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ABSTRACT

This collection of reports analyzes the roles and responsibilities of the major participants in the financing system for postsecondary education. The six papers present: (1) a conceptual basis for the roles of the various parties in postsecondary education finance and a description of changes in these roles and the difficulties posed for longitudinal data; (2) an examination of trends in the proportion of higher education costs borne by federal, state, and local governments, philanthropy, the family, and other sources from 1950 to 1990; (3) a comparison of postsecondary financing systems in the United States and 10 other countries; (4) case studies of 5 federal programs showing how laws, regulations, and program practices operate to discourage federal human resource program beneficiaries from pursuing postsecondary education and training; (5) a discussion of proposals to adjust the current trend analysis models and improve the student aid delivery system pending before Congress in the last reauthorization of the Higher Education Act; and (6) a proposal for policy remedies including consolidation of federal programs and simplifications in need analysis to reduce the complexity of the financial aid process. Papers and their authors are as follows: "Changing Roles in Higher Education Financing" (Martin Kramer); "Trends in Paying for Higher Education, 1950-1990" (Arthur Hauptman and David Rose); "Postsecondary Education Financing: International Comparative Models" (Melora Sundt); "Problems in Coordinating Federal Student Assistance with Other Federal Income Support and Human Resource Programs" (Lawrence N. Gold); "Need Analysis and Delivery: Options and Issues" (Ruth Beer Bletzinger); "The Final Report of the Vermont Task Force" (The Vermont Task Force). (GLR)

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NATIONAL COMMISSION ON RESPONSIBILITIES
FOR FINANCING POSTSECONDARY EDUCATION

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The National Commission on Responsibilities for Financing Postsecondary Education would like to acknowledge the efforts of those who contributed to this volume. In particular, we would like to thank authors Martin Kramer, Arthur Hauptman, David Roose, Melora Sundt, Lawrence Gold, Ruth Beer Bletzinger, and the members of The Vermont Task Force—Karrin Wilkes, Jonathan Silverman, Joseph Moore, Jeffrey Higgins, Judith Hastings, Henry Geller, and Mark Fitzsimmons. This compendium of background papers was prepared by Commission staff who worked with Executive Director Jamie Merisotis—Colleen O'Brien, Maureen Hill, and Julie Goldman—as well as consultant Holly Hexter. Responsibility for the content and viewpoints expressed in the papers rests solely with the authors.

FOREWORD

The National Commission on Responsibilities for Financing Postsecondary Education was created by the United States Congress to chart long-term options for restructuring postsecondary education finance and to make recommendations to the President and Congress. The nine-member bipartisan commission, composed of both Congressional and Presidential appointees, is an independent federal agency.

To fulfill its mandate, the Commission examined the roles and responsibilities of the major participants in the financing system. This was accomplished through a variety of activities, including regional hearings held across the nation and nearly a dozen meetings of the Commission. In the spring and summer of 1992, the Commission sponsored two intensive seminars and a national symposium in which participants diagnosed the major ills of the current system and prescribed various remedies for its reform. In February 1993 the Final Report of the National Commission, which urged major changes in the way federal student financial assistance is provided, was submitted to the President and Congress.

To help accomplish its work, the Commission asked distinguished analysts to produce the six background papers that make up this volume. Two of the papers look at the distribution of burden sharing among the participants in the postsecondary finance system. Martin Kramer's monograph outlines the conceptual basis for the roles of the various parties in postsecondary education finance and describes changes in these roles and the difficulties they pose for longitudinal data. Arthur Hauptman and David Roose examine trends in the proportion of higher education costs borne by federal, state and local governments, philanthropy, the family and other sources over a 40-year period, from 1950 to 1990.

Three other papers were solicited to inform the Commission on specific higher education financing issues. Melora Sundt's monograph on international comparative models describes postsecondary financing systems in the United States and 10 other countries. Lawrence Gold's case studies of five federal programs show how laws, regulations and program practices operate to discourage federal human resource program beneficiaries from pursuing postsecondary education and training. Ruth Beer Bletzinger analyzes proposals to adjust the current need analysis models and to improve the student aid delivery system that were pending before Congress in the last reauthorization of the Higher Education Act (P.L. 102-325, which was enacted in July, 1992).

The final component in this volume was the product of a university-based research team. The seven-member Vermont Task Force, which was formed to assist the Commission, proposes a variety of policy remedies including consolidation of federal programs and simplifications in need analysis to reduce the complexity of the financial aid process.

The collective contributions of these essays to the discussions of the Commission and, ultimately, to the Final Report, have been substantial. The Commission publishes this volume in the hope that it will further inform issues surrounding the responsibilities for financing postsecondary education.

Jamie P. Merisotis
Executive Director
April 1993

Changing Roles in Higher Education Financing

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CHANGING ROLES IN HIGHER EDUCATION FINANCING

Martin Kramer

INTRODUCTION

The financing of postsecondary education in the United States can be seen in different ways, depending on the eye of the beholder. It can be viewed as a chaotic enterprise. Alternatively, it can be viewed as an admirable example of financial pluralism. In either view, it is undeniably complex. This complexity is always present, whether we are seeking to understand the system as it is, as it has developed or as it ought to be. This paper is intended as an introduction to that complexity.

A number of parties make decisions about spending for higher education, and we need concepts that illuminate their varied motivations to understand the way they share financial burdens and the trends affecting their distribution.

To take the most conspicuous example of such trends, it is undeniably true that the parents of students pay a far lower fraction of aggregate educational costs than they did 50 or 60 years ago. According to the analysis of Alan Cartter and June O'Neill, in a 1973 Carnegie Commission Report on Higher Education, the share of total monetary outlays for higher education paid by families in the 1939-40 academic year was 63.7 percent, which mainly represented spending by parents. The continuation of the Cartter-O'Neill analysis (with many caveats) shows the family share had fallen to 37 percent by 1988-89, and perhaps half of these outlays were made by students themselves, not by their parents.

However, this dramatic change did not occur because we as a society decided that parents should pay less. Indeed, there is currently widespread discussion of ways in which they can be encouraged and enabled to pay more. Rather, we decided as a society that whether people went to college should not depend so much on parental resources. Participation in higher education expanded from the affluent young to members of income groups whose parents are much less able to pay, and to older students who make financial decisions about education that do not involve their parents' resources at all. A large reduction in the share of the aggregate burden born by parents resulted from changing patterns of enrollment, not from a decision to give parents relief as such, although some relief has indeed been brought about.

To take another example of such a trend: The share paid by parents in the aggregate would have fallen even lower if many private colleges had not adopted the practice of increasing tuition charges for parents willing and able to pay in order to increase student aid funds for students whose parents are not able to pay. This has become a major feature of private college finance. From 1980 to 1988 institutionally financed grants doubled in constant dollars. A study of 150 small private colleges

showed an annual real growth rate for aid from unrestricted revenues of 13.9 percent from 1979 to 1986. Both the willingness of affluent parents to pay high tuitions and the concern of private colleges to foster more equal opportunity are factors in determining the actual sharing of burdens.

Focusing on the Motivation of the Parties

The 1973 report of the Carnegie Commission on Higher Education that explored the issues of burden sharing was entitled *Higher Education: Who Pays? Who Benefits? Who Should Pay?* It was an assumption of public policy discussions at the time that answers to the three questions should be compared and contrasted. If one party to higher education finance benefitted disproportionately to its payments, then it should pay a larger or smaller share accordingly.

This paper will usually take a somewhat different (though not necessarily inconsistent) view of the relationship among the Carnegie Commission's three questions. It will regard the question, "Who benefits?" as our best clue to the understanding of "Who pays?" — that is, of *why* they pay. The task of public policy ("Who should pay?") is, from this perspective, the task of adjusting the motivating factors and incentives that enter into decisions about paying for college, so that we will achieve a socially desirable quantity and distribution of benefits.

Because the reasons for the contributions of the various parties to higher education finance are different, interact and change over time, economists, policy advocates and administrators have used a considerable conceptual apparatus to analyze higher education finance. The four sections of Part I of this paper introduce the most basic of the concepts they have used, and these sections attempt to show how those concepts illuminate the motivations and incentives of the various parties. Part II attempts a closer look at how these influences have played themselves out in the history of higher education finance in the United States, and examines the problems involved in giving these trends quantitative expression through updating the Cartter-O'Neill estimates of costs and burdens.

Such a presentation is disjointed in several ways, and this fact may make it useful to link up the various topics here in this introduction. One way to do so is to anticipate the "story line" of this report. That "story line" would go something like this: The basic shape of American higher education has been determined by its pluralism. Colleges and universities were founded by many different parties for many different reasons. They looked, at first, to parents and philanthropy to finance their educational programs. However, two very long-range trends operated to shift more and more of the financial burden to the taxpaying public and to students themselves. The first of these trends was a clearer perception that the costs of higher education were worthwhile as an investment in which the public and students both had stakes. This perception was also operative in Europe, but there the investment rationale tended usually to foster a distinct set of technologically-oriented institutions much more separate from traditional universities than in the United States.

The second of the two trends was democratization, which entailed much wider access to higher education and much greater equity among families in paying for its costs. In the United States democratization did not occur abruptly, as, for example, it occurred in England after World War II. Rather, state and local governments created a gradually growing number of subsidized low-tuition institutions, and both state and federal governments created, step by step, a complicated student aid system. Loans provided by this system, accompanied by expanding employment opportunities, enabled students themselves to take a larger role in financing their own education. This larger role for students expressed both democratization and an appreciation of returns to investment in higher education.

This "story line" is only the roughest outline and it leaves a great deal more to be explained — much more than would be called for in the case of a less pluralistic system created less gradually or from a more comprehensive policy blueprint. The system of higher education finance in the United States is the opposite of all of those things. It has to remain an open question how fortunate we are to have so complex a system, subject to so many motivations and accretions of policy.

PART I
THE COSTS OF HIGHER EDUCATION
THE COMPOSITION OF HIGHER EDUCATION COSTS

Before we can come to terms with the sharing of the financial burdens of higher education, we must first decide what those burdens are. This turns out not to be as easy as it might appear. The task looks easy because most of the cost of operating institutions of higher education should clearly be included in the financial burden, and these costs are known from institutional budgets. Data from these budgets have been aggregated by the National Center for Education Statistics in time series data going back several decades. By academic year 1974-75 total institutional revenues had reached $35.7 billion; by 1988-89, these revenues totaled $81.8 billion.

The problem is that institutional budgets include items that do not entirely represent costs of education, and they do not include some items that very plausibly *do* represent such costs. The task, therefore, is to decide what institutional costs should be excluded in assessing the financial burdens of higher education, and what other costs should be added.

There would be very broad consensus that this subtracting and adding process is what the task of assessing the total financial burden is all about. The assumption is that there is a core of institutional expenses that are central to the cost burden. This has been the approach of Carter and

O'Neill and many other analysts, and it will not be disputed here. It is conceivable that the inclusion of some items in the core expenses of institutions—such as some administrators' salaries, some library acquisitions and some campus landscaping—could be debated on the merits as educational outlays, but that will not be attempted in this paper. Educational costs as most of us think of them include these outlays, along with even more clearly necessary expenses of producing education such as faculty and staff salaries, utility bills and purchases of consumable supplies of many kinds.

This section will not challenge the consensus but will instead focus on only two items with respect to which difficult and important determinations must be made in assessing the costs of higher education: research costs (a candidate for exclusion) and costs of student subsistence (a candidate for inclusion). These items are large and the financial responsibility for them tends to be loaded on specific parties to higher education finance to such a degree that they affect how we see the pattern of burden sharing in major ways. A third item—foregone student earnings—is important for the same reasons, but, for convenience, it will be discussed in detail in the last section of this paper where the continued usefulness of the Carter-O'Neill series of cost and burden estimates will be examined.

How do these three items affect our picture of burden sharing? Take first research expenditures: Here the role of federal grants is so large that, if we were to count all institutionally-based research outlays as expenditures for education, then the federal role in higher education finance would appear considerably larger than if we did not count them. These research expenditures amounted to $5.9 billion in 1988-89—about one-fifth as much as parents and students together contributed to educational funds of institutions. The government share of educational funds of institutions would be 60 percent if all federal research expenditures were counted instead of 55.7 percent as shown in the appendix table for that year.

Similarly with student subsistence costs: Families pay a much larger fraction of room and board costs for students who attend public institutions than the fraction they pay of instructional costs. Therefore, if we count subsistence costs as expenses of education, the family share of the total financial burden will appear considerably larger than if we do not count them. Counting subsistence costs, the parent-student share of all monetary outlays for higher education was 37 percent in 1988-89. Not counting them, the parent-student share of educational funds of institutions was only 32.3 percent. Subsistence outlays in 1988-89 almost equaled the contributions of parents and students to the net educational funds of institutions—$25 billion, compared to $27 billion.

So also with the foregone earnings of students—that is, wages and salaries the students could be expected to earn if they were not spending their time and energy being students. Any estimate of foregone earnings is extremely tricky, but whether we include *some* amount of foregone earnings as a cost of education or not is extremely important to any analysis of burden sharing. This is because students bear almost all of this cost. Students' parents bear little and the public almost

none. Therefore, if this cost is included as a cost of education, the student share of the total burden will appear much larger than if it is not.

Research Costs and Joint Products

Almost everyone would agree that getting an education at an institution where there are ongoing research activities improves the quality of that education. Yet people would differ about the size and importance of this contribution. If research contributes to *both* education and scientific discovery—that is, if they are "joint products" of research—we must come up with some definite way, more or less arbitrary, to assign part of the cost to each purpose. Cartter and O'Neill decided in the Carnegie report to assume that 25 percent of federally financed research costs at institutions of higher education would be attributed to education. It is hard to see how they would have been clearly wrong or clearly right in this guess, or to see any trends that would have made it a worse guess in the 1990s than it was in the 1970s.

Student Subsistence Costs and Nonspecific Costs

The people who are students would still have to eat, be clothed, and be sheltered even if they were not students. These are necessary outlays in order for them to be engaged in any educational process, and yet they do not purchase education specifically. Nor is staying alive a joint product of education, so difficulties with subsistence costs cannot comfortably be dealt with by the kind of arbitrary assumption Cartter and O'Neill made in the case of research outlays.

And there are problems. They arise because subsistence costs are very elastic; they can appear in the budgets of those other than students, and they are met in part from resources that are very hard to estimate.

Demarcating Minimum Subsistence Costs

Subsistence costs are elastic in the sense that the character, amount and quality of minimum subsistence costs are hard to define. A student needs more than one set of clothes, but how many and how expensive? Some students need cars, but, again, how cheap a car will do? Students need, in human terms, to visit their families, but how often, and do they also need a vacation trip during the winter break? When a parent pays for more than the minimum of such things, is the parent paying for education or simply making gifts to an offspring for current consumption? If the student pays for comforts and entertainment from extra earnings over and above his college's "self-help expectation," are they still costs of education? What if the job was taken solely because the student wanted a more comfortable standard of living?

Support-in-Kind

When part of the student's subsistence is provided in kind by parents, spouse or friends there is an added dimension of complexity. Is room and board provided by such parties a cost of education even if no money changes hands? This question is made harder by the fact that as a practical matter, the quantity, quality and character of the support is usually indivisible among members of the household.

Trends in Subsistence Costs

The considerations that make it hard to pinpoint educational costs in these cases also make it hard to estimate aggregate amounts of subsistence costs attributable to education or to chart trends in such costs. It is *probably* the case that the minimum acceptable standard of living of traditional parent-supported students has risen over the last 20 years and almost certainly over the last 40 years. The source of funds for this improvement have been student earnings, parental support and student aid, *probably* in that order.

If these conjectures are correct, it is not hard to see why. Students are willing to make contributions to their own living costs, and increasing contributions if circumstances permit, because, after all, it is their own standard of living that is in question. Parents are willing to make contributions, and rising ones if possible, because they want their offspring to be able to stay alive and be comfortable too. Student aid enters the picture because the public does not want the access to the higher education it subsidizes to be frustrated by an inability to meet minimum subsistence costs. In other words, each party makes a financial commitment in line with its obvious motivation, and is prepared to increase that contribution for the same reasons as general living standards rise.

At the same time, we should *not* regard as costs of education living standards over a minimally acceptable level, when this higher standard is financed through employment that represents partial *withdrawal* from educational participation. Typically this is what occurs when a student chooses part-time enrollment to permit a level of earnings, and thereby a standard of living, in excess of such minimums. Such enrollment and employment patterns are probably increasingly commonplace, especially among older independent students, but they do not affect the costs of education, nor do they bring about a shifting of the burden of such costs.

