

EXECUTIVE SUMMARY

- The 2004 results from the **Longitudinal Immigrant Database (IMDB)**¹ are now available from Statistics Canada.
- Average employment earnings one year after landing continued to decline for immigrants landing in 2003 (see Figure 1) but to a much lesser extent than observed for the 2001 and 2002 cohorts. The decline for the 2003 cohort was only 0.65 percent compared to 12.7 percent and 3.3 percent for the 2001 and 2002 cohorts, respectively.
 - For Skilled Principal Applicants (SPAs), who landed in 2003, employment earnings one year after landing declined by 2.2 percent compared to 19.6 percent and 4.6 percent for the 2001 and 2002 cohorts, respectively.
- The major factor contributing to the decline in earnings of SPAs for the 2001 and 2002 cohort was related to intended occupation. More than half of the SPAs landing in Canada in 2001 and 2002 stated intentions to work in Professional Occupations in Natural and Applied Science (mainly engineering and computer and information systems professionals). The economic conditions for this occupational grouping largely dictate the earnings profile for recent SPAs.
- Many of the professional natural and applied science occupations struggled with the high-tech “bubble” and subsequent “bust” which had an impact on the earnings of SPAs. Given that labour market conditions in the IT (information technology) sector deteriorated after the “bust” in 2001, it is reasonable to assume that fewer new workers (including immigrants) have been able to secure employment in the high paying IT sector. Consequently, immigrants may be working in lower-skilled occupations and generally lower-paying occupations to secure entry into the labour market. In addition, SPAs who managed to secure employment in the natural and applied science occupational grouping encountered further impediments to higher earnings in the form of lower actual hours worked and marginal, if any, real increases in wages.
- Although immigrant entry earnings continued to decline slightly for the 2003 cohort, the 2004 data from the IMDB and the LFS shows signs of recovery in the IT industry which would be expected to improve the economic outcomes of the large share of SPAs intending to work in that industry.
- SPAs who landed in 2004 have shown recovery in employment earnings in their year of landing (see dotted line in Figure 2, YSL=0).
 - SPAs who landed in 2004 reported average employment earnings 21.7 higher than the previous cohort.

¹ The IMDB combines administrative records on immigration with taxation information to form a comprehensive source of data on the labour market experiences of the landed immigrant population. The IMDB is managed by Statistics Canada on behalf of a Federal-Provincial Funding Consortium led by Citizenship and Immigration Canada.

- SPAs who landed in 2004 and intended to work in Professional Occupations in Natural and Applied Science (NOC21) had a 23 percent increase in their year of landing (YSL=0) employment earnings over the previous cohort.
- The percentage of SPAs intending to work in NOC21 reporting employment earnings (Figure 9) has stabilized at 76 percent during the most recent period after declining by 5 percentage points in 2001. The share reporting EI has also stabilized for recent cohorts after a spike in 2001 (Figure 10). What may also be indicative of a recovery in the IT sector was the decrease in EI (employment insurance) claims in 2004 for those already in the labour market during the time of the "bust".
- Even though the entry earnings of the 2003 cohort did not show a strong recovery, the data from the IMDB and LFS suggest that the IT industry is recovering and it is expected that this will positively affect the economic outcomes of SPAs.

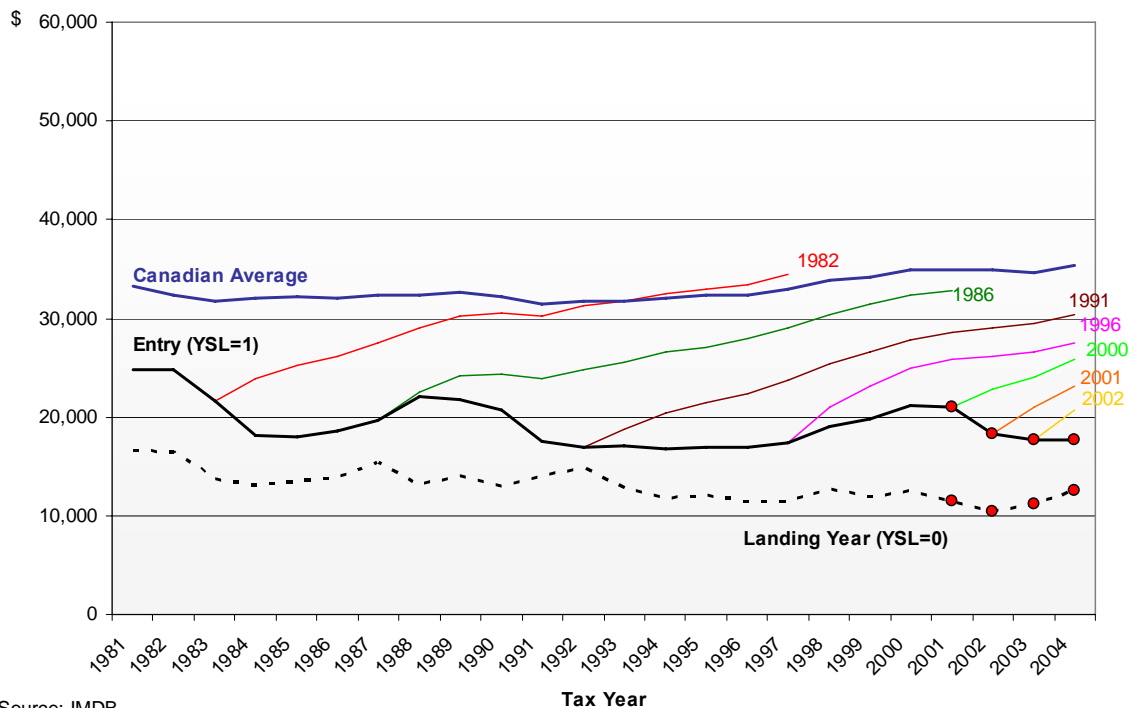
RECENT IMMIGRANT OUTCOMES – 2004 – EMPLOYMENT EARNINGS

IMMIGRANT CATEGORY

- Average employment earnings one year after landing continued to decline for immigrants landing in 2003 (see Figure 1) but to a much lesser extent than observed for the 2001 and 2002 cohorts.
 - The downward trend in employment earnings slowed considerably for the 2003 cohort. Immigrants landing in 2003 reported average employment earnings one year after landing \$110 (2004\$) lower than the previous cohort, representing only a 0.65 percent decline in earnings. For the 2001 and 2002 cohorts the declines in entry earnings were 12.7 and 3.3 percent, respectively.
- Immigrants who landed in 2004 have also shown recovery in employment earnings in their year of landing, (see dotted line in Figure 1, YSL=0).²
 - Immigrants who landed in 2004 reported average employment earnings of roughly \$12,500 (2004\$) in their year of landing, representing a 12.3 percent increase over the previous cohort. This matched the year of landing employment earnings reported by the 2000 cohort, the last cohort to land before the downturn of the IT sector.

² Note that employment earnings in the first year of landing (YSL=0) are often not analyzed because it may not reflect a full year of residency. For example, an immigrant landing in July will only have resided in Canada for 6 months at the time of his first tax filing. Thus, the employment earnings of immigrants in their year of landing cannot be meaningfully compared with their employment earnings in subsequent (full) years. However, comparing the employment earnings in the year of landing across cohorts can offer insight into the very early labour market outcomes of immigrants.

Figure 1: Average Employment Earnings (2004 \$) for Immigrants in All Categories by Landing Year and Tax Year



Source: IMDB

- Although the decline in 2004 entry earnings is identified for all immigrants, it continued to be largest for the skilled principal applicants (SPAs) who represented 29.5 percent of the 2003 cohort of immigrants reporting employment earnings one year after landing (see Table 1).

