

Are Lower Income Families Averse to Financing Post-Secondary Education by Borrowing?

Overview

The objective of this question scan was to locate literature that examines the role of debt aversion pertaining to lower income families' financing of their children's post-secondary education. Utilizing applicable search terms and databases, research was carried out by the Canadian Council on Learning to identify and document relevant literature and resources devoted to debt aversion among lower income groups.

An initial scan of four databases yielded 75 potentially relevant articles. Subsequent examination of the abstracts reduced this number to 50; just six articles related specifically to lower income families. In fact, in a paper prepared for the Canadian Millennium Scholarship Fund, *A Family Affair: the Impact of Paying for College or University*, Hemingway and McMullen (2004) state "no data or studies were found that documented the Post Secondary Education-related debt of Canadian parents." In light of this finding, this scan includes research addressing low income groups as well as research where income level is unspecified

The majority of debt aversion research related to financing post-secondary education appears to emanate from the United States. Many articles illuminate how families and individuals manage and make decisions relating to the fiscal realities of financing an education. Some authors suggest that financing education has become a matter of effectively using financing strategies (i.e. loans, part-time study, 2 or 4 year programs) (Hartle, 1994; Hilmer, 1998).

Observations

Three themes seem to permeate the retrieved articles:

- Problems of paying for post-secondary education – systemic issues, changes in government aide, inflation, etc.
- Methods used to manage debt – making decisions based on cost, choice of schools, enrolment patterns, etc.
- Effects on families and individuals – perceptions of the cost of post-secondary education, how families and individuals manage pre and post matriculation.

Quantitative: 25 articles- These empirical articles are primarily large scale descriptive studies, mostly surveys and questionnaires. A few appropriate articles discuss the systemic changes influencing attitudes towards debt. In *College Debt and the New England Family*, Merisotis and Parker (1996) survey a number of disturbing trends in student borrowing habits before concluding "rising debt and rising costs predict a growing problem of indebtedness among students. Social and economic consequences could be severe if this trend continues."

Of the six articles examining how parents and students actually finance post-secondary education, most illustrate that families sincerely attempt to save or pursue other sources of funding. Souleles (2000) writes in *College Tuition and Household Savings and*

Consumption that households tend to “smooth their consumption into the academic years despite large expenses.” Despite this positive trend, Miller (1996) observes in *Parental Plans and Actions to Finance Higher Education* that fully one third of parents with high school aged children had not begun preparing for the cost of a post-secondary education; although they had investigated financial aid possibilities, relatively few had actually applied.

Ten articles describe families and students’ attitudes towards the costs of post-secondary education. In *Student Attitudes to Student Debt*, Davies and Lea (1995) report “students were found to be a relatively low-income, high-debt group with relatively tolerant attitudes towards debt.” In attempting to determine the influence of debt reduction on college selection, Braunstein, McGrath and Pescatrice (1999) *Measuring the Impact of Income and Financial Aid Offers on College Enrolment Decisions* shows that an increase in financial aid offered by a given institution had a positive impact on enrolment decisions for both parents and students. In addition, Thomas Flint (1997) *Intergenerational Effects on Paying for College* indicates parents’ experiences financing their own education significantly affect how they believe their children’s post-secondary education should be financed.

Qualitative: 17 Articles- Included under this heading are descriptive case studies, narratives and interviews, generally published in academic journals. These articles appear to explore individual and family decision making about post-secondary education and the possibility of accruing large debt. Articles address the systemic problems that contribute to the need to borrow for post-secondary education: a decrease in government expenditure in the form of grants and low interest loans; and, an increase in the cost of higher education and inflation (Bannon and King, 2002; Hartle, 1994). Some articles illustrate that in conjunction with systemic problems, parents are unwilling or unable to pay their share of educational expenditures due to decreased family savings, increased consumer debt, and an unwillingness to sacrifice their own luxuries (Reisberg, 1999).

Qualitative articles address how families and individuals respond to the high cost of post-secondary education. Many articles illustrate that perception of post secondary education costs shape attitudes towards them. Sanoff (2004) *Americans See Money for College Somewhere over the Rainbow* discovers many American parents believe government should subsidise post-secondary education, without considering where this benefit might originate. In *Students' Attitudes Toward Debt*, Bell, Grayson and Stowe (2001) reveal that educated individuals with positive attitudes about debt were far more likely to have begun saving at an earlier age.