A Note on Student Earnings

The preceding discussion of subsistence costs underlines a problem that will be encountered again and again in this paper. We simply do not know how much students earn or how

much of what they earn goes toward meeting educational costs. The survey evidence tends to be unconvincing, and reporting via student financial need statements tends to be unconvincing also. Students in general have a strong incentive to earn more (to enjoy a higher standard of living) and to report less (so that parents or the student aid system will not reduce support). There are also a number of reasons why, in perfectly good faith, students may be highly inaccurate in estimating earnings:

1. Students tend to have seasonal needs for earnings and seasonal opportunities for work.
2. Students often work more than they have planned in order to make up for unanticipated needs or shortfalls from other sources, parents especially.
3. Non-traditional students often make their decisions about employment in the even more complicated context of the needs and earning capabilities of other members of a household.Throughout this paper it will often be necessary to offer a caveat about the student role in the sharing of financial burdens, because we simply do not know enough about the role of student earnings. For example, an apparent shift of burdens to parents may really be a shift to parents *and* students, or even mostly to students. Or an apparent burden on students may in fact be, for the most part, a burden on parents. There doesn't seem to be any way around this source of uncertainty and inconclusiveness.

The Incentive of Return on Investment

When the costs of education are narrowly defined by excluding the share of expenses incurred for the sake of joint products and the share for subsistence above minimum needs, it becomes much easier to think about the purpose and motivation of such expenditures. There are many such purposes: the dissemination of knowledge may be regarded as a good thing in itself, or good for participation in a democratic society or good for the social mobility and productivity of its members. The list could be a long one: From time to time higher education has been regarded as essential for things as different as personal morality and national defense.

An umbrella concept that includes many (but not all) of these purposes is the notion of investment in human capital. This notion is often assumed to mean only investment that increases money income, but the idea can be put in more inclusive terms: Wherever the person who receives education is expected to perform differently and better in the future for having received it, we can speak of an investment and a return on investment. Starting with this broadest defini-

tion, we can then draw distinctions between economic and non-economic returns, private returns and public returns, and in doing so we will have a taxonomy of many (but not all) of the purposes for which higher education costs are incurred.

Investment in Human Capital for Economic Returns

The idea of higher education as an investment now seems an obvious one. A century and a half ago it would have seemed much less obvious. Except for the professions of law, medicine and the church, investment in a career was normally made through one or another form of apprenticeship. Participation in higher education occurred mainly for the purpose of acquiring status or for learning to exemplify the status one already had.

Since those times, the investment character of higher education has become increasingly clear. More and more occupations have called for, and provided financial rewards for, education beyond high school. The common observation that educated people generally make more money has been validated by increasingly good statistics showing correlations of education and income. To be sure, there are considerable swings over time in the rates of return to higher education, and they depend importantly on such non-educational factors as the size of the young-worker cohort and the structure of the economy. Thus, male college graduates earned 23.8 percent more than high school graduates in 1979, but they earned 53.4 percent more in 1989. Female graduates earned 27.9 percent more in 1979, but they earned 59.4 percent more in 1989.

Analyses have attempted to estimate the aggregate contribution of education to national income, as well as the economic return to individuals. Human capital theory has become a recognized specialty in economics. Surveys of students show that financial returns are now often in first place as a reason for going to college, although it is possible that students are just being more candid about financial motives than earlier generations were.

The Investment Rationale and Burden Sharing

The idea of higher education as an investment yielding economic returns has been the premise of powerful arguments about responsibilities for financing higher education. These arguments purport to give answers to the three questions of the Carnegie title: *Who Pays? Who Benefits? Who Should Pay?* The main line of argument is that returns to education show up in the income of the individual student. Employers are willing to pay for the skills the student acquires. They cost him time and money to acquire, so the increment in pay is a return on that time and money invested. That is why, the argument goes, the student and his parents pay for education: they are

making an investment from which they expect income returns. Since it is the student who benefits, it is he who should pay, unless others want to make him a gift of investment capital.

The Zacharias Plan

This argument is not just a matter of analytic interest; it purports also to have practical consequences for public policy. These consequences are most clearly exemplified by the Zacharias plan proposed in the 1960s that has periodically resurfaced with modifications ever since. Under these "income-contingent loan" plans, a student would be expected to pay for his own education out of the investment income the education would produce. When parents pay, they are making a gift of such an investment. But students themselves should be willing and able to borrow to make so profitable an investment, just as a business corporation should be willing and able to borrow to invest in a promising new factory.

According to this view, the reasons why students do not borrow and invest in education as much as they rationally might are two: First, students cannot be sure the investment will pay off. A student cannot be sure that he will have the talents and opportunities to make the investment successful. Second, he cannot offer a lender the investment itself as collateral in the way that a company can offer the new factory itself as collateral for the loan that builds it. A lender cannot be sure that an investment in education will pay off, and he cannot "foreclose" on the person who embodies the investment.

In the Zacharias plan and its successors, this analysis forms the basis for the proposed role of government in assuring a ready supply of student loans and guaranteeing that they will be repaid. Individual students and lenders are handicapped by uncertainty. Not so the government, because it knows that the average return from investment in education will be ample to pay off the average loan.

Most plans, like the original Zacharias proposal, have other persuasive features. They often incorporate either a progressive tax on education-derived income or a scheme of extra interest or principal payments that serve the role of insurance premiums whereby the more financially successful borrowers will pay back all or part of the loans of the less successful.

Problems of the Zacharias Analysis

There are problems about Zacharias-type schemes that are beyond the scope of this paper. They include problems of adverse selection in a less-than-universal plan, the possibility of excessive debt levels, and problems of loan collection. But the main problems are difficulties with the underlying economic investment rationale itself. The intellectually powerful logic of the investment rationale tends to obscure three things:

1. First, the investment rationale leaves very unclear why spending (and burden sharing) for elementary and secondary education should differ so markedly from spending and burden sharing for higher education. We need an analysis that explains why the two are so different and yet also makes clear how far they can be treated as alike. A major sector of American higher education—namely, the community colleges—began with the assumption that there need be, and should be, no difference. Education in proprietary schools operated on exactly the opposite assumption, except under the GI Bill and the federal student aid programs, the assumption that private parties should pay the whole cost.
2. Second, the Zacharias rationale has nothing to say about the benefits of higher education that are not appropriated by the individuals who receive education in the form of their own higher money incomes.
3. Third, the Zacharias rationale has nothing to say about the intergenerational aspects of distributing the burdens of higher education finance. Its showpiece proposal simply assumed that each generation should shoulder the burden of its own education. This assumption is wildly at variance with both the tradition of parent-financed higher education and with equal opportunity efforts on the part of state and federal governments. These efforts have taken the form of subsidies to institutions of higher education directly or via student aid. Who is right?

Public and Private Benefits

The usual way of reconciling the investment rationale and public policy in these three areas is to say that only part of the return on investment in education is represented by economic benefits accruing to the individual student. It is suggested that there are other public benefits that also constitute a return on investment. These public benefits include economic, cultural and social benefits that belong to everyone and for which we cannot and should not expect individual parents and students to pay.

However, it does not help very much just to say that there exists such a difference between public and private benefits. Whether we want to justify present patterns of burden sharing or want to change them, we need ways to distinguish different kinds of benefits so that we can see *why* they are public or private. One way to draw such distinctions is to focus on the question of whether the benefits of any activity (not just education) are appropriated by individuals, whether they practically *can* be (e.g., by charging admission to concerts) and whether they *should* be (perhaps in the interest of enabling market forces to operate).

This kind of analysis is fascinating, and it can open our eyes to things we ordinarily do not

think much about. It tends, however, to get very far from practical policy choices affecting education before the issues it raises are resolved. For example, national defense is a very clear case of a public benefit. Our protection from aggression by foreign powers is indivisible as things are, probably can only be indivisible and probably should be indivisible. But the skills of college-educated people who contribute to defense are, for the most part, purchased by the government or by defense contractors at the going wage or salary rate, so that the public defense benefits arising specifically from education and *not* appropriated as economic benefits by the people in defense jobs are quite difficult to define.

A Taxonomy of Desirable Results of Education

In this paper a different approach will be adopted, involving four broad categories of desirable results of education:

1. There are results of education whose whole value lies in the preferences and satisfactions of the people who receive the education. Most obviously, these are increments to private money incomes and private enjoyments. The rest of us may be glad for the person who gains such benefits, but this does not make them public benefits if we are to have useful distinctions at all. They are clearly private benefits.

2. There are also results of education that have the potential of conferring either public or private benefits or both depending on how this potential is being used. The benefits of general literacy are typical of this category. Because the stream of such benefits now seems to go in a private direction, now in a public direction, and now in a private direction again, these will be referred to as "inchoate" benefits, and their distribution as a "cascade" of benefits.

3. There are returns of education that are exclusively public benefits. The benefits most usually cited as public—for example, greater rationality in public discourse—mostly belong in the second category, since whether the benefits are public or private depends on circumstances. But there is no reason not to concede that there are some items in this category.

4. There are consequences of education and its distribution that we can say are desirable or not entirely without reference to the question, "Who benefits?" Values such as fairness, justice and opportunities for the development of talent simply do not need this kind of justification to be worth spending money on. The usefulness of the analysis of public and private benefits is diminished rather than enhanced by trying to force an exhaustive distinction between public and private. To call justice a public benefit, for example, is only to invite confusion with the structure of very different issues, such as who should pay for the fluoridation of the water supply.

Discussion of the first three categories clearly belongs here: In all three the reasons why people spend money on higher education is to produce some future return. That is, the relevant motivations are investment incentives. The fourth category, however, is quite another matter. The purposes included under this fourth heading are *not* goals of investment-for-return, although they may coincide with investment purposes. For example, achieving intergenerational equity—one of the items in the fourth category—is very likely to produce public, private and inchoate benefits of many kinds.

Returns to Education vs. Returns to Educational Credentials

For some kinds of investigation in human capital theory it is important to distinguish returns to the skills acquired through higher education—that is, the actual increment in productivity—from returns to being awarded a degree or other credential. For many reasons, rewarding productive skills is more desirable than rewarding sheer credentials. But whether or not the earning capacity conferred by a credential really represents productive investment, the greater income of someone with an educational credential is clearly a private benefit. Indeed, in the case where the enhanced income was entirely due to a credential that signified *no* desirable skills or other qualities, the Zacharias case for unsubsidized investment would be strongest.

Public Benefits and the Tax Base

It has often been argued that the higher incomes of educated people produce more public revenue through income taxes and that education, for this reason, creates public benefits that justify public expenditures. This way of thinking falls into a trap of double counting: To count the income taken in taxation as a public benefit and to count, for example, the national defense that the taxes buy as also a public benefit would be to count the same benefit twice. The mistake is like that of adding the earnings of a business *and* the dividends it pays out to measure its profitability. Taxation does not create public benefits. It takes away private benefits to purchase public ones.

"Inchoate" Benefits

An illustration of benefits in this category are those arising from literacy, and this example shows how they tend to create a "cascade" of private and public benefits. Plainly, a person who can read is better off than one who cannot. He can take and perform a job that an illiterate person cannot, and he can earn money in that job. He can also use reading skills as a consumer, getting more for his money when he spends it. So literacy confers private monetary benefits. It also

enables a person to read for pleasure, and thereby confers nonmonetary private benefits as well.

But the presence of literate people in a society—especially if almost all people are literate—creates advantages for others as well. People can count on the literacy of others in designing production processes and reaching markets with advertising. General literacy becomes a public benefit because it enables everyone to rely on the communicability of ideas in writing, whether or not the written word is actually used to communicate in particular circumstances. Sometimes this public benefit is appropriated for private purposes. If a potential employer places a want ad and someone seeks and obtains the job advertised, the public benefit of general literacy has resulted in private benefits for both employer and employee and these, of course, have monetary value. General literacy can also be appropriated to achieve further public benefits, of which a very important example is the kind of communication of fact and opinion that enables democratic institutions to function.

Public Support for Educational "Cascade" Effects

The clearest rationale for public financing of elementary and secondary education is precisely that it fosters skills such as literacy which produce inchoate benefits with cascading effects—public and private benefits giving rise to further private and public benefits.

The smaller share of the public in financing higher education suggests we believe the same kind of cascade operates, but that either (1) a larger fraction of the benefits are appropriated exclusively by the individual student without passing through such a cascade or (2) there are enough such purely private benefits to provide sufficient motivation for individuals to seek education that will also produce public benefits by the cascade effect. For example, the private financial rewards of education in accounting are sufficient to motivate enough students to become accountants that we can all rely on the availability of accountants. Their availability prevents the kind of chaos in the financial aspects of our relationships that the former Soviet Union is now experiencing.

Education and Competitiveness

Much of the recent public dialogue about the need of the United States to educate more people better, so that the nation will be more competitive internationally, can be translated into the terms of the preceding analysis. It is not the contention of most advocates of educational reform that we lack outstanding individual scientists or engineers. Plainly, we have them. Rather, the contention is that we need to have higher levels of skills in enough of the population so that innovators, managers and entrepreneurs can rely on their availability as new enterprises are created and as old ones are transformed to take advantage of changing technologies and markets. It is a cascading of benefits that is sought.

THE STRUCTURE OF EMPLOYER INCENTIVES

The role of employers in training the workforce is enormous. Their contractual relationships with institutions of higher education are numerous and complex. They make increasingly important philanthropic contributions to colleges and universities.

The importance of these roles and relationships can easily mislead people into thinking that employers have become, themselves, providers of higher education, or at least that they have become permanent partners in carrying the financial burdens of higher education. But if we look only at their role as employers—not as contractors or philanthropists—a different picture emerges. As employers they ask whether investment, on their part in training and education, appropriately amortized, will increase their profits. If so, they will invest; if not, they will not invest.

The calculation that a rational private employer makes can be put in the following format:

Costs of education and training

Less: Education and training costs not recoverable (amortizable) because the employee leaves the employer

Equals: Recoverable (amortizable) education and training costs

It makes sense for the employer to invest in an employee's education and training if (and only if) these *recoverable* costs are less than the value of production resulting from the training over the probable period of amortization.

The decision to hire and train a worker can depend on considerations such as these:

1. "How long can we expect the employee to stay?"
2. "Does the worker already have the training to be productive? If so, we can save on training expense."
3. "Is the worker young, although untrained? If so, we may save on fringe benefits enough to pay for training costs."
4. " Is anyone else willing to pay a subsidy for training costs? If so, we can save here."
5. "Are the potential employee's seriousness and skills credentialed or otherwise certified? If so, the probability that we will have made a good choice (with lower selection, training and supervision costs) is increased."
6. "Will the worker accept (and does the law allow) a lower level of wages or salary to offset our training costs? If so, we may be able to hire the worker, even if other prospective employees already have a higher level of training."

Most of these factors are straightforward, at least in concept, although often very difficult to quantify, even as probabilities. But the concept of "non-recoverable training costs" deserves special attention because it greatly affects employer motivation to finance education and training in postsecondary institutions.

Some of what an employee learns that makes him productive is useful only in the particular enterprise in which he gains experience, whereas other skills and training would be of value to other employers as well. If the employee changes jobs, the benefits of these skills are lost to the employer and may even be gained by a competitor. Any training costs not already amortized are unrecoverable when the employee leaves.

This difference affects employer incentives to finance training in several ways:

1. Training of value exclusively in the particular enterprise will tend to be financed as long as increments in productivity over a probable amortization period exceed training costs.

2. The employer will, however, tend to be willing to finance training in transferable skills only if employing the worker is profitable even when the cost of the training in those skills is regarded as only fractionally recoverable. In the limiting case, it will not be regarded as recoverable at all, any more than wages.

3. As a result, an employer will tend to treat costs of training in transferable skills more as he would treat wages paid for skills the employee already has than as an investment.

4. The economic burden of financing the acquisition of transferable skills will, therefore, tend to fall on employees. When labor is scarce, but still low-paid compared to its productivity, profits may be so high that employers will train aggressively in transferable skills, disguising this effect, but the tendency for the burden to fall in one way or another on employees will sooner or later assert itself.

5. If productive skills are not only transferable but can be acquired at independent training and certifying institutions (colleges, universities or proprietary schools), employers will tend to prefer such training to in-house training because it will enable them to avoid the costs of running a training program and the risks of non-recoverability.

The logic here explains a good deal that everyone is familiar with. Employers do not ordinarily expect to have to provide, or pay for, training in word processing, because the skills are transferable and can be acquired and certified in pre-employment settings. On the other hand, a corporation may be prepared to spend a good deal on training junior managers in the peculiarities of its particular corporate culture because almost the entire value of such training benefits that corporation and no one else; nor can it be acquired at an independent education or training institution.

The same logic, however, sets limits to the kind of role we can expect employers to take in financing education and training in schools, colleges and universities. There will be boom times when they will be glad to pay for non-recoverable training costs at such institutions, but only in boom times. Government mandates and subsidies can compel or induce employers to finance such education and training at other times, but in these cases it will often be the taxpayer or the consumer who really bears the economic cost of the financing.

