



C.D. Howe Institute

Backgrounder

www.cdhowe.org

No. 103, August 2007

Laggards No More:

*The Changed Socioeconomic Status
of Francophones in Quebec*

François Vaillancourt
Dominique Lemay
and Luc Vaillancourt

The Backgrounder in Brief

The economic returns to knowing French in the Quebec labour market have increased steadily since 1970, while the returns to knowing English have decreased. The ability to speak both English and French has increased the earnings of anglophone men since 1980 and anglophone women since 1990, while the returns to bilingualism for francophone men and women remain positive. The healthy state of the French language in Quebec is also evident in the impressive growth in ownership of Quebec's economy by francophone firms, from 47 percent to 67 percent since the early 1960s.

About the Authors

François Vaillancourt is a professor in the economics department at l'Université de Montréal; *Dominique Lemay* is an economist with Tecsalt; and *Luc Vaillancourt* is a law student at McGill University.

The C.D. Howe Institute

The C.D. Howe Institute is a national, nonpartisan, nonprofit organization that aims to improve Canadians' standard of living by fostering sound economic and social policy.

The Institute promotes the application of independent research and analysis to major economic and social issues affecting the quality of life of Canadians in all regions of the country. It takes a global perspective by considering the impact of international factors on Canada and bringing insights from other jurisdictions to the discussion of Canadian public policy. Policy recommendations in the Institute's publications are founded on quality research conducted by leading experts and subject to rigorous peer review. The Institute communicates clearly the analysis and recommendations arising from its work to the general public, the media, academia, experts, and policymakers.

The Institute began life in 1958 when a group of prominent business and labour leaders organized the Private Planning Association of Canada to research and promote educational activities on issues related to public economic and social policy. The PPAC renamed itself the C.D. Howe Research Institute in 1973 following a merger with the C.D. Howe Memorial Foundation, an organization created in 1961 to memorialize the Right Honourable Clarence Decatur Howe. In 1981, the Institute adopted its current name after the Memorial Foundation again became a separate entity in order to focus its work more directly on memorializing C.D. Howe. The C.D. Howe Institute will celebrate its 50th Anniversary as the gold standard for public-policy research in 2008.

The Institute encourages participation in and support of its activities from business, organized labour, associations, the professions, and interested individuals. For further information, please contact the Institute's Development Officer.

The Chairman of the Institute is Tim Hearn; William B.P. Robson is President and Chief Executive Officer.

* * * * *

C.D. Howe Institute Background® is an occasional publication of the C.D. Howe Institute. Its purpose is to comment briefly on policy issues of concern to Canadians. Barry Norris edited the manuscript; Diane King prepared it for publication. As with all Institute publications, the views expressed here are those of the authors, and do not necessarily reflect the opinions of the Institute's members or Board of Directors.

To order a hard copy of this publication, please contact: Renouf Publishing Co. Ltd., 5369 Canotek Rd., Unit 1, Ottawa K1J 9J3 (tel.: 613-745-2665; fax: 613-745-7660 e-mail: order.dept@renoufbooks.com), or the C.D. Howe Institute, 67 Yonge Street, Suite 300, Toronto M5E 1J8 (tel.: 416-865-1904; fax: 416-865-1866; e-mail: cdhowe@cdhowe.org). Quotation with appropriate credit is permissible.

\$5.00; ISBN 0-88806-711-9;
ISSN 1499-7983 (print); ISSN 1499-7991 (online)

The socioeconomic status of francophones has been a driver of political debates and public policy in Quebec since the late 1960s, when the Royal Commission on Bilingualism and Biculturalism reported that labour market incomes of French Canadians were lower than those of other ethnic groups. In the 1970s, political debate in Quebec was influenced by concerns about economic disparities between francophones and other groups, and by fears that the assimilation of immigrants into the anglophone population would lead to the eventual disappearance of francophones. The debate on these issues explains in part both the election of the Parti Québécois in 1976 and the adoption of two language laws, Bill 22 in 1974 and Bill 101 in 1977. Now, on the 30th anniversary of Bill 101, it seems appropriate to take stock of how things stand — to present new results on the socioeconomic status of francophones in Quebec.

In earlier studies (Vaillancourt and Touchette 2001; and Vaillancourt and Vaillancourt 2005), we showed that the socioeconomic status of francophones and the economic benefits of using the French language have been improving continuously over the past 40 years or so. These results support the view that existing policies on the language of work are adequate in ensuring that Quebec francophones are able to utilize fully their linguistic human capital, even in the broader economic context of a North American market where English is the predominant language of the workplace, followed by Spanish. Indeed, in the years since the introduction of free trade (the Canada-US Free Trade Agreement in 1989 and the North American Free Trade Agreement in 1994), there has been, if anything, a strengthening of the status of French in Quebec even as the unilingual English US market has become more important for Quebec firms.¹

Labour Income and Returns to Language Skills

To determine the relative socioeconomic status of Quebec francophones in the closing decades of the 20th century and the opening years of the 21st, we used data from the 1971, 1981, 1991, and 2001 censuses² to look, first, at the evolution of average labour income by language group and sex, and, second, at the net effect of different language skills on the labour income of both men and women.

This paper draws on an MSc essay prepared by Dominique Lemay (2005) under the supervision of François Vaillancourt, and on a paper prepared by François Vaillancourt and Luc Vaillancourt (2005) for the Conseil supérieur de la langue française. We thank Yvan Guillemette, Finn Poschmann, and Bill Robson, as well as four anonymous readers, for comments on a previous version of this paper.