Table 1: Number and Share of Immigrants Reporting Employment Earnings One Year After Landing by Landing Year and Immigrant Category, 2001-2003

Immigrant Category	2001		2002		2003	
	Number	%	Number	%	Number	%
Skilled PAs	35800	36.5	30610	35.0	25820	29.5
Business	2840	2.9	1975	2.3	1550	1.8
Other Economic	20890	21.3	17500	20.0	14440	16.5
Family Class	27035	27.6	25045	28.6	27755	31.7
Refugees	9010	9.2	8135	9.3	9515	10.9
Other	2470	2.5	4195	4.8	8480	9.7
Total	98045	100.0	87460	100.0	87560	100.0

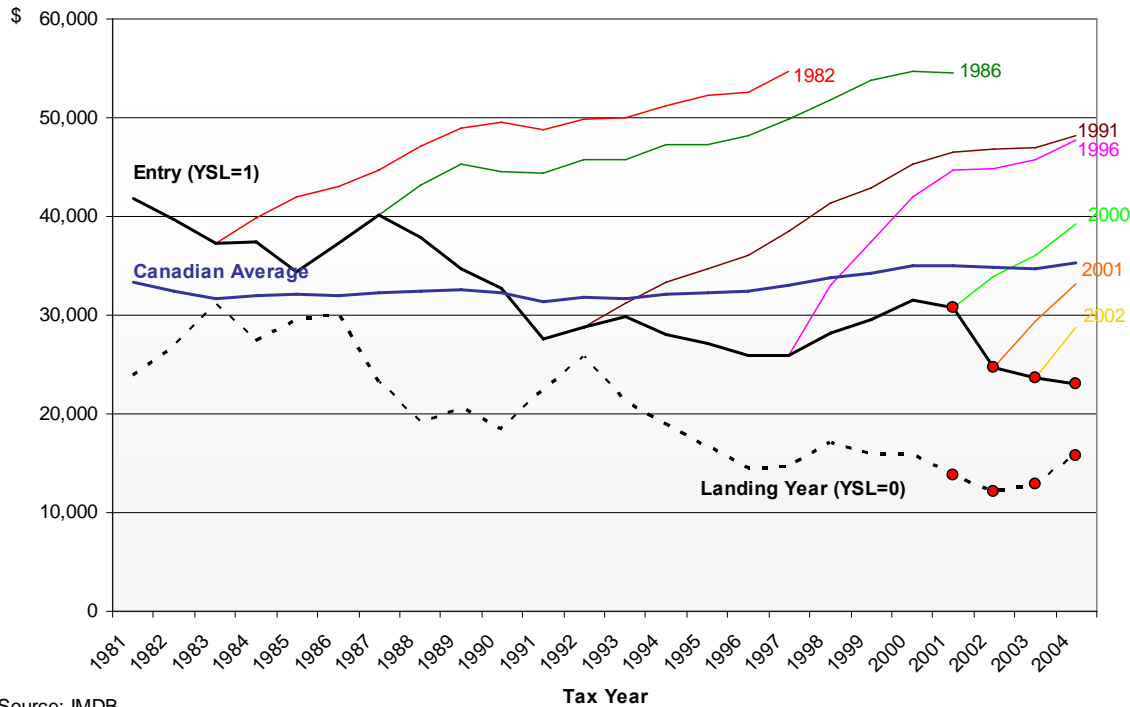
Source: IMDB

- SPAs who landed in 2003 reported average employment earnings one year after landing equal to approximately \$23,060 (2004\$), \$505 lower than the employment earnings reported one year after landing by SPAs who landed in 2002. This represents a 2.2 percent decline in entry earnings for the 2003 cohort (see Figure 2).
 - Although, the employment earnings of skilled principal applicants continued to decline, the decline has slowed considerably. The 2001 and 2002 cohorts experienced declines

in employment earnings one year after landing equal to \$6,315 and \$1,070 (2004\$), representing 19.6 and 4.6 percent declines in entry earnings, respectively.

- SPAs who landed in 2004 have also shown recovery in employment earnings in their year of landing (see dotted line in Figure 2, YSL=0).
 - SPAs who landed in 2004 reported average employment earnings of roughly \$15,685 (2004\$) in their year of landing, representing a 21.7 percent increase over the previous cohort. The year of landing earnings of this cohort fell just short of those reported by the 2000 cohort, the last cohort to land before the downturn of the IT sector.
 - The incidence of employment earnings in the year of landing for the 2004 cohort of SPAs was also up 4 percentage points from the 2003 cohort and was only 1 percentage point lower than that of the 2000 cohort.
- Over the same period, economic spouses and dependents also experienced a decline in employment earnings one year after landing equal to \$435 (3.3 percent). All other categories showed increases in employment earnings one year after landing. The increase was \$370 (3.2 percent) for business class immigrants, \$331 (2.2 percent) for family class immigrants, and \$1095 (7.9 percent) for refugees.

Figure 2: Average Employment Earnings (2004\$) for Skilled Principal Applicants by Landing Year and Tax Year



Source: IMDB

GENDER

- For the 2003 cohort 75 percent of SPAs reporting employment earnings one year after landing were male and 25 percent were female. This translates into a slight increase in the share of female SPAs reporting employment earnings compared to the previous cohort.
- The small decline in average employment earnings for new SPAs seen in Figure 2 is observed for males but not females. Female SPAs reported a slight increase in employment earnings one year after landing. (see Table 2a).
- Male SPAs who landed in 2003 reported average employment earnings one year after landing \$640 (2004\$) lower than male SPAs who landed in 2002, representing a 2.6 percent decline in earnings. For female SPAs the employment earnings one year after landing were \$300 (1.5 percent) higher than the previous cohort.

Table 2a: Average Employment Earnings One Year After Landing (2004\$) for Skilled Principal Applicants, by Landing Year, Age at Landing, and Gender

Age	Males				Females				Total			
	%Δ		%Δ		%Δ		%Δ		%Δ		%Δ	
	2002	2001-02	2003	2002-03	2002	2001-02	2003	2002-03	2002	2001-02	2003	2002-03
15-24	22,530	-11.5	21,887	-2.9	13,281	-1.0	20,030	50.8	21,681	-13.0	21,194	-2.2
25-34	24,305	-5.8	23,376	-3.8	19,604	-6.7	19,157	-2.3	23,088	-6.2	22,214	-3.8
35-49	25,364	-1.5	25,005	-1.4	18,672	-6.2	19,958	6.9	24,012	-2.4	23,937	-0.3
50-64	28,991	-6.6	38,182	31.7	21,622	-19.0	33,846	56.5	27,691	-9.2	37,287	34.7
Total	24,872	-3.8	24,231	-2.6	19,293	-6.7	19,590	1.5	23,565	-4.6	23,063	-2.1

Source: IMDB

Table 2b: Share of Skilled Principal Applicants Reporting Employment Earnings One Year After Landing by Landing Year, Gender and Age at Landing

Age	2001			2002			2003		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
15-24	0.5	0.3	0.9	0.5	0.4	0.9	1.5	0.9	5.7
25-34	40.2	13.4	53.6	39.4	13.8	53.2	41.0	15.6	56.6
35-49	35.6	8.5	44.1	35.2	8.9	44.2	31.3	8.4	39.7
50-64	1.2	0.2	1.4	1.4	0.3	1.7	1.0	0.3	1.2
65 +	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	77.5	22.5	100.0	76.6	23.4	100.0	74.8	25.2	100.0

Source: IMDB

AGE

- The slight decline in average employment earnings one year after landing for new SPAs seen in Figure 2 is observed for males in the three youngest age groups, albeit to different degrees (see Table 2a). For females, the decline is observed for those aged 25-34.
- For both males and females, those aged 50-64 reported employment earnings one year after landing that were significantly higher than the previous cohort (31.7 percent higher for males and 56.5 percent higher for females). It is important to note however, that this age group only accounts for 1.2 percent (315 persons) of the 2003 cohort of SPAs reporting employment earnings one year after landing.
- For both males and females the majority of SPAs landing in 2003 were aged 25-49 (see Table 2b).
 - For the 2003 cohort, males aged 25-34 represented approximately 41 percent of all SPAs reporting employment earnings one year after landing. Males SPAs aged 35-49 represented roughly 31 percent.

EDUCATION

- The slight decline in average employment earnings one year after landing for the 2003 cohort of SPAs seen in Figure 2 is observed for those with a university degree (see Table 3a), the majority (84 percent) of SPAs who landed in Canada in 2003 and reported employment earnings the following year had a university degree at the time of landing (see Table 3b).
- SPAs who landed in 2003 with a Bachelor's degrees had only a half of a percent decline in employment earnings one year after landing, compared to the previous cohort. Those with a Master's or Doctorate degree had a decline of 3.1 percent.

