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Immigrants in product fabricating

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Canada's immigrants are located a throughout the occupational spectrum. Some are in high-skill occupations, such as professional and managerial, others are in low-skill jobs such as services and product fabricating. Immigrants are, however, over-represented in certain occupations. Product fabricating is one such occupation. According to the 1986 Census, immigrants represented 18% of all workers, but 28% of workers in fabricating jobs - the highest representation of immigrants in any major occupational group.

This study profiles immigrants working in product fabricating. The key questions examined are: how do they differ from non-immigrant workers in the same occupation, and do the two groups earn comparable incomes?

Fabricating jobs highly concentrated by industry

Although fabricating workers were located in a variety of industries, three-quarters were in manufacturing and retail trade.

Two-thirds of immigrant fabricating workers were in manufacturing compared with 49% of non-immigrants (<u>Table 1</u>). Within manufacturing, immigrant workers actually dominated the clothing industry (1) (53%).



Table 1 Product fabricating workers by industry, 1986

Source: 1986 Census of Canada

Over one-quarter of fabricating workers were immigrants

The highest proportion of immigrants (2) was in product fabricating, where they represented 28% of all workers (Table 2). Immigrant women were particularly concentrated in product fabricating occupations, accounting for 43% of all women in these jobs. Immigrants made up 23% of all men in product fabricating, but they were also represented in professional and processing occupations in about the same proportion.



Table 2 Immigrant workers by occupation, 1986

Source: 1986 Census of Canada

Recent immigrants

In the past, product fabricating was a traditional source of employment for new immigrants to Canada and it continues to be so. Since 1983, only service jobs have ranked higher than fabricating jobs as the intended occupation of immigrant workers entering Canada's labour market. (3) About one in every ten immigrant workers entering this country from 1980 to 1987 was destined for a fabricating job. This ratio has remained relatively constant during the past decade.

Major metropolitan centres were home to most immigrants in fabricating

Nearly two-thirds of the immigrants in fabricating lived in Toronto, Montreal or Vancouver. In comparison, just over half of Canada's total immigrant population, and less than one-third of the total population, resided in these metropolitan areas.

Of the three metropolitan centres, Toronto depended the most on immigrant workers to fill fabricating jobs. Over half of the men and three-quarters of the women who worked in fabricating in Toronto were immigrants. In fact, immigrants accounted for 94% of all tailors and sewing machine operators in the

Toronto region.

Kind of work

What kind of work did immigrants do within the fabricating occupations? More than two-thirds of immigrant women worked in textile products - in other words, as garment workers (<u>Table 3</u>). These women accounted for almost half of all female garment workers: the majority were sewing machine operators. (4)



Table 3 Women in product fabricating occupations, 1986

Source: 1986 Census of Canada

Although the largest number of immigrant men worked as mechanics, they represented only 18% of this minor group (<u>Table 4</u>). However, immigrant men made up almost half of male garment workers. As garment workers, immigrant men performed relatively diverse types of work. For example, more than one-quarter of immigrant men were sewing machine operators, a further 19% were upholsterers, 16% were pattern-makers, and 11% were foremen.



Table 4 Men in product fabricating occupations, 1986

Source: 1986 Census of Canada

Close to two-thirds born in Europe

Almost two-thirds of immigrants in product fabricating were born in Europe, as were most of Canada's immigrant workers. This reflects Canada's long history of predominately European and British immigration. Over half of the European-born in fabricating were from Southern Europe (particularly Italy).



Chart A Immigrant population in fabricating by place of birth and period of immigration, 1986

Source: 1986 Census of Canada

But the picture is changing: the proportion of immigrants from non-European countries, especially Asian, has increased among those who have arrived since 1961. Among recent immigrants in product fabricating, the Asian-born were the largest group, accounting for almost half of those coming to Canada between 1981 and 1986. Of the recent Asian immigrants in fabricating, the largest group were from South East Asia, especially the Philippines and Vietnam.