- 1 In 1986, exports abroad — mainly and increasingly to the United States — accounted for 22.6 percent of Quebec's gross domestic product (GDP), while exports to the rest of Canada accounted for 22.3 percent. By 2004, the figures were 33.4 percent and 19.7 percent, respectively. We should note that the other provinces have seen a similar shift in the relative importance of Canadian and external markets. See Institut de la statistique du Québec (2005), table 2.2 (p.26).
- 2 For our calculations, we used the public micro databases from those censuses. No such database is available for the 1961 census, but Vaillancourt (1985) shows that, in 1960, the ratio of wages and salaries of unilingual men of British census ethnic origin and those of unilingual francophone men was 1.95:1; for bilingual British men and unilingual francophone men, the ratio was 1.91:1; and for bilingual francophone men and unilingual francophone men, the ratio was 1.46:1.

Average Labour Income

This investigation of the census data on labour income (summarized in Table 1 and Figure 1 for men, and Table 2 and Figure 2 for women) reveals that, over the 1970-2000 period,

- differences in mean labour income between anglophones and francophones were smaller for women than for men, while labour income was higher for men than women;
- labour incomes of anglophones and francophones saw some convergence; and
- the position of allophones — those people, often immigrants, whose first language is neither French nor English — deteriorated relative to that of francophones.

Net Returns to Language Skills

Changes in the mean labour income of people with particular language skills might not reflect changes in the economic returns to having certain language skills as such; such income changes could be explained, for example, by changes in the education or experience of individuals with particular language skills.³ Accordingly, to determine the net effect of language skills on labour income, we examine census data using the methodology of multivariate analysis. This allows us to account for the effects of the level of education, estimated years of labour market experience, and number of weeks worked on labour income, and thus to calculate the “net” effect of language skills on income — that is, the effect of language skills once the effects of these three other factors have been neutralized (see Table 3 and Figure 3 for men, Table 4 and Figure 4 for women).⁴

In general, results not shown here (Lemay 2005) indicate that, as expected, labour income tends to increase with education and weeks worked, and first increases then decreases with experience. In particular, our analysis reveals that

- for anglophone men, the economic returns to speaking only English turned from positive in 1970 (relative to unilingual francophones) to increasingly negative from 1980 to 2000, while for anglophone women, the effect on their labour income of being unilingual English varied between negative and insignificant over the period;

3 Alternatively, one could argue that differences in the education levels of different language groups are linked, in part, to the language skills of each group and, thus, that to control for such educational differences in establishing the net returns to language skills would lead to a measurement error. In our case, however, this is not a serious issue since, in comparing the evolution of the socioeconomic status of different language groups over time, the measurement error, should there be one, would be of a similar nature over time.

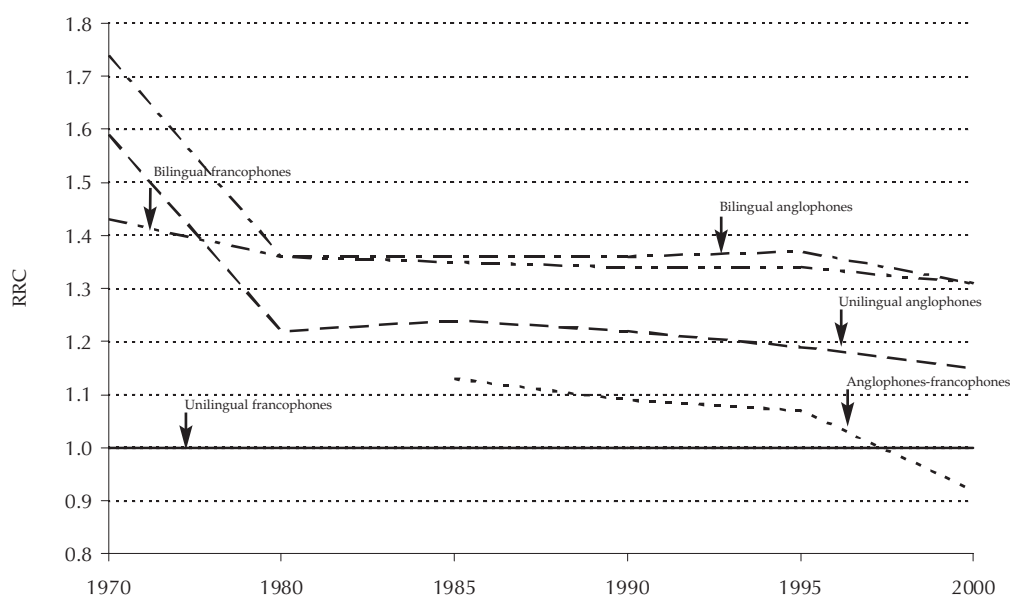
4 These three independent variables and the dependent variable, the natural logarithm of labour income, are the same as those used in Vaillancourt and Touchette (2001). To undertake our comparisons, we use the statistical tool of Ordinary Least Squares; the square of the number of years of labour market experience also enters the estimating equation.

Table 1: Average Labour Income by Language Skills, Quebec Men, 1970–2000

Language Group	1970		1980		1990		2000	
	\$	RRC	\$	RRC	\$	RRC	\$	RRC
Unilingual anglophones	8,171	1.59	17,635	1.22	30,034	1.22	34,097	1.15
Bilingual anglophones	8,938	1.74	19,562	1.36	33,511	1.36	38,745	1.31
Unilingual francophones	5,136	—	14,408	—	24,702	—	29,665	—
Bilingual francophones	7,363	1.43	19,547	1.36	33,065	1.34	38,851	1.31
English-speaking allophones	6,462	1.26	15,637	1.09	20,609	0.83	27,216	0.92
French-speaking allophones	5,430	1.06	13,287	0.92	18,503	0.75	21,233	0.72
Bilingual allophones	7,481	1.46	17,964	1.25	22,837	0.92	33,097	1.12
Other allophones	4,229	0.82	10,003	0.69	15,748	0.64	20,146	0.68
Anglophones-francophones	n.a.	—	n.a.	—	27,044	1.09	27,192	0.92

Notes: Dollar amounts are in current dollars; RRC = ratio to reference category (unilingual francophones = 1); “anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

Source: Lemay 2005, table 26.