Table 3a: Average Employment Earnings One Year After Landing (2004\$) for Skilled Principal Applicants, by Landing Year, Level of Education at Landing

Level of Education	2001	%Δ 2000-01	2002	%Δ 2001-02	2003	%Δ 2002-03
Less than High School	22,466	-5.0	20,965	-6.7	25,399	21.2
High School Degree	22,040	-19.2	20,545	-6.8	22,103	7.6
Trade Certificate	26,423	-5.0	24,369	-7.8	25,396	4.2
Non-university Diploma	23,259	-13.0	21,938	-5.7	22,796	3.9
Bachelor Degree	22,578	-18.1	21,925	-2.9	21,809	-0.5
Masters or Doctorate Degree	26,391	-19.1	26,991	2.3	26,162	-3.1
Total	23,594	-17.8	23,147	-1.9	23,063	-0.4

Source: IMDB

Table 3b: Share of Skilled Principal Applicants Reporting Employment Earnings One Year After Landing by Landing Year, Gender and Level of Education

Level of Education	2001			2002			2003		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Less than High School	1.2	0.4	1.6	1.0	0.4	1.4	0.9	0.3	1.2
High School Degree	2.6	1.1	3.7	2.5	1.0	3.5	2.5	1.0	3.5
Trade Certificate	2.3	0.6	2.9	2.3	0.7	3.0	2.2	0.6	2.9
Non-university Diploma	6.2	1.9	8.1	6.3	1.9	8.3	6.3	2.5	8.8
Bachelor Degree	46.9	14.0	60.9	45.9	14.4	60.3	45.3	15.6	60.9
Masters or Doctorate Degree	18.3	4.6	22.9	18.6	5.1	23.7	17.7	5.2	22.9
Total	77.5	22.5	100.0	76.6	23.4	100.0	74.8	25.2	100.0

Source: IMDB

PROVINCE OF DESTINATION AND PROVINCE OF RESIDENCE

- The decline in average annual employment earnings one year after landing for SPAs seen at the national level is also seen at the provincial level for British Columbia, Ontario, and Quebec, albeit to different degrees.
- SPAs who resided in British Columbia illustrated the largest decline in average annual employment earnings one year after landing. SPAs who landed in 2003 and resided in British Columbia in 2004 reported \$950 (2004\$) less in average annual employment earnings one year after landing than those who resided in Ontario in 2004. For SPAs in Ontario and Quebec the decline was \$495 and \$95, respectively.
- The shift in the intended destination of SPAs, observed since 2000, continued with the 2004 landing cohort (see Figure 3), albeit slightly. The share of SPAs destined to British Columbia remained stable again; however, the share destined to Ontario declined by 1 percentage point and the share destined to Quebec rose by 2 percentage points.
 - Overall, since the 2000 landing cohort, the share of SPAs destined to Ontario and British Columbia fell by 11 and 2 percentage points, respectively. The share destined to Quebec rose by 13 percentage points.
- The shift in intended destination resulted in a lower share of recently landed SPAs residing in Ontario and a larger share residing in Quebec (see Figure 4). As a result, the share of SPAs residing in Ontario and reporting employment earnings one year after landing decreased further from 57 percent for the 2002 cohort to 52 percent for the 2004 cohort. The share of SPAs residing in Quebec and reporting employment earnings one year after landing continued to increase from 21 percent for the 2002 cohort to 25 percent for the 2004 cohort (see Figure 4).
 - Overall, since the 2000 landing cohort, the share of SPAs residing in Ontario and reporting employment earnings one year after landing fell by 12 percentage points. While the share residing in Quebec and reporting employment earnings one year after landing rose by 11 percentage points.

Figure 3: Intended Destination for Skilled Principal Applicants, by Landing Year, 1980-2004

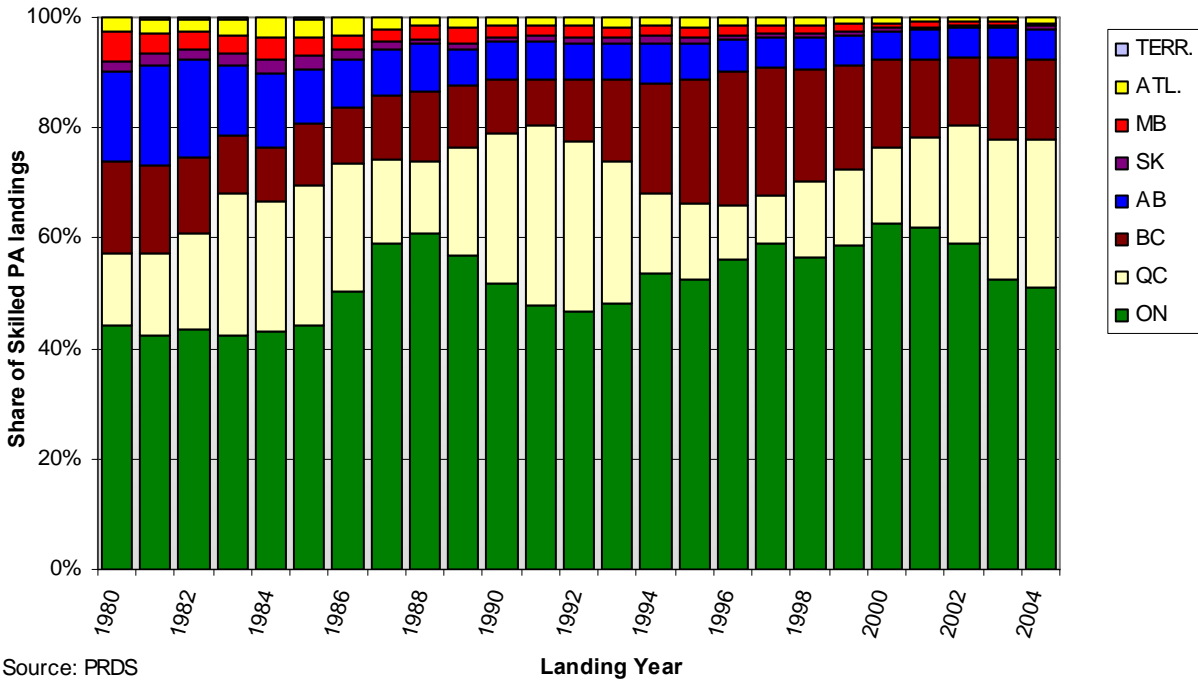
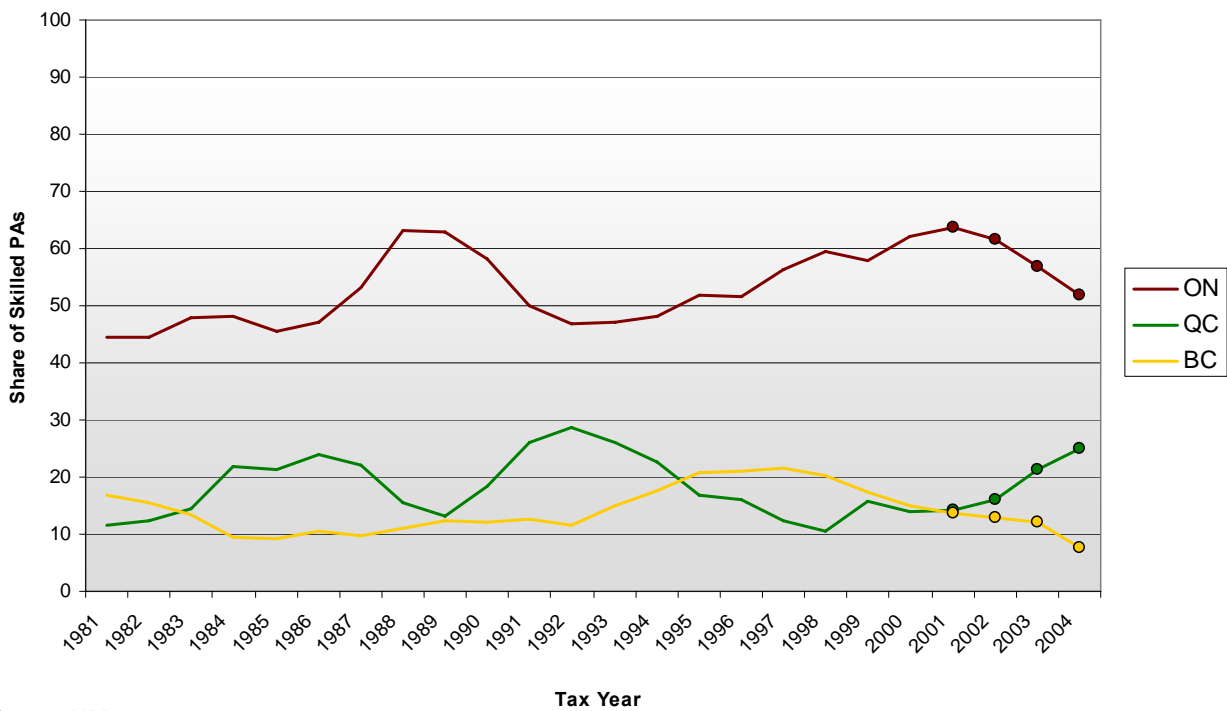
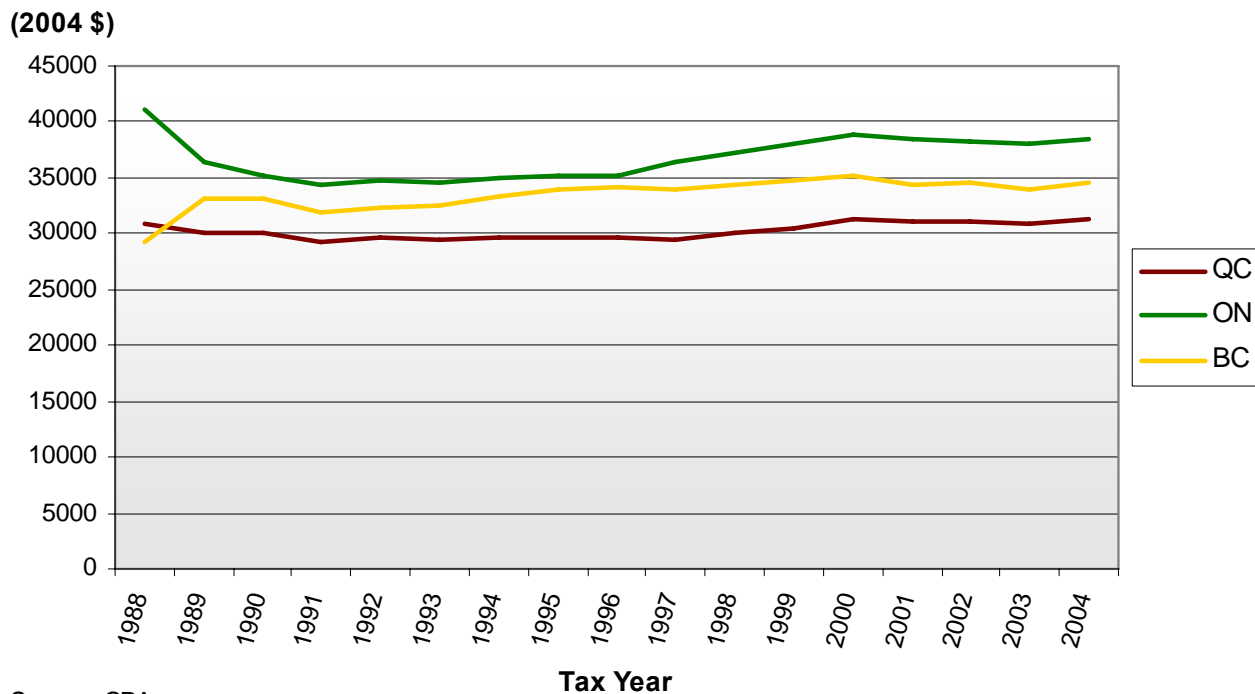