The very fact that it is possible to acquire a particular skill at a college or university, rather than on the job, is the strongest indication that the skill in question *is* transferable. If it is transferable, then employer financing is less likely to be recoverable. It is, therefore, *not* a skill an employer would want to finance if only the productivity of that skill were at issue. Formal postsecondary education is the kind of training employers are least likely to want to pay for.

Those who would like to increase the role of employers in financing education in postsecondary institutions will regard the preceding analysis as far too bleak. For a number of reasons this may be so:

1. To the extent that an employer creates long-term loyalty to the enterprise, the probability that training costs will be fully recoverable are increased, and willingness to invest in training will be increased also.

2. Where employers create formal or informal consortia for the support of training, the chances that together they will be able to recover investments in training are increased, and their willingness to invest will be increased also.

3. Where increments in knowledge (and training in the use of that knowledge) result in very high rates of profitability, non-recoverable training costs may be willingly absorbed—as in the most successful high-tech industries.

However, if the analysis is basically correct, then a good deal of what employers do in financing formal education has to be explained otherwise than by the productivity of what the employee learns. One explanation is morale: An employee whose tuition for an English literature course is paid by the employer may have higher morale, and therefore be more productive, even if the skills acquired do not enhance his productivity at all. The same considerations of morale explain alumni-gift matching programs and scholarships for the children of employees. Such programs make workers feel better about their situations, and the result can be higher productivity. Still more indirectly, scholarships for unaffiliated graduates of the local high school can improve community relations and thereby reduce costs or enhance productivity in subtle ways. Private business probably also pays taxes more willingly (although still reluctantly) knowing that public educational expendi-

tures will foster a more skilled labor force, with "cascade" effects of the kind described earlier.

What is left of the role of employers in financing formal higher education when what they actually do is explained in the above ways? The main role of employers is to provide the capital, ideas and management that create jobs in which educated people can earn a good return on investments in education that belong to them, not to their employers. These investments may be made by themselves, their parents, the public or philanthropy. Employers are very concerned about the quality of education, for obvious reasons, and by creating good jobs they provide others with incentives to make investments in education. They also are willing, at times, to invest their own money impressively. But none of this should conceal the fact that they will tend to refuse financial burdens for training costs that are not, with a high degree of probability, recoverable by them individually and exclusively. Existing government training policies can be read as accepting this reality, since they normally operate by means of mandates or incentives, not by addressing the uninfluenced self-interest of employers.

Intergenerational Equity

The fullest accounting of investment returns and consumption benefits, of public and private benefits, of productive skills and status-conferring credentials, cannot explain why certain students are selected for support from public and philanthropic resources, or for more such support than other students receive. Nor can investment returns fully explain even the financial contribution of parents. A relatively small number of students are selected for support either because of extraordinary talent or because they commit themselves to particular careers after completing their educational programs (as a kind of advance payment of compensation for service in these careers). But most students are selected for support on quite different grounds. Among these are considerations of intergenerational equity, and these considerations belong in the fourth category suggested in Section Two of this paper. That is, there would be reasons for spending money to achieve intergenerational equity even if little or nothing were gained in aggregate net returns to investment. We as a society care about *who* benefits as well as about the total of all benefits.

Transfers From Parents to Offspring

To appreciate fully how important such considerations are in explaining the way the burdens of financing postsecondary education are in fact shared, imagine a society in which such motivations were inoperative. In such a society, parents would not make a significant contribu-

tion. Of course, there are many ways of interpreting the intentions behind parental support. Undoubtedly, family pride plays a role: Parents generally feel better about themselves and have a greater sense of their own achievements if they see their children through college. Many parents—perhaps most—would feel ashamed if they did not do the best they could in providing financial support for education. Many parents also identify with the prospects and achievements of their children and would share their children's feelings of being thwarted if college opportunities were denied them. But underlying the feelings that can be described in these various ways there is surely some sense that offspring should be given at least as good a chance as parents themselves have had, if not better. If there were no such motivation, it is hard to see why parents—even affluent ones—would make an effort to finance education for their offspring.

Intergenerational Equity as Public Policy

Much philanthropic and governmental support for higher education makes the most sense as a case of elevating such intergenerational concerns to the level of public policy. Certainly, such support can also be partially explained in terms of more optimal investment in human capital. But if this were the sole reason for such philanthropic and governmental support, it would surely be much more targeted on the individual students of greatest talent. It is hard to see how such grounds for support would explain either the maintenance of open admissions, low-tuition institutions by the states, or the federal programs of need-based student aid available on an entitlement or near-entitlement basis without regard to qualifications. Such programs must be premised on the idea that the opportunities more affluent parents make available to their offspring as a matter of intergenerational fairness should be made available also to students whose parents cannot afford to make such a private intergenerational transfer. There is a widespread belief, given firm political expression, that it would be intolerable for young people to miss out on educational opportunities for lack of support from the previous generation.

Policy Change and Intergenerational Equity

Purposes of intergenerational equity explain an important part of our system of postsecondary finance as well as the anguish that accompanies changes in the system. It is surely a part of the reason for subsidizing student loans that many people have great reservations about shifting burdens to the student generation and wish to moderate that shift. Considerations of intergenerational equity are also among the reasons why it is so difficult for policymakers to find appropriate definitions and treatments for independent and other categories of "non-traditional" students,

for these are students to whom the ordinary measures of the ability of parents to provide intergenerational support are alleged not to apply.

Appropriate Levels of Intergenerational Transfer

The importance of intergenerational transfers and intergenerational equity in accounting for the sharing of cost burdens in American higher education makes analysis of the overall pattern of sharing much more difficult. Rates of private monetary return to investment in human capital can be calculated. The empirical data for such calculations has never been fully adequate, and the calculations are usually out-of-date by the time they are made. Still, we know how to calculate such rates and we know of other rates to which they can be compared.

Not so with intergenerational transfers. How much should parents of given means be expected to sacrifice to be fair to the educational prospects of their offspring? We have no fully rational way of calculating such amounts. "Need analysis" is inevitably full of judgment calls, no matter how simple or complex the "methodology" or how uniform or ad hoc the system. And the same difficulties arise in assessing how much in college costs philanthropy and government should pay to make up for inadequate family contributions. Nor do we know how to deal in any clear and prescriptive way with questions that arise when the intergenerational aspect of sharing college costs interacts with other features of the postsecondary finance system. What, for example, should we make of the common phenomenon of affluent parents spending a modest amount of money to send their children to flagship state universities? They thereby capture for their offspring large intergenerational transfers made by government at the cost of a much smaller intergenerational transfer of their own than they would be expected to make if their children attended an academically comparable private university.

PART II
PATTERNS OF BURDEN SHARING
AN HISTORICAL SUMMARY

It is emphasized throughout this paper that the various parties to financing higher education perform their roles for what seem to them good and sufficient reasons. The variety of their evolving motivations must be understood whether we simply want to make sense of existing arrangements or whether we would like to see their financial contributions changed, either in kind or amount.

Before the Morrill Act

The history of higher education finance in the United States indicates the importance of this perspective. Before the Morrill Act of 1862 there were two main reasons for supporting colleges and universities: to train ministers for the various churches, and to provide the background of a classical education for the elite of a new country which it believed it needed to regard itself as civilized. Both motives were present in the founding of colleges on the eastern seaboard and also in areas closer to the receding frontier.

Even in the early 19th century, there were calls for a more "practical" curriculum, and by the middle of the century there were also calls for universities to become centers for research. But the basic structure of American higher education was the result of the earlier purposes: ease of entry for new institutions; pluralism of purposes, often religious; governance by boards independent both of government and faculty, and reliance on tuition and gifts for financial support. Calls for a national university—by George Washington, among others—went unheeded, and education is nowhere mentioned in the Constitution as either a purpose or a power of government.

The Morrill Act and Education for Economic Development

The Morrill Act thus represented a major new purpose and major new sources of support. By this time the usefulness of "practical" education had been validated in Europe and the United States. The nation, faced with the vast undeveloped resources of the country, saw it as a good bargain to exchange some of those resources for skills to develop the rest. Public lands and some federal funding were to be used as an incentive for the states to provide sustaining support for the new land-grant institutions. What was anticipated was a "cascade" of benefits, public and private, as discussed earlier. It proved a very good bargain indeed. The most conspicuous result was American leadership in agricultural productivity.

Independently, but with the same "cascade" rationale, the states undertook to establish and maintain additional institutions of higher education. Of these many were "normal colleges" to train teachers who, in turn, would provide society with a general level of basic skills needed to pursue economic growth and civic participation. Through the 19th century, the states increasingly pursued a zero-tuition strategy for elementary and secondary education. It was, therefore, natural for them also to attempt at least a *low* tuition policy for public higher education. Low, or free, tuition was seen as the appropriate way to bring about a "cascade" of public and private benefits. The states followed the same strategy when they turned to goals of equalizing opportunity and intergenerational equity. There was, until the 1960s, little appreciation on the part of the states

that any mechanisms other than low tuition (for example, support for student subsistence) would be necessary to achieve the additional objectives.

The Federal Strategies

The Second World War led the federal government to adopt quite different strategies. Science had proved crucial during the war and federal support for research was a role thereafter taken for granted. Since the federal government wanted to fund the most promising scientists wherever they were located, it adopted a competitive grant system that channeled funds through the scientist's institution, whether public or private. It thus parted company with the states whose funds were almost always earmarked for their public institutions.

The GI Bill marked another departure from previous federal policy and that of the states. It initiated a federal role in achieving goals of intergenerational equity, with funding following the student, although this was initially solely for the one very special generation that had fought the Second World War. It was a powerful argument that service men should have a chance to go to college without regard to background, because, after all, they had been chosen to go to war without regard to background. Their generation had protected generations before and after them at great cost and risk. These other generations owed them something in return, and not just to those whose parents were willing and able to make a private intergenerational transfer.

There were other motivations for the GI Bill—fear of renewed depression levels of unemployment and fear of the veterans as a potentially obstreperous political force—but the program continued to receive general support even after these fears had proved groundless. It had such support because it represented an especially clear case of intergenerational equity.

Trends Since 1950

Wide popular support for the GI Bill and its success in extending opportunities for higher education had the effect of opening up issues of higher education finance as never before. In the years since, new policy interventions have been proposed and some important ones have been implemented. It helps to see these interventions against the backgrounds of actual trends in higher education finance, and to see those trends portrayed graphically. The following chapter discusses the difficulties (and they are formidable) of bringing up to date the series of higher education accounts developed by Cartter and O'Neill. The task has nonetheless been attempted. The resulting accounts and trend charts are presented in an appendix to this paper, along with lists of both substantive and technical *caveats* about the estimates. Subject to those caveats, Figure C-1 (see Appendix) summarizes major trends in the distribution of the burdens of higher education finance since 1950.

Figure C-1 charts the most important of the "bottom lines" in the Carter-O'Neill analysis, that for total monetary outlays for higher education.

The sharp decline in taxpayer financing of higher education from 1950 to 1959 marks the decline of the post-World War II GI Bill and indicates its consequences for the relative financial burdens of families and the public. By the mid-1950s, most veterans of the Second World War who would ever use their GI Bill benefits to attend college had already done so, and this previously major financial resource was in rapid decline. In these years there were two parties to financing postsecondary education whose contributions dwarfed all the rest. These two parties were parents and state governments, the latter through the subvention of public institutions. Local government supported an increasing number of public community colleges, but their size and numbers were relatively small until the major expansion of the 1960s and 1970s.

Philanthropy was of immense importance to some private institutions that held the lion's share of endowment funds, but their students were a small fraction of all students in postsecondary education. Philanthropy in the form of current budget support was also important to those religiously-oriented institutions with very close ties to their sponsoring denominations, but their students were also relatively few in number. Student aid was almost exclusively funded by philanthropy through institutions, and its availability tended to be proportional to an institution's overall access to philanthropy.

The Anecdotal Evidence

It is difficult today to recall how much the ability to go to college in the 1950s depended on the luck, ingenuity and sacrifice of individual families. These are dimensions that are, of course, impossible to chart statistically. However, specific situations and anecdotes make the situation clearer.

In urban areas with accessible public institutions, meeting subsistence costs through living at home while commuting to college was a manageable undertaking for some lower middle-class and working-class students and their families. This manageability was to be an important and valid argument for the strategy of expanding community college opportunities. Still, even where commuting was a viable option, real incomes were much lower than today, and providing even room, board and supplies to a family member over age 18 commonly entailed real sacrifice. Median family income in 1949 was about half what it was by 1989 ($16,187 in constant 1989 dollars, compared with $32,191).

Where commuting to a local public institution was not an available option, or an unacceptable one, sacrifices were often much more serious. One fairly common pattern in highly-cohesive families was for one sibling to go to college while other offspring went straight from high school to work. If all

went well, when the first child graduated from college, another child would have a turn. If there were both male and female children, the first to go to college under this arrangement was probably a son.

In other families, aunts, uncles and grandparents were recruited to help carry the financial burden. Many families took it for granted that there could be no saving for retirement until the last child completed education. In families with parents in low-paid professions, such as teaching and the ministry, it was not that uncommon for a third of the family's current income to go for college expenses. Some farmers and small business owners mortgaged these enterprises anew each time a child entered college.

The great contrast between these situations of the early 1950s and the present situation of most families helps to make several points. First, where families are expected to bear almost all of the financial burden, it can be so heavy that only the most affluent or the most dedicated are likely to attempt it. Second, it was a major step in relieving such burdens and encouraging college attendance when the states directed more of their resources to supporting commuter institutions, including community colleges. Third, the steps taken by all kinds of institutions to accommodate students who were trying to "work their way through" by term-time employment as well as summer jobs were also of major importance in sharing burdens and making college costs manageable. Expanding commuter access and increasing earnings options were well underway before publicly-financed student aid began its rapid growth, and they remain of enormous importance.

The Beginnings of Need Analysis

It was against this background of heavy family sacrifice that the early student aid means tests were devised: Families were expected to make very considerable sacrifices before they were allowed to demonstrate "financial need."

The development of a uniform need analysis system by the College Board in 1954 and 1955 had a number of very important consequences. With the ebbing of the GI Bill the colleges—especially the private colleges—found themselves with student bodies almost entirely dependent financially on their parents. The philanthropic funds available needed to be stretched to the utmost. But there was a temptation to use those funds to bid for the students who were regarded as the most desirable. The College Board's uniform means test enabled the colleges both to stretch the funds and to end the "bidding wars."

In a recent lawsuit, the U.S. Justice Department has contended that such a means test, producing the same expected family financial contribution whatever college the student attends, amounts to price fixing. The idea is that the family contribution represents the true price of going to college and that standardizing that contribution is a form of collusion.

Because so few students received large amounts of aid in the mid-1950s, the premise of the Justice Department suit would have seemed bizarre in those days. A standardized means test was considered wholly benign, promoting fairness and giving aid-eligible students a chance to choose their colleges without worrying about relative cost.

It was benign in another sense as well: When state legislatures initiated or expanded scholarship programs in the late 1950s, they did not have to struggle with the very thorny issues involved in deciding which students had financial need or how much. They could adopt an already existing system with their own modifications. They could thus be sure of a reasonably fair way of distributing aid among needy students, supported by a consensus of the best-informed academic administrators. They could concentrate on other issues of eligibility and funding.

The National Defense Education Act

This convenient availability of an accepted, standardized means test was also valuable in the enactment and administration of the student loan provisions of the National Defense Education Act of 1959 (NDEA). The explicit rationale of the program was to enable a larger proportion of talented youth to go on to college and thereby strengthen the competitive position of the United States vis-a-vis the Soviet Union, which the success of Sputnik had caused people to see as more of a technological challenge than they had before.

Placed in the context of motivating rationale, the idea behind the higher education provisions of the NDEA was that the federal government should take on a slightly larger part of the burden of financing higher education as part of its traditional burden of national defense. Yet the fact that the program focused attention on family ability to pay prepared the way for programs having a clear rationale of intergenerational equity. The program highlighted the fact that a good many highly talented young people were not going to college because of the inability of their parents to make an adequate intergenerational transfer of resources. The means-testing of the program underlined precisely this issue.

It is often said that the GI Bill and the NDEA marked the beginning of a commitment to an equal opportunity goal on the part of the federal government. In one sense, this view is contrary to the historical facts. Both programs were motivated by genuine concerns for issues having little to do with intergenerational equity in general. Yet, in a way, the GI Bill and the NDEA *were* important precursors of such a commitment. If the country looked to all its young people to make sacrifices in wartime, and if it looked to the talents of all its young people to sustain its security and competitiveness in the future, then leaving the affordability of college to the strictly private efforts of parents and children seemed out of date.