Figure 1: Average Labour Income, Ratio of Anglophone and Francophone Men to Unilingual Francophone Men, by Language Skills, Quebec, 1970–2000

Notes: RRC = ratio to reference category (unilingual francophones = 1). “Anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

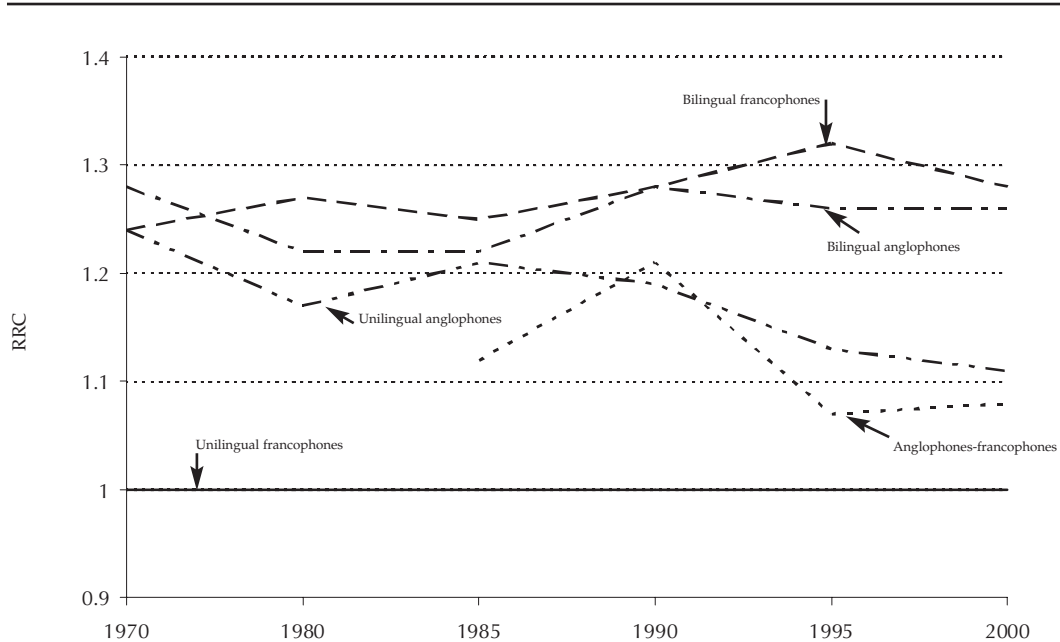
Source: Lemay 2005, figure 1.

Table 2: Average Labour Income by Language Skills, Quebec Women, 1970–2000

Language Group	1970		1980		1990		2000	
	\$	RRC	\$	RRC	\$	RRC	\$	RRC
Unilingual anglophones	3,835	1.24	10,271	1.17	18,844	1.19	23,002	1.11
Bilingual anglophones	3,956	1.28	10,759	1.22	20,292	1.28	26,247	1.26
Unilingual francophones	3,097	—	8,801	—	15,850	—	20,786	—
Bilingual francophones	3,842	1.24	11,195	1.27	20,261	1.28	26,644	1.28
English-speaking allophones	3,329	1.07	9,753	1.11	13,393	0.84	18,996	0.91
French-speaking allophones	3,241	1.05	8,191	0.93	12,647	0.80	15,551	0.75
Bilingual allophones	3,881	1.25	10,868	1.23	16,229	1.02	24,034	1.16
Other allophones	2,342	0.76	7,589	0.86	10,067	0.64	15,379	0.74
Anglophones-francophones	n.a.	—	n.a.	—	19,135	1.21	22,425	1.08

Notes: Dollar amounts are in current dollars; RRC = ratio to reference category (unilingual francophones = 1); “anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

Source: Lemay 2005, table 27.

Figure 2: Average Labour Income, Ratio of Anglophone and Francophone Women to Unilingual Francophone Women, by Language Skills, Quebec, 1970–2000

Notes: RRC = ratio to reference category (unilingual francophones=1). “Anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

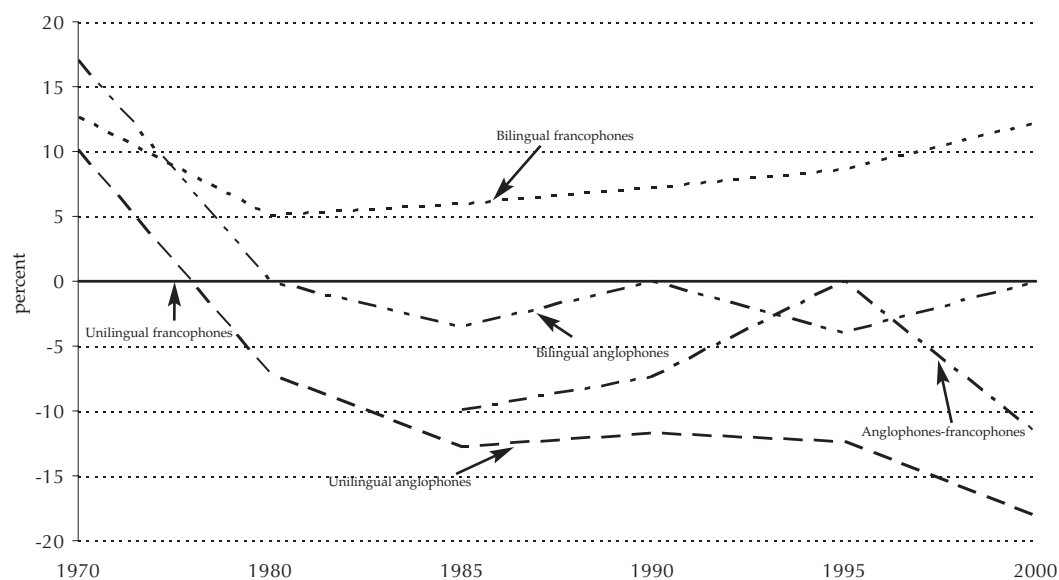
Source: Lemay 2005, figure 2.