An older population

The majority of Canada's immigrants came to this country as young adults. Because of this, and because any children born in Canada are non-immigrants, the immigrant population had a relatively low proportion of youth.



Chart B Workers in fabricating, 1986

Source: 1986 Census of Canada

Immigrants in fabricating also tended to be older - in part because the majority came to Canada before the 1970s. In 1986, 52% of immigrants in fabricating were between the ages of 35 and 54, compared with one-third of non-immigrants. This age distribution was similar for both male and female workers.



Chart C Percentage of population in fabricating by educational attainment, 1986

Source: 1986 Census of Canada

Lower levels of educational attainment

Immigrant workers in fabricating tended to have lower levels of education than non-immigrants. (5) Higher proportions of non-immigrants had high school, trades and non-university certificates or university degrees. Immigrant women were the largest group with no degree, certificate or diploma: 74% compared with 65% of non-immigrant women and 41% of immigrant men. But regardless of immigrant status, the majority of women in fabricating occupations had no certificate or diploma, while the majority of men did. Typically, these male workers held a trades certificate.

Official language

Immigrants may come to Canada either as sponsored family members, as refugees, or as independent applicants. Since 1967, independent applicants have been rated on a point system based on several criteria, including knowledge of Canada's official languages. (6) For immigrant workers, the ability to speak one or both of Canada's official languages affects the type of employment they can obtain. (7)



Chart D Immigrants speaking neither english nor french, 1986

Source: 1986 Census of Canada

Although most immigrant workers in product fabricating could speak one or both of Canada's official languages, 7% were unable to speak either. Fully 13% of immigrant women in fabricating spoke neither English nor French, a large proportion compared with immigrant women in other occupations (3%) and immigrant men in fabricating (also 3%). Among all employed immigrant women who could speak neither English nor French, one-third were in product fabricating.

Employment income

All the factors just discussed - age, education, kind of work, knowledge of English and French - as well as the length of residence in Canada, contribute to the differences in the employment incomes of immigrants and non-immigrants. These differences are explored in the following sections.

The average employment income (8) of immigrant women in fabricating was lower than the income of non-immigrant women in this occupation. The reverse was true for men: immigrants earned more.

Immigrant women in product fabricating earned just over half of the income of immigrant men, while non-immigrant women earned 61% of non-immigrant men's earnings. Differences in the kind of work performed within product fabricating likely contribute to these disparities in female/ male earnings.



Table 5 Average employment income of workers in product fabricating, 1985*

Source: 1986 Census of Canada

* Average employment incomes in this table and subsequent tables are for persons who worked full-year, full-time in 1985.

Age

For both immigrants and non-immigrants in product fabricating, average employment incomes were lowest for young workers (aged 15-24 years), peaked for those aged 35-44, and decreased significantly for those aged 65 years and over. Although the average income of immigrant men was higher than that of non-immigrant men, the picture changes when the data are viewed by age: the incomes of non-immigrants are generally higher than those of immigrants (<u>Table 6</u>). In other words, because immigrants tend to be older, their overall average income is higher.



Table 6 Average employment income by age, 1985

Source: 1986 Census of Canada

Period of immigration

In general, the economic position of immigrants improves the longer they reside in Canada. This is also true for product fabricating workers. The average employment incomes of both male and female immigrants were higher the longer they were in Canada. This pattern held true for all age groups.



Chart E Average employment income for fabricating by period of immigration, 1985

Incomes peaked for immigrant men aged 35-44 regardless of period of immigration. Among women, there was no clear pattern: incomes showed little variation by age within each period of immigration. This uniformity was likely due to the high percentage of women in the low-skill jobs, such as textile fabricating. In these jobs, seniority and work experience have little impact on wages.

