons for staying. Over half of these respondents (55%) said they planned to stay because of the 'quality of life' in Canada while 39% planned to stay because of the positive future for their family here. Educational opportunities were important for many.

45. Fewer new immigrants pointed to the importance of economic factors as a reason for staying. While some new immigrants expressed dissatisfaction with their economic experiences in Canada, most provided positive assessments about the quality of life here.

46. LSIC respondents were asked if their level of material well-being—such as home, car and disposable income—was better, about the same or worse than it had been prior to coming to Canada. Family-class immigrants had more favourable assessments of these relative outcomes than their economic-class colleagues. This is consistent with other studies that showed that outcomes deteriorated more for the economic than family class following 2000. Among skilled economic immigrants, about one third (35%) said their level of material well-being was better than it had been prior to arrival, about one third said it was about the same (31%) and about one third said that it was worse (34%). In contrast, among family-class immigrants, 58% said their material well-being was better than it had been before coming here.

47. LSIC respondents were also asked about the quality of life in Canada—such as safety, freedom and pollution—compared with their situation before coming here. Responses to this question were more positive than those regarding material well-being. Indeed, 84% to 92% of immigrants in each admission category said that their quality of life was better in Canada than it had been prior to coming here.

48. When asked a general question about the challenges they faced in Canada, the largest share of new immigrants said that finding a job had been the most difficult. The immigrants believed there were a number of factors at play here that included a lack of Canadian work experience, language barriers, credential recognition and lack of social networks.

## **B. Assessment of life in Canada**

49. Among immigrants remaining in the survey after four years, about two thirds reported a fairly positive congruence between their expectations of life in Canada and their experiences here.<sup>11</sup> There is a low or declining degree of congruence between the expectations and experiences of about one third of remaining new immigrants.

50. Once again, economic immigrants were more likely than others (mainly family class) to feel that their expectations had not been met. Economic immigrants may have had higher expectations than others regarding their employment prospects in Canada, and opportunities elsewhere.

51. During each of the three LSIC interviews, respondents were asked, “*If you had to make the decision again, would you come to Canada?*” About three quarters of new immigrants said ‘yes’ to this question each of the three times they were asked it. Another 12% said ‘no,’ but by the third interview felt they had made the right decision in coming here. Altogether, 84% were positive about their decision to come to Canada.

52. The generally positive views that new immigrants have regarding their decision to come to Canada are also reflected in their plans to become Canadian citizens. In order to become a Canadian citizen, landed immigrants must reside in Canada for at least three years. By the time they were interviewed four years after landing, over 70% of new immigrants had already completed or had initiated the citizenship process. Another 22% said that they intended to become Canadian citizens but had not yet started the process.

## **C. Canadians’ perception of immigration**

53. The results above provide a picture of immigrants’ perception of life in Canada, but what of the views of Canadians regarding immigration? Levels have been high, economic assimilation issues are well known, and the face of the three largest cities has changed significantly as a result.

54. Overall, the opinions of Canadians toward immigration remain positive. Citizenship and Immigration tracks Canadians’ views on an annual basis. In 2007, they found that about two thirds of Canadians agree that “immigration has a very positive or somewhat positive effect on

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<sup>11</sup> More specifically, 21% of them said their expectations of life in Canada have consistently been exceeded, and another 16% said their expectations have consistently been met. In addition, another 29% reported that life in Canada was initially worse than or about what they had expected, but that their situation improved over the first four years. In this respect, their assessment was positive. Combining these groups, the expectations of 37% of new immigrants who remained in Canada had been met or exceeded, and an additional 29% find expectations had been improved upon as they remain in Canada.

Canada” (Citizenship and Immigration, 2007). When asked if the fabric of Canadian society was being threatened by the influx of visible minority immigrants, about two thirds disagreed. They were also asked whether Canada should focus on the social assimilation of immigrants (encourage minority groups to be more like most Canadians), or the more multicultural policy of welcoming and accepting diversity (encourage Canadians to accept minority groups and their culture and language). Overall, 58% felt the former policy should have the highest priority, while 38% felt the latter.

55. In general, Canadians opinions in 2007 were somewhat more positive toward immigration in 2007 than in 2004, the first year of the tracking survey.