Perception is not the only factor affecting attitudes towards debt. Gladieux and Swail (2000) *Is College Affordable? Sorting Perception and Reality*, suggest that while perceptions of costs dissuade many from attending college or university, students from low- and moderate-income families are increasingly adversely affected by trends in tuition, family income, and student aid.

Editorials: 5 Articles- These are position papers advocating for a particular measure, or illustrating problems in current understandings of debt's role in decision making situations. The majority of these articles illustrate the systemic failures that lead to parents and students feeling chiefly responsible for the financial burden incurred by post-secondary enrolment. Burd (2002) *Rift Grows over What Keeps Low-Income Students out of College* illustrates a basic problem in understanding debt aversion: there is no clear answer as to what keeps low-income students out of college. What is clear to Bill Graham (2000), President of Canadian Association of University Teachers is "Low- and middle-income families are now paying a far greater share of their disposable income in tuition. The situation is simply not sustainable."

Reports: 3 Articles- These reports sponsored by the Canadian Government provide insightful reading on the topic:

- Hemingway and McMullen (2004) *A Family Affair: the Impact of Paying for College or University* written for the Canada Millennium Scholarship Foundation looks at the increasingly difficult time families are having keeping up with the cost of post-secondary education. They observe the paucity of study on the amount of household debt related to educational spending.
- Corack, Lipps, and Zhao (2003) use statistical charts and analysis in *Family Income and Participation in Post-Secondary Education* to illustrate graphically many of Hemingway and McMullen's observations.
- Usher (2005) *A Little Knowledge is a Dangerous Thing: How Perceptions of Costs and Benefits Affect Access to Education* finds that many low income families have misperceptions about the cost and value of post-secondary education which leads to lower participation rates.

Summary

From the reviewed articles it is difficult to establish to what extent debt aversion pertaining to educational expenditure is a problem endemic to lower income groups specifically. Rather, aversion to debt is shared by all those uneasy with the increasing costs of education, especially compared to smaller increases in real incomes. Perception of the costs of post-secondary education is consistently overestimated while its value is underappreciated. This unsubstantiated belief plays an alarmingly large role in post secondary decision making for many families especially among lower income groups. How to upend this "common wisdom" is unexplored in the research. Parents' education also helps determine whether accumulating debt for post-secondary education is regarded a worthwhile undertaking. Families and individuals who see value in post-secondary education appear willing to sacrifice for it financially, whether before, during, or after the student's post-secondary attendance.

Feasibility:

The volume of literature in this domain is not sufficient to warrant a systematic review of the literature.

Appendix A: Included References

References - Canada

- Education Moving out of Reach [report: Out of reach: Trends in household spending on education]. (2000). *CAUT Bulletin*, 47(3), 3.
 "The soaring cost of post-secondary education has placed a considerable burden on low- and middle-income households," the report concludes. "If current trends continue, access to post-secondary education will be increasingly divided along income lines." "What's particularly troubling is that out-of-pocket spending on post-secondary education has ballooned at the same time that household incomes have declined," noted CAUT president Bill Graham. "Low- and middle-income families are now paying a far greater share of their disposable income in tuition. The situation is simply not sustainable."
- Bell, S., Grayson, J. P., & Stowe, S. (2001). Students' Attitudes toward Debt--A Study of Atkinson Faculty of Liberal and Professional Studies, York University, and Ryerson University. *Journal of Student Financial Aid*, 31(3), 7-19.
 A survey of Canadian undergraduates found that when all else is held constant, students with positive attitudes toward debt are more likely than others to have an Ontario Student Assistance Plan loan.
- Corak, M., Lipps, G., & and Zhao, J. (2003). Family Income and Participation in Post-Secondary Education (Analytical Studies Branch research paper series No. 210). Ottawa, Ontario: Family and Labour Studies Division Statistics Canada. (family income) September 30, 2005, from the <http://www.statcan.ca:8096/bsolc/english/bsolc?catno=11F0019M2003210> database.
 The relationship between family income and postsecondary participation is studied in order to determine the extent to which higher education in Canada has increasingly become the domain of students from well-to-do families. An analysis of two separate data sets suggests that individuals from higher income families are much more likely to attend university, but this has been a long-standing tendency and the participation gap between students from the highest and lowest income families has in fact narrowed. The relationship between family income and postsecondary participation did become stronger during the early to mid 1990s, but weakened thereafter. This pattern reflects the fact that policy changes increasing the maximum amount of a student loan as well as increases in other forms of support occurred only after tuition fees had already started increasing.
- Dennison, D. J., & Schuetze, G. H. (2004). Extending Access, Choice, and the Reign of the Market: Higher Education Reforms in British Columbia, 1989-2004. *The Canadian Journal of Higher Education*, 34(3), 13.
 Inevitably, there was pressure on governments to provide more seats in degree programmes as demand from prospective students grew and public interest intensified. The response by provincial governments in the 1990s was threefold. First, established universities were funded to increase capacity. Second, a number of