Kind of work

Within an occupational group as diverse as product fabricating, one can expect to find significant differences in average employment income. Among both immigrants and non-immigrants, over 80% of the full-year, full-time workers in product fabricating were concentrated in four minor groups: fabricating of metal products; electrical, electronic and related equipment; textile, fur and leather products; and mechanics and repairers (Table 7).



Table 7 Average employment income by occupation (minor groups) and sex, 1985

Source: 1986 Census of Canada

By far the lowest employment incomes for both immigrant and non-immigrant women were associated with textile fabricating. Women in product fabricating were concentrated in this group; it accounted for 47% of non-immigrant and 65% of immigrant full-year, full-time workers. Among male workers, immigrants had higher average incomes than non-immigrants in each of the four minor fabricating groups. For both immigrants and non-immigrants, the incomes earned by workers who fabricate textile products were substantially lower than the incomes in the other minor groups.

The female-to-male income ratio for immigrants ranged from a high of 0.67 in textiles to a low of 0.62 in metal products fabricating. These ratios were much higher than the 0.54 recorded for product fabricating as a whole; the reason for this paying textile group. However, female-to-male ratios were still lower among immigrants than among non-immigrants in each of these groups.



Chart F Female to male average employment income ratio, 1985

How great an effect does the difference in age structure between immigrant and non-immigrant workers have on the income comparisons among the four minor groups? Average employment incomes for immigrant workers were recalculated (see box next page) using the non-immigrant age distributions (Table 8). These adjusted incomes represent the average employment income immigrants would have if they had the same age distribution as the non-immigrant population. In all cases, for both men and women, the result of this standardization process was a lowering of the average employment income of the Immigrants in product fabricating immigrant workers. The average employment income of immigrant male workers fell below that of non-immigrants for all groups except mechanics and repairers. The incomes of female immigrants were less affected by the adjustment.



Table 8 Average employment income (adjusted by age) by occupation (minor groups) and sex, 1985

Source: 1986 Census of Canada

Educational attainment

Did educational qualifications translate into higher earned incomes for product fabricating workers? In general, the higher the degree, certificate or diploma attained, the higher the average employment income, particularly for men (Table 9).



Table 9 Average employment income for product fabricating workers by highest degree, certificate or diploma, 1985

Source: 1986 Census of Canada

The difference in income between men with no educational qualifications and those with a high school diploma was small, but a trades certificate significantly increased their average employment income. Educational attainment above the trades level made little difference in the incomes of immigrant male workers, but was associated with higher incomes among non-immigrant men. Since the educational requirements for different jobs within product fabricating vary considerably, the overall findings by education may be affected by the different mixes of fabricating jobs held by immigrant and non-immigrant workers.

The incomes of female product fabricating workers showed less variation among the schooling categories than those of men. This may have been because of the much larger percentage of female garment workers. These low-skill occupations offer little remunerative advantage for higher educational achievement. The average employment income of immigrant women with trades and higher qualifications was slightly more than for immigrant women with no postsecondary certificate or degree. Non-immigrant women with educational attainment above the trades level had somewhat higher incomes.

Ability to speak Canada's official languages

When the average employment incomes of immigrant workers in all occupations are compared according to the ability of immigrants to speak Canada's official languages, bilingual workers have a remunerative advantage. Workers who spoke English only had a considerably higher average income than those who spoke French only. Those who spoke neither English nor French had the lowest average income.

Among product fabricating workers, the picture changes. Immigrant fabricating workers who spoke English only reported higher average incomes than bilingual workers. However, two-thirds of these bilingual immigrants worked in the Montreal metropolitan area, where incomes are generally lower than in either Toronto or Vancouver.



Chart G Average employment income of immigrant workers by official language, 1985

Source: 1986 Census of Canada

Summary

Immigrants represented 28% of workers in product fabricating, the highest proportion of immigrants in any major occupational group. Compared with non-immigrants, immigrants in fabricating jobs tended to be older, to have lower levels of educational attainment and to perform different kinds of work. Immigrant women were highly concentrated in textile fabricating' jobs, especially as sewing machine operators.