56. Canadians’ views of immigration remain positive, with about two thirds of the population reporting such a positive outlook. Immigrants’ views of their decision to come to Canada are also positive. While immigrants entering in 2000 were not happy about their economic outcomes, most of the two thirds who remained in the sample after four years were fairly positive about their decision to come to Canada and to remain here.

### **VIII. OTHER STATISTICS CANADA RESEARCH**

57. The summaries provided above draw on only a few of the 64 immigrant-related papers produced at Statistics Canada over the past six years. Other research papers addressed topics such as:

- (a) Immigrant health, including the ‘healthy immigrant effect:’ the observation that immigrants coming to Canada are often healthier than their Canadian-born counterparts; however, as they remain in Canada, they converge to health levels of the Canadian born;
- (b) Outcomes for young children of immigrants—including their school performance, which may lag when the children are very young—tend to catch up and at times exceed that of the Canadian born by the time they reach late elementary or early secondary school;
- (c) Issues surrounding adequate housing for immigrants;
- (d) The spatial distribution of immigrants in Canada, particularly the tendency to concentrate in the three largest cities;
- (e) Fertility patterns among immigrant groups, and projections of the visible minority population in Canada;
- (f) The effect of immigration on the wages of Canadian-born workers, and comparisons with the United States and Mexico;
- (g) Re-accreditation and outcomes for immigrants in particular occupations, such as engineering and medicine;
- (h) Changing ethnic diversity in the neighbourhoods of the three large cities, and the effect of this on the general sense of ‘trust’ in the neighbourhoods. This research is suggesting

that the effect of rising ethnic diversity in Canada on the population's sense of 'trust' is different than in other immigrant-receiving countries, notably the United States, the United Kingdom and Australia. In those countries, empirical studies suggest that trust is negatively associated with racial diversity. The preliminary results suggest that this relationship is not negative in Canada and, if anything, is positive. Rising neighbourhood ethnic diversity—larger numbers of ethnic groups represented in a neighbourhood—is not associated with a decline in the sense of trust. However, a rising neighbourhood concentration of one particular ethnic group is negatively correlated with trust, mainly among the white community.

## **IX. DATA SOURCES AND DATA DEVELOPMENT**

58. The early research on immigration issues helped guide data development. Statistics Canada, in co-operation with the relevant policy agencies, has developed a suite of data sets used in the types of analysis described above.

### **A. The Census of Population: the mainstay of immigration research in Canada**

59. The requirement for large samples when focusing on successive cohorts of entering immigrants drives analysts to large sample data sources, most notably the Census of Population. It remains the most important data source for immigration research in Canada. Like all datasets, it has both advantages and disadvantages.

#### **Advantages of the census for immigration research**

(a) Sample size is obviously the reason many people use the census. The 20% sample of Canadians, with detailed information on education, occupation, earnings and family income, geographic mobility, and neighbourhood of residence has been the mainstay for immigration research in Canada over the past few decades. It allows the researcher to focus on successive entering immigrant cohorts, an essential part of such research;

(b) Recent changes to the census allow the country where the highest level of education was received to be identified. Since economic returns to education for immigrants differs significantly depending upon the country where it is received, this is important;

(c) Parental place of birth—added to the census in 2001—allows for the analysis of the outcomes of the children of immigrants for the first time;

(d) Research on the impact of immigration on neighbourhoods is facilitated by the fact that the most commonly used 'neighbourhood' definition, the census tract, is longitudinally consistent from one census to the next. This is a tremendous advantage. One can study changes in the ethnic and immigrant composition of neighbourhoods over decades, and the correlation with other neighbourhood outcomes;

(e) One of the most important events to encourage and facilitate immigration analysis in Statistics Canada was the creation of easy to use, 'flat,' SAS or STATA files from the census. In earlier periods, census data were only available to analysts through a relatively difficult to use hierarchical software that produced only tables. Following the 2001 Census, easy to use flat files

formatted for use with popular statistical analysis packages allowed researchers to themselves exploit the census data. This change was very important in facilitating the immigration research reported here.