new universities or university-like institutions were established. Finally, some non-university institutions in a few provinces were authorized to offer "applied" degree programmes. The latter was a clear departure from prior practice under which the term "degree" (as was the term "university") was protected so institutions other than universities could not grant degrees. The concept of a post-secondary institution offering degrees and at the same time technical, vocational, and adult education programmes, was new to Canada. They defied clear definition: in one province they were labelled university colleges and in another, Institutes of Technology and Advanced Learning. Neither name seems fully satisfactory. Of greater consequence was the question of accreditation, the wish to be included in the degree granting community of institutions, previously dominated by traditional universities. As no formal path to accreditation exists for public institutions in Canada, the solution undoubtedly lies with the passage of time, student and faculty performance, and public support. A similar dilemma confronts those holding the "new" or "applied" degrees. Inevitably, graduates holding the new degrees will be under scrutiny. Again, time and the success of graduates in the universities and the workplace will ensure the credibility of the applied degrees just as their acceptance has been long assured in countries such as the UK, Germany, New Zealand and Europe, Australia, and other advanced societies. The concept of "applied" degrees remained as vague as ever. Traditionally, universities had offered, together with Arts and Science, a wide range of "professional" (Commerce, Law, Dentistry, and so on) degrees. Although the concept of an "applied" degree has long been accepted in Europe and the United Kingdom, in Canada there had been no conceptual distinction between academic and professional degrees, even if there might have been a status gap between academic and applied studies.

Hemingway, F. C., & McMullen, Kathryn, CPRN. (2004). A Family Affair: the Impact of Paying for College or University (Literature Review No. MRS14). Montreal, QC, Canada: Canada Millennium Scholarship Foundation. (Family Affair) September 30, 2005, from the

<http://www.millenniumscholarships.ca/en/research/AllPublications.asp> database

Over the past decade, major shifts have taken place in the funding of Canadian post-secondary education, with implications for the financing of student participation. More of the costs of postsecondary education (PSE) are now being borne by students, while governments have reduced their direct post-secondary funding on a per-student basis. The evidence suggests that many families may be unprepared for the costs they will face in helping their children pursue a postsecondary education.

Hoy, Michael, Christofides, N. L., & Cirello, Jim. (2001). Family Income and Postsecondary Education in Canada. *The Canadian Journal of Higher Education*, 31(1), 177.

These results shed light on a number of important issues concerning equity and efficiency in the financing of postsecondary education. It is clear that, whatever the reason, the time period 1975 to 1993 has seen a larger increase in postsecondary education for individuals from relatively lower income families. Although individuals from higher income families are still more likely to attend postsecondary

education, the extent to which the benefits of government subsidies for postsecondary education are enjoyed disproportionately by higher income individuals and families has been reduced and so the regressive impact of government subsidization of postsecondary education has fallen over this period. Our results suggest that, although the expected positive effect of increasing family income on postsecondary education participation is stronger at lower income levels, this property in conjunction with overall increasing family income over this period is not strong enough to explain the higher rate of growth of postsecondary participation rates of children from lower income families. Alternatively, long-term trends in postsecondary education have been very important and relatively more important for low income families in explaining increasing rates of participation in postsecondary education. Income, however, continues to exert a strong influence on participation rates for any given year. This suggests that imperfect capital markets may continue to play a role in determining the decision to attend postsecondary education. Finally, to the extent that there has been significant convergence in participation rates in postsecondary education between income classes, which is independent of trends in income levels, there is reason to believe that trends in postsecondary education attendance will exert a positive influence on social mobility and equality of incomes in the future. The data for this study are drawn from the available Surveys of Consumer Finance (SCF). These include the SCFs for 1975, 1977, 1979, 1981, 1982, and 1984 to 1993. Although a survey is available for 1983, it is not used because information on a critical variable, the number of children attending school, is presented in a manner which is not consistent with the fourteen other SCF surveys. (8) Each SCF tape was used to construct the sub-sample of particular interest, namely that of families with children aged between 18 and 24. (9) (The SCF defines an economic family as a group of individuals living together and related by blood, marriage or adoption.) Since we are interested in the forces that determine attendance at postsecondary institutions, we focus on the number of children attending school on a full-time or part-time basis. The variable Children at School (CAS) is the subject of study of a Poisson count data model. This model is suitable for the study of count variables such as the number of children at school (CAS). (Note that CAS is the variable used in Table 3.) The propensity for postsecondary education involves the variable CAS in relation to the total number of children (Children) in the relevant age group (18 to 24) in the economic family. In exploratory Ordinary Least Squares (OLS) regressions, we study the variable PROP that is the number of children at school relative to the total number of children of the relevant age in the family (CAS/Children). This is the variable used in Tables 1, 2 and 4. In addition, we report a Probit equation which focuses on the probability that a given family unit will have at least one child at school. In this latter specification, the dependent variable (I) takes the value of 1 if a family has at least one child in postsecondary education and is equal to 0 otherwise. All three specifications take into account the influence of the number of children in the family on the dependent variable -- i.e., on the variables PROP, CAS and the Probit index. The three approaches (OLS, Poisson regression and Probit) have different strengths and deal with slightly different aspects of the problem at hand. They are complementary and together they serve to produce some confidence about the statistical significance of