Table 3: Net Effects of Language Skills on Labour Income, Quebec Men, 1970–2000

Language Group	1970	1980	1990	2000
	<i>% change in average labour income relative to that of unilingual francophones</i>			
Unilingual anglophones	10.1	-7.2	-11.7	-18.1
Bilingual anglophones	17.0	0.0	0.0	0.0
Bilingual francophones	12.6	5.1	7.3	12.2
English-speaking allophones	0.0	-16.3	-34.9	-30.1
French-speaking allophones	0.0	-20.0	-20.8	-33.9
Bilingual allophones	6.0	-6.4	-20.3	-11.8
Other allophones	-17.6	-45.1	-26.8	-25.8
Anglophones-francophones	—	—	-7.4	-11.7

Notes: A zero indicates that a given language skill has no significant effect on average labour income; “anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

Source: Lemay 2005, table 28.

Figure 3: Net Effect on Labour Income of the Language Skills of Anglophone and Francophone Men Relative to Those of Unilingual Francophone Men, Quebec, 1970–2000

Note: “Anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

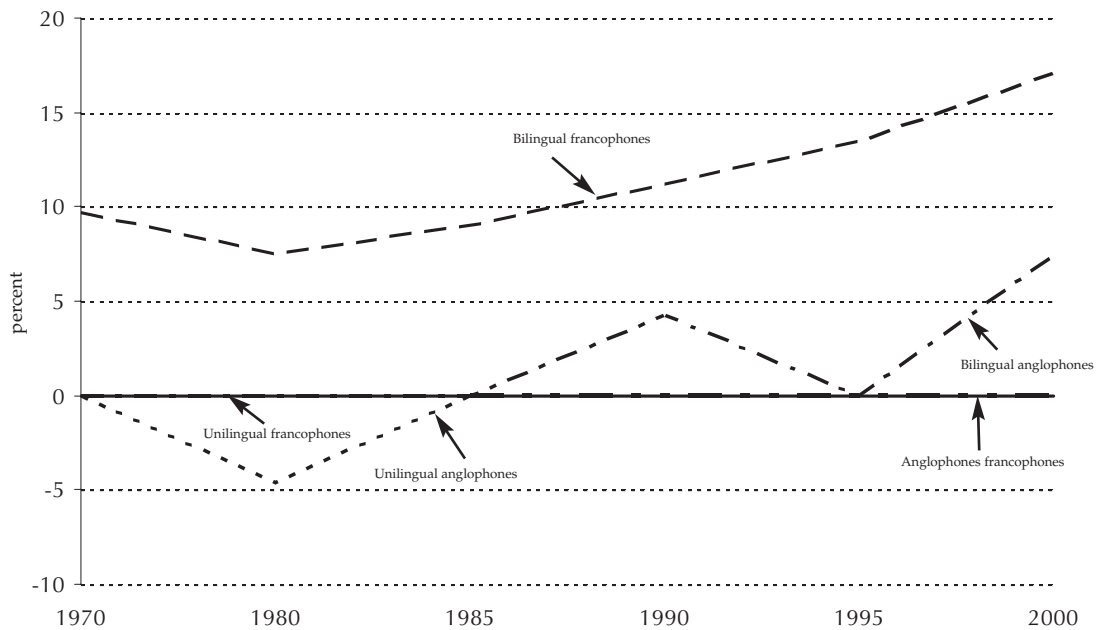
Source: Lemay 2005, figure 3.

Table 4: Net Effects of Language Skills on Labour Income, Quebec Women, 1970–2000

Language Group	1970	1980	1990	2000
	<i>% change in average labour income relative to that of unilingual francophones</i>			
Unilingual anglophones	0.0	-4.6	0.0	0.0
Bilingual anglophones	0.0	0.0	4.3	7.4
Bilingual francophones	9.7	7.5	11.2	17.0
English-speaking allophones	0.0	0.0	-11.1	0.0
French-speaking allophones	22.8	0.0	-8.5	-19.1
Bilingual allophones	11.1	0.0	0.0	5.3
Other allophones	0.0	0.0	-13.2	0.0
Anglophones-francophones	—	—	0.0	0.0

Note: A zero indicates that a given language skill has no significant effect on average labour income; “anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

Source: Lemay 2005, table 29.

Figure 4: Net Effect on Labour Income of the Language Skills of Anglophone and Francophone Women Relative to Those of Unilingual Francophone Women, Quebec, 1970–2000

Note: “Anglophones-francophones” refers to individuals who declare both English and French as their mother tongue. Such an answer does not appear as a census category prior to 1985.

Source: Lemay 2005, figure 4.

- for anglophone men, the returns to bilingualism were positive when compared with the returns to unilingualism, but their language skills earned similar returns to those of unilingual francophones; for anglophone women, the returns to bilingualism were positive after 1990;
- the returns to bilingualism for francophone men and women were positive throughout the period, dipping in both cases to their minimum in 1980; and
- for allophone men, the returns to English- and French-language skills generally deteriorated relative to the returns of unilingual francophones over the period; for allophone women, there is no obvious trend.