### **Some issues with the census data**

(a) Language ability (in French or English) may be one of the most important determinants of economic and social integration. However, measures on almost all surveys do not capture it well. Variables such as mother tongue and language spoken at work are available, but they do not provide a good measure of ability. The variables are self-reported, and are not designed to be measures of language ability. The lack of a reliable measure of language ability is one of the major data shortcomings in immigration research;

(b) The use of 'synthetic cohorts' from the census has allowed researchers to develop a picture of the assimilation trajectory with years since immigration. For example, immigrants aged 30 to 34 in one census are assumed to be the same population as those aged 35 to 39 in the next census, five years later. Based on such an assumption, earnings, employment, poverty and other trajectories are developed (see Chart 1). However, recent research has shown that, in fact, a significant proportion (perhaps one quarter) of immigrants leave Canada within the first few years of arrival. Little is known yet of the characteristics of these leavers and how they compare with the stayers. However, some 'selection' effects almost certainly exist in the synthetic cohort trajectories produced from the census. Whether this is positive or negative selection, and its extent, is as yet unknown;

(c) Immigrant class (skilled economic immigrant, family class, refugee, etc.) is an important determinant of various outcomes, but cannot be identified on the census. It is unlikely that self reporting would provide reliable data.

### **B. Other on-going surveys used in immigration research**

60. There are a host of other on-going surveys to which researchers turn when conducting immigration research in Canada. They include:

(a) *The Survey of Labour and Income Dynamics (SLID)*

61. SLID is a longitudinal survey that focuses primarily on income and labour market outcomes of the adult population, but it has an immigrant identifier which allows some immigrant research. At the heart of the survey's objectives is the understanding of the economic well-being of Canadians (and immigrants), and how the population reacts and adjusts to economic 'shocks.'

62. This longitudinal survey of 30,000 households was first conducted 1993, and it is in many ways similar to the German and British household panel surveys. However, it has a narrower content focus, a larger sample size and a shorter panel length (six years) than these European panel surveys. Also, the survey is cross-sectionally representative, allowing for the production of the official annual income statistics. Statistics Canada is currently exploring the possibility of replacing SLID with a household panel survey that more closely resembles, in design and

content, those in existence in some European countries, the United States and Australia. Such a move would enhance the opportunity for internationally comparative research. It is as yet unknown whether a new Canadian household panel survey will be implemented. It depends, as always, upon funding and the degree of support from policy agencies.

63. SLID supports some analysis of immigrant economic assimilation issues, but it does not have the sample or statistical reliability to concentrate on particular entering cohorts, such as was done in the research described earlier;

(b) *The Adult Literacy Survey*

64. The 2003 International Adult Literacy and Skills Survey (IALSS) is the Canadian component of the Adult Literacy and Life Skills Survey (ALLSS). The main purpose of the survey was to assess how well adults used printed information to better function in society. Survey data include background information and psychometric results of respondents' proficiency along four skill domains: prose and document literacy, numeracy and problem-solving. It is capable of supporting important research on the effect of literacy and numeracy skills on earnings outcomes of both the Canadian born and immigrants (and the gap between the two). Citizenship and Immigration Canada funded an over sampling of immigrants to allow more recent immigrants to be differentiated from earlier immigrants. It has supported some very important immigrant research. Some of the results were reported earlier in this paper.

(c) *National Population Health Survey*

65. This is a longitudinal survey of 17,276 persons of all ages, and it was initiated in 1994. These same persons are interviewed every two years over a period of 18 years. The survey's objectives are to aid in the development of public policy by providing information on the health status of the population, understanding the determinants of health, and increasing the understanding of the relationship between health status and health care utilization. An immigrant identifier supports both research on the health dimensions of the immigrant population and comparisons with the Canadian born.

(d) *The National Longitudinal Survey of Children and Youth*

66. The National Longitudinal Survey of Children and Youth (NLSCY) is a long-term study of Canadian children that follows their development and well-being from birth to early adulthood. The study is designed to collect information about factors influencing a child's social, emotional and behavioural development and to monitor the impact of these factors on the child's development over time. With a very small immigrant sample, it does allow some basic comparisons of childhood outcomes of immigrants and the Canadian born, and the trajectory of these childhood outcome 'gaps' as children age. As with some of the other surveys, sample size is of concern when addressing issues surrounding the assimilation of immigrant children.