The War on Poverty

However, it was the War on Poverty of the 1960s that made intergenerational equity an explicit rationale for government intervention to provide financing for higher education where parents could not. The goal was to "break the cycle of poverty" so that subsequent generations would not be held back by the inadequate resources of their parents and end up poor themselves. The Higher Education Act of 1965 took important steps by adding a nationwide College Work-Study program and Educational Opportunity Grants to NDEA loans. All three programs were to be means of equalizing opportunities. But the intergenerational rationale of government intervention was most clear in the change in Social Security that apportioned (and in some cases augmented) a family's benefits to provide a share for younger members in school or college. Since the purpose of Social Security family benefits was explicitly to provide funds to take the place of the support a deceased, disabled or retired parent could no longer provide, this step constituted clear recognition of the role of public programs in equalizing intergenerational transfers.

A Decade of Growth

The 1972 Amendments to the Higher Education Act took these premises to their logical conclusion. The politics of the time resulted in extremely complex legislation that authorized a large number of programs. But embedded in the legislation was the Basic Educational Opportunity Grant program, now called the Pell Grant program. Its mechanism addressed issues of intergenerational equity directly: The resources of every student were to be leveled up to a stated amount. This was termed the grant "ceiling," because, no matter how poor the student's family, this was the most he could get under the program. But this "ceiling" also specified an amount below which an intergenerational transfer should not be allowed to fall. To the extent that parents could not come up with this amount, the federal government would. Putting the matter this way, of course, makes Pell Grants sound like an entitlement program. For technical and ultimately budgetary reasons, it was not; however, the idea and the mechanism were there.

The Role of the States in the 1970s

In the years just before and just after the enactment of the 1972 amendments, the states were also especially active in expanding government support for higher education. This was a period of very rapid growth in the number or size (or both) of state-supported public institutions. New community colleges were opening at a rate of one a week. There were few increases in fees to off-

set these new commitments, and in many cases fees declined after taking inflation into account. There can be no question that an equal opportunity, intergenerational equity rationale explains most of this expansion, although the contribution of higher education to economic growth and increasing a state's revenue base were also frequently cited.

The states also expanded their student aid programs in major ways during this period. The intergenerational equity arguments were behind much of this expansion as well, but another reason was to improve the competitiveness of private institutions. The state programs could not ordinarily have this second desired effect unless their benefits extended well up into middle-income brackets where the intergenerational equity rationale was weaker, although still not without force.

Federal policy also took the private college tuition problem into account. The 1972 legislation retained the so-called "campus-based" federal programs—College Work-Study, Supplemental Educational Opportunity Grants and NDEA loans (now called Perkins Loans). These programs tended to favor private colleges because both low-income and high tuitions created "financial need" under their means tests. This was in contrast to the Pell Grant program which, for almost all practical purposes, recognized only low income and a corresponding lack of family resources available for intergenerational transfers.

Student Loans

If there was some ambiguity of purpose behind the state student aid programs and the federal campus-based programs, they do not compare with the ambiguities that have accompanied the development of the federal-state Guaranteed Student Loan (GSL) program. Even if we look only at the intentions of the federal government (and leave aside default costs and a sad administrative history), motives have constantly been mixed and changing.

When originally enacted in 1965, the GSL program was designed to provide a benefit to middle-income families and thereby reduce pressures for a tax deduction or credit for college expenses paid by parents, although their offspring were to be liable on the loans. In effect, the program offered parents who felt themselves overburdened a chance to shift some of that burden to their offspring. The shifted burden would then be made easier for the offspring to bear by charging them only the low interest rate on loans guaranteed by the U.S. Treasury.

This was a complicated strategy for dealing with college costs. It acquired additional levels of complexity as additional policy requirements were laid on the program:

1. To assure parents that borrowing could take the place of the parental contributions that might be assessed by the common means tests, eligibility for the program was itself not effectively subjected to a means test until the 1980s.

2. Because of the growing commitment to equality of opportunity and intergenerational equity, it soon became intolerable for only middle-income families with established banking relationships to have access to credit under the program. To make loans available to low-income students, subsidies were added that would assure that a lender could not lose money.

3. These subsidies became so generous that even middle-income families who would not have wanted or needed a market-rate loan nevertheless took advantage of the program if they possibly could. Their eligibility depended on confusing determinations that were applied in lieu of the standard means tests, a situation so unsatisfactory that even these criteria were abolished by the Middle-Income Student Assistance Act of 1978.

4. As enrollment growth waned in the late 1970s, private colleges came to depend heavily on the program to offset the competitive disadvantage in recruitment that they faced vis-a-vis low-tuition public institutions.

Student Loans and Burden Sharing

This series of developments makes it difficult to summarize the burden-sharing implications of what is now the largest public student aid program in the country. Because students take out most GSL loans, the growth of the program looks like a shift of financial burdens to students. If we compare 1950 and 1990, there has indeed been a shift in aggregate burden. However, it is considerably smaller in many individual cases than might be supposed, for several reasons.

1. Many of the students who now use the GSL program would have had *no* resources for college in 1950 and would not have gone on to postsecondary education at all. We cannot speak of a "shifting" of burdens in the case of these students, even though their participation in the GSL program is one cause for an increase in the share of the *aggregate* financial burden borne by students.

2. Borrowers have received a real economic benefit in the form of the federal guarantee of their loans and they have received valuable interest subsidies whereby the public has, in fact, carried much of the burden. The inflation-adjusted present value of student borrower liabilities net of interest subsidies has, for considerable periods, been less than half their apparent obligations.

3. It has been deplorably easy much of the time for students simply to reject their repayment burdens—that is, to default on their loans. The cost of defaults has shifted a good deal of the burden back to the public.

Assessing the Overall Shift of Burdens

The rapid growth of the role of student loans in the late 1970s and in the 1980s is one reason, although not the only one, why the changing role of student aid in allocating burdens is hard to state with clarity. One way to get a general picture of the course we have followed is to compare the overall role of student aid in the mid-1970s with its present role.

The mid-1970s now looks like a golden age for the finance of higher education. Both federal and state aid programs had grown rapidly at the same time that states were opening large numbers of low-tuition institutions. Tuition charges at neither public or private institutions were keeping up with inflation, but subsidies for student loans were keeping up. There were more and more jobs open to students and real wages had been rising. Important kinds of aid were becoming de facto entitlements—Pell Grants, GSLs and Social Security benefits. Major means tests had become less strict, permitting more middle-income students to become eligible, or eligible for larger amounts of aid. The private institutions had successfully staked out a privileged claim to funding under the campus-based programs and were able to use aid from this source with GSLs to cover a good part of the tuition differential that made competition with public institutions difficult.

The picture, then, is of public support, including a publicly-supported aid system, replete with options and flexibility for individual students, families and institutions. Families that had saved little or nothing for college could nonetheless find ways to manage college attendance, not necessarily at their first-choice college, but at some college. Students found more room in their budgets, either through borrowing, working, or both, for a higher standard of living than their predecessors in, say, 1950 could have managed.

A correspondingly general picture of the 1990s is much less clear. Tuition and fees at public and private institutions are rising, at private institutions somewhat less rapidly than in the 1980s, at the public institutions somewhat more rapidly. Public grants to students failed to keep up with inflation in the late 1970s and 1980s, although there now seems to be considerable political interest in some catching up At the same time, GSLs now have a much more prominent place, and the decline in inflation and inflation-driven interest subsidies mean that the real burden of loan repayments will be much greater than for the borrowers of the 1970s. Private colleges now fund a much greater fraction of their aid budgets out of tuition revenues than ever before, with the result that a private college student whose own parents get relief through the award of aid tends increasingly to get that relief at the expense of other students' parents.

Thus, federal and state governments have backed off from the level of commitment that

made the mid-1970s a "Golden Age." They have done this, however, mainly by not making adjustments to compensate for inflation or for growth in the number of students attending community colleges and proprietary schools participating in the aid programs, especially the federal programs. Federal and state governments have generally not renounced or even retreated from the equal opportunity and intergenerational equity premises of their programs. They have not been pressed to reconsider those premises because the failures to make adequate adjustments for inflation and program participation have automatically redistributed burdens in the direction of parents and students without major changes in legislated program mechanisms.

The Years Since 1950

As Figure C-1 indicates, over the last 40 years the most conspicuous trend has been the rising share of the financial burden borne by the public. It is through growing public spending that the proportion of total degree credit enrollments in public institutions has been able to grow from about 50 percent in 1950 to about 80 percent now. In the last 20 years, this spending through institutional support has been joined by a major stream of public spending for student aid. In many ways the growth of student aid has been a distinct development, but both growing subsidies to public institutions and student aid are parts of the same trend toward a greater public share of costs. Together they have made possible increased participation by students whose parents could afford far less than the true costs of their education. The parental share of higher education costs has therefore fallen dramatically, even though the share of upper middle-class parents whose offspring attend private institutions has often increased.

The second major trend is a shift of burdens from parents and/or the public to students themselves. This is a more recent trend, and it can probably be dated from the late 1970s. Two factors have been at work. First, there has been increasing reliance on student loans, and these loans have been less and less heavily subsidized on an inflation-adjusted basis. Second, students are earning more of the funds they need. This is a significant factor in the finances of full-time traditional students, but it is even more a reflection of rapid growth in the proportion of enrollments that are non-traditional students. These latter students may or may not receive the benefits of state subsidies to public institutions, depending on the type of institutions they choose. But they receive relatively little support from either parents or the public student aid system. They make up the difference mostly from their own earnings.

It is not clear whether this more recent shift of the aggregate burden in the direction of student financing has relieved the public of some of the absolute burden it assumed in the 1970s. Probably not, or not much. But we *can* say that if all of this self support had to be replaced with institutional

support or grant aid from public sources, then the public share would have to have continued to grow rapidly in the 1980s instead of more or less stabilizing at a lower fraction of costs.

A Judgment About Trends

It is perfectly possible to look at where these trends have brought us and to decide that the present sharing of burdens is acceptable. After all, each of the parties is, in the aggregate, making a serious contribution—serious enough to motivate thoughtful and responsible choices about how money is spent. Most parents who have the means to do so pay something important, even though it may be less than earlier generations of highly-dedicated parents paid. Few students get a free ride, either. And certainly governments, at both state and federal levels, have their hands full in juggling higher education along with other priorities.

Yet there is also room for unease about where these trends have taken us. The most powerful rationale for greater public support since at least the 1960s has been the argument for greater intergenerational equity. It is this argument that urged state and federal governments to take the role of making intergenerational transfers on behalf of students whose lower-income parents could not take that role. Growing public support has been for the explicit purpose of leveling-up expectations of intergenerational support.

But if the longer-term trend toward larger public outlays makes sense in intergenerational terms, how can the more recent trend toward a larger student share of the total burden also make sense? Traditional students whose "self-help" share of costs has risen markedly, and non-traditional students who effectively "go it alone" unless they attend heavily-subsidized public institutions, suggest a movement in the direction of every generation for itself. What, then, has become of intergenerational equity? There is obviously room for debate about whether we are dealing with an important inconsistency in public policy, or whether the serious degree of pluralism in higher education finance that has in fact been achieved is its own sufficient justification.

Estimates, Costs and Burdens

The work of Cartter and O'Neill that lay behind the Carnegie *Who Pays? Who Benefits?* volume deserves great praise. It was an ambitious undertaking, carried out with consistency for a period of several decades in the history of higher education finance—a period in which expenditures for higher education were growing dramatically and the goals and character of higher education were also changing. Still more important, the struc-

ture of the analysis was conceptually sound, so that comparisons are meaningful over time, illuminating what was really happening.

The most important feature of the Cartter-O'Neill analysis and the tables it generated was that they provided not just one "bottom-line" figure, but several distinct summary figures for purposes of policy discussion, with "cross-walks" for getting from one of these figures to another by simple arithmetic. They provided totals for institutional funds, educational funds, monetary outlays and economic costs of higher education. Further, each of these summary figures can, in principle, be disaggregated by institutional sector and by the various parties that contribute resources to higher education. This structure is not only illuminating in the comparisons it permits; it also makes much easier the kind of critique that will be presented here.

The Structure of the Cartter-O'Neill Analysis

Partial updates of the Cartter-O'Neill tables are presented in an appendix to this paper, but for present purposes we can concentrate on a schematic version of these tables. Cartter and O'Neill offer us the following basic calculations:

Total institutional funds (all revenues of institutions expended in a given year)

Less: 75 percent of estimated research spending

Less: Institutional expenditures for non-educational purposes (all spending for contract services, community services, auxiliary enterprises, student aid and most co- and extra-curricular activities)

Equals: Total educational funds of institutions

Plus: Student subsistence costs

Less: Student aid expenditures from all sources

Equals: Total monetary outlays on education

Plus: Foregone student earnings net of student subsistence

Equals: Total economic costs of higher education.

Is this scheme still useful for the years since the Cartter-O'Neill study? Can the series really be updated for these years to permit valid long-term comparisons of costs and the sharing of cost burdens? Can and should the series be carried forward into the 1990s? If the logic of the Cartter-O'Neill analysis were alone the issue, the answer to all of these questions would be an obvious "yes," because all we demand of the logic of such as scheme is internal consistency, and such consistency is manifest.

The reason why these are not merely rhetorical questions is that the methodologies Cartter and O'Neill used to arrive at constituent numbers need to be examined. There are a number of areas where Cartter and O'Neill knew perfectly well they had no real empirical source of time

series data, and they used proxies instead. Changing circumstances have made a number of the proxies chosen by Cartter and O'Neill less convincing.

One way to reach a judgment about these problems is to ask whether the difficulties discussed below seem serious or mere quibbles. If all, or most, of them seem to be mere quibbles, then the project of continuing the Cartter-O'Neill series and using it for comparative purposes makes sense. But if the problems seem serious, or if some of them do, then we would have to abandon the Cartter-O'Neill series, however regretfully. We might still work with a greatly curtailed version of the model, but the usefulness of the numbers generated would be severely limited, the burden-sharing numbers especially.

The Problem of Foregone Earnings

The first of the problems that must be examined is the last adjustment that adds foregone student earnings to total monetary outlays to arrive at the total economic costs of higher education. This is an extremely important adjustment: Cartter and O'Neill found that the burden of higher education costs on families (parents and students together) had remained highly stable (except for the GI Bill years) at around two-thirds of costs, from 1930 to 1970. But this finding was wholly dependent on a growth in foregone student income, increasing both the total costs of higher education and the family share. If the cost of foregone income had been ignored, and only monetary outlays by parents and students were counted, the family share of higher education costs would have dropped from about two-thirds to about one-third amid the growth of public expenditures for higher education over that period.

Cartter and O'Neill made several assumptions in estimating foregone earnings. They found that the average hourly wage of 18- to 24-year-olds was 93 percent of average hourly earnings in manufacturing. They then applied this 93 percent factor to hourly earnings in manufacturing, a readily available figure, for each year they generated a table. They assumed that students lost 40 weeks a year of earnings at this 93 percent rate if they were enrolled in college, but that they recouped 12 percent of the loss by part-time work during the academic year. The loss was further reduced by assuming that students, if they had not been in college, would have experienced twice the applicable rate of unemployment in the labor force. That is, the cost of foregone earnings was reduced to reflect the fact that some students could not have obtained jobs even if they had not been enrolled in college.

It is worth reviewing the Cartter-O'Neill assumptions in this much detail to show how responsibly they used available data to construct a long time series for costs of foregone income. But these details also give us a picture of the youth labor market in the late 1960s that contrasts with present realities:

1. The service sector of the economy has grown to dwarf the manufacturing sector, and consequently it is earnings in the service sector that are most probably "foregone" when students are in college. Full-time equivalent employment in the service industries grew from 54.7 percent of all employment in 1947 to 67.4 percent in 1988.

2. While some full-time students are still available for full-time employment only during summer vacations, most would now consider that they have much more time to work during the academic year than the five hours per week assumed by Cartter and O'Neill.

3. A growing number of non-traditional students, both part-time and even full-time, tend to have large and often full-time job commitments, juggling study and work time as best they can.

4. Because college students are not nearly as concentrated in the 18- to 24-year-old bracket as they were in the 1960s, using earnings and unemployment data for this age group to make estimates would not seem to be the acceptable simplification it certainly was when Cartter and O'Neill did their work.

In summary, to deal with the issue of foregone earnings—important as it may be for burden sharing discussions—we have to deal with an unhappy choice: either follow the Cartter-O'Neill methodology, knowing full well that it is increasingly off the mark, or else develop quite new estimates complicated by the variety of ages and labor force roles of students today. The conservative estimates presented in the appendix tables show what happens if amounts for foregone earnings are based on the lowest earnings in the service sector—that is, on the federal minimum wage.

Whatever course is taken, one result would probably stand out: The real inflation-adjusted earnings of noncollege-educated entrants into the labor market, whether in manufacturing or other sectors, have declined importantly in relation to college costs. This has been documented in a number of reports sponsored by the Grant Foundation. The average annual earnings of 20- to 24-year-old civilian males not currently in school or college fell from $15,221 to $10,924 in constant 1986 dollars from 1973 to 1986. Foregone earnings as a component of higher education costs have, accordingly, been shrinking, not growing, relative to monetary outlays by all parties (including students). And this shrinkage would be *in addition* to that stemming from the greater labor force participation of those who are students.