We also examined other factors that might play a role in determining the net impact of language skills on labour income. Accordingly, we took into account various combinations of marital status, ethnicity, mobility, industry worked in, and occupation. We find, for example, that adding the factors of marital status, ethnicity, and mobility makes no difference to the economic returns to bilingualism for francophone men (the first four upper bars in Figure 5); for unilingual anglophone men, however, these factors cause their negative returns to unilingualism to diminish from -18 percent to -13 percent.⁵

Why are the net returns to bilingualism not the same for anglophones and francophones? Except for their mother tongue, are they not identical workers? The answer is no. The census defines “bilingualism” as answering “yes” to the following question: “Can this person speak English or French well enough to conduct a conversation?” In fact, bilingual anglophones will know English better than bilingual francophones, but bilingual francophones will know French better than bilingual anglophones; therefore, in a labour market where French-language skills command higher returns than English, francophones derive relatively less economic benefit from becoming bilingual than anglophones do. What is of interest is that bilingual individuals know a second language while unilinguals do not.

Overall, in the Quebec labour market, the economic returns to knowing French increased between 1970 and 2000 while the returns to knowing English decreased. That being said, one must be careful to note that, for francophones, the net returns to knowing English went up.⁶

We discuss the various factors that explain these results in the conclusion, but one key factor — the ownership of employers — deserves a closer examination.

Ownership of Quebec’s Economy

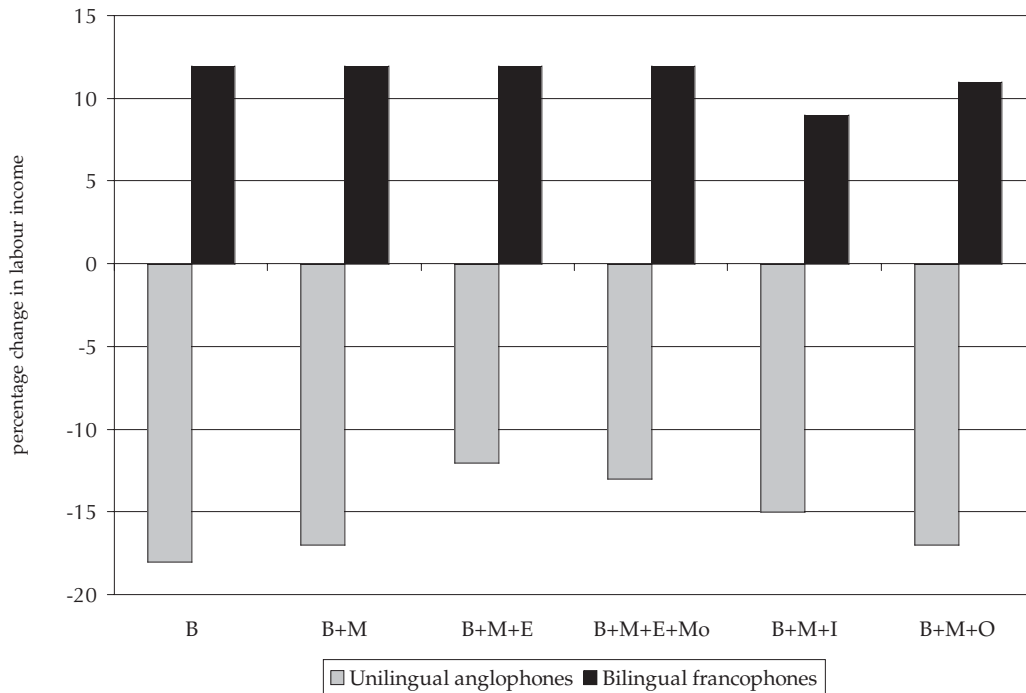
The ownership of employers — whether foreign-controlled or domestic, anglophone or francophone — is an important determinant of the use of French in the Quebec labour market and, therefore, of the economic returns to knowing French.⁷ The evolution of the ownership of various sectors of Quebec’s economy

5 Vaillancourt and Touchette (2001) report similar results for 1995.

6 We thank an anonymous referee for emphasizing this point.

7 See, for example, Vaillancourt, Champagne, and Lefebvre (1994), who show an econometric relationship between, on the one hand, language use by industry and, on the other, the ...

Figure 5: Effect of Additional Socioeconomic Variables on the Net Effect of Language Skills on Labour Income, Unilingual Anglophone and Bilingual Francophone Men Relative to Unilingual Francophone Men, Quebec, 2000



Note: B = the base case (unilingual francophone men); M = marital status; E = ethnicity (non-white, aboriginal); Mo = mobility (from within Canada or abroad); I = industry; and O = occupation.

Source: Lemay 2005, tables 3-7.

over the 1961–2003 period is interesting (see Table 5). Before we present it, however, we should present our methodology for determining ownership.

First, to identify foreign-owned firms, we mainly used a database maintained by Statistics Canada under the *Corporations and Labour Unions Returns Act* (CALURA — now the *Corporations Returns Act*). As Statistics Canada indicates, “an enterprise is deemed to be foreign controlled if at least 50 per cent of its voting stock is known to be held by one investor outside Canada. But if effective control is held with less than 50 per cent of the voting stock, then the enterprise is classified as controlled by the group holding the controlling block of stock.”⁸

Second, we determined whether domestic firms were owned by francophones or anglophones by looking at the names of the owners or board members of the ultimate controlling firm. For small firms, this was easy, as there is often a single corporate layer occupied by members of one family: Louise Tremblay, president; Alain Tremblay, vice president; Luc Tremblay, secretary. In the case of large firms,

footnote 7 cont'd

.... ownership of, importance of exports to, and technology of the industry.