### **C. The development of new data sources to support immigration research**

67. In spite of the existence of surveys such as those mentioned above, the early research suggested that there were a number of data gaps. As a result, the following data sources, largely longitudinal, were developed.

#### **The development of the Immigrant Data Base (IMDB)**

68. As noted, the census remains the primary source of data for immigration research. But it is conducted only once every five years, and outcomes for entering cohorts can change over such a period. Furthermore, the availability of true longitudinal data (not synthetic cohorts) would enhance the power of the analysis. Hence, another source of longitudinal data with very large samples of immigrants was required. This requirement was met through the creation of two data sources that are based mainly on taxation data. The first was the IMDB.

69. The IMDB (immigrant data base) was created jointly by Statistics Canada and Citizenship and Immigration Canada, and was funded in part by a consortium of users, including provincial governments. This file merges immigrant landing records with taxation records. The former provide detailed information on immigrant characteristics, the latter give detailed longitudinal information on employment earnings in particular. Given the universal coverage of tax files (almost complete coverage of the population in many age groups), this data source allows detailed tracking of earnings trajectories of entering cohorts of immigrants since the early 1980s up to 2005. The data source was created in large part to provide the data necessary to evaluate outcomes for immigrants in different immigrant classes, and program changes implemented by Citizenship and Immigration Canada.

70. But the data source also has its shortcomings. Most notably, there is no comparison group (no data on the Canadian born), and hence the earnings gaps between immigrants and the Canadian born cannot be assessed. Furthermore, the data are for individuals only; families are not formed on this file. Hence, economic welfare issues such as low-income levels cannot be measured. To overcome this, yet another administrative data source was created.

#### **The linking of the IMDB to the Longitudinal Administrative Database (LAD)**

71. The LAD (longitudinal administrative database) was an already existing longitudinal data source, covering 20% of the Canadian population, and based on taxation data. It does allow families to be formed, and it covers the period from 1982 to the present. This database supports numerous kinds of analyses, such as the effect of divorce on economic outcomes for men and women, the intergenerational income mobility of Canadians, poverty dynamics, entry and exit from social assistance and other government programs, and the 'brain drain.' However, until recently it was not possible to identify immigrants on this file, and hence precluded potentially important immigrant research. The linking of the IMDB file, with its detailed information on immigrants and immigrant identifier, overcame this problem. Due to the very large sample, this data source supported more recent work (since the 2001 Census) on the economic assimilation patterns of immigrants entering. It also has supported research on low-income dynamics among immigrants, the use of government transfers (social assistance, employment insurance, etc) by immigrants, the onward migration of immigrants and other topics.

### **The development of the Longitudinal Survey of Immigrants**

72. As useful as the previously described administrative longitudinal sources are, they suffer from a drawback common to almost all administrative databases: they contain a limited number of covariates. The administrative data have substantial detail on immigrants, but they lack key information on the Canadian born, such as education and occupation. Furthermore, being based on taxation data, they cannot support research on the social integration of immigrants. To overcome these and other data gaps, Citizenship and Immigration Canada, along with Statistics Canada, created a true longitudinal sample survey. The Longitudinal Survey of Immigrants (LSIC) followed a single entering cohort of immigrants (those entering in 2000) for four years, with interviews at six months, two years and four years after entry.

73. Topics covered in the survey include housing, education, foreign credential recognition, employment, health, values and attitudes, the development and use of social networks, income, and perceptions of settlement in Canada. This survey, with an initial sample of 12,000 immigrants, continues to be exploited by analysts inside and outside of Statistics Canada, particularly those concerned with social integration issues.

### **The development of the Ethnic Diversity Survey**

74. In 2002 Canadian Heritage and Statistics Canada initiated a survey that focused on issues relating to the rapidly changing cultural diversity in Canada. While not strictly an immigrant survey, it has provided many opportunities for immigration research. The survey used the 2001 Census as the survey frame. It was designed to better understand how people's backgrounds affect their participation in the social, economic and cultural life of Canada.

75. Topics covered include ethnic ancestry, ethnic identity, place of birth, visible minority status, religion, religious participation, knowledge of languages, family background, family interaction, social networks, civic participation, interaction with society, attitudes, satisfaction with life, trust and socioeconomic activities. The sample of approximately 57,000 individuals was stratified so as to provide large samples for the ethnic groups whose mother tongue tends to be a language other than English.