the variables used to account for the observed patterns of postsecondary education. The statistical appropriateness and properties of these models are considered further in the next section.

Usher, A. (2005). *A Little Knowledge is a Dangerous Thing: how Perceptions of Costs and Benefits Affect Access to Education*. (Canadian education report series) Toronto, ON: Educational Policy Institute. September 30, 2005, from the <http://www.educationalpolicy.org/publications.html>

This study introduces the concept of cost-barriers to education and the decision-making framework within which individuals determine whether or not to invest in post-secondary education, and explores Canadians' perceptions of the costs and benefits of a university education. The purpose of his paper is therefore twofold: to investigate the quality of the information available to Canadians and whether or not that information might affect rational decision-making in such a way as to be called a "barrier" to education in its own right. Using data from a survey commissioned by the Canada Millennium Scholarship Foundation in 2003, this report finds that substantial differences exist in Canadians' perceptions of the returns to university education and that these differences are primarily income-related. However, this barrier of poor information is not actually financial in nature, but can best be described as an income based, non-financial barrier.

References - USA

Adding it up: The Price-Income Squeeze in Higher Education. (1997). *Change*, 29, 45-48.

The price-income squeeze in higher education has resulted in a public that is desensitized to explanations of why higher education now costs so much. Against the simple standard supplied by a family's own income, the current price of four years of baccalaureate education cannot be justified. Therefore, the public does not care for explanations of the high costs but cares for a better balance between costs and benefits. An analysis developed to make palpable the meaning of recent changes in the nation's economic climate for higher education is presented.

Footing the bill: The Shifting Burden of Higher Education Finance. (1996). *Change*, 28, 49-52.

The recent actions of state and federal governments signal a new willingness to ask student beneficiaries to assume a greater share of their educations' costs. The implications of this change of attitude may include reduced access to higher education for a significant portion of the population and an increasing number of institutions that pay more attention to the rhythms of the marketplace than to any broader notion of serving the public good. The writers discuss some of the tough choices now facing institutions of higher education and their students.

Bannon, E., & King, T. (2002). The Burden of Borrowing: Reversing the Trend toward Unmanageable Student Debt. *Student Aid Transcript*, 13(4), 49-53.

This article analyzes "skyrocketing" student debt levels, discussing debt burden, borrowing trends among student subpopulations, and why debt is increasing. It asserts that to reverse these trends, particularly among low-income and minority families, Congress must increase grant aid, lower the cost of borrowing to students, and make repayment less burdensome.

Braunstein, A., McGrath, M., & Pescatrice, D. (1999). Measuring the Impact of Income and Financial Aid Offers on College Enrollment Decisions. *Research in Higher Education*, 40(3), 247-259.

A study analyzed demographic, socioeconomic, and financial factors in enrollment behavior of accepted applicants to Iona College (New York). Financial aid had a positive impact on enrollment decisions (excepting upper-income applicants): for every \$1,000 increase offered, probability of enrollment increased 1.1 to 2.5%. Work-study was not influential unless packaged with other aid forms.

Burd, S. (2002). Rift Grows over What Keeps Low-Income Students out of College. *The Chronicle of Higher Education*, 48(20), A18-19.

Researchers are increasingly divided on the question of what prevents low-income students from going to college. Some believe that the primary obstacle is a lack of money but others point to a lack of preparation. Each side is staking its ground as the government prepares to reauthorize the Higher Education Act, which governs student aid programs.

