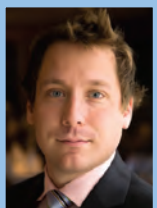


TUITION FEES AND THE LONG-TERM FINANCING OF UNIVERSITIES

The Quebec government plans to raise university tuition fees by \$50 per term until 2011-2012. Few studies up to now have assessed how this "unfreezing" policy will affect university financing and student enrolment. Moreover, no announcement has hinted at the tuition policy for university studies to be applied after 2012. This Economic Note begins a reflection on the type of policy that could be adopted to ensure long-term financing for universities.



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Since 1968, university tuition fees in Quebec have undergone only two periods of increase, from 1991 to 1994 and from 2007 to 2012. In the modern history of Quebec, tuition freezes in university education have thus been the rule rather than the exception. As such, it can be understood why, during the last year of Quebec's tuition freeze policy (2006-2007), tuition was only 38% of the Canadian average.

In 2011-2012, Quebec students will pay (in 2007 dollars) \$2,024 annually in tuition fees, whereas they paid \$2,168 in 1994-1995. This means that, at the end of the announced period of increases in Quebec tuition fees in 2012, they will still be less than 50% of the Canadian average for the last available year (2007-2008)¹ and that the amount paid by Quebec students will still be slightly lower than in 1994-1995.²

Because tuition fees continue to be set arbitrarily by the government, without reference to the cost of education, and because they are the same regardless of program, the current increase gives students little reason to appreciate the connection between what their studies cost and their return. This situation, which will endure after 2012 if nothing

changes, is problematic because of the distortions it creates in relation to the job market.

Since all students pay the same price for their university studies, the difference in education costs is paid by the government. For example, in 2007-2008, medical and veterinary students paid only 12.3% and 5.4% respectively of the cost of their education.³ In comparison, humanities students assumed 40% of this cost. Uniformity of

tuition fees thus represents a greater implicit subsidy for students who have chosen a field in which education costs more to provide.

Given the need for a process of modifying tuition fee policy to be announced in advance to

enable current and future students to adapt to the new reality, it is desirable to start reflecting now on what should follow the current unfreezing after 2012.

The effects of raising tuition fees

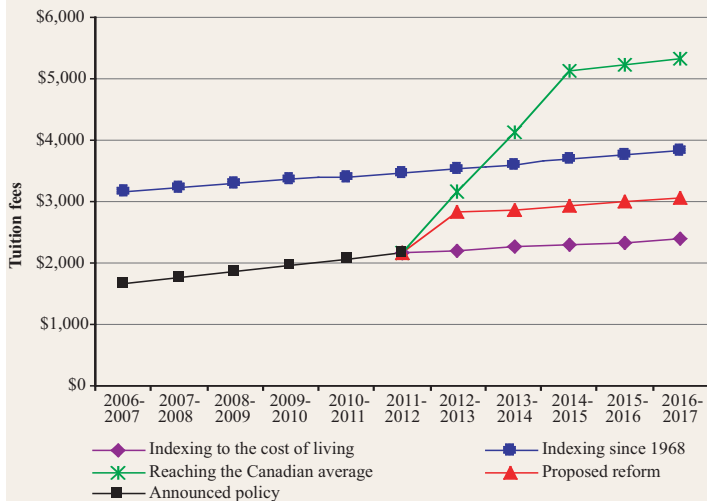
A number of scenarios involving higher tuition fees have been assessed. The Department of Education ordered a study assessing how certain scenarios would affect students.⁴



1. More precisely, 48.5% according to data from the Department of Finance used in Claude Montmarquette, Joseph Facal and Lise Lachapelle, *The right fees to live better together*, Report of the Task Force on Fees for Public Services, 2008, p. 50.
2. This is often taken as a reference year because it corresponds to the peak of federal transfers for postsecondary education. See: FEUQ, FQPPU, FP-CSN, FPPU, FNEEQ-CSN, SCFP, *Déclaration commune des organisations syndicales et étudiantes du réseau universitaire québécois*, January 2006.
3. Robert Lacroix and Michel Trahan, *Le sous-financement des universités québécoises et une proposition de réinvestissement*, CIRANO, March 2007. Estimates of education costs for 2007-2008 were based on average costs observed in 2002-2003 for undergraduates, adjusted according to the consumer price index.
4. Valérie Vierstraete, *Les frais de scolarité, l'aide financière aux études et la fréquentation des établissements d'enseignement postsecondaire*, June 2007, Department of Education, p. 112. Variations in enrolment take account of tax deductions and financial aid for studies.

FIGURE 1

Different scenarios for raising tuition fees (2012 to 2017)



Source: Task Force on Fees for Public Services and calculations by the author. Tuition fees in nominal dollars were calculated by the author, when necessary, for purposes of prediction, based on the hypothesis of 2% annual CPI growth, matching the inflation target set by the Bank of Canada.