These differences were reflected in the average employment incomes earned by immigrants and non-immigrants in fabricating jobs. The average income of immigrant women in fabricating occupations was lower than that of non-immigrant women, mainly because of the proportionately higher number of

immigrant women in low-paying textile jobs. When incomes were recalculated to account for the older age structure of the immigrant population, the income gap was slightly increased. Among men, the average income of immigrant fabricating workers was higher than that of non-immigrants. However, after standardizing the incomes by age, only the average income of immigrant mechanics and repairers remained higher.

Immigration provides an important supply of labour to the Canadian economy. Although this article has focused on immigrant workers in product fabricating, there are many other occupational groups in which immigrants are found and on which future studies could be based.

What is product fabricating?

The product fabricating, assembling and repairing group is one of 22 major occupational groups in the 1980 Standard Occupational Classification (SOC). Product fabricating, assembling and repairing includes the following seven minor groups:

- fabricating and assembling of metal products
- fabricating, assembling, installing and repairing of electrical, electronic and related equipment
- fabricating, assembling and repairing of wood products
- fabricating, assembling and repairing of textile, fur and leather products (textile or garment workers)
- fabricating, assembling and repairing of rubber, plastic and related products
- mechanics and repairers
- other related fabricating occupations

Immigrants are especially prominent among textile or garment workers - workers in pattern-making. marking and cutting occupations; tailors and dressmakers; furriers; milliners, hat and cap makers; shoemaking and repairing occupations; upholsterers; and sewing machine operators.

In the 1986 Census, the data source used in this study, all persons who worked at any time since January 1, 1985 were asked to indicate their occupation. All the data in this study, unless otherwise stated, pertain to this population.

"Product fabricating, assembling and repairing" is the full title of this major occupational group. A shorter version, "product fabricating" or "fabricating", is used throughout this study.

For further information on this occupational group and its components, see **Standard Occupational**

Standardization of product fabricating work force by age

In this study the average employment income of immigrants who worked full year, full-time in 1985 was standardized by age using non-immigrant full-year, full-time workers as the standard population. The formula applied was the following:

$$\mathbf{y}^* = \Sigma \mathbf{y_i} \cdot \frac{\mathbf{N_i}}{\Sigma \mathbf{N_i}}$$

where

 y^* = standardized average employment income for the immigrant population

i = the ith age category

 N_i = the number of non-immigrants in the ith age category

 y_i = the average employment income of immigrants in the ith age category

Ten-year age groups were used up to age 64, that is, 15-24, 25-34, 35-44, 45-54, 55-64. A separate group was formed for age 65 and over. Standardization of average employment income by educational attainment was also considered for this study but, with the narrow occupational focus, the impact of education was considered minimal.

Notes

Note 1

For an industry perspective on immigrant workers, see *Immigrant women in the clothing industry*:

Implications for labour adjustment by S.B. Seward.

Note 2

An immigrant is a permanent resident of Canada who is not a Canadian citizen by birth.

Note 3

Data used in this section are from Employment and Immigration Canada, *Immigration Statistics*, 1980-1987. Data for 1987 are unpublished. The "intended occupation" is based on a statement of intention by those who have been granted landed immigrant status (that is, permanent residence status) and may or may not be the occupation realized in the labour market.

Note 4

For this article, two unit groups - tailors and dressmakers, and sewing machine operators - have been combined.

Note 5

Educational attainment is measured in this article by the highest degree, certificate or diploma obtained as of June 1986.

Note 6

The other criteria used in the point system for the admission of the independent class of applicants are age, education, training, occupational skills, the demand for the applicant's occupation in Canada, and the existence of prearranged employment.

Note 7

The 1986 Census data on knowledge of official languages are based on the respondent's own assessment of his or her abilities in these languages.