Figure 4: Skilled Principal Applicants Reporting Employment Earnings One Year After Landing, Distribution by Province of Residence, 1981-2004



- Since 2000, average annual employment earnings for the Canadian population have been stagnant at approximately \$35,000 (2004 \$). Similarly, the average employment earnings for the Canadian population in Ontario, British Columbia, and Quebec have changed very little since 2000. Ontario has maintained average annual employment earnings of roughly \$38,000, for British Columbia the average was \$35,000, and for Quebec the average has remained near \$31,000 (see Figure 5).

Figure 5: Average Annual Employment Earnings (2004\$) for the Canadian Population, by Province of Residence



Source: CRA

- Previous to the 2003 cohort, the increase in the share of newly landed SPAs residing in Quebec observed since 2000, coupled with the lower average annual employment earnings reported for that province, served to depress the average annual employment earnings observed for SPAs in Figure 2. (A larger share of the newly landed SPA population is residing in a province with, on average, lower employment earnings. This is cutting into the share that, previous to 2001, were residing in Ontario the province with the highest average employment earnings.) For the 2003 cohort, this is no longer the case.
- For the 2001-2002 cohorts, the shift in province of residence was estimated to account for \$350 of the \$7,380 (2004\$) decline, representing roughly 5 percent of the decline experienced by SPAs.
- For the 2003 cohort, the shift in province of residence served to offset some of the decline observed in the entry employment earnings of SPAs. Had the provincial distribution of SPAs remained as it was for the 2002 cohort, the overall decline in entry earnings observed would

have been \$170 lower than it is because there would have been more immigrants (in Ontario) with a greater decline in average employment earnings.

OCCUPATION

- Based on intended National Occupation Classifications (NOC) at time of landing, the occupational composition of SPAs landing in Canada had some noticeable changes since the 2003 cohort (see Tables 2a,b).³
 - The share of SPAs intending to work in NOC21 (professionals in natural and applied science) fell by roughly 9 percentage points. In contrast, the share intending to work in NOC41 (professionals in social science, education, government service and religion) rose by 3.5 percentage points.
 - The shares of SPAs intending to work in NOC12 (skilled administrative and business occupations) and NOC31 (professionals in health) also showed modest increases.
- Even with the decline, the lion's share of SPAs (44.4 percent) stated intentions to work in NOC21 (*mainly engineering and computer and information systems professionals*), and an additional 6 percent intended to work in NOC22 (*mainly technical occupations to support engineering and computer and information systems occupations*).

Table 4a: Top Ten Intended 2-Digit NOCs for Skilled Principal Applicants, by Landing Year, 2000-2004 (Numbers)

Major Occupational Group	2-Digit NOC	2000	2001	2002	2003	2004
Professional Occupations in Natural and Applied Sciences	21	28,258	30,962	26,588	24,191	21,270
Professional Occupations in Social Science, Education, Government Service and Religion	41	2,208	2,783	2,701	2,598	4,425
Professional Occupations in Business and Finance	11	3,805	4,392	4,163	3,549	3,681
Technical Occupations Related to Natural and Applied Science	22	3,348	4,251	4,032	2,857	2,850
Skilled Administrative and Business Occupations	12	2,117	2,182	1,994	1,759	2,148
Professional Occupations in Health	31	905	1,042	1,272	1,164	1,891
Skilled Sales and Services Occupations	62	1,987	2,149	2,071	1,633	1,736
Professional Occupations in Art and Culture	51	1,257	1,369	1,330	1,171	1,342
Middle and Other Management Occupations - Business and Finance	01	930	1,282	1,174	1,086	1,251
Middle and Other Management Occupations - Sales and Service	06	314	370	386	379	927
Top Ten 2-Digit NOC		45,129	50,782	45,711	40,387	41,521
Other 2-Digit NOC		6,997	8,127	7,261	4,991	6,368
Total Skilled Principal Applicants		52,126	58,909	52,972	45,378	47,889

Source: PRDS

³ According to the second wave results from the Longitudinal Survey of Immigrants to Canada (LSIC), 48 percent of skilled principal applicants who had employment within the first two years in Canada had found a job in their intended occupation.