According to this study, if tuition fees were indexed to follow the general rise in prices, university enrolment would remain unchanged. If tuition fees rose by double the expected annual inflation rate, enrolment could diminish by about 0.1% in the first year. For this scenario, however, students could react less strongly to higher tuition fees than the model predicts. According to the report's author: "For a majority [of students], eliminating a non-essential expense, for example, or working several hours longer, would exactly offset the tuition increase [...]."⁵

Other studies also found that students' adaptation strategies could lessen the effect of higher tuition fees. Thus, full-time enrolment continued to rise in Ontario in the 1980s and 1990s despite a significant rise in tuition fees.⁶ Moreover, the composition of the student body based on socio-economic origins did not change substantially during these two decades, in particular because support programs intended for disadvantaged students were set up in the same era.⁷

Other scenarios, based on catching up to the Canadian average in tuition fees, have also been suggested. Robert Lacroix and Michel Trahan, respectively the former rector and former executive vice-rector of the University of Montreal, have suggested that, to maintain the competitiveness of Quebec universities, tuition fees in Quebec be increased to reach the Canadian average in three years⁸ and then indexed annually. Their proposal also states that 30% of additional revenues should be used for scholarships awarded to students in financial difficulty. Supposing that the Canadian average rises 2% a year from 2007-2008 to 2014-2015, catching up in three years starting in 2012 would involve an annual increase of \$989.

These scenarios (for a summary, see Figure 1) all fail to take account of the variable cost and return of the different programs. Yet, these factors should be major determinants of the price of university education services to bring the setting of tuition closer to a market process. This aspect is important because tuition fees currently being uniform regardless of cost to the university, and students take little account of this factor in choosing their area of study. Differentiating the price of programs would give students an incentive to compare this price with each area's relative return on the job market. More students can be expected to head to high-demand sectors thanks to this assessment.

A 2012-2017 transitional plan: asymmetric unfreezing

Since neither the current policy on tuition fee increases nor the scenarios studied previously link tuition fee levels to the cost of education in different areas, the problem of uniformity in the price of university studies remains unresolved. That is why this proposal calls for tuition fees to rise asymmetrically from 2012 to 2017. Students in areas of education⁹ with more onerous demands in equipment or human resources would see their

At the end of the announced period of increases in Quebec tuition fees in 2012, they will still be less than 50% of the 2007-2008 Canadian average.

5. *Id.*, p. 109.

6. Christopher Michael, *Rising Tuition Fees: Measuring the Impact Upon Undergraduate Enrolment in Ontario, 1977/78-1996/97*, presentation to the Canadian Institutional Research and Planning Association, October 24-26, 1999, p. 20.

7. Miles Corak, Garth Lipps and John Zhao, *Family income and participation in postsecondary education*, Statistics Canada, October 2003, p. 13, and Marc Frenette, *The Impact of Tuition Fees on University Access: Evidence from a Large-scale Price Deregulation in Professional Programs*, Statistics Canada, September 2005, p. 19.

8. Robert Lacroix and Michel Trahan, *op. cit.*, footnote 3.

9. The proposal covers general areas of studies since costs for each program are not available. Ideally, tuition fees should be set more precisely based on the program.

TABLE 1

Additional annual amount collected in tuition fees for each Quebec university after the proposed reform (in 2007 dollars)

University	Additional amount
Concordia University	\$10,125,686
Université Laval	\$21,077,191
McGill University	\$16,966,981
Université de Montréal	\$27,244,759
Université de Sherbrooke	\$9,687,851
Université du Québec à Montréal	\$8,225,917
Bishop's University	\$1,063,670
HEC Montréal	\$556,848
École Polytechnique de Montréal	\$3,548,355
Université du Québec en Abitibi-Témiscamingue	\$511,201
Université du Québec à Chicoutimi	\$1,679,180
Université du Québec en Outaouais	\$914,807
Université du Québec à Rimouski	\$1,454,086
Université du Québec à Trois-Rivières	\$3,649,880
École de technologie supérieure	\$3,394,180
TOTAL:	\$110,100,592

Source: Department of Education, *Règles budgétaires révisées et calcul des subventions de fonctionnement aux universités du Québec pour l'année universitaire 2006-2007*, General financing and equipment directorate, May 2007, and calculations by the author.

tuition fees go up while those with lower education costs would see their tuition fees rise less quickly or even decrease.