Choy, S. P. (1999). College Access and Affordability. *Education Statistics Quarterly*, 1(2), 74-90.

Examines the extent to which the financial-aid system promotes access to postsecondary education by equalizing income differences. Describes ways in which students and their families cope with the increasing costs of college, and explores the consequences of full-time and part-time work on college persistence.

Choy, S. P., & Bobbitt, L. (2000). Low-Income Students: Who They Are and How They Pay. *Opportunity Outlook*, 9-11.

This article examines the characteristics of low-income undergraduates and how they pay for college. It examines their financial need, describes the contribution of financial aid, and presents what is known about how they close the gap between their costs and the amount of aid they receive.

Dynarski, S. (2000). Hope for Whom? Financial Aid for the Middle Class and its Impact on College Attendance. *National Tax Journal*, 53(3), 629-61.

Dynarski, S. M. (2003). Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion. *American Economic Review*, 93(1), 279-88.

Finnie, R., & Garneau, G. (1996). An Analysis of Student Borrowing for Post-Secondary Education. *Canadian Business Economics*, 4(2), 51-64.

Finney, J. E., & Kelly, P. J. (2004). Affordability: Obtaining and Making Sense of Information about How Students, Families, and States Pay for Higher Education. *Change*, 36(4), 54-59.

Affordability, the ability of students and other sources to offer financial support to colleges and universities, is a subject of increasing importance. The writers assess the affordability of college from two perspectives: from that of students and their families and from that of the state. They also identify numerous references to up-to-date databases, analyses, and policy perspectives that are relevant to issues of affordability in higher education.

Flint, T. (1997). Intergenerational Effects of Paying for College. *Research in Higher Education*, 38(3), 313-344.

A study of families' means of paying for college using data from the National Postsecondary Student Aid Study strongly indicates that part of the process of deciding how students should pay for college is the parents' college financing experience. These effects appear in patterns in parent contribution, amount of financial aid received, and use of student's earnings.

Flint, T. A. (1994). Ideal vs. Real Dependent Student Family Contributions. *Journal of Student Financial Aid*, 24(3), 13-32.

Analysis of the family contributions of 2,544 dependent first-time college students at 396 institutions revealed that, although many parents contribute more than anticipated, many inequities among income groups persist, regardless of college cost level. Policy alternatives to reduce inequities are discussed.

Gladieux, L. E., & Swail, W. S. (2000). Is College Affordable? Sorting Perception and Reality. *The College Board Review*, (189-190), 55.

The writers discuss whether college is affordable. Research indicates most students and families tend to overestimate the prices of college and underestimate the availability of student financial aid. In fact, some students are deterred from pursuing a postsecondary career because of such misperceptions. Nevertheless, students from low- and moderate-income families have serious problems with trends in tuition, family income, and student aid.

Grassmuck, K. (1990). Fewer Students from Middle Class Enrolling in College. *The Chronicle of Higher Education*, 37, A1.

Hansen, J. S. (1991). The Shifting Roles of Parents and Students. *New Directions for Higher Education*, (74), 21-31.

Hartle, T. W. (1994). How People Pay for College: a Dramatic Shift. *The Chronicle of Higher Education*, 41, A52.

Between 1990 and 1994, the number of federal loans made to students and families

in the United States increased by almost 50 percent. Most of the increased borrowing is the result of provisions in the 1992 reauthorization of the Higher Education Act. The increase in student loans has not been accompanied by an increase in student grants, and most students are now expected to fund their own higher education.

Hilmer, M. J. (1998). Post-Secondary Fees and the Decision to Attend a University or a Community College. *Journal of Public Economics*, 67(3), 329-48.

This paper examines the effect that postsecondary fees have on a potential student's decision to start his or her college education at a university or a community college. A theoretical model demonstrates that the student's decision follows a natural ordering that depends on his or her probability of graduation. Based on this natural ordering, ordered probit is used to estimate the effect of interstate variation in fees on student attendance. The results indicate that the own-price effects of fee increases are negative while the cross-price effects are positive.

Hoover, E. (2003). Families See Plentiful Options and Tough Choices on Paying for College. *The Chronicle of Higher Education*, 49(34), A15-16.

A survey by the Chronicle of Higher Education revealed that 41 percent of participants believed that the quality of education at private colleges is better than that at public colleges. However, this view is not substantiated in practice, with almost twice as many students attending four-year public institutions as four-year private institutions.