Note 8

Average employment incomes reported in this article are for persons who worked full-year, full-time in 1985. In product fabricating occupations, immigrant full-year, full-time workers accounted for 57% of the immigrant population who had worked at any time since January 1, 1985. The corresponding figure for non-immigrant full-year, full-time workers was 56%.

References

• Employment and Immigration Canada. *Immigration Statistics*. (No. MP22-1/1986).

- Employment and Immigration Canada. *Immigration Statistics*. (No. MP22-1/1986).
- Seward, S.B. *Immigrant women in the clothing industry: Implications for labour adjustment*. Institute for Research on Public Policy, Ottawa (forthcoming).
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Source

Perspectives on Labour and Income, Winter 1989, Vol. 1, No. 3 (Statistics Canada, Catalogue 75-001E). This is the fourth of six articles in the issue.



Table 1					
Product fabricating workers by industry, 1986					
	Total	Immigrants	Non-immigrants		
	%				
Total	100.0	100.0	100.0		
Manufacturing	54.2	67.4	49.0		
Retail trade	20.2	14.9	22.3		
Transportation and communication	6.4	4.3	7.2		
Wholesale trade	5.8	4.1	6.5		
Community, business and personal services	5.8	5.1	6.1		
Other	7.7	4.2	9.0		
Source: 1986 Census of Canada					

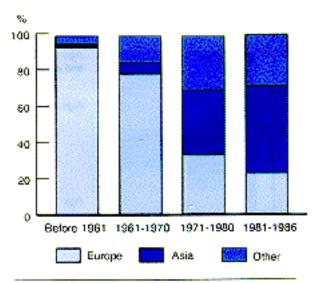
Table 2						
Immigrant workers by occupation, 1986						
	Total Immigrant					
	'000	'000'	%			
Total	13,858	2,553	18.4			
Managerial, administrative and related	1,401	271	19.4			
Professional and related	1,979	387	19.6			
Clerical	2,542	396	15.6			
Sales	1,267	204	16.1			
Service	1,851	372	20.1			
Primary	790	84	10.7			
Processing	779	177	22.7			
Product fabricating	1,016	288	28.3			
Construction	805	147	18.3			
Other	1,427	226	15.9			
Source: 1986 Census of Canada		J	1			

Table 3						
Women in product fabricating occupations, 1986						
	Total	Immigr	ants			
	,		%			
Total	257,400	110,600	43.0			
Metal products	21,100	7,100	33.5			
Electrical and electronic products	31,300	11,800	37.6			
Wood products	6,700	2,200	33.0			
Textile, fur and leather products	158,200	76,600	48.4			
Rubber and plastic products	11,500	4,000	35.0			
Mechanics and repairers	5,800	1,100	19.7			
Other	22,800	7,800	34.1			
Source: 1986 Census of Canada						

Table 4							
Men in product fabricating occupations, 1986							
	Total	Immigr	ants				
			%				
Total	758,900	177,300	23.4				
Metal products	89,400	25,900	29.0				
Electrical and electronic products	110,500	26,700	24.1				
Wood products	46,500	12,700	27.3				
Textile, fur and leather products	47,600	22,200	46.7				
Rubber and plastic products	28,800	6,300	21.8				
Mechanics and repairers	361,200	64,000	17.7				
Other	74,900	19,600	26.2				
Source: 1986 Census of Canada							

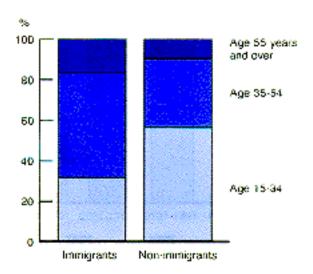
Immigrant population in fabricating by place of birth and period of immigration, 1986

Among immigrants arriving since 1961, the proportion from non-European countries has increased.



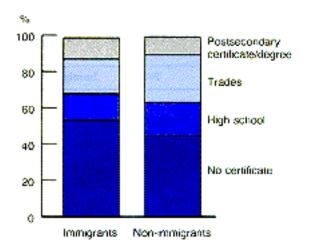
Workers in fabricating, 1986

In fabricating, immigrants tend to be older than non-immigrants.