For example, universities could be given the goal of setting minimum tuition fees over time equivalent to the proportion of the education cost paid by social science students in 2007-2008, which was 38.1%.¹⁰ The tuition fees (in 2007 dollars) of humanities students would decrease \$81 in five years while those of social science and management students would remain unchanged. Law students, on the other hand, would see their tuition fees rise by \$432 over five years, while tuition for engineering would go up by \$1,303 and for optometry by \$5,347 over the same period.¹¹ Average tuition fees, weighted according to the proportion of students in each field, would be only \$2,507 after five years (a \$68 annual rise,

Differentiating the price of programs would give students an incentive to compare this price with each area's relative return on the job market.

still in 2007 dollars). This reform would increase the amounts paid by students, and thus university financing, by more than \$100 million a year (see Table 1). This amount would allow the Quebec government to collect a quarter of what the province would otherwise obtain by matching its tuition fees with the 2004-2005 Canadian average.¹²

One fear raised with respect to the possibility of setting tuition fees according to the cost of education is that this would cause a reduction in the number of students in high-demand areas, for example, medicine. However, the areas that would see tuition fees rise most are also those that generally provide the greatest private returns in terms of salary. For example, medical students can hope to receive a salary 21% higher than if they only had a high school diploma, if the cost of studying, taxes, and the lower number of years of work are taken into account.¹³ In pharmacology, this return is 26%. In comparison, the return on studies in humanities or social science is about 8%.

University autonomy after 2017

At the end of the transition period in 2018, full discretion could be left to universities to set tuition fees as they choose. This deregulation of the tuition structure for university studies would allow each university to set tuition fees based on the return of the education offered and on its development strategy. Quebec universities would then have more incentive to compete and develop expertise in key areas. For example, a university that wishes to develop its arts programs could choose to raise its tuition fees in this sector so that it could steer more resources to it, attract better professors and raise the quality of teaching. Conversely, a university that is having trouble recruiting students to a program it wishes to maintain could decide to set lower tuition for the program to make it more popular.

This competition is beneficial because it pushes universities to offer education that is better adapted to students' and employers' needs. It also leads universities to specialize in areas where they have a relative advantage. It thereby encourages them to innovate

10. Department of Education, *Règles budgétaires révisées et calcul des subventions de fonctionnement aux universités du Québec pour l'année universitaire 2006-2007*, General financing and equipment directorate, May 2007, Appendix 1.

11. For reasons of simplicity, amounts are expressed in constant 2007 dollars. See the appendix on the Montreal Economic Institute website for a detailed table showing the expected tuition fee increase in each area of study.

12. Robert Lacroix and Michel Trahan, *op. cit.*, footnote 3, p. 5.

13. Robert Lacroix and Michel Trahan, *op. cit.*, footnote 3, p. 10.

in their practices and in the services they provide. A university that did not maintain its competitive position compared to other establishments would see its student enrolment decline and could lose a significant part of its financing as a result.

This deregulation of tuition fees should apply not only to Quebec students but to all Canadian and foreign students as well. To encourage Quebec universities to compete with American and European universities in recruiting the best talent, the tuition fees required from foreign students could also be deregulated, letting universities keep the full tuition fees paid by these students and compensating universities adequately in cases where agreements between Quebec and other governments allow nationals of the countries involved to pay lower tuition than those set by the university.

The issue of access

Deregulation of tuition fees could lead to substantial hikes in certain areas of study, and this could raise the question of access to university studies. While raising tuition fees may be desirable, access to postsecondary studies is also a goal that must be taken into account. Accordingly, any policy of unfreezing tuition should be accompanied by a support program for the needy. An income-based student loan repayment program (IBR) is a worthwhile option in this instance.

IBR helps students repay their student debt once they have joined the job market. For example, the program may set out a minimum income threshold; former students who earn incomes above this threshold must then start to pay back their student debt in amounts proportionate to the difference between their gross income and the minimum threshold. The repayment period could vary according to various factors: the amount of

the debt, an ex-student's income, or interest rates. IBR could also be brought under the tax system, with payments due added to the amount of tax to be paid. A number of countries use various forms of IBR, notably Australia, New Zealand, the United Kingdom and South Africa. IBR conditions vary greatly from one country to another, suggesting that this type of program can be adapted to each educational system.¹⁴

In brief, IBR is a form of insurance against study-related risks. If a former student were to face an especially difficult situation or were simply to be unlucky on the job market, his or her student loan would not become an insurmountable financial burden. It also helps attenuate the effects of higher tuition fees. In itself, IBR thus encourages university attendance by doing away with part of the uncertainty related to higher education.

Conclusion

Neither a policy of indexing, which would correspond to a tuition fee freeze in real terms, nor tuition asymmetry as outlined here, would provide for the necessary catching-up with competing North American universities. However, the second option is a clear first step toward a less arbitrary policy of setting tuition fees, paving the way for a deregulation of tuition fees that would favour university autonomy in this respect. Even if sharper increases in tuition fees can be expected later, they would not occur to the detriment of access to university studies if they are connected to an income-based student loan repayment program for needy students. A long-term policy of this sort would help ensure the vitality of Quebec universities and the quality of programs they provide.

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14. Claude Montmarquette, *Le remboursement proportionnel au revenu (RPR) : Un système pour les prêts d'études alliant efficacité et accessibilité*, CIRANO, April 2006, p. 8.