Hossler, D., & Vesper, N. (1993). An Exploratory Study of the Factors Associated with Parental Saving for Postsecondary Education. *Journal of Higher Education*, 64(2), 140-165.

Using longitudinal college student (n=2,497) and parent data and interviews of a sub sample (n=60), a study examined factors associated with parental savings for students' postsecondary education. Results suggest that socioeconomic status, student educational aspirations, and the extent to which parents think they will need outside financial help influence family savings.

Kalenkoski, C. M. (2005). Parents who won't Pay: Expected Parental Contributions and Postsecondary Schooling. *Public Finance and Management*, 5(1), 1-59.

Evidence from the High School and Beyond (HS&B) Surveys indicates that many parents of first-year college students do not make their Expected Parental Contribution (EPC) toward their child's postsecondary education. This is a concern because children with under-contributing parents may experience lower schooling outcomes than those with parents who make their expected contributions. This paper investigates the effects of changing the EPC on several schooling outcomes as well as the effects on scholarships and grants and parental transfers. The results indicate that changing the EPC does not affect the decision to enroll in postsecondary school or the amount of schooling expenditures, although it does affect whether or not a non-vocational student enrolls in a four-year program. The results also indicate that increasing the EPC negatively affects the amount of scholarships and grants received by a student while positively affecting parental transfers, suggesting a tradeoff

between external and parental funds in the financing of a child's postsecondary education.

Kane, T. J. (1996). College Cost, Borrowing Constraints and the Timing of College Entry. *Eastern Economic Journal*, 22(2), 181-94.

Magner, D. K. (1988). Young People Found Widely Misinformed About Cost of College. *The Chronicle of Higher Education*, 35, A1.

Manton, E. J., & English, D. E. (2002). Do Recent College Graduates Regret the Amount of Funds Borrowed for Educational Purposes? *Education (Chula Vista, Calif.)*, 123(1), 82-89.

The purpose of the study was to determine if recent graduates of Texas A&M University-Commerce would change their borrowing patterns in their college loans. It was expected that the majority would now change the amounts borrowed and that they would now borrow less than they actually have. In the spring of 2000, 661 questionnaires were sent to the A&M-Commerce graduates from the summer and the fall terms of 2000. One hundred and thirty four responses were received and of these 62 reported having a Stafford Loan outstanding. Sixty one percent indicated that they would now change their borrowing pattern which substantiates the expectation (hypothesis) of the study. A somewhat surprising result was that almost ten percent of these graduates would now borrow more in order to study more, do better in grades, and participate in more social activities and/or to be able to spend more time with their families. Of those who would now borrow less, the major reason is that the loan is too difficult to repay. Almost 80[percent] of the graduates rated the Stafford Loan Program "good", "very good", or "excellent" and over 80[percent] indicated that they either could not have completed their program or only could have done so with difficulty if the loan program was not available. Reprinted by permission of the publisher.

McPherson, P. (1996). Affordability and the Public Institution. *Educational Record*, 77, 15-16.

Part of a special section on the aims and objectives of higher education in the 21st century. Public colleges and universities need to stop procrastinating and introduce real reforms to cut costs. For American families, the higher education issue of the decade is financing college costs. Higher education institutions must show that they can and will attack the problem of increasing tuition and costs or else face the intrusive government action that public pressure may prompt. However, the most difficult task involves an ambitious agenda, and the establishment of institutional priorities and the preparation of tough program decisions should top the list.

Merisotis, J. P., & Parker, T. D. (1996). College Debt and the New England Family. *Connection: New England's Journal of Higher Education and Economic Development*, 11(1), 18-19.

Between 1991 and 1994, college student borrowing increased by 28% annually, higher than the national rate. The highest rates are among older, part-time,

independent and minority students. Rising debt and rising costs predict a growing problem of indebtedness among students. Social and economic consequences could be severe if this trend continues.

Miller, R. A. (1996). Parental Plans and Actions to Finance Higher Education. *Journal of Student Financial Aid*, 26(1), 45-47.

Analysis of data from National Education Longitudinal Study found that a third of parents of high school seniors had not begun preparing for college costs and a quarter had begun only recently. Most did not expect savings to cover costs and had investigated financial aid but relatively few had applied. Grants, scholarships, and fellowships were preferred over work and loans.

Muffett, D., & Others. (1990). The Parents' Perspective on Financing their Child's College Education. *Journal of Student Financial Aid*, 20(1), 32-41.

The parents of college students at a large state university in the Midwest were surveyed to analyze the parents' perspective on college financing. Results offered insight into what parents think and know about college financing and point to ways parents can be better informed about the college financial aid process.