Student Aid in the Cartter-O'Neill Analysis

Another step in the Cartter-O'Neill estimates that needs to be examined is their treatment of student aid. Total monetary outlays for higher education are calculated by adding student subsis-

tence costs to total educational funds of institutions and deducting the net contribution of student aid funded out of the general revenues of institutions, along with aid from external sources. Student aid is dealt with at this point in the Cartter-O'Neill calculations not because it is viewed as defraying subsistence costs exclusively, but in order to reconcile the institutional part of the accounts with the accounting for burden sharing. For this purpose of reconciliation, aid from all sources must be counted, but none of it twice. To accomplish this aim, the sum of all aid is treated as a deduction to what families (parents and students) would otherwise have to pay to meet costs through monetary outlays. This sum includes funds appropriated for student aid out of the general revenues of institutions and not merely passing through institutional hands from government or philanthropy.

These internally-generated funds today look odd as a *deduction* from the parent and student share of the burden, because, at private institutions, the revenue that makes these institutional funds possible comes increasingly from tuition *payments* by parents and students. The Cartter-O'Neill procedure is nonetheless valid, since the extra tuition payments from some are properly canceled by the reduced payments of others when the burden of all parents and students is aggregated.

However, the fact that Cartter and O'Neill could deal with the matter as a purely technical one of account reconciliation shows how much the world of higher education finance has changed. They would perhaps give the matter extensive treatment and explicit tabular recognition if they were to undertake their enterprise today. The appendix tables at the end of this paper adopt the device of regarding those families who are net suppliers of aid funds as philanthropic contributors. This clears up some of the confusion, although the rising share of philanthropy that results could also be misleading.

Subsistence Costs in the Cartter-O'Neill Analysis

The other "adjustment" made at this point—for subsistence—also bears comment. Although the Carnegie report is not explicit about its sources, the internal evidence is that the 1970-71 base-line estimates of $1,200 for resident students and $850 for commuter students were derived from student aid data bases. These figures were then adjusted for cost-of-living indices to obtain figures for earlier academic years.

This approach was not at all unreasonable at the time, given the difficulties in defining subsistence costs noted in Section One of this paper. For a number of reasons, subsistence costs estimates from the student aid data base tend in most respects to be quite conservative. That is, they tend to be close to the amounts that barely enable students to get by, with few frills or extras not billed by the institutions attended.

There are three problems with these estimates: First, there appears to be a widening range of institutional practice in deciding on the costs that will be billed students as tuition, as opposed to non-tuition and subsistence expenses. Second, there has almost certainly been a rise in the standard of living that students, parents and colleges consider minimal. And, third, there is the very large problem of the growth in the proportion of enrollments represented by students who neither reside on campus, nor with parents. Among these are many varieties of non-traditional students. Many of these latter students have understandable expectations of a far higher standard of living than those of a young full-time undergraduate student who just barely gets by.

This is not to say that Cartter and O'Neill would, today, necessarily scrap the basis for estimating subsistence costs they used in the 1970s. They could argue that the best subsistence cost figures for use in an estimate of the costs of education would be the minimum costs of resident and commuter students, all other costs, however necessary, really being non-educational. But they would surely, today, defend their procedure explicitly and warn their readers of the difficulties involved.

An alternative approach to the subsistence problem might be to adopt a standard that frankly has no empirical reference to higher education or the student aid data base. For example, it could be decided that subsistence for an FTE student would be counted as a percent of the poverty threshold, and this approach is adopted as a basis for indexing subsistence costs in the appendix tables for years after 1970-71. This is an explicitly arbitrary choice. But it has the merit of not considering students as having an importantly different style of life than that of other people, when fewer and fewer students actually do. It would treat all students, traditional and non-traditional, as coping with the same core problems of survival, even though many have needs for additional income.

Technical and Non-Technical Problems

There are a number of other problems in continuing the Cartter-O'Neill estimates into the 1990s. One is a change in Higher Education General Information Survey reporting beginning in 1974 that makes it difficult to know whether institutional allocations to student aid for later years are truly comparable to those for earlier years and used by Cartter and O'Neill. Another problem is to decide which institutional expenditures for extracurricular and cocurricular activities should be counted as "non-educational services." As the role (and the perception of the role) of such activities changes, perhaps the classification of such activities should be modified.

Parent and Student Burdens

The largest problem with the Cartter-O'Neill accounts, however, is not technical. Nor is it due to changing enrollment patterns or educational practices. Cartter and O'Neill simply did not attempt to distinguish parental and student burdens at all. In their accounts, foregone income represents a purely student burden, and the adjustments they make to foregone income represent purely student earnings. Otherwise, however, they do not separate parent and student contributions. Student loans, for example, are treated as part of an undifferentiated family contribution, except for the amount of explicit interest subsidies.

To raise this major problem is not to criticize Cartter's and O'Neill's work. To distinguish parent and student contributions was never easy. It is not easy now. But there is ample indication that a period in which both parent and student burdens were being reduced (through growing public subventions) has been succeeded by a period in which student burdens have increased relative to both parental and public burdens. To continue the Cartter-O'Neill series may be illuminating on many issues, but not on *this* issue, although it may well be the most important issue concerning burden sharing that could be addressed today. The continuation tables in the appendix do not attempt to resolve it.

APPENDICES
APPENDIX A

Table A-1

Foregone Income Adjustments to the Cartter-O'Neill Accounts
Selected years, 1949-1970 (in millions of dollars)

Year	Total Costs	Burden of costs borne by		
		Family	Taxpayer	Philanthropy
1949–50				
Total monetary outlays	2,782 (100%)	592 (21.3%)	1,956 (70.3%)	234 (8.4%)
Foregone income	215	215		
Total economic cost	**2,997** (100%)	**807** (26.9%)	**1,956** (62.3%)	**234** (7.8%)
1959–60				
Total monetary outlays	5,568 (100%)	2,669 (47.9%)	2,231 (740.1%)	669 (12.0%)
Foregone income	953	953		
Total economic cost	**6,521** (100%)	**3,622** (55.5%)	**2,231** (34.2%)	**669** (10.3%)
1969–70				
Total monetary outlays	19,902 (100%)	7,725 (38.8%)	10,394 (52.2%)	1,783 (9.0%)
Foregone income	4,922	4,922		
Total economic cost	**24,824** (100%)	**12,647** (50.9%)	**10,394** (41.9%)	**1,783** (7.2%)

APPENDIX B

The Continuation Accounts
Notes on changes of format

1. The line "services and related" combines lines in the Cartter-O'Neill accounts for which there are no longer separate data.
2. The "student aid income" lines are omitted for reasons explained in Appendix D, in which a new treatment of the sources of aid funds is discussed.
3. Two lines for "Total educational funds of institutions" are included instead of one. They are designated "A" and "B". This treatment allows for disaggregation of aid funds by source ("Less: institutionally-awarded aid") while disaggregating other items of "non-educational services" by public and private institutions. It also highlights the effect of the new treatment of aid sources.
4. The treatment of subsistence costs and foregone income is explicitly added to the total resource column, rather than only implicitly.

Table B–1

Aggregated Income Accounts for Higher Education 1974–75 (in millions of dollars)

	Public Institutions	Private Institutions	Total	Burden of costs borne by			
				Family	Taxpayer	Philanthropy	Other
State	10,741	250	10,991		10,991		
Local	1,343	88	1,431		1,424		
Federal	3,822	2,290	6,112		6,112		
Tuition & fees	3,088	4,196	7,284	7,284			
Endowment	107	611	718			718	
Gifts	559	1,189	1,748			1,748	
Services & related	374	182	556				556
Auxiliary enterprises	2,553	1,535	4,088	3,679			409
Total institutional funds	**22,587**	**10,341**	**32,928** (100%)	**10,963** (33.3%)	**18,527** (56.3%)	**2,466** (7.5%)	**965** (2.9%)
Less: non-educational services	-5,003	-3,131	-8,134	-3,679	-3,490		-965
Total educational funds of institutions (A)	**17,584**	**7,210**	**24,794** (100%)	**7,284** (29.4%)	**15,037** (60.6%)	**2,466** (9.9%)	
Less: institutionally awarded aid			-1,744	-1,249	-495		
Total educational funds of institutions (B)			**23,050** (100%)	**6,035** (26.2%)	**14,542** (63.1%)	**2,466** (10.7%)	
Adjustments:							
Student aid expenditures				-6,815	+5,566	+1,249	
Subsistence			9,878	+9,878			
Total monetary outlays			**32,928** (100%)	**9,089** (27.6%)	**20,108** (61.1%)	**3,715** (11.3%)	
Foregone income			8,468	8,468			
Total economic cost			**41,396** (100%)	**17,566** (42.4%)	**20,108** (48.6%)	**3,715** (9.0%)	

Table B–2

Aggregated Income Accounts for Higher Education 1979–80 (in millions of dollars)

	Public Institutions	Private Institutions	Total	Burden of costs borne by			
				Family	Taxpayer	Philanthropy	Other
State	17,974	404	18,378		18,378		
Local	1,437	151	1,588		1,588		
Federal	5,073	3,829	8,903		8,903		
Tuition & fees	4,860	7,070	11,930	11,930			
Endowment	191	986	1,177			1,177	
Gifts	979	1,829	2,808			2,808	
Services & related	819	420	1,239				1,239
Auxiliary enterprises	4,089	2,393	6,481	5,833			648
Total institutional funds	**35,422**	**17,082**	**52,505** (100%)	**17,764** (33.8%)	**28,869** (55.0%)	**3,985** (7.6%)	**1,888** (3.6%)
Less: non-educational services	-7,591	-5,166	-12,756	-5,833	-5,035		-1,888
Total educational funds of institutions (A)	**27,831**	**11,916**	**39,749** (100%)	**11,931** (30.0%)	**23,834** (60.0%)	**3,985** (10.0%)	
Less: institutionally awarded aid			-2,816	-1,888	-928		
Total educational funds of institutions (B)			**36,933** (100%)	**10,043** (30.0%)	**22,906** (60.0%)	**3,985** (10.0%)	
Adjustments:				-9,671	+7,783	+1,888	
Student aid expenditures			15,360	+15,360			
Subsistence							
Total monetary outlays			**52,294** (100%)	**15,732** (27.6%)	**20,108** (61.1%)	**3,715** (11.3%)	
Foregone income			13,908	13,908			
Total economic cost			**66,202** (100%)	**29,640** (44.8%)	**30,689** (46.4%)	**5,873** (8.9%)	

Table B–3

Aggregated Income Accounts for Higher Education
1984–85 (in millions of dollars)

	Public Institutions	Private Institutions	Total	Burden of costs borne by			
				Family	Taxpayer	Philanthropy	Other
State	26,965	618	27,583		27,583		
Local	2,179	208	2,387		2,387		
Federal	6,310	5,199	11,509		11,509		
Tuition & fees	8,648	12,636	21,283	21,283			
Endowment	343	1,753	2,096			2,096	
Gifts	1,846	3,051	4,896			4,896	
Services & related	1,425	702	2,127			2,127	
Auxiliary enterprises	6,296	3,804	10,100	9,090		1,010	
Total institutional funds	**74,012**	**27,971**	**81,983** (100%)	**30,373** (37.0%)	**41,479** (50.6%)	**6,992** (8.5%)	**3,137** (3.8%)
Less: non-educational services	-10,899	-7,676	-18,5754	-9,090	-6,348		-3,137
Total educational funds of institutions (A)	**43,113**	**6,992**	**20,295** (100%)	**63,408** (33.6%)	**21,283** (55.4%)	**35,131** (11.0%)	
Less: institutionally awarded aid			-3,575	-2,556	-1,019		
Total educational funds of institutions (B)			**59,833** (100%)	**18,727** (31.3%)	**34,112** (57.0%)	**6,992** (11.7%)	
Adjustments:							
Student aid expenditures				-8,374	+5,818	+2,556	
Subsistence			21,064	+21,064			
Total monetary outlays			**80,897** (100%)	**31,417** (38.8%)	**39,930** (49.4%)	**9,548** (11.8%)	
Foregone income			10,944	10,944			
Total economic cost			**91,841** (100%)	**42,361** (46.1%)	**39,930** (43.5%)	**9,548** (10.4%)	

Table B–4

Aggregated Income Accounts for Higher Education 1988–89 (in millions of dollars)

	Public Institutions	Private Institutions	Total	Burden of costs borne by			
				Family	Taxpayer	Philanthropy	Other
State	34,836	1,195	36,031		36,031		
Local	3,026	338	3,364		3,364		
Federal	8,413	7,481	15,894		15,894		
Tuition & fees	12,436	18,371	30,806	30,806			
Endowment	422	2,492	2,914			2,914	
Gifts	2,949	4,112	7,061			7,061	
Services & related	2,186	1,129	3,316				3,316
Auxiliary enterprises	7,809	5,046	12,856	11,570			1,286
Total institutional funds	**72,076**	**40,165**	**112,242** (100%)	**42,376** (37.8%)	**55,289** (49.3%)	**9,975** (8.9%)	**4,602** (4.1%)
Less: non-educational services	-14,409	-10,811	-25,220	-11,570	-9,050		-4,602
Total educational funds of institutions (A)	**57,667**	**29,354**	**87,021** (100%)	**30,806** (35.4%)	**46,239** (53.1%)	**9,975** (11.5%)	
Less: institutionally awarded aid			-6,256	-5,208	-1,048		
Total educational funds of institutions (B)			**80,765** (100%)	**25,598** (31.7%)	**45,191** (56.0%)	**9,975** (12.3%)	
Adjustments:				-12,446	+7,238	+5,208	
Student aid expenditures			25,164	+25,164			
Subsistence							
Total monetary outlays			**105,929** (100%)	**38,316** (36.2%)	**52,429** (49.5%)	**15,183** (14.3%)	
Foregone income			10,945	10,945			
Total economic cost			**116,874** (100%)	**49,261** (42.1%)	**52,429** (44.9%)	**15,183** (13.0%)	

APPENDIX C

Summary Figures

Figure C–1
Percentage Contributions to Institutional Funds

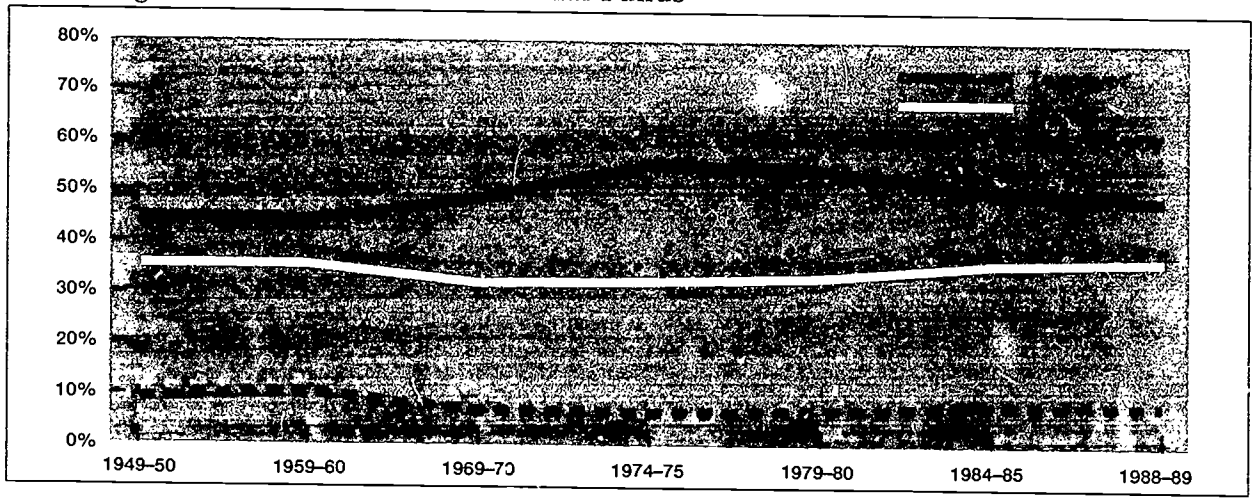

Figure C–2
Percentage Contributions to Educational Funds "A"