8 <http://www.statcan.ca/english/freepub/11-516-XIE/sectiong/sectiong.htm> section G152-380.

Table 5: *Ownership of the Quebec Economy by Foreign-, Anglophone-, and Francophone-Owned Employers, by Sector, Various Years*

Sector	Foreign-Owned Employers	Anglophone-Owned Employers	Francophone-Owned Employers
		<i>percent</i>	
Agriculture			
1961	0.0	8.7	91.3
1978	0.0	8.2	91.8
1991	0.7	2.3	97.0
2003	1.6	8.7	89.6
Forestry			
1961	n.a.	n.a.	n.a.
1978	37.7	28.9	33.4
1991	1.0	11.3	87.7
2003	5.2	7.9	86.9
Mining			
1961	40.4	53.1	6.5
1978	64.9	18.1	17.0
1991	24.1	45.9	30.0
2003	29.8	30.6	39.5
Manufacturing			
1961	31.3	47.0	21.7
1978	33.5	38.6	27.8
1991	24.5	33.5	42.0
2003	25.4	25.7	48.8
Construction			
1961	14.1	35.2	50.7
1978	7.1	18.5	74.4
1991	3.1	10.1	86.8
2003	3.1	13.0	83.9
Transportation, communications, public utilities			
1961	8.3	55.3	36.4
1978	4.4	53.4	42.2
1991	4.3	44.8	50.9
2003	7.0	38.3	54.7
Commerce			
1961	11.5	39.3	50.4
1978	17.0	32.0	51.0
1991	10.2	23.7	66.1
2003	12.3	23.8	64.0
Finance			
1961	21.1	53.1	25.8
1978	12.1	43.1	44.8
1991	7.6	38.7	53.7
2003	9.3	30.4	60.3
Services			
1961	0.0	28.6	71.4
1978	3.8	21.2	75.0
1991	3.6	19.6	76.8
2003	5.3	17.3	77.5

Table 5 cont'd on pg 10

Table 5 cont'd: *Ownership of the Quebec Economy by Foreign-, Anglophone-, and Francophone-Owned Employers, by Sector, Various Years*

Sector	Foreign-Owned Employers	Anglophone-Owned Employers	Francophone-Owned Employers
		<i>percent</i>	
Public sector			
1961	0.5	47.7	51.8
1978	0.0	32.8	67.2
1991	0.0	34.8	65.2
2003	0.0	38.3	61.7
All sectors			
1961	13.6	39.3	47.1
1978	13.9	31.2	54.8
1991	8.7	26.2	65.1
2003	10.0	22.9	67.1

n.a. = not available.

Note: The reader may note some instability in the figures for the three primary sectors. For example, in the agriculture sector, Vaillancourt and Leblanc (1993) note a measurement problem in the data for 1991; the correct number is in the 8-9 percent range as it was in all three other years. In the forestry sector, the issue arises from whether tree-cutting activities are classified under logging (primary), pulp and paper (manufacturing), or wood (manufacturing). In 1961, these activities were included in the manufacturing sectors; in 1978, they were split between the primary and secondary sectors; in 1991 and 2003, they were mainly carried out by small francophone-owned independent firms operating in the logging sector. In the mining sector, measurement problems arise when smelting and refining are assigned sometimes to mining (primary) and sometimes to primary metals (secondary), and also when changes occur in the ownership or the activities of one big mine (through temporary or permanent closure or the opening of a new one). In 2003, agriculture accounted for 2.0 percent of employment, forestry 0.12 percent, and mining 0.43 percent (calculations from Vaillancourt and Vaillancourt 2005, table 1.2). Hence, a measurement error in any one of these sectors would not be significant; it also would not affect the measurement of the overall control of the economy, as all jobs are accounted for in the total percentages.

Source : Vaillancourt and Vaillancourt 2005, table 3.1.

we looked at board membership.⁹ For both small and large firms, we looked at the person's first name and family name, as well as contextual information. For example, we assumed that Jean-Pierre Blackburn from Chicoutimi is francophone and Harry Tremblay from Pontiac is anglophone. Though this criterion sounds rough and ready, in practice it is quite precise, as few firms — perhaps one or two per year over the period we studied — had a board with an equal number of English- and French-sounding names.

9 The determination of the size of employers within a given sector has varied over time, as shown by Vaillancourt and Vaillancourt (2006). Overall, the number of employees is the criterion used most often, but sales, budgets, and number of users (the latter two apply particularly to the public sector) have also been used. Sources used include, for 1961, the central registry of the then Dominion Bureau of Statistics; for 1978, lists drawn from the Census of Manufacturers and the establishment survey (known as the ES-1/2 surveys) both carried out by Statistics Canada. For 1991 and 2003, the main source for all private sector employers was the Quebec government registry of businesses, known in 1991 as the Fichier central des entreprises and in 2003 as the Registre des entreprises du Québec. One major difference between the two years is that the information for 1991 came in paper form while the information for 2003 was presented online. See web site: <https://ssl.req.gouv.qc.ca/slc0110.html>.

Finally, we aggregate (sum) percentages of type of ownership in the various sectors for the overall economy using employment data from the censuses or from Statistics Canada's Labour Force Survey.

Turning to the results, our analysis reveals:

- impressive growth in the ownership of Quebec's economy by francophones from 1961 to 2003, with the overall rate up by 20 percentage points, or 0.5 of a percentage point per year;
- a noticeable slowdown in the growth of ownership by francophones between 1991 and 2003, just two percentage points in 12 years;¹⁰ and
- a decline in foreign ownership of Quebec's economy by 26 percent between 1961 and 2003 (although it increased slightly after 1991), while anglophone Canadian ownership declined by 44 percent.