Table 4b: Top Ten Intended 2-Digit NOCs for Skilled Principal Applicants, by Landing Year, 2000-2004 (Shares)

Major Occupational Group	2-Digit NOC	2000	2001	2002	2003	2004
Professional Occupations in Natural and Applied Sciences	21	54.2	52.6	50.2	53.3	44.4
Professional Occupations in Social Science, Education, Government Service and Religion	41	4.2	4.7	5.1	5.7	9.2
Professional Occupations in Business and Finance	11	7.3	7.5	7.9	7.8	7.7
Technical Occupations Related to Natural and Applied Science	22	6.4	7.2	7.6	6.3	6.0
Skilled Administrative and Business Occupations	12	4.1	3.7	3.8	3.9	4.5
Professional Occupations in Health	31	1.7	1.8	2.4	2.6	3.9
Skilled Sales and Services Occupations	62	3.8	3.6	3.9	3.6	3.6
Professional Occupations in Art and Culture	51	2.4	2.3	2.5	2.6	2.8
Middle and Other Management Occupations - Business and Finance	01	1.8	2.2	2.2	2.4	2.6
Middle and Other Management Occupations - Sales and Service	06	0.6	0.6	0.7	0.8	1.9
Top Ten 2-Digit NOC		86.6	86.2	86.3	89.0	86.7
Other 2-Digit NOC		13.4	13.8	13.7	11.0	13.3
Total Skilled Principal Applicants		100.0	100.0	100.0	100.0	100.0

Source: PRDS

- Figure 6 illustrates the average employment earnings of SPAs for all intended occupations. Figure 7 illustrates average employment earnings for SPAs intending to work in NOC21 only and figure 8 illustrates the average employment earnings of SPAs excluding NOC21 (professionals in natural and applied science).
- For those SPAs who intend to work in NOC21 (figure 7) the results show significantly higher entry and overall earnings as compared to the average (figure 6). However for the 2002 and 2003 cohorts, those intending to enter NOC21 have noted substantial declines in entry level earnings and is the major factor impacting the results in the IMDB. This drop continued for SPAs who landed in 2003 and intended to work in NOC21, with a decline in entry employment earnings of \$1,200 (2004\$) or 5 percent.
 - Similar to what was observed for all SPAs (see figure 6), those intending to work in NOC21 have shown recovery in employment earnings in their year of landing (YSL=0). Year of landing employment earnings for those who landed in 2004 (and intended to work in NOC21) were \$2,700 higher than the year of landing employment earnings of the 2003 cohort intending to work in NOC21, a 23 percent increase.

Figure 6: Average Employment Earnings (2004\$) for Skilled Principal Applicants, by Landing Year and Tax Year

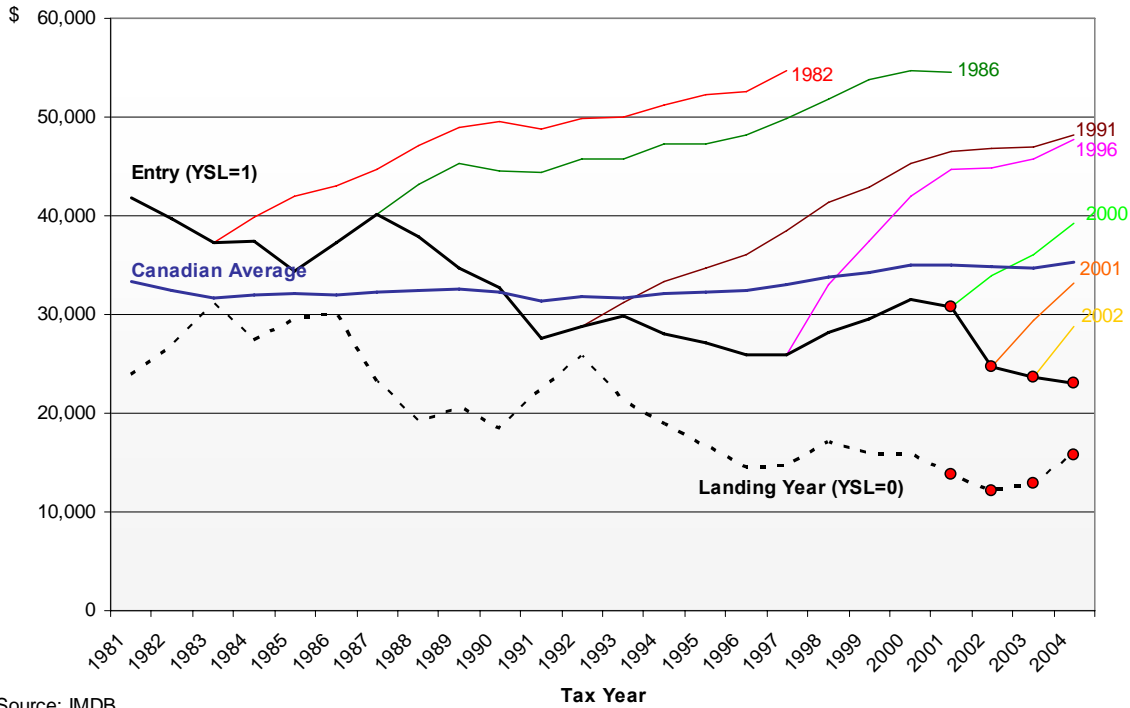


Figure 7: Average Employment Earnings (2004\$) for Skilled Principal Applicants, intending to work in Professional Occupations in Natural & Applied Science (NOC=21), by Landing Year Cohort

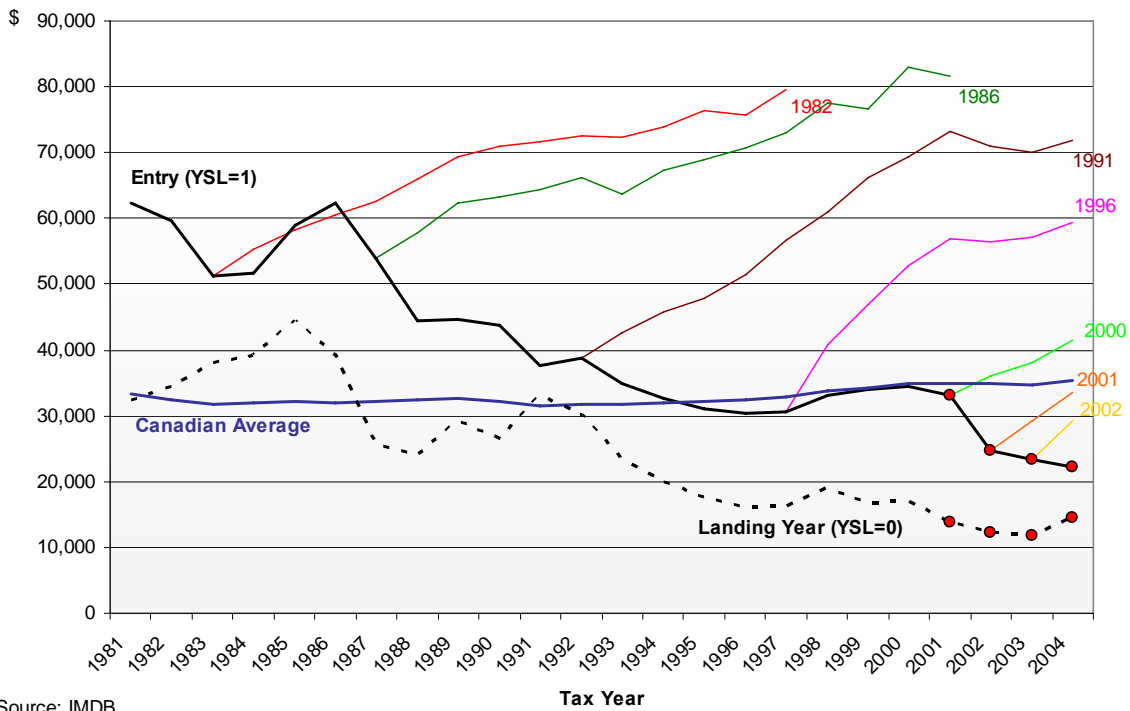
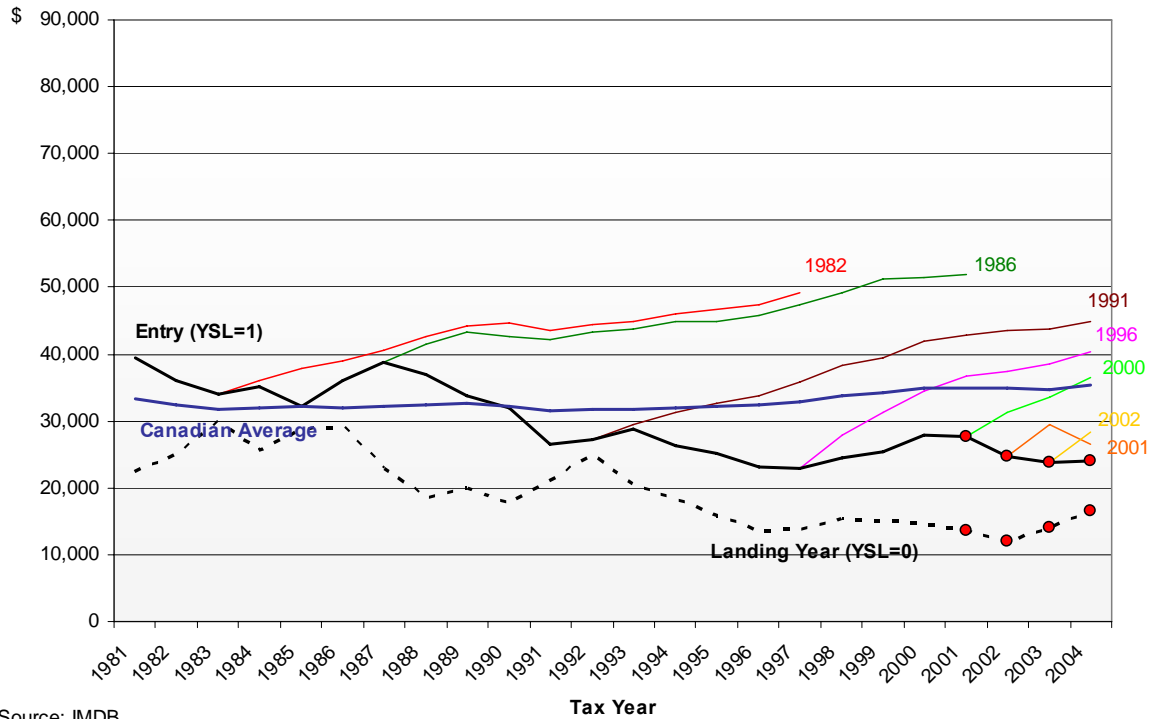