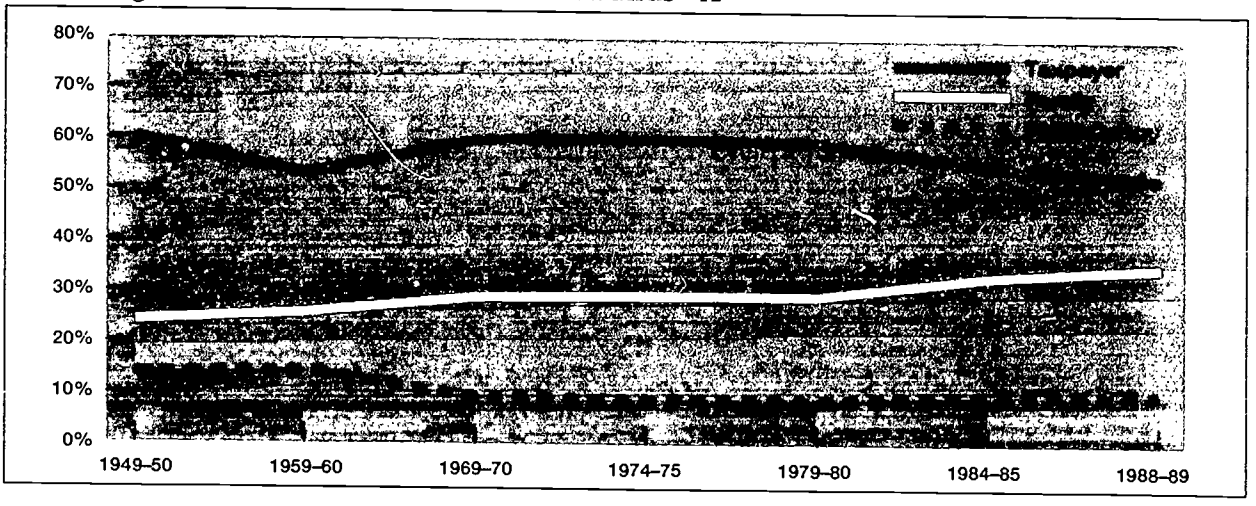

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Figure C–3
Percentage Contributions to Educational Funds "B"

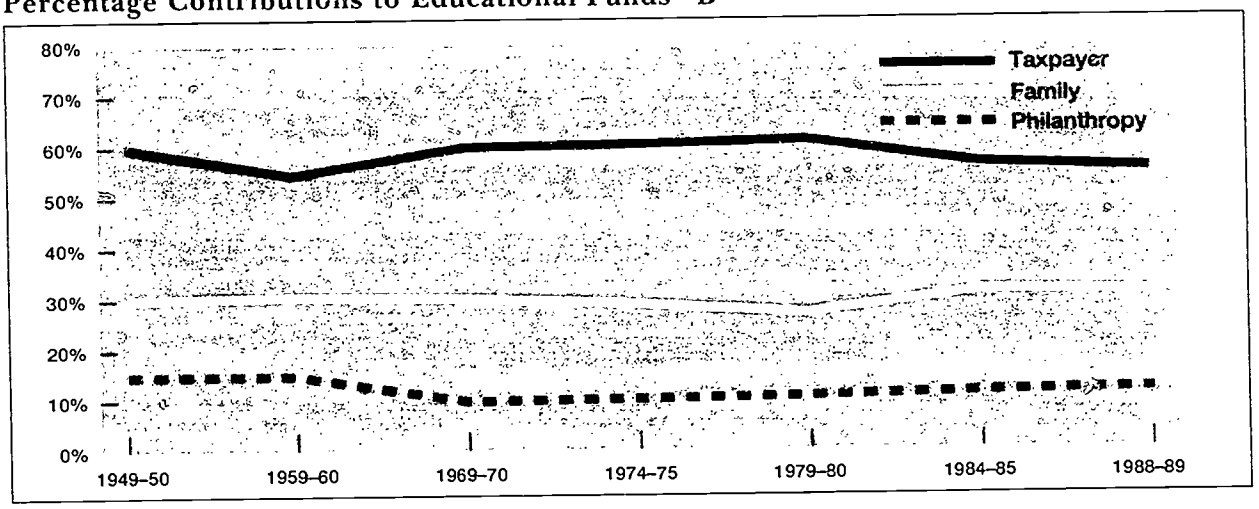


Figure C–4
Percentage Contributions to Monetary Outlays

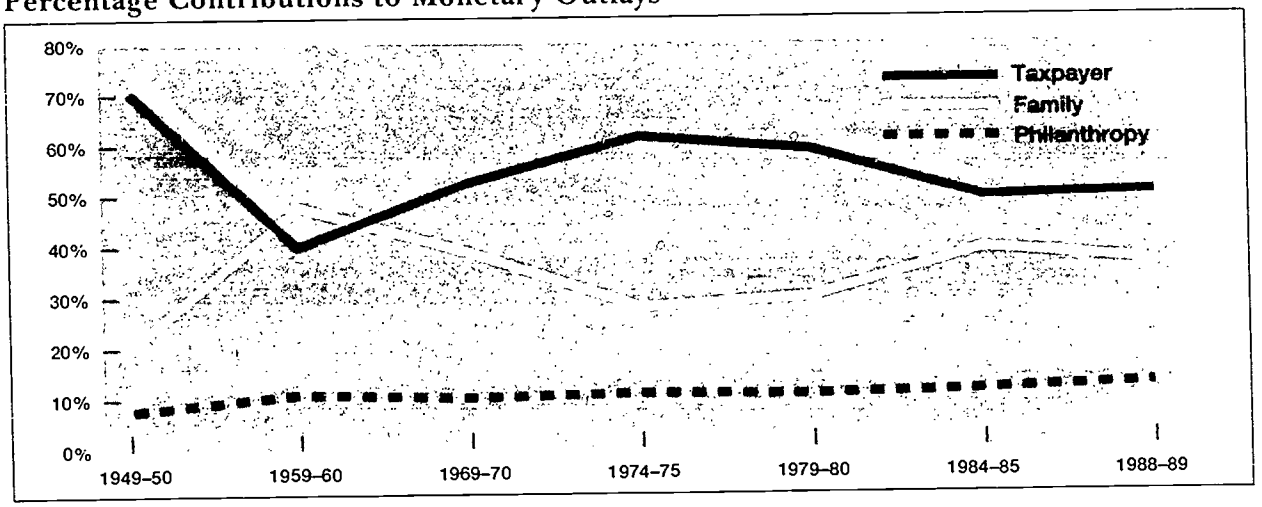
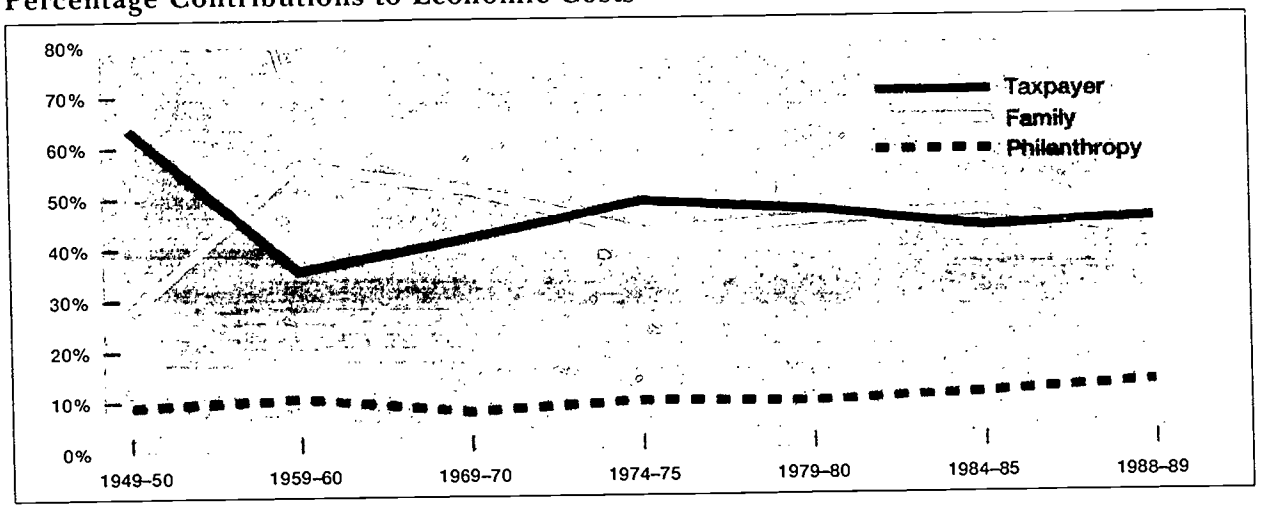


Figure C–5
Percentage Contributions to Economic Costs



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APPENDIX D

Policy Relevant Issues in the Continuation Accounts

The current funds revenue data of NCES is used in both the Cartter-O'Neill accounts and in the continuation accounts presented here. Definitions in the underlying survey have changed from time to time and the categories of income itemized in the published tables have also changed. These changes result in some uncertainty in using the NCES data for continuing the Cartter-O'Neill accounts. It is unlikely, however, that these changes make misleading the long-run trends charted in the accounts.

One exception may be changes in accounting for institutional receipts earmarked for student aid. These changes, made in 1974, were intended to bring the current funds series more in line with principles of fund accounting. These may have been appropriate changes, but they have the effect that we can no longer identify within the current funds series the source of institutionally-administered aid funds, despite the fact that the source of such funds has become a matter of major importance, especially for private colleges and universities.

For the continuation accounts, a new data source for student aid and a new tabular presentation were both necessary. The data source used in the new tables is the College Board *Trends in Student Aid* series, "Aid Awarded to Students by Source." This series has advantages for the continuation accounts in that it clearly separates estimates for public loan programs, public grant and grant-like programs and "institutionally-awarded aid." This last estimate is entirely appropriate for continuing the Cartter-O'Neill practice of deducting institutionally-administered aid from "institutional funds" in arriving at "total educational funds of institutions."

Using the College Board series in this way does not, however, solve all the problems of achieving comparability and continuity between the Cartter-O'Neill accounts and the new tables presented here. Without an NCES series for student aid funds, it is impossible to attribute this institutionally-administered student aid to its sources—to the parties that bear the financial burden. Cartter and O'Neill attributed aid funds to three sources: the taxpayer, philanthropy and institutional unrestricted funds. This cannot be done using the College Board series in any straightforward way.

The new tables resolve the problem by adopting an approach that may seem odd, but it does serve to allow approximate comparability between the old and new tables and it also serves to highlight the increasingly important practice of funding institutionally-awarded aid from tuition revenues. This approach is to reduce the contribution of families to "total educational funds of institutions" by the whole amount of institutionally-awarded aid. This step recognizes that more and more of the funds for such aid come from parents and students, although by no means all.

Then all of these funds reappear as philanthropy's contribution in the student aid adjustment line further along in the accounts. This treatment recognizes affluent parents as willing or unwilling philanthropists along with more traditional donors. If this approach seems odd, it is hard to think of any other that both permits continuation of the Cartter-O'Neill accounts and uses available aggregate data.

Anyone who rejects the parent-as-philanthropist rationale is likely to find the continuation tables misleading in two specific ways: Because of the approach taken, the family share of "educational funds of institutions" and all subsequent totals is somewhat smaller than if the Cartter-O'Neill approach could have been continued exactly. At the same time, philanthropy's share is larger by a corresponding amount. The figures in Appendix C indicate a slight rise in philanthropy's share since 1975, which partly reflects growth in tuition funding of student aid, as well as growth in more conventional kinds of philanthropy.

The federal student aid programs represent a different sort of difficulty. Each of the federal programs is marked by an ambiguity that makes it difficult to decide on its treatment in the continuation tables. The issue for the Pell Grant program is whether all the aid awarded should be included in the "higher education" accounts, or only the amount of the aid that does not go to students attending proprietary institutions. Since data on costs and on other financial resources comparable to that used by Cartter and O'Neill is available only for non-profit institutions, the continuation tables exclude Pell Grants to students attending proprietary schools. The tables thus do not represent all of "postsecondary education", or all aid from public sources awarded to students in postsecondary education.

A similar problem exists concerning aid from the federal campus-based programs to students attending proprietary schools. It could in principle be handled the same way. However, readily available data does not permit such an exclusion for exactly the years and programs necessary, and since the share of proprietary school students in the campus-based programs has never been much more than 5 percent, no exclusion has been attempted.

With the Perkins and GSL loan programs, the ambiguity concerns the treatment of interest subsidies. Cartter and O'Neill apparently included some estimate of the implicit subsidy in Perkins loans (then, NDEA loans) as a form of aid from public sources, but excluded the principal amount of the loans from their student aid adjustment. In effect, they counted the principal amount of the loans as part of the family contribution.

There would be nothing technically impossible in treating more recent Perkins Loans and GSLs the same way, but there would first have to be a consensus about just what the subsides consist of. The amount added to aid from public sources could include the explicit "in-school" subsidies, the difference between Treasury-backed and private borrowing costs, or interest-rate pegged subsidies to lenders, or some combination of these benefits. The present value of these benefits,

with or without recognition of inflation, could be added to the aid awarded in any one year, or only the amount amortized in that year. Lacking consensus on just what the subsidies consist of, the continuation tables presented here in effect regard the principal amount of student borrowing as part of the family share (as did Cartter and O'Neill) and ignore interest subsidies entirely. The effect is to underestimate public funding of student aid to an unfortunate extent.

A final ambiguity concerns the College Work-Study program. Since students spend time in work-study jobs just as in other jobs, the funding for the program could be treated as student earnings in the tables—that is, it could be added to the family share of the financial burden. Yet work-study jobs are commonly quite different from, say, fast-food jobs in having an intended educational purpose and they are treated as aid, not earnings, for many purposes of aid packaging and institutional budgeting. In the continuation tables work-study funds are, therefore, included as aid from public sources just as though they were grants.

The problems involved in continuing the subsistence and foregone earnings estimate of Cartter and O'Neill are discussed in the text. They are dealt with in the appendix tables as follows:

- The "subsistence" adjustment in the continuation accounts is the amount for 1969-70 in the Cartter-O'Neill accounts indexed for increases in the poverty threshold for a family of four and adjusted for FTE enrollment growth. This is intended to provide comparability and continuity with the Cartter-O'Neill accounts, but at the same time to recognize that minimum living standards for students are less distinct from those of people generally than they were before 1970.

- The "foregone income" line is recalculated for both the old and new tables. (See Appendix A for the recalculations for years before 1974.) The recalculations assume that full-time students give up 150 days of full-time earnings at the minimum wage applicable at the time, less their subsistence calculated as described above. Part-time students are not counted as giving up any earnings. This approach results in drastically lower estimates of foregone income. However, the Cartter-O'Neill approach would result in very inappropriate estimates in today's circumstances, for the reasons discussed in the last section of the text. At the same time, not to have recalculated the Cartter-O'Neill figures for earlier years on the new more modest assumptions would have caused a great apparent discontinuity with the earlier years, including an apparent sudden collapse in the family share of economic costs. This would have given an entirely false impression.

The effect of the recalculation is greatly to reduce the estimated family contribution and the family percentage share on the "total economic cost" line in both the old and new accounts. There is obviously room for debate on the issue of foregone earnings and its treatment here. It will be an important debate to the extent that "total economic cost" is regarded as the most policy relevant "bottom line" rather than "total monetary outlays" or "educational funds of institutions."

APPENDIX E

Technical Notes on Extending the Continuation Accounts

1. In both the old and new tables, all institutional current fund revenue from state governments reported by NCES is included in line 1 and carried down to subsequent totals. However, state governments provide some funds to institutions that arguably should be excluded from "educational funds of institutions" just as much as federal research funds, 75 percent of which are excluded both by Cartter and O'Neill and by the new tables.

2. Total federal funds (line 3) were broken down in the NCES data used by Cartter and O'Neill into "unrestricted appropriations," "sponsored research" and "other sponsored programs." The 75 percent exclusion of research spending in line 10 was presumably applied to most of the last two categories. In the new tables, the 75 percent exclusion is applied to items somewhat differently captioned by NCES: "restricted grants and contracts" and "independent operations."

3. Tuition and fee revenues (line 4) has the same meaning in the old and new tables, that is, *gross* revenue. Line 12 shows student aid funded from unrestricted revenues, netted out against gross tuition and fee revenue. In the old tables, the amount of such aid as calculated by Cartter and O'Neill is added to the line 10 exclusion.

4. In the Cartter-O'Neill tables, student aid income from "public sources" and "private sources" is separated from other public and philanthropic support through grants, gifts and endowment. It is not separated in the new tables, to the extent that post-1974 NCES reporting includes it at all. Both NCES and Cartter-O'Neill were trying to deal with real resource flows in a context governed by the conventions of fund accounting. The drastic change in the treatment of institutionally-awarded student aid in the new tables, discussed in Appendix D, has the intended effect of making fund accounting irrelevant to the presentation of resource flows.

5. How Cartter and O'Neill developed figures for "sale of services" and "related" is unknown. A best guess is that they included "recovery of indirect costs," "other educational and general revenue," and "other major service programs" in the NCES tables but excluded hospital revenues and any recognition of changes in capital account balances. Line 7 in the new tables attempts to be comparable by including "sales and services/educational activities" and excluding "hospitals" and "other sources." There are probably some inconsistencies here, but they probably have only minor effects on our picture of resource flows.