In another study (Vaillancourt and Vaillancourt 2006), we calculate that 20 percent (or four percentage points out of the 20) of the growth of francophone ownership came from an increase in the share of employment in sectors that already had high levels of francophone ownership in 1961. Thus, 80 percent of that growth reflects growth internal to each sector. We also determined that about one-third of the internal growth of francophone control took place in the manufacturing sector.

Conclusion

The socioeconomic status of francophones in Quebec has increased substantially since 1960, whether one uses as an indicator mean labour income, returns to language skills, or ownership of the Quebec economy. The relative status of francophones within Quebec itself is under no immediate threat, though one might see a relative decline in the socioeconomic status of all Quebec workers in the North American context if policymakers fail to address concerns about productivity issues. Worth noting in this context is the extremely high growth of employment outside Quebec by such francophone firms as Alimentation Couche-tard, Bombardier, and Quebecor (see Vaillancourt and Russo 2005), an indication that francophone capitalists are showing an opening to the world that is promising for their long-term success.

What accounts for the changes that have occurred in the relative socioeconomic status of francophones over the past four decades? It seems plausible that the following factors played a role.

First, there was a significant departure of anglophones from Quebec over the 1970-2000 period as a result of push factors (the threat of sovereignty, the passing of language laws in 1974 and 1977, and the moving of some head offices) and pull factors (including a general drift of economic activity toward the West, particularly the 1970-85 oil boom in Alberta). Anglophone migrants were generally younger and better educated than those who remained, which reduced the earnings potential of anglophones who remained relative to substantially less mobile

10 Indeed, Vaillancourt and Vaillancourt (2005) speculate that growth of ownership by francophones over the 2005-15 period is likely to be small and that francophone ownership will hold at a maximum of about 70-75 percent.

francophones. Unilingual anglophones were also somewhat more likely to leave than bilingual anglophones. Moreover, anglophones had a better knowledge of French in 2000 than in 1970 thanks to more efficient learning techniques such as immersion, while allophones know French better in 2000 than they did in 1970 as a result of the language laws of the 1970s.

Second, as a result of the *Révolution Tranquille* of 1960-66, Quebec's public sector — government, hospitals, public enterprises — grew in size, hiring large numbers of qualified francophones. In turn, francophone-owned firms in the private sector grew by providing services in French to the public sector — for example, hydro dams by engineering firms such as SNC-Lavalin or computer services by firms such as CGI — and then exporting their new-found expertise to world markets in French, English, and other languages. The result of this large state intervention, Quebec Inc., significantly increased the ownership of Quebec's economy by francophones and increased the labour income of francophones relative to anglophones in the province — though perhaps at the expense of reducing overall income levels, or at least income growth, in Quebec relative to potential growth in other provinces.

Third, the increased purchasing power of francophones who have benefited from Quebec Inc. has also increased demand within Quebec for goods and services in French. This, in turn, has increased the relative use of French in the Quebec labour market and thus the relative value of French-language skills.

Although we cannot measure the relative contribution of these factors to changes in socioeconomic status, the language laws of the 1970s probably played only a small direct role in changing the relative returns to language skills (see Vaillancourt 1979).

What are the implications, if any, of these findings for public policy, if not political debate? A decade and a half ago, Vaillancourt (1992) suggested a set of policy options that included the compulsory use of French on signs with any number of other languages allowed, the requirement that businesses serving the internal market be able to do so in French, and, given markets and technology, the pursuit of the optimal (rather than maximal) use of French as the language of work in Quebec. Of particular relevance to our focus here on the economic returns to linguistic human capital are Vaillancourt's recommendations on the language of schooling. He proposed that French be the common language of schooling for all students from kindergarten to grade 3, and that francophones then undergo one or two years of English-language immersion while anglophones would be schooled in English in grades 4 through 6 and then in French again in grades 7 and 8. Given the economic returns to bilingualism that have been reported for some decades now, policies that make better use of the higher plasticity of younger brains in learning a second language still seem appropriate.

References

- Institut de la statistique du Québec. 2005. *Comptes économiques des revenus et dépenses du Québec*. [Available at <http://www.stat.gouv.qc.ca/publications/economi/pdf2005/compannu05.pdf>]
- Lemay, Dominique. 2005. "La différenciation des revenus de travail en fonction des groupes linguistiques au Québec, 2001." MSc essay. Montreal: Université de Montréal, Département de sciences économiques; available at web site: <http://hdl.handle.net/1866/155>.
- Vaillancourt, François. 1979. "La situation démographique et socio-économique des francophones du Québec: une revue." *Canadian Public Policy* 5 (4): 542-52.
- . 1985. "Un aperçu de la situation économique des anglophones et francophones du Québec, de 1961 à 1971 et de l'impact possible sur cette situation du projet de loi I." In François Vaillancourt, ed., *Économie et Langue: un recueil de textes*. Québec: Conseil de la langue française.
- . 1992. "English and Anglophones in Quebec: An Economic Perspective." In John Richards, François Vaillancourt and William Watson, *Survival: Official Language Rights in Canada, The Canada Round 10*. Toronto: C.D. Howe Institute.
- Vaillancourt, François., René Champagne et Lise Lefebvre. 1994. "L'usage du français au travail par les francophones du Québec: une analyse économique." In Pierre Martel and Jacques Maurais, eds., *Langues et sociétés en contact, Canadiana Romanica 8*. Tübingen: Niemeyer.
- , and Lisa Russo. 2005. *L'importance des activités hors Québec des entreprises québécoises: un aperçu fondé sur l'emploi*. Québec: Conseil supérieur de la langue française; available at website: <http://www.cslf.gouv.qc.ca/publications/PubF210/F210.pdf>.
- , and Christine Touchette. 2001. "Le statut du français sur le marché du travail au Québec, de 1970 à 1995: les revenus de travail." *Article documentaire*. Toronto: C.D. Howe Institute. March 9.
- , and Luc Vaillancourt. 2005. *La propriété des employeurs au Québec en 2003 selon le groupe d'appartenance linguistique Québec*. Québec: Conseil supérieur de la langue française; available at web site: <http://www.cslf.gouv.qc.ca/publications/pubf209/f209.pdf>.
- . 2006. "La croissance de la propriété francophone de l'économie québécoise, 1961-2003: évolution et déterminants." Paper presented at the colloquium "La Caisse de dépôt et placement et le développement économique du Québec: 1965-2005," Montreal, March.
-