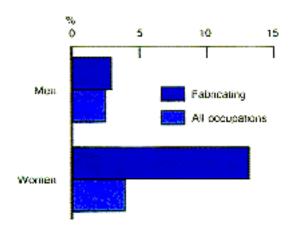
Percentage of population in fabricating by educational attainment, 1986

Immigrants in fabricating had higher proportions of workers with no formal educational certificate than did non-immigrants.



Immigrants speaking neither english nor french, 1986

Immigrant women in labricating were most likely to speak neither English nor French.



,			<i>U</i> ,
	Women	Men	Female/male ratio
	\$		
Immigrants	14,400	26,600	0.54
Non-immigrants	15,600	25,800	0.61
Source: 1986 Census of Canada			

Average employment income by age, 1985							
	Women Men						
	Immigrants	Non-immigrants	Immigrants Non-immigran				
	\$						
All ages	14,400	15,600	26,600	25,800			
15-24	11,900	12,600	16,500	17,300			
25-34	13,700	15,900	24,100	25,600			
35-44	14,800	16,600	28,400	28,600			
45-54	14,800	16,300	28,300	28,400			
55-64	14,700	16,300	27,100	26,900			
65 and over	13,600	13,000	22,000	20,200			

Average employment income for fabricating by period of immigration, 1985

For both male and lemale immigrants, average employment income was higher the longer they were in Canada.

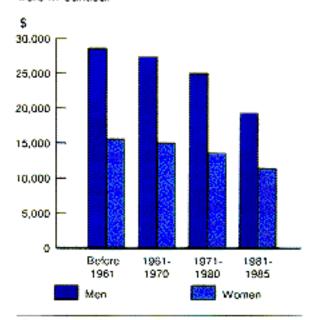
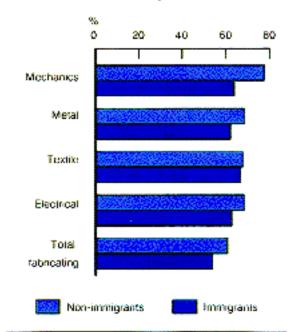


Table 7						
Average employment income by occupation (minor groups) and sex, 1985						
	Women Men					
	Immigrants Non-immigrants Non-immigrants					
	\$					
Fabricating:						
Metal products	18,000	19,900	29,200	28,800		
Electrical	17,500	18,800	27,900	27,500		
Textile	13,100	12,800	19,700	18,900		
Mechanics and repairers	18,300	20,400	28,800	26,200		
Source: 1986 Census of Canada						

Female to male average employment income ratio, 1985

The ratio of female to male carnings was lower among immigrants – meaning the earnings gap between the sexes was larger.



 ${\bf Average\ employment\ income\ (adjusted\ by\ age)\ by\ occupation\ (minor\ groups)\ and\ sex,\ 1985}$

	Women		Men	
	Immigrants	Non-immigrants Immigrants		Non-immigrants
		\$		
Fabricating:				
Metal products	17,300	19,900	27,900	28,800
Electrical	16,900	18,800	26,500	27,500
Textile	12,700	12,800	18,600	18,900
Mechanics and repairers	18,000	20,400	27,000	26,200

Table 9

Average employment income for product fabricating workers by highest degree, certificate or diploma, 1985

	Women		Men	
	Immigrants	Non-immigrants	Immigrants	Non-immigrants
	\$			
None	14,100	15,200	24,000	23,900
High school	14,500	15,700	25,100	24,700
Trades	16,000	16,200	29,100	27,200
Postsecondary certificate or degree	15,700	18,800	29,600	28,700
Source: 1986 Census of Canada				

Average employment income of immigrant workers by official language, 1985

Bitingual workers generally earn more. But among immigrants in fabricating, they earn less than those who could speak English only.