Paulsen, M. B., & St John, E. P. (2002). Social Class and College Costs: Examining the Financial Nexus between College Choice and Persistence. *Journal of Higher Education*, 73(2), 189-236.

Examined how students' enrollment responses to college cost--both in college choice and persistence decisions--vary by social class. Found substantial class-based patterns of enrollment behavior in response to prematriculation perceptions of college costs and actual postmatriculation costs, consistently restricting postsecondary opportunities for lower-income relative to higher-income students.

Powell, B., & Steelman, L. C. (1989). The Liability of Having Brothers: Paying for College and the Sex Composition of the Family. *Sociology of Education*, 62, 134-147.

Reisberg, L. (2000). Many Families are Not Prepared to Finance College Educations, Survey Finds. *The Chronicle of Higher Education*, 47(13), A58.

A new study has found that many families are not adequately prepared to finance the increasing cost of their children's college education. The study warned that these families will be forced to work more, use retirement funds, or take a second home mortgage. Although the study has received political and academic backing, some higher education officials are skeptical about its dollar figures.

Reisberg, L. (1999). Why Parents are paying a Smaller Share of the Tuition Bill. *Chronicle of Higher Education*, 45(31), A45, 47.

Parents are covering less of their children's college costs than ever before, according to a recent study. On average, parents contributed 55% in 1997-98, down from 69% in 1986-87; during the same period, college costs increased 38%. Reasons include

decreased family savings, higher consumer debt, incomes not keeping up with inflation, and unwillingness to sacrifice luxuries.

Sanoff, A. P. (2004). Americans See Money for College Somewhere over the Rainbow. *The Chronicle of Higher Education*, 50(34), B6-8.

Part of a special issue on admissions and student aid. A recent study has revealed that a clear majority of American adults think the government should do more to help needy students pay for college. These represent an implicit recognition that many families are struggling to pay college costs. However, although the public seems to have a fairly realistic idea of costs when it comes to personal expenditures for college, it seems to be living in a world of illusion when it comes to government. The findings highlight the need for discussion about where additional government money would come from and what the fiscal trade-offs would be. Further findings from the study are discussed.

Schmidt, P. (2000). Boom in Savings Plans is Changing the Way Families Pay for College. *Chronicle of Higher Education*, 46(32), A42-A43.

A review of the current status of state prepaid tuition plans and savings trust plans suggests that there is an accelerating trend toward participation in such programs. Also notes competition among programs and some problems (such as a negative audit in Colorado).

Souleles, N. S. (2000). College Tuition and Household Savings and Consumption. *Journal of Public Economics*, 77(2), 185-207.

Despite the high cost of college, there has been little study of the adequacy of household savings and other resources available to fund college. To gauge their adequacy this paper examines households' standard of living as they pay for college. Using the Consumer Expenditure Survey, the main finding is that households appear to do a relatively good job smoothing their consumption into the academic year, despite large expenses. This is consistent with the Life-Cycle Theory of saving and consumption. There is some evidence of a delayed decline in consumption and of a decline for households with children first beginning college, but the magnitudes of these declines are rather small.

Steelman, L. C., & Powell, B. (1993). Doing the Right Thing: Race and Parental Locus of Responsibility for Funding College. *Sociology of Education*, 66(4), 223-244.

Asserts that, although minority groups have made progress in educational attainment, they still face barriers to higher education. Reviews statistical data from two national studies. Finds that, once background characteristics are held constant, minority parents make as much, if not more, effort to save money and support their children as do white parents.

Vail, K. (2002). Higher Costs Put Higher Ed Out of Reach. *The American School Board Journal*, 189(5), 20-21.

A January 2002 report by the Lumina Foundation for Education in Indianapolis claims that higher education is increasingly unattainable for low-income students.

According to the report, even with loans and grants, low-income students have access to fewer colleges than students from middle-income families. Other findings of this report are discussed.

Weiler, W. C. (1991). The Effect of Undergraduate Student Loans on the Decision to Pursue Post Baccalaureate Study. *Educational Evaluation & Policy Analysis, 13*, 212-220.

Previous research on the demand for graduate study has not focused on the effect of undergraduate indebtedness on individual decisions to pursue a graduate degree. In this article, a modified version of the approach typically used to analyze the transition from high school to college is used to study this effect. Estimates indicate that the level of undergraduate debt is not a significant factor in determining a student's choice of whether to enter the labor market or continue his or her education. However, this result is subject to qualifications related to the way choices facing students had to be specified, given available data.