NOTES

NOTES

NOTES

Recent C.D. Howe Institute Publications

- July 2007 Smart, Michael. *Lessons in Harmony: What Experience in the Atlantic Provinces Shows About the Benefits of a Harmonized Sales Tax*. C.D. Howe Institute Commentary 253.
- July 2007 Laidler, David. *Better Late Than Never: Towards a Systematic Review of Canada's Monetary Policy Regime*. C.D. Howe Institute Commentary 252.
- July 2007 Chen, Duanjie, Jack Mintz and Andrey Tarasov. "Federal and Provincial Tax Reforms: Let's Get Back on Track." C.D. Howe Institute Backgrounder 102.
- June 2007 Koeppl, Thorsten V., and James MacGee. *Branching Out: The Urgent Need to Transform Canada's Financial Landscape and How to Do It*. C.D. Howe Institute Commentary 251.
- June 2007 Jaccard, Mark, and Nic Rivers. "Estimating the Effect of the Canadian Government's 2006-2007 Greenhouse Gas Policies." C.D. Howe Institute Working Paper.
- June 2007 Jaccard, Mark, and Nic Rivers. "Estimating the Effect of the Canadian Government's 2006-2007 Greenhouse Gas Policies." C.D. Howe Institute e-brief.
- June 2007 Laidler, David, and William B. P. Robson. *Ill-Defined Benefits: The Uncertain Present and Brighter Future of Employee Pensions in Canada*. C.D. Howe Institute Commentary 250.
- June 2007 Kneebone, Ronald, D. *Following the Money: Federal and Provincial Budget Balances with Canada's Major Cities*. C.D. Howe Institute Commentary 249.
- May 2007 Tomlin, Ben. "The Seat Shortage: Changing Demographics and Representation in the House of Commons" C.D. Howe Institute e-brief.
- May 2007 Banerjee, Robin and William B.P. Robson. "Give Canadian Workers the Tools to do the Job! Why Canada Needs More Robust Capital Investment." C.D. Howe Institute e-brief.
- May 2007 Cumming, Douglas. *Financing Entrepreneurs: Better Canadian Policy for Venture Capital*. C.D. Howe Institute Commentary 247.
- May 2007 Brown, Robert D. and Finn Poschmann. "On Taxes and Foreign Investment, Flaherty's Aim is Off." C.D. Howe Institute e-brief.
- April 2007 Howitt, Peter. *Innovation, Competition and Growth: A Schumpeterian Perspective on Canada's Economy*. C.D. Howe Institute Commentary 246.
- April 2007 Herman, Lawrence L. "American Corn and Canadian Trade Actions: One Step Forward, Two Steps Back." C.D. Howe Institute e-brief.
- March 2007 Robson, William B. P. "Found Money: Matching Canadians' Savings with Their Infrastructure Needs." C.D. Howe Institute e-brief.
- March 2007 Robson, William B. P. "Will C-36 Undermine CPP '9.9'? Benefit Enhancement and the Sustainability of the Canada Pension Plan." C.D. Howe Institute e-brief.
- February 2007 Johnson, David. "Ontario's Best Public Schools: An Update to Signposts of Success (2005)." C.D. Howe Institute e-brief.
- February 2007 Poschmann, Finn, William Robson and Robin Banerjee. "Fiscal Tonic for an Aging Nation: A Shadow Federal Budget for 2007." C.D. Howe Institute Backgrounder 101.
- February 2007 Adrian, Reid S., Yvan Guillemette and William B.P. Robson. "Missed Targets: Canada's 2007 Fiscal Accountability Ranking." C.D. Howe Institute Backgrounder 100.
- February 2007 Adrian, Reid S., Yvan Guillemette et William B.P. Robson. "Cibles ratées : le classement 2007 de la responsabilité fiscale au Canada." C.D. Howe Institute Backgrounder 100.
- February 2007 Finnie, Ross and Alex Usher. *Room at the Top: Strategies for Increasing the Number of Graduate Students in Canada*. C.D. Howe Institute Commentary 245.
- February 2007 Hurwitz, Stephen A. and Louis J. Marett. *Financing Canadian Innovation: Why Canada Should End Roadblocks to Foreign Private Equity*. C.D. Howe Institute Commentary 244.
- February 2007 Iacobucci, Edward M., Michael J. Trebilcock and Tracey D. Epps. *Rerouting the Mail: Why Canada Post is Due for Reform*. C.D. Howe Institute Commentary 243.
- February 2007 Cherniavsky, Ben and Benjamin Dachis. *Excess Baggage: Measuring Air Transportation's Fiscal Burden*. C.D. Howe Institute Commentary 242.
- January 2007 Payne, A. Abigail and Huizi Zhao. "Uncharitable Treatment? Why Donations to Private and Public Foundations Deserve Equal Tax Status." C.D. Howe Institute e-brief.

C.D. Howe Institute
67 Yonge Street, Suite 300
Toronto, Ontario
M5E 1J8

Canadian Publication Mail Sales
Product Agreement #40008848