Figure 8: Average Employment Earnings (2004\$) for Skilled Principal Applicants (excluding Professional Occupations in Natural & Applied Science (NOC=21), by Landing Year Cohort



Source: IMDB

- If we exclude those intending to work in NOC21 (figure 8), entry level earnings of SPAs actually increased by \$270 (2004\$) for the 2003 cohort, a 1.1 percent increase. There was also recovery in the year of landing employment earnings of the 2004 cohort of SPAs not intending to work in NOC21. For this group year of landing earnings increased by \$2,560, an 18.3 percent increase over the year of landing earnings for the 2003 cohort.

REAL WAGE RATES OF KEY IMMIGRANT OCCUPATIONS

- Professional occupations in natural and applied science have been the dominant intended occupational field of skilled worker principal applicants during the 2000-2004 period. Well over 50 percent of these immigrants intended to find employment in this occupational classification which is dominated by computer professionals and engineers.
- Table 5 provides information on real wage rates of key immigrant occupational fields. An important point to take from table 5 is that computer professionals and engineers (including software and electrical engineers) are found in the natural and applied science category and continue to be among the best paying occupations in the economy. These occupations had to endure the high-tech “boom” and subsequent “bust” which seems to be having an impact on immigrant earnings. Given that labour market conditions in the IT (information technology) sector have deteriorated after the “bust” in 2001, it is reasonable to assume that fewer new workers (including immigrants) have been able to secure employment in the high paying IT

sector. Given this condition, immigrants may be working in lower-skilled occupations to secure entry into the labour market.

- Flows of temporary foreign workers (from the Client-Based Data System) support this argument and give an indication of the domestic labour market demand for these key immigrant occupations. For professionals in natural and applied science a total of 9,355 foreign workers were issued work permits in 2000 and this number fell to 5,654 in 2003, a 40 percent decline. The number of permits issued for workers going into technical occupations in natural and applied science fell by 52 percent during the same timeframe and the number of work permits for professionals in business and finance also fell by 42 percent. Under the rules of the foreign worker program job offers must be “confirmed” by HRSDC and this requirement provides some validity to the labour market requirements presented above.

Table 5: Ranking of Real Hourly Wage Rates (2004\$) by Key Immigrant Occupations, 2004

Table 5 - Ranking of Real Wage Rates by Key Immigrant Occupations	
	2004 (\$/hr)
Other Engineers	32.53
Civil, Mechanical, Electrical And Chemical Engineers	31.45
Computer and Information Systems Professionals	28.89
Human Resources And Business Service Professionals	27.99
Secondary And Elementary School Teachers And Counsellors	27.23
Nurse Supervisors And Registered Nurses	26.78
Auditors, Accountants And Investment Professionals	25.58
University Professors And Assistants	25.48
Technical Occupations in Computer and Information Systems	25.10
Technical Occupations In Civil, Mechanical And Industrial Engineering	23.56
Technical Occupations In Electronics And Electrical Engineering	21.45
Technical Sales Specialists, Wholesale Trade	21.29
Mechanical, Electrical And Electronics Assemblers	19.31
Secretaries, Recorders And Transcriptionists	16.27
Machine Operators And Related Workers In Food, Beverage And Tobacco Processing	14.37
Other Assembly And Related Occupations	14.03
Clerical Occupations, General Office Skills	13.78
Labourers In Processing, Manufacturing And Utilities	13.52
Childcare And Home Support Workers	13.15
Machine Operators And Related Workers In Textile Processing	13.05
Retail Salespersons And Sales Clerks	10.67
Machine Operators And Related Workers In Fabric, Fur And Leather	10.56
Total, all occupations	18.50

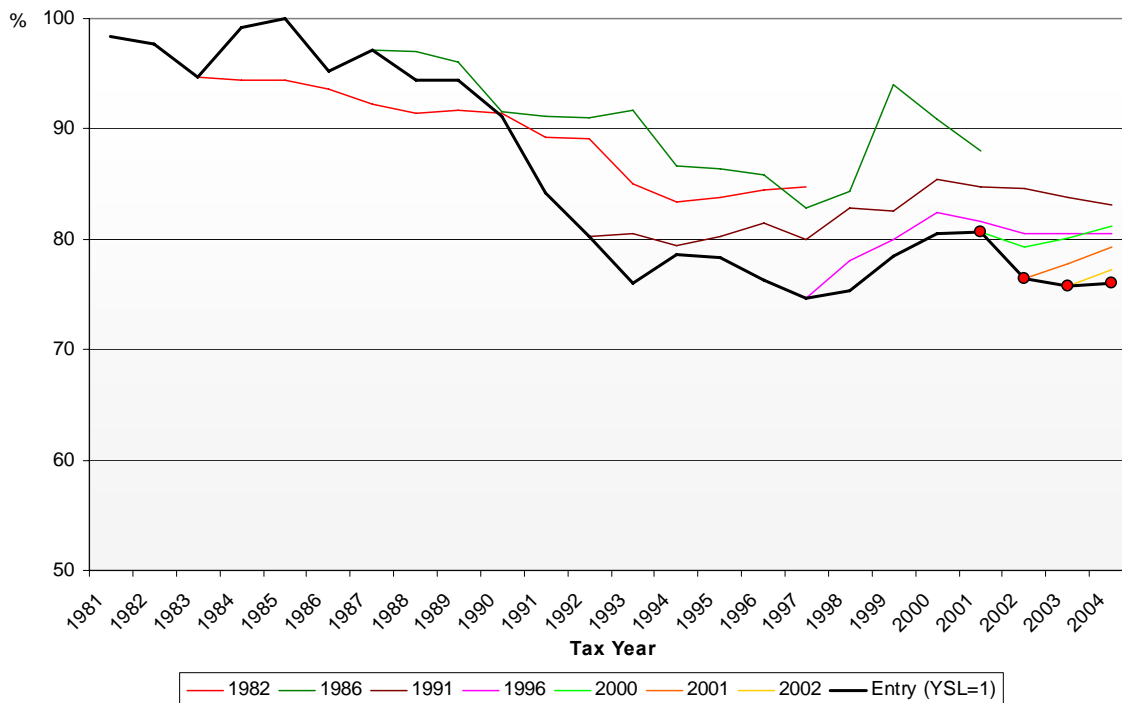
Source: Labour Force Survey, Statistics Canada

- The decline in the flows of temporary foreign workers in these fields has slowed or reversed in 2004. For professionals in natural and applied science a total of 5,620 foreign workers were issued work permits in 2004, only a 0.6 percent decline from 2003. The number of permits issued for workers going to technical occupations in natural and applied science increased by 1.7 percent during the same timeframe and the number of work permits for professionals in business and finance also increased by 2.1 percent. Flows of temporary foreign workers in all

three NOC groupings increased in 2005 as well. This may be an indication of increased labour demand for these occupations.