### **Recent changes to existing surveys**

76. Other steps have been taken to improve the data availability for immigration research. Most notably, last year an immigrant identifier was added to the monthly Labour Force Survey. This move will allow data on immigrant outcomes to be more current.

77. Faced with the demand for improved and expanded longitudinal and cross-sectional data on immigrant outcomes, Statistics Canada along with its partners in the three most relevant policy agencies, Citizenship and Immigration Canada, Heritage Canada and Human Resources and Skills Development Canada, responded in a significant manner.

## **X. THE EFFECT OF IMMIGRATION ON SOCIAL COHESION IN CANADA**

78. With rising immigration and the resulting ethnic diversity, many western nations are concerned with the effect on social cohesion. There are two policy agendas that governments can pursue regarding this issue (Soroka, Johnston and Banting 2007). One approach is to celebrate diversity, respect cultural differences and allow minorities to express their distinctive culture. The second agenda is to focus on social integration and assimilation, and try to build a common national identity. These agendas can be pursued simultaneously, but often the balance shifts between the two. In the very recent past, events in many European nations have led them to consider what agenda might be most effective in maintaining social cohesion in the face of rising ethnic diversity. Demonstrations and violent confrontations have prompted concerns regarding social cohesion in some European nations.

79. But Canada, at least to date, has escaped such demonstrations and clashes between minority groups and the state. There is little evidence of a breakdown in social cohesion, in spite of the very rapid increase in ethnic diversity and the share of the population in visible minority groups. There are some signs of concern, such as a recent debate in Quebec regarding “reasonable accommodation” of immigrant groups entering Canada with very different cultural and religious backgrounds. Overall, however, Canada has largely escaped both the outward signs of disharmony between immigrant groups and the Canadian born, as well as prolonged debates about such an issue. There are a number of possible reasons for this outcome. Statistics Canada has conducted virtually no research on this topic, but some speculation may be worthwhile.

(a) Canada, unlikely many nations, has never pursued or developed a single national identity. At Canada’s inception in 1867, there were two founding peoples with very different cultures, religion, history and language; the English in Ontario, and the French in Quebec. From the very beginning Canada has needed to try to accommodate very different groups as equals, and in the process built a tradition. Furthermore, concerns with the protection of minority rights, such as those at the English in Quebec and the French outside of Quebec at the time of the creation of Canada, also have a long history in Canada. The latest manifestation of this was the creation of the Charter of Rights and Freedoms. This history has no doubt influenced the way in which people from different cultural backgrounds integrate into Canadian society;

(b) Following its creation (and before), Canada became a nation of immigrants, and immigration has long been seen as a natural part of the growth of the country. Most Canadians take pride in the ability of the country to welcome people from many different cultural backgrounds, and they expect immigration to contribute positively to the growth of the nation, as it has in the past. Many European nations, on the other hand, have only recently begun to think of themselves as immigrant-receiving nations. Hence, the population has a very different perspective on immigration and its effects;

(c) The very high level of education among Canadian immigrants, much higher than that of the Canadian born, promotes adaptation to a modern ‘knowledge-based’ society. Furthermore, the typical immigrant in Canada is not perceived as a less educated person lacking the skills to succeed. Rather, the image is often one of a highly educated, ambitious and capable individual with the potential to contribute positively to Canadian society. The education level of immigrants

to Canada is higher than that of (legal) immigrants going to the United States and most European nations;

(d) In Canada, politicians at all levels—federal, provincial and municipal—have clearly stated that higher immigration levels are essential to the economic health of the nation (or city). Leaders in cities not receiving their ‘share’ of immigrants often devise incentives to attract more. This message has been largely accepted by the population, and it affects their views of the value of immigration. Immigration is seen by most as necessary to maintaining population growth and prosperity. There is no political party that has adopted an anti-immigrant stance, and hence there is no vehicle for the expression of what dissatisfaction may exist among some of the population;