6. Cartter and O'Neill distributed auxiliary enterprise income (line 8) between "families" and "other" sources on the basis of unknown data. For purposes of rough continuity and comparability, the new tables assume that 10 percent of total NCES reported auxiliary enterprise income comes from "others." These are, presumably, faculty, family and unaffiliated individuals who sometimes use campus food services, dormitories and bookstores.

TRENDS IN PAYING FOR HIGHER EDUCATION, 1950–1990

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TRENDS IN PAYING FOR HIGHER EDUCATION, 1950–1990

Arthur Hauptman and David Roose

Trends in Paying for Higher Education, 1950-1990

The burdens of financial responsibility for higher education have varied since 1950. The proportions of costs borne by the federal government, state and local governments, philanthropy, the family, and other sources—the five principal sources of revenues for higher education—have changed over time as circumstances have changed.

Federal Spending. The federal government's share of spending for higher education has declined from more than 45 percent in 1950 to about 10 percent in 1990 (see Table 1). This picture is strongly influenced, however, by the changing utilization of the GI Bill. Federal expenditures for veterans overwhelmed all other federal higher education expenditures in 1950, and to a somewhat lesser degree in 1975. Peaks in these two years were followed by 15 years of decline in both student aid spending for veterans and in the federal share of the higher education burden. Excluding 1950, the federal government's share of higher education spending ranged from about 10 percent to 24 percent. The federal share of total revenues in private higher education has typically been higher than that of public higher education, although the range of difference has varied considerably over time.

State and Local Expenditures. State and local governments have contributed significantly different amounts to public and private higher education. Of total spending for public higher education, state and local governments account for about 30 percent. For private education, the state and local government share has consistently hovered around 4 percent. For all institutions, the state and local government share of revenues ranged between 14 percent and 25 percent.

Revenues from state and local governments as a share of total spending generally rose until 1975. Since then, there has been an accelerating decline in the state share of public sector spending. That share was lower in 1990 than at any time since 1965, whereas the state and local government share of the private sector was higher than ever in 1990.

Philanthropy. The share of total revenues from philanthropy increased slightly over the 40-year period, from just under 5 percent in 1950 to just under 6 percent in 1990. After an increase to almost 7 percent of total revenue in 1960, philanthropy's share declined to a low of less than 5 percent in 1980, followed by 10 years of increases. As expected, the share of revenues from philanthropy is significantly higher in the private sector, where it consistently has accounted for more

than 10 percent of total revenues. By contrast, revenues for philanthropy never exceeded 3 percent of total revenues in the public sector, although philanthropy's share more than doubled for public institutions from 1950 to 1990.

Other Sources. "Other" sources of revenue, which include revenues from university hospitals and noneducational activities, have increased dramatically in importance from 1950 to 1990. These sources contributed about 2 percent of total revenues in 1950 but more than 11 percent in 1990. This growth reflects the national growth in health care expenditures as well as an expansion in university activities beyond purely educational purposes.

Family Share. The family share of spending represents the costs of tuition, room and board, and other expenses minus grant aid. The share of the burden borne by the family increased from 1950 to 1965 and from 1975 to 1985. These increases can be explained in large part by the declines in student aid for veterans in these periods. From a low of 30 percent in 1950, when expenditures under the GI Bill were at their highest, the family share of spending increased to more than 55 percent in 1965. Since 1970, the family share has been less than 50 percent, although in 1985 and 1990 it was nearly 50 percent.

Except for 1950, the family share has been greater in the private sector, as would be expected. The gap between sectors has been declining since 1975, with families with students in private institutions bearing over 12 percentage points more of the burden in 1975 and only 7 percentage points more in 1990.

Within the family, parents and students have faced a shifting of the burdens as well. In the public sector, the parents' share accounted for more than 40 percent of the total spending in 1965, whereas the students' share was more than 12 percent. By 1980, the students' share had increased to 21 percent and had surpassed the 19 percent share contributed by parents. The parents' share increased over the next 10 years, however, as the students' share declined moderately, so that by 1990, parents of those students attending public institutions contributed over one-fourth of the total spending on higher education, while the students contributed about one-fifth.

In the private sector, parents typically have shouldered a much greater share of the burden than have students. In 1965, parents contributed more than half of the funds for private institutions, while the share borne by students was under 10 percent. In 1980, the parental share hit a low of 31 percent, while the students' share peaked at 17 percent.

To examine the mix of parental and student responsibility, it is also possible to divide the costs of attendance—tuition, fees, room, board, and other expenses—into parents' contributions, those of students, and grant aid (see Table 2). From 1950 to 1960, the parents' share increased just as dramatically as aid declined. In 1960 and 1965, parents were paying more than 80 percent of the costs of attendance, net of aid. This share declined to just above 50 percent in 1980, then increased to

more than 60 percent in 1990. These trends hold for both the public and private sectors, though the declines are generally more pronounced in the private sector. The private students' share is consistently more than 10 percentage points less than the public students' share, although private students typically pay more in dollars because the costs of attendance are so much higher.

In sum, the picture of financial responsibility for higher education in 1990 is different from that in 1950. The federal government's share decreased over the period, from a high in 1950 to a low in 1990, with a peak in 1975. Changes in the federal share are intertwined with changes in expenditures on student aid for veterans.

In 1990, the states and localities shouldered more than twice the burden of the federal government, and they have covered a larger share of spending than the federal government since 1960.

The role of philanthropy increased slightly overall, and its share more than doubled in the public sector.

"Other" sources showed the second largest increase of any source of funds, more than doubling their share in both sectors.

The share of the burden borne by the family has varied throughout this period, its changes always roughly of the same magnitude but opposed to those in the federal government's share. The students' share increased until 1980, and it has fallen since then. Within the family, parents of students in public institutions shoulder less of the burden in 1990 than they did in 1950, while parents of private students bear more of the burden.

Methodology and Definitions

Discerning the long-term trends in sources of money spent on higher education is a rather difficult task. A variety of problems, including a lack of data, make it impossible to devise exact numbers. Nevertheless, a consistent data set can be constructed from which general trends can be discovered. With many caveats, the following presents the changing shares of higher education responsibilities in the United States since 1950.

Martin Kramer, and the Carnegie Commission on Higher Education before him, have attempted a similar assignment (see the previous paper). Because Kramer's study updated the Carnegie Commission's report, he was bound to their methodology as far as possible. Essentially the same data are analyzed here but in a different manner.

Data collected by the federal government concerning higher education institutions' revenues since 1950 forms the core of the study. Unlike the previous studies, all revenue is included: no attempt has been made to deduct income which is applied to noneducational purposes. Since many such exclusions can only be accomplished by assumption (i.e., only counting 25 percent of

research income, as the Carnegie Commission and Kramer did), all revenue is presented so that the reader can make his or her own adjustments.

Not all money spent on the education enterprise is received by institutions. Payments for housing of off-campus students, transportation for commuters, trips home and personal expenses for all students do not go to the institutions, but such costs are indisputably intertwined with the higher education financing needs of students. Rather than attempting to utilize a "minimum required for subsistence" as the previous reports do, this study uses data supplied by the College Board on the average total costs of attending postsecondary institutions.

Also unlike the previous studies, the opportunity cost of college attendance, or foregone earnings, is not considered. And since all revenues are attributed to their sources, student aid, especially "institutional" aid, is treated differently than in Kramer's study. Additionally, data are reported only by public and private institutions. The "total" does not include proprietaries; it is simply the public and private sectors combined.

Because of these differences, the results differ slightly from those of the previous two studies. This loss is offset, however, by the consistent treatment of the data, which should provide for more accurate comparisons throughout the period 1950-1990.

Five categories are assumed to constitute the total revenue of the higher education enterprise—the federal government, state and local governments, philanthropy, the family and "Other" sources. All data are reported by public and private institutions. While this encompasses two-year, four-year, and four-year plus institutions, proprietary institutions are omitted to the extent possible, because the surveys from which education statistics are collected did not consistently include proprietaries until 1990. It should be kept in mind, however, that a rather large share of government aid goes to proprietary institutions. More than $1 billion in Pell Grants went to proprietary institutions in 1989-90 and almost $4 billion in guaranteed loans.

The governmental categories are perhaps the most reliable, though some estimation is necessary. For instance, the current fund revenue tables of the *Digest of Education Statistics* break out the institutional revenues provided by the federal government. Research, appropriations, and all student aid given directly to the institution from the government are included, but all aid provided directly to students is excluded.

Such aid includes Pell Grants, aid under the GI Bill, and educational aid from Social Security. Thus, total federal expenditures on education include these aid expenditures as well as the line-item in the *Digest*.

The "State and Local" government category is much the same. The category in the *Digest* represents all appropriations, grants and contracts, and aid given directly to institutions. For the total, this amount is added to the total student aid provided directly to students. The amounts for 1980-90 are

based on the annual survey reports of the National Association of State Scholarship and Grant Programs (NASSGP), while the amounts for previous years are projected backwards from the reports.[1] No data have been found concerning local government aid to students, but such aid is in all probability much smaller than state grants and therefore negligible for the purposes of this paper.

The "Philanthropy" category is also rather straightforward. Income from both private gifts and endowments are reported in the *Digest*. Scholarships, however, are estimated using techniques similar to those used by the Carnegie Commission.[2] These scholarships represent aid offered directly to students by churches, schools, community organizations, and so on. Philanthropy is the sum of these three items.

The "Other" category presents some difficulty. This category is not consistent throughout the period 1950-1990, since changes were made in the surveying and reporting format several times. For the post-1970 period, these data were derived directly from the *Digest's* revenue tables. The relevant categories are educational activities, hospitals and "other sources."[3]

For the pre-1970 period, data sources do not break out income into categories readily identifiable as those above. For this period, the "Other" category represents the "leftovers." To the extent possible, all income was assigned to one of the other four categories. The remaining amount was placed into "Other."[4]

The remaining category is "Family." Tuition and fees and room and board come from the lines in the *Digest* labelled "tuition and fees" and "auxiliary enterprises." "Other Expenses" shows the *estimated* total amount spent on higher education that is not received by educational institutions.[5] All aid (save that from tuition) is subtracted from the "Family" total.

Tuition, fees, room, board and "Other Expenses" constitute the cost of attendance. This figure is broken down into three categories—parents, student and aid. There is no reliable survey data concerning how much students contribute to their education relative to their parents. Several assumptions must be made to get any idea of this relationship. One possible method, the one adopted here, assumes that students are responsible for any loans for their education (except PLUS). In addition, students are assumed to pay for one quarter of the "Other Expenses" in 1950, an amount which increases until 1980, from which time students are assumed to pay for one half of the "Other Expenses." The amount provided by parents is determined by subtracting this assumed student share and all grant aid from the cost of attendance.

While it would be interesting to note the differences in trends regarding traditional and non-traditional students, this task would be very difficult. No data was collected specifically on non-traditional students before 1987. One thing that can be asserted with some degree of certainty is that, because they are much more likely to be financially independent, non-traditional students pay a larger share of the costs of attendance than do traditional students. Non-traditional stu-

dents therefore are more affected by changes in cost and aid amounts. For more information on the distinctions between traditional and non-traditional students' financial situations, see Ross and Hampton, "How the Non-traditional Student Finances Her Education."[6]

It is important to note that no category labelled "Institutional" exists in this report. This is because all aid given by institutions derives from another source, one of which must be any of the five previously described categories. Institutional aid may be funded by government programs. Private gifts, interest from endowments or the endowments themselves may also be considered institutional aid. Some portion of the income from the "Other" operations may go to help students. And a large portion of institutional aid comes directly from other families, through the tuition they are paying. All institutional aid must therefore come from some combination of these sources; institutions have no other sources of income. If institutional aid were made a separate category, the true source of the funds would not be accounted for.

REFERENCE NOTES

1. Several problems relating to the identification of public and private aid result from use of the NASSGP reports. Total aid to graduate and undergraduate students is reported, but only *need-based, undergraduate* aid is reported by control of institution. Such aid represents about 80 percent to 85 percent of total aid, whereas graduate aid represents only about 2 percent of the total. The percentage of need-based undergraduate aid dollars received by public and private institutions is applied to the total amount of aid. In addition, about 1.5 percent of aid goes to "out-of-state institutions," control of which is indeterminate. This amount—a little more than $20 million in 1984-85—has been ignored. This lack of information necessarily introduces uncertainty.

   For years previous to 1980, two simple regressions of the form

$$\ln(\text{aid}) = \beta_0 + \beta_1 \text{ year}$$

   were estimated, where aid represents either public or private aid. The natural log is taken to ensure a positive result. The resulting equation is used to estimate state grant amounts back to 1950. While the 1950-1975 numbers are much more uncertain than the 1980-90 numbers (which are also of dubious reliability), they represent from .25 percent to .7 percent of total revenues. The range of possibilities is therefore insignificant compared to total revenue, and though these estimates are not particularly reliable, their unreliability should have very little effect on the findings.
2. Scholarships were estimated by the method employed in the Carnegie Commission report (see p. 134). Their numbers for total scholarships were used for 1950-1970. For 1975 and subsequent years, the assumption of 1 percent of tuition, fees, room and board was used.

The public and private shares of this estimate were assumed to be identical to the proportion of students attending each type of institution. This assumption was made because awards of this type of aid seem to rely more on academic results, religion, parents' employers and the like rather than on the type or cost of the institution attended. Again, although this estimate may be wildly at variance with reality, it constitutes such a small percentage of total revenues that its effects are inconsequential.

3. These expenditures fall into the "Other" category because their sources are only marginally the government, philanthropy or family. While it is true that a student may buy a T-shirt from the bookstore or the state government may give a grant to the hospital, outsiders are the primary source of income derived from these operations.
4. This method should not result in any inaccuracies unless some income was assigned to this category which belongs elsewhere.
5. Room and board of students who do not live in institutional housing, and transportation and personal expenses of all students constitute the "Other Expenses" subcategory in the "Family" category. For 1975-1990 these figures were estimated from information presented in College Board publications (*Student Expenses at Postsecondary Institutions* and the *College Cost Book*). Average costs for those living on campus, in private housing, and with their parents were multiplied by the estimated number of students with those respective living arrangements (from NCES' *Profile of Undergraduates in American Postsecondary Institutions*). Figures for the remaining years were estimated by following trends.

   The figures for "Other Expenses" are fraught with uncertainty for many reasons. The data on living arrangements are from 1985, but they were assumed to hold for the entire period. This assumption is mistaken because the percentage for those living on campus has probably declined since 1950 and the percentage of commuters has risen with the growth of community colleges. The "Other Expenses" figure for the early years should probably be adjusted downwards (since more lived on campus).

   Only undergraduates were considered in arriving at both the cost and living arrangement numbers. Their expenses are probably greater, one explanation for which is the much larger percentage of graduate students who live off-campus. Since about 15 percent of all students throughout this period were graduate students, the actual other expenses for all years is probably somewhat higher than reported.

   The "Other Expenses" figures for 1950 to 1970 are very rough estimates. While the post-1975 numbers are not exact, there is at least some measure of empirical evidence behind them. The fact that "Other Expenses" constitute such a large percentage of the total implies that any mistakes in estimating the "Other Expenses" will greatly affect the shares of the other sources. The relative shares of those categories will remain unchanged, however.
6. Laurent Ross and Diane Hampton, "How the Non-traditional Student Finances Her Education," in *Financing Non-traditional Students: A Seminar Report*. Judith Eaton, ed. (Washington, DC: American Council on Education, 1992).