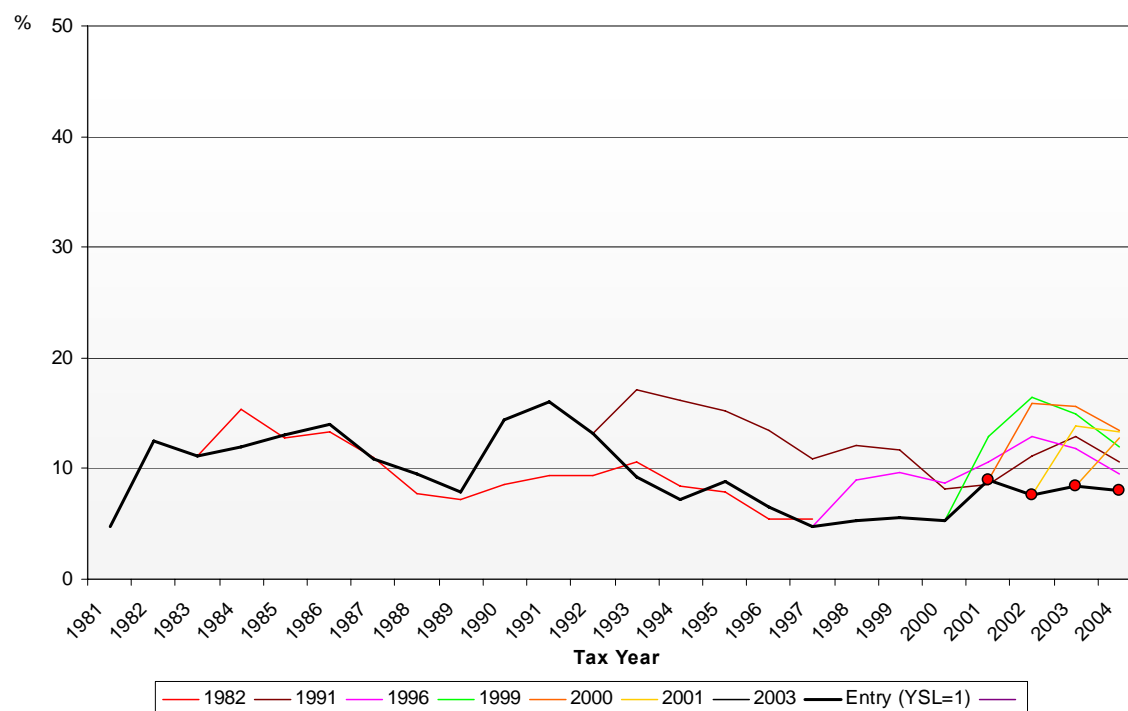
- In addition to the flows of temporary workers, the incidence of employment earnings and employment insurance (EI) for immigrants who had intended to work in the natural and applied science sector is a gauge of the labour market conditions for these occupations. Looking at data from the IMDB, the percentage of SPAs reporting employment earnings (Figure 9) has stabilized at 76% during the most recent period after declining by 5 percentage points in 2001. The share reporting EI has also stabilized for recent cohorts after a spike in 2001 (Figure 10). Further, what may also be indicative of a recovery in the IT sector was the decrease in EI (employment insurance) claims in 2004 for those already in the labour market during the time of the "bust".

Figure 9: Incidence of Employment Earnings for Skilled Principal Applicants, intending to work in Professional Occupations in Natural & Applied Science (NOC=21), by Landing Year Cohort



Source: IMDB

Figure 10: Incidence of Employment Insurance for Skilled Principal Applicants, intending to work in Professional Occupations in Natural & Applied Science (NOC=21), by Landing Year Cohort



Source: IMDB

AVERAGE ACTUAL HOURS WORKED IN KEY NATURAL AND APPLIED SCIENCE OCCUPATIONS

- Table 6 shows the average actual hours worked according to the Labour Force Survey (LFS) for key natural and applied science occupations. Note that this data is for the total Canadian labour market and that specific estimates for the immigrant-born population are not possible at this time.

Table 6: Average Actual Hours Worked (per week) for Key Occupations in Natural and Applied Science, 2000-2004

Occupations in Natural and Applied Sciences	2000	2001	2002	2003	2004
Civil, Mechanical, Electrical And Chemical Engineers	40.1	38.5	38.4	37.6	38.1
Other Engineers	39.6	39.8	38.0	37.1	38.5
Computer and Information Systems Professionals	37.7	36.5	36.6	35.4	35.4
Technical Occupations In Civil, Mechanical And Industrial Engineering	39.5	36.8	36.8	36.7	37.9
Technical Occupations In Electronics And Electrical Engineering	37.0	36.8	36.0	35.0	35.1
Technical Occupations in Computer and Information Systems	36.5	35.4	35.2	34.9	34.4

Source: Labour Force Survey

- From 2000 to 2003, the average actual hours worked by workers in key occupations within the natural and applied science sector declined. In 2004, however, the average actual hours increased for almost all occupations in the natural and applied science sector. Yet another factor signaling a potential recovery in the sector.

REAL WAGE RATES IN KEY NATURAL AND APPLIED SCIENCE OCCUPATIONS

- The earnings profile in the IMDB is related to the wages immigrants earn in their specific occupations. From the LFS wage rates by occupations can be produced for the Canadian labour market. While we cannot single out the immigrant-born population from the survey, one can nevertheless get an indication of compensation rates provided for all Canadians. Table 7 provides real wages rates for the identical occupations provided in Table 6.
- The real wage rates shown in Table 7 are quite variable. For instance, civil, mechanical, electrical and chemical engineers continued to note real declines in pay during 2004. While, computer and information systems professionals, average real hourly wages remained relatively stable.

Table 7: Average Real Hourly Wages (2004\$) for Key Occupations in Natural and Applied Science, 2000-2004

Occupations in Natural and Applied Science	2000	2001	2002	2003	2004
Civil, Mechanical, Electrical And Chemical Engineers	30.52	32.37	32.12	31.72	31.45
Other Engineers	31.56	31.49	33.17	33.42	32.53
Computer and Information Systems Professionals	27.21	28.15	28.43	28.88	28.89
Technical Occupations In Civil, Mechanical And Industrial Engineering	23.11	24.25	23.34	23.34	23.56
Technical Occupations In Electronics And Electrical Engineering	21.55	22.01	21.85	21.14	21.45
Technical Occupations in Computer and Information Systems	23.14	24.17	24.82	23.38	25.10

Source: Labour Force Survey, Statistics Canada

- With the information provided in Table 6 and 7, the essential pieces are in place to determine an earnings profile for key immigrant occupations. Table 8 is an estimate of average real earnings per week of key occupations in natural and applied science (multiplication of real average hourly wage rates by actual average hours worked per week). Although the weekly earnings provided are for the total Canadian labour market, this does give an idea of the occupational earnings profile during the 2000-2004 timeframe.