References- International

Davies, E., & Lea, S. E. G. (1995). Student Attitudes to Student Debt. *Journal of Economic Psychology, 16*(4), 663-79.

Levels of debt and attitudes towards debt were investigated in a sample of undergraduate students. Students were found to be a relatively low-income, high-debt group with relatively tolerant attitudes towards debt. Some of the variables that have been found to be associated with debt in general public samples were also found to have significant effects in the student group: these included religion, age, number of credit cards used, and more tolerant attitudes towards debt. In addition, men were more likely to be in debt than women. Variables correlated with tolerant attitudes towards debt included age, some kinds of expenditure, religion, and external locus of control. A pseudo-longitudinal design was used to examine the relationship between attitudes and debt: cohort (year of study) was taken as a proxy for time. Higher levels of debt, and greater tolerance of debt, were found in students who had been at university longer. The increase in debt occurred earlier in students' careers than the increase in tolerance towards debt. The results are interpreted in terms of a life cycle theory of economic behaviour, and a behavioural theory of attitude change. Students come from relatively prosperous socioeconomic groups but have low incomes which they perceive as temporary; to sustain their expected life style, they have to accept some level of debt. Their attitudes then adjust towards tolerance of debt so as to ensure consistency.

Ezewu, E. E. (1986). The Relative Contribution of the Extended Family System to Schooling in Nigeria. *The Journal of Negro Education, 55*, 222-228.

Hook, S. (2002). Parents Must Prepare to Pay. *The Times Educational Supplement*, (4501), 35.

The Learning and Skills Research Centre in Great Britain has warned that poor families will struggle in a world where students will have to increasingly pay for their own learning. The center fears that less affluent families are not ready for a huge culture change that will require students to pay in order to help fund the expansion of post-16 education.

Johnstone, D. B. (2004). The Applicability of Income Contingent Loans in Developing and Transitional Countries. *Journal of Educational Planning and Administration*, 18(2), 159-74.

In the face of rapidly rising costs of higher education, various countries are turning to forms of cost sharing. Portions of costs formerly borne predominantly or exclusively by taxpayers are increasingly shared by parents and/or students. Policies calling for students to share these costs generally call for some form of government-sponsored student loans. Countries like Sweden, Britain, South Africa, Australia and New Zealand provide different kinds of income contingent student loans, in which repayment obligation is expressed as some percentage of future income or earnings. Supporters frequently portray this loan form as inherently superior to more conventional forms of fixed repayment schedules. Examining this presumption, with particular reference to its applicability in developing and transitional countries, the paper finds income contingent forms of repayment obligations to be highly variable and in all ways still constituting a student loan, carrying for most students a rate of interest, that may or may not be to the advantage of the student borrower, frequently to conventional loan forms from the perspective of the lender, which is generally the government.

Metcalf, H. (2005). Paying for University: The Impact of Increasing Costs on Student Employment, Debt and Satisfaction. *National Institute Economic Review*, 0(191), 106-17.

The costs of higher education in the UK have shifted increasingly from the state to the student (and students' families). In 1998, a fee contribution of L1, 000 per annum was introduced for new entrants to full-time degree courses. This paper examines its effect on debt, term-time employment and student satisfaction. The analysis uses data from a survey of two cohorts of students and identifies how the impact varied with student and course characteristics. Fees led to an increase in student debt (particularly for disabled students and for students who did not receive financial support from their families) and a decline in student satisfaction. No general impact on term-time employment was identified, but term-time employment increased for students who did not receive financial support from their families. Whilst for these two groups inequality was increased, fees appeared to lead to greater equality, in terms of term-time employment, between children of graduate and non-graduate parents. The paper discusses the implications for the introduction of top-up fees in 2006.

Pennell, H., & West, A. (2005). The Impact of Increased Fees on Participation in Higher Education in England. *Higher Education Quarterly*, 59(2), 127-137.

The writers examine the possible effects of the higher education reforms in England on participation in third-level education among students from lower socioeconomic backgrounds. A key element of the reforms is the introduction of "top up" fees set at up to L 3,000 per annum for undergraduate students that will be repayable after students graduate and earn over L 15,000 per annum. In addition, a package of measures relating to means-tested grants, remission of fees grants, and student loans is to be introduced. It remains to be seen what effect this new financial regime will have on applications from prospective students from low-income families, but there is a concern that the incentives for those who are highly debt-averse and cost-conscious may not be sufficient to increase participation in higher education to meet government targets.

Appendix B: Excluded References

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