(e) Political and civic engagement among visible minorities, while not at the level of that of some other groups, is substantial in Canada. This activity sends a message to the newly arrived immigrant that participation in the political system is possible and to the country that visible minority group members play an important and active role in the state. The naturalization of newcomers to Canada, a necessary step for participation in a democracy, is among the highest in the world (Banting, Courchene and Seidle 2007). And while voting rates are lower among recent immigrants than in the Canadian-born population, they are at significant levels. Furthermore, there are somewhere between 15 and 20 members of the federal parliament from visible minority groups, and they have been premiers of provinces and members of provincial parliaments;

(f) The fact that immigration is extremely racially diverse may contribute to its relatively small negative effect on social cohesion. In nations where immigrants from one particular ethnic group dominate, the native born may react to the cultural values and norms of that group. However, immigrants to Canada come from such a wide range of source countries and they have such widely varying cultural and religious backgrounds. Accommodation of the differences becomes the norm;

(g) The absence of any significant number of illegal immigrants in Canada may also contribute to the relatively positive attitude that most Canadians have toward immigration. Illegal immigration is a significant issue within the United States and some European nations. One result is an increased sense among some citizens that some immigrants are not following the rules and that they are receiving benefits to which they are not entitled. The situation in Canada is quite different, given the relative absence of illegal immigrants.

## **XI. CONCLUSION**

80. The response by Statistics Canada to concerns regarding immigrant integration, documented in this paper, was guided by some of the priorities in place in the Agency. The important role played by substantive research in Statistics Canada is among these. Substantive research allows the statistical agency to hold a mirror to important social and economic trends in an objective manner, thereby contributing to the public discussion and policy development. In so doing, the Agency fulfills its mandate to not only collect statistics but also to analyse them.

81. Substantive research also provides important data quality feedback. For example, information on immigrant undercoverage issues in the Survey of Labour and Income Dynamics

stemmed from such substantive analysis. Significant feedback from research has allowed statisticians to learn what worked and what did not in the new Longitudinal Survey of Immigrants, a survey that contained a number of new content blocks. The significant data development outlined earlier in the paper was guided to a considerable degree by the research results and by the resulting questions for which the policy departments and Statistics Canada had no answer.

82. Significant and meaningful co-operation with the policy departments is another important agency priority. In this particular case, regular formal meetings are held with Citizenship and Immigration Canada (CIC) to discuss both research projects and data requirements in the immigration area. Research priorities are influenced by the needs of the appropriate policy agencies, although they are not the sole influence.<sup>12</sup> Virtually all of the significant data development described earlier was a joint effort of Statistics Canada and the relevant policy agency.

83. The successful conduct of both substantive research and data development is enhanced by strong links with the academic research community as well, another important priority for Statistics Canada. Agency researchers interact with their academic counterparts through publications in academic journals, presentations at academic conferences and the co-authoring of studies. This activity tends to keep the quality of the research high, the methods up to date, and it lends credibility to the studies produced by the Agency. It is also very useful in recruitment drives, allowing Statistics Canada to bid for some of the better graduates. Their view of the Agency is altered by such interaction. Needless to say, when new databases that are designed primarily to meet analytical and research objectives are developed (as is the case with most of the longitudinal surveys), strong links with the academic research community, as well as the policy community, are essential.

84. Finally, much of the research described in this paper might not have been conducted at all had it not been done in Statistics Canada. The Agency has a considerable comparative advantage in the conduct of some substantive research. This is particularly true for research employing complex administrative data files, such as taxation data described earlier. Access to the taxation data for research purposes is ultimately controlled by the department that collects taxes.<sup>13</sup> The protection of these data is paramount in the public's mind. Having the appropriate legislation (such as the *Statistics Act*) in place to protect the confidentiality of these data is an important part of acquiring access. Few other research organizations have similar legislation. But beyond access, the detailed knowledge of the complex and idiosyncratic administrative data, as well as the skills developed in the analysis of such data, provide an advantage to Statistics Canada researchers. Some types of research are more efficiently carried out in Statistics Canada than elsewhere.

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<sup>12</sup> Other criteria include Statistics Canada's comparative analytical advantage (often related to access to data and research skills), the need to exploit new datasets, and quality testing through analysis, and the public interest in particular issues.

<sup>13</sup> The Canada Customs and Revenue Agency.

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