Table 8: Average Real Weekly Earnings (2004\$) for Key Occupations in Natural and Applied Science, 2000-2004

Occupations in Natural and Applied Science	2000	2001	2002	2003	2004
Civil, Mechanical, Electrical And Chemical Engineers	1,223.83	1,246.25	1,233.28	1,192.71	1,198.25
Other Engineers	1,249.86	1,253.41	1,260.60	1,239.94	1,252.41
Computer and Information Systems Professionals	1,025.64	1,027.62	1,040.65	1,022.34	1,022.71
Technical Occupations In Civil, Mechanical And Industrial Engineering	912.92	892.33	858.79	856.58	892.92
Technical Occupations In Electronics And Electrical Engineering	797.48	810.03	786.62	739.92	752.90
Technical Occupations in Computer and Information Systems	844.79	855.74	873.76	815.99	863.44

Source: Labour Force Survey, Statistics Canada

- Data from Table 8 show declines for all occupations at some point during 2002 or 2003. For instance, civil, mechanical, electrical and chemical engineering noted real weekly earnings declines of 1 percent and 3.3 percent during 2002 and 2003, respectively. Reasons for this general decline in earnings is not fully known, but most certainly the IT “bust” has played a role in limiting wage gains and hours worked for many employed in these occupations
- In 2004, however, some recovery is again observed. The prevailing trends emerging suggest that an average employee (regardless of whether they were an immigrant or not) would have seen an increase in weekly earnings, and consequently annual earnings, for most of the occupations in natural and applied science (remember that over 50 percent of skilled workers principal applicants come to work in this field).⁴

OTHER FACTORS

- In addition to the factors outlined above, recent research from Statistics Canada points to evidence that shows earnings of new employees have fallen during the 2002-03 period. The research done suggests that median hourly wages of male and female employees with two years of seniority or less fell during 2002-2003. This, of course, is an important point to note given recent immigrants are included in this group and the decline in earnings is an economy-wide phenomenon for new entrants into the labour market.⁵ It is not known whether this trend has stabilized or reversed itself in more recent years.

⁴ Results from the first wave of the Longitudinal Survey of Immigrants to Canada (LSIC) show that during October 2000 and September 2001, roughly 21,800 skilled worker principal applicants arrived intending to work as a professional in the natural and applied sciences. After 6 months in Canada, 38 percent of those who had found work were working in the same occupational group as originally intended.

⁵ Morissette and Johnson, “Are Good Jobs Disappearing in Canada”, Catalogue no. 11F0019MIE — No. 239, January 2005

CONCLUSIONS

- The 2004 results from the **Longitudinal Immigrant Database (IMDB)**⁶ are now available from Statistics Canada.
- Average employment earnings one year after landing continued to decline for immigrants landing in 2003 (see Figure 1) but to a much lesser extent than observed for the 2001 and 2002 cohorts.
 - The downward trend in employment earnings slowed considerably for the 2003 cohort. Immigrants landing in 2003 reported average employment earnings one year after landing \$110 (2004\$) lower than the previous cohort, representing only a 0.65 percent decline in earnings. For the 2001 and 2002 cohorts the declines in entry earnings were 12.7 and 3.3 percent, respectively.
- Skilled Principal Applicants (SPAs) who landed in 2003 reported average employment earnings one year after landing equal to approximately \$23,060 (2004\$), \$505 lower than the employment earnings reported one year after landing by SPAs who landed in 2002. This represents a 2.2 percent decline in entry earnings for the 2003 cohort (see Figure 2).
 - Although, the employment earnings of skilled principal applicants continued to decline, the decline has slowed considerably. The 2001 and 2002 cohorts experienced declines in employment earnings one year after landing equal to \$6,315 and \$1,070 (2004\$), representing 19.6 and 4.6 percent declines in entry earnings, respectively.
- The major factor contributing to the decline in earnings of SPAs for the 2001 and 2002 cohort was related to intended occupation. More than half of the SPAs landing in Canada in 2001 and 2002 stated intentions to work in Professional Occupations in Natural and Applied Science (mainly engineering and computer and information systems professionals). The economic conditions for this occupational grouping largely dictate the earnings profile for recent SPAs.
- Many of the professional natural and applied science occupations struggled with the high-tech “bubble” and subsequent “bust” which had an impact on the earnings of SPAs. Given that labour market conditions in the IT (information technology) sector deteriorated after the “bust” in 2001, it is reasonable to assume that fewer new workers (including immigrants) have been able to secure employment in the high paying IT sector. Consequently, immigrants may be working in lower-skilled occupations and generally lower-paying occupations to secure entry into the labour market. In addition, SPAs who managed to secure employment in the natural and applied science occupational grouping encountered further impediments to higher earnings in the form of lower actual hours worked and marginal, if any, real increases in wages.

⁶ The IMDB combines administrative records on immigration with taxation information to form a comprehensive source of data on the labour market experiences of the landed immigrant population. The IMDB is managed by Statistics Canada on behalf of a Federal-Provincial Funding Consortium led by Citizenship and Immigration Canada.

- One of the most revealing signs of the poor conditions in the IT sector was the large increase in EI (employment insurance) claims for those already in the labour market during the 2001-2003 timeframe. Looking at IMDB data for SPAs who intended to work in the natural and applied science sector, the data shows a large increase in the share of immigrants reporting EI as a source of income. Consistent with this trend was the fact that a lower share of SPAs reported employment earnings.
- Is the decline in entry level earnings related to changes in immigration policy or is it about domestic labour market conditions? From the labour market perspective, research done to date points to the fact that large numbers of IT professionals arrived at an inopportune time in terms of domestic labour market conditions in the IT sector.
- From the immigration policy perspective, new selection criteria have placed greater emphasis on human capital than in the past. However, not enough SPAs have come to Canada under IRPA for this to be relevant in this analysis. The human capital emphasis under IRPA may apply to analysis in future years particularly if the educational/training focus in our sending countries is concentrated to limited fields of study. A more fulsome discussion follows in the main paper.
- Although immigrant entry earnings continued to decline slightly for the 2003 cohort, the 2004 data from the IMDB and the LFS shows signs of recovery in the IT industry which would be expected to improve the economic outcomes of the large share of SPAs intending to work in that industry.
- Immigrants who landed in 2004 have shown recovery in employment earnings in their year of landing (see dotted line in Figure 1, YSL=0).⁷
 - Immigrants who landed in 2004 reported average employment earnings of roughly \$12,500 (2004\$) in their year of landing, representing a 12.3 percent increase over the previous cohort. This matched the year of landing employment earnings reported by the 2000 cohort, the last cohort to land before the downturn of the IT sector.
- SPAs who landed in 2004 have also shown recovery in employment earnings in their year of landing (see dotted line in Figure 2, YSL=0).
 - SPAs who landed in 2004 reported average employment earnings of roughly \$15,685 (2004\$) in their year of landing, representing a 21.7 percent increase over the previous cohort. The year of landing earnings of this cohort fell just short of those reported by the 2000 cohort, the last cohort to land before the downturn of the IT sector.
- Similar to what was observed for all SPAs (see figure 6), those intending to work in Professional Occupations in Natural and Applied Science (NOC21) have shown recovery in

⁷ Note that employment earnings in the first year of landing (YSL=0) are often not analyzed because for some immigrants it does not reflect a full year of residency. For example, an immigrant landing in July will only have resided in Canada for 6 months at the time of his first tax filing. Thus, the employment earnings of immigrants in their year of landing cannot be meaningfully compared with their employment earnings in subsequent (full) years. However, comparing the employment earnings in the year of landing across cohorts can offer insight into the very early labour market outcomes of immigrants.

employment earnings in their year of landing (YSL=0). Year of landing employment earnings for those who landed in 2004 (and intended to work in NOC21) were \$2,700 higher than the year of landing employment earnings of the 2003 cohort intending to work in NOC21, a 23 percent increase.

- The percentage of SPAs intending to work in NOC21 reporting employment earnings (Figure 9) has stabilized at 76 percent during the most recent period after declining by 5 percentage points in 2001. The share reporting EI has also stabilized for recent cohorts after a spike in 2001 (Figure 10). What may also be indicative of a recovery in the IT sector was the decrease in EI (employment insurance) claims in 2004 for those already in the labour market during the time of the "bust".
- From 2000 to 2003, the average actual hours worked by workers in key occupations within the natural and applied science sector declined. In 2004, however, the average actual hours increased for almost all occupations in the natural and applied science sector. Yet another factor signaling a potential recovery in the sector.
- Average actual wages remained fairly stable and as a result, an average employee (regardless of whether they were an immigrant or not) would have seen an increase in weekly earnings, and consequently annual earnings, for most of the occupations in natural and applied science (remember that over 50 percent of skilled workers principal applicants come to work in this sector).
- Even though the entry earnings of the 2003 cohort did not show a strong recovery, the data from the IMDB and LFS suggest that the IT industry is recovering and it is expected that this will positively affect the economic outcomes of SPAs.