Appendix

Table 1

Financing Responsibilities of Higher Education

(In Percent)

	1950	1960	1965	1970	1975	1980	1985	1990
Public Institutions								
Federal	34.7	14.8	12.5	16.0	23.2	16.3	9.7	9.3
State & Local	22.7	29.8	29.3	32.1	33.3	33.0	32.4	30.7
Philanthropy	1.2	2.2	1.5	2.0	1.9	2.1	2.5	3.0
Other	3.5	3.9	4.0	5.9	5.4	7.0	7.9	9.9
Family	37.9	49.3	53.0	44.9	35.3	40.8	46.9	46.6
Parent	25.6	38.0	40.6	29.4	18.4	19.3	25.2	26.7
Student	12.3	11.4	12.4	15.5	16.9	21.4	21.7	19.9
Private Institutions								
Federal	60.9	18.4	19.4	20.3	24.2	22.2	15.5	15.3
State & Local	3.6	3.4	3.3	4.0	4.3	4.3	4.0	4.6
Philanthrophy	9.6	14.0	12.9	13.0	12.3	11.6	12.1	11.8
Other	3.8	4.9	4.8	8.9	10.7	12.4	13.5	13.7
Family	22.1	59.3	59.9	55.4	47.4	47.9	54.0	53.7
Parent	11.8	50.8	51.5	44.7	35.6	31.0	38.3	39.5
Student	10.3	8.5	8.3	10.8	11.8	16.9	15.6	14.3
All Institutions								
Federal	46.3	16.3	15.2	17.4	23.5	18.0	11.5	11.2
State & Local	14.2	19.2	19.2	23.1	25.0	24.7	23.8	22.6
Philanthrophy	4.9	6.9	5.9	5.5	4.9	4.8	5.4	5.7
Other	2.0	2.3	2.5	4.0	6.9	8.6	9.6	11.1
Family	30.9	53.3	55.6	48.2	38.7	42.8	49.0	48.8
Parent	19.5	43.1	44.8	34.2	23.3	22.7	29.2	30.7
Student	11.4	10.2	10.8	14.0	15.5	20.1	19.8	18.2

Table 2

Shares of Costs of Attendance

(In Percent)

	1950	1960	1965	1970	1975	1980	1985	1990
Public Institutions								
Parent	40.1	68.6	74.4	56.4	36.7	38.5	49.2	53.0
Student	19.3	20.6	22 7	29.8	33.8	42.7	42.4	39.5
Aid	40.5	10.8	2.9	13.8	29.5	18.7	8.4	7.5
Family Percentages								
Parent	67.5	77.0	76.6	65.4	52.1	47.4	53.7	57.3
Student	32.5	23.0	23.4	34.6	47.9	52.6	46.3	42.7
Private Institutions								
Parent	16.7	76.7	82.6	70.6	60.0	53.4	64.3	67.5
Student	14.6	12.8	13.4	17.0	20.0	29.2	26.2	24.4
Aid	68.7	10.5	4.0	12.4	20.0	17.5	9.4	8.1
Family Percentages								
Parent	53.3	85.7	86.1	80.5	75.0	64.7	71.0	73.4
Student	46.7	14.3	13.9	19.5	25.0	35.3	29.0	26.6
All Institutions								
Parent	29.2	72.2	77.8	61.5	44.2	43.3	54.3	58.0
Student	17.1	17.1	18.8	25.2	29.4	38.4	36.9	34.3
Aid	53.7	10.7	3.4	13.3	26.4	18.3	8.7	7.7
Family Percentages								
Parent	63.0	80.9	80.6	71.0	60.1	53.0	59.5	62.8
Student	37.0	19.1	19.4	29.0	39.9	47.0	40.5	37.2

Table 3

Institutional Sources of Revenue in Higher Education

(In Percent)

	1950	1960	1965	1970	1975	1980	1985	1990
Public Institutions								
Federal	0.8	0.8	1.2	3.3	8.5	9.8	8.9	12.5
State & Local	0.6	1.6	2.9	6.7	12.2	19.8	29.8	41.3
Philanthropy	0.0	0.1	0.2	0.4	0.7	1.2	2.3	4.0
Other	0.1	0.2	0.4	1.2	2.0	4.2	7.2	13.3
Family	0.9	2.6	5.9	9.3	13.0	24.4	43.0	62.6
Total Revenue	**2.4**	**5.3**	**9.9**	**20.8**	**36.8**	**59.9**	**91.8**	**134.3**
Private Institutions								
Federal	1.2	0.7	1.2	2.0	3.6	5.4	6.2	9.3
State & Local	0.1	0.1	0.2	0.4	0.6	1.1	1.6	2.8
Philanthropy	0.2	0.5	0.8	1.3	1.8	2.8	4.8	7.2
Other	0.1	0.2	0.3	0.9	1.6	3.0	5.4	8.3
Family	0.4	2.1	3.8	5.4	7.0	11.7	21.7	32.6
Total Revenue	**1.9**	**3.5**	**6.3**	**9.7**	**14.7**	**24.4**	**40.2**	**60.6**
All Institutions								
Federal	2.0	1.4	2.5	5.3	12.1	15.2	15.2	21.8
State & Local	0.6	1.7	3.1	7.1	12.9	20.8	31.4	44.1
Philanthropy	0.2	0.6	1.0	1.7	2.5	4.1	7.2	11.2
Other	0.1	0.2	0.4	1.2	3.6	7.3	12.6	21.6
Family	1.4	4.7	9.0	14.7	19.9	36.1	64.7	95.2
Total Revenue	**4.4**	**8.8**	**16.2**	**30.5**	**51.5**	**84.3**	**132.0**	**194.9**

Figure 1

Changing Shares of Revenue for Public Institutions

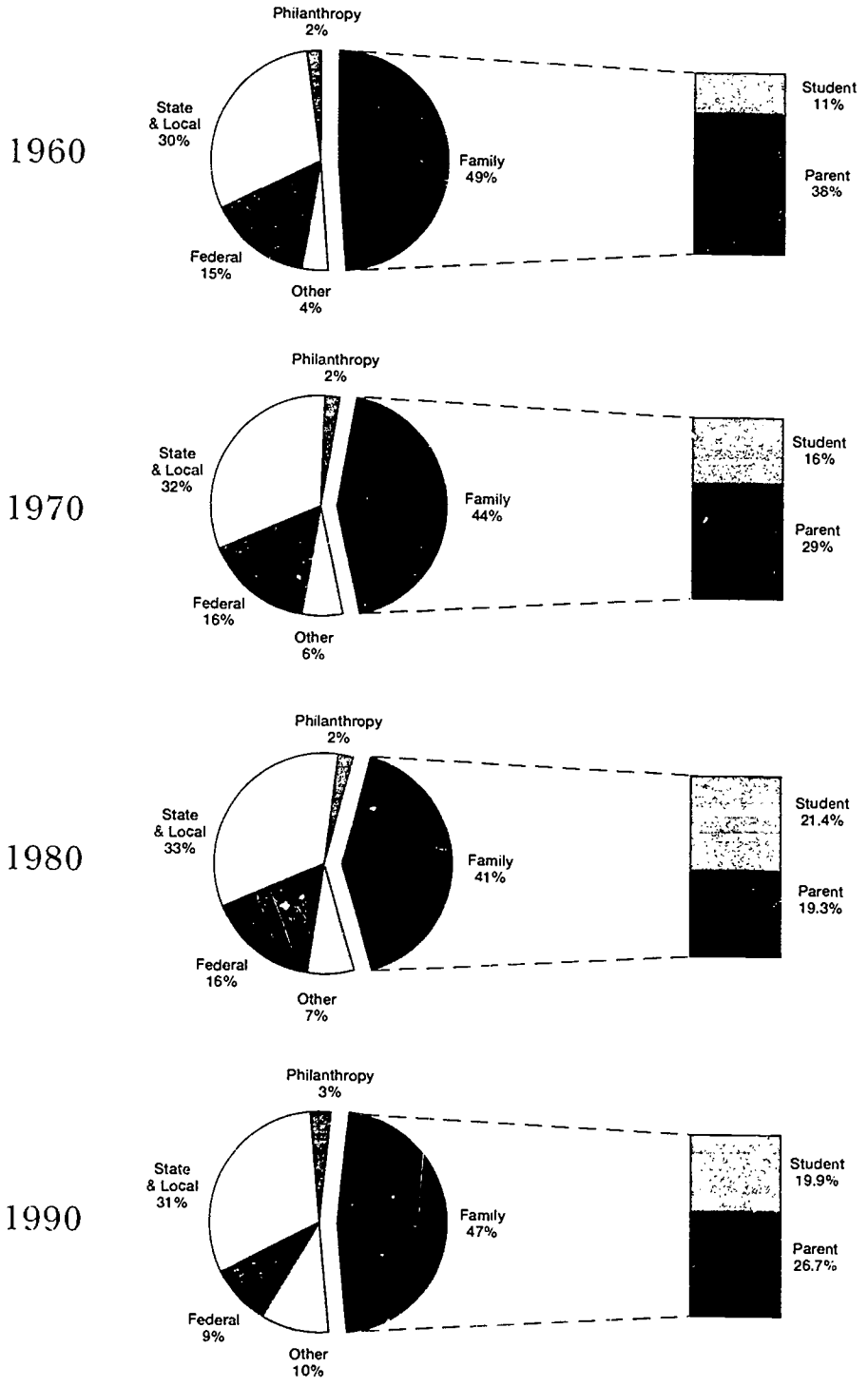
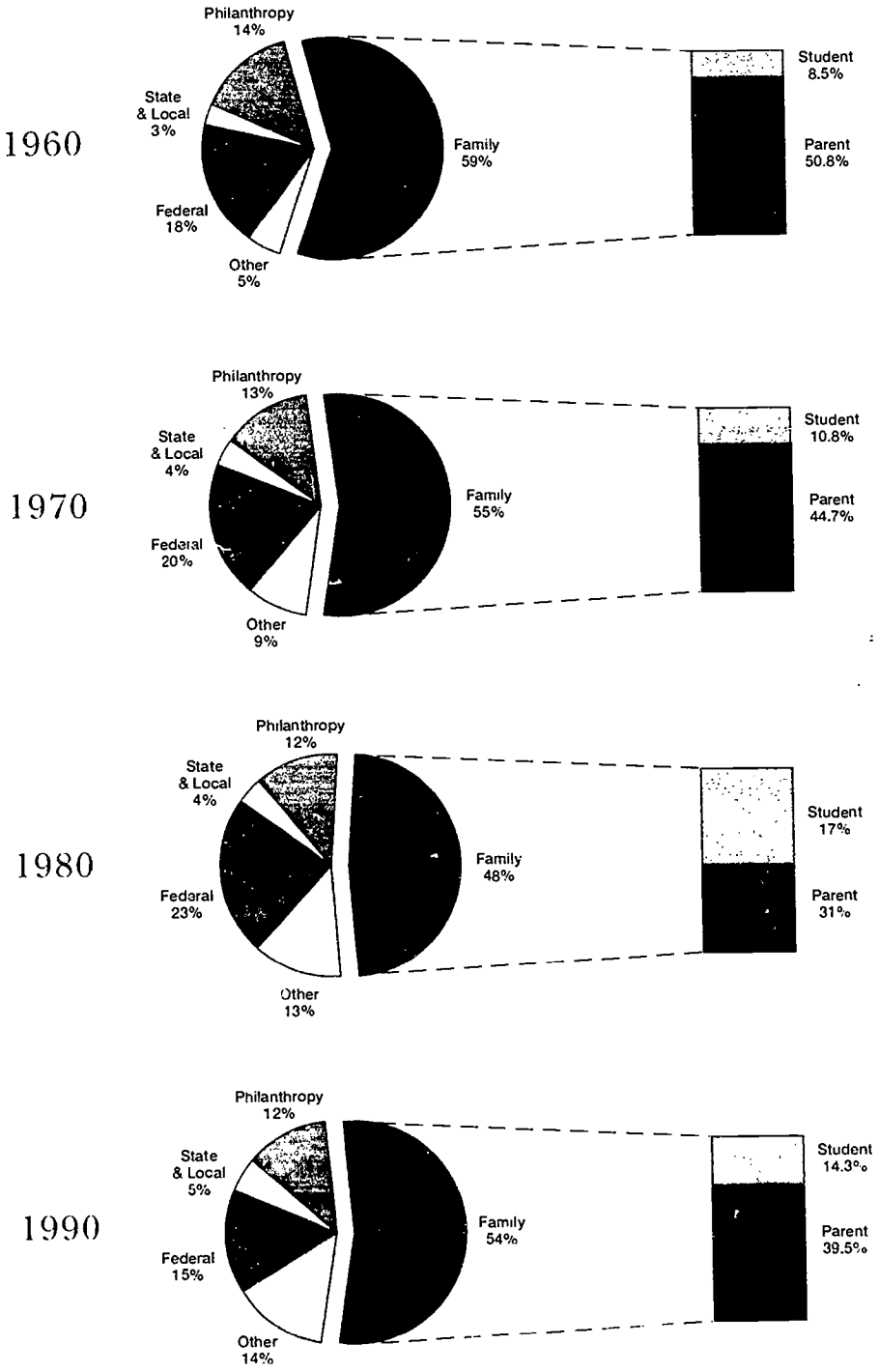


Figure 2

Changing Shares of Revenue for Private Institutions



POSTSECONDARY EDUCATION FINANCING: INTERNATIONAL COMPARATIVE MODELS

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POSTSECONDARY EDUCATION FINANCING: INTERNATIONAL COMPARATIVE MODELS

Melora Sundt

INTRODUCTION

The purpose of this paper is to provide a discussion of international models for financing postsecondary education, to analyze the financing choices different countries have made, and to examine the relative strengths and weaknesses of those choices. The paper begins with a discussion of the essential funding decisions any country must make with respect to access, control and quality. Next, the paper will sort countries by model of financing, borrowing from Johnstone (1986) by clustering countries on the basis of where they place the primary financial responsibility: the government (taxpayer) or the student/parents. General strengths, weakness and variations of both models will be discussed with particular issues highlighted by the experiences of specific countries. Finally, an overview of changes in these financing models will be provided, in particular exploring the historical and political contexts for proposed changes. Throughout the discussion, comparisons to the United States' system of financing will be drawn wherever relevant.

Issues Common To All Financing Systems

The following issues pertain to all financing systems: access to the educational system, control (governance) of the system, quality control of the system, and the purpose of the system (vocational vs. general education). Although not always articulated as such, prevailing assumptions concerning these issues dramatically influence the particular financing mechanisms in a given country. For example, access to most countries' universities is awarded on the basis of competitive academic achievement. In contrast, through the community college system, the United States and Canada provide open access to the postsecondary education system as a whole, although access to some segments (in particular, the selective liberal arts colleges and research universities) is competitive. Whether and how a country chooses to limit access to the system determines not only the percentage of the population that participates in the system but also the available amount of governmental, local and philanthropic support per student. Consequently, the amount of financial support available may influence the number of qualified students who participate.

Decisions related to access indirectly influence a student's time to degree and likelihood of completing a program. In countries that provide full support, time to degree is shorter and a

greater percentage of students finish. In the United Kingdom, for example, although a small percentage of the population enrolls (about 25 percent, compared to approximately 55 percent in the United States), completion rates are roughly equivalent to those of other countries (except the United States and Canada) because most students complete a program once enrolled (Bruce 1985).

Control or governance often accompanies financial support. In the United States, institutions are relatively autonomous of federal and state intervention. Just as there is no central Ministry of Education with primary funding responsibility for postsecondary education in the United States, so too is there no central governing body. As this paper will reveal, in most countries that look to the government for primary financial support, the government also has primary decisionmaking authority (although it often delegates it) over those systems.

Another concern is that of quality assurance or accountability. While the United States relies largely on the diversity and competition within the postsecondary educational system to weed out weaker programs, other countries have built overt accountability mechanisms into their funding processes (Brazil, for example).

Funding responsibilities also can vary by educational purpose. In most countries, some form of support is available for a student's first degree; and, in the United States, little distinction is made between vocational versus general education programs. Other countries have bifurcated funding systems, one for general education programs and one for vocational programs (as, for example, in Japan or Finland).

Defining Cost

Johnstone (1986) breaks down the costs of higher education into three areas: cost of student living, direct cost of instruction and foregone earnings of students. The cost of student living includes room, board, living expenses, books, supplies, and travel. The direct cost of instruction includes those costs assumed under tuition and fees: faculty and staff salaries, plant operation and depreciation, and supplies. Foregone income is that which the student would have earned had she or he entered the work force rather than an educational institution. Not all countries include foregone earnings in their calculations of cost.

General Financing Patterns

Johnstone (1986) describes postsecondary education financing as a zero sum process in which any shift of responsibility from one segment to another will result in an overall shift throughout the system as the final cost remains the same. The primary segments considered here

are federal and local government, the student, the family, the institution and private industry/philanthropy.

In general, all countries expect the central government to provide some support for postsecondary education, at a minimum part of the operational costs; many countries expect students to pay for their own living expenses; some require students to pay tuition; and some require a parental contribution, usually toward student living expenses (see Table 1). Industry is generally not expected to contribute, although philanthropic donations are normal, except for vocational education for current employees, which in many countries is funded entirely by the employer but offered through a postsecondary institution (in Finland, for example). The key distinction in this paper is not only which segments end up paying the greatest percentage of the costs, but also to whom the government looks first for funding. In some countries, such as Canada, the parent and student are looked to first, but after assessing their ability to pay, quite often the provincial or federal government ends up paying the majority of cost for a particular student.

Further, while all countries provide some, if not all, financial support to students, their mechanisms have two different origins. Some countries incorporated entitlement-style financial support into their financing strategies, generally during the 1960s, because they viewed education as an investment in the country's resources. Others (the United States and Canada in particular) began federal programs of financial support with specific populations, like World War II veterans, programs which later developed into more universal, need-based student aid (Student Financial Aid, In press).

One final distinction should be kept in mind—the strains of supporting a postsecondary educational system on a developing economy versus those on an established economy. Each of the developing countries included in this paper funds postsecondary education through its national government. Their participation rates are not high, nor is the percentage of funding they direct towards higher education; however, bear in mind that these countries often incur the additional financial burden of reestablishing basic communication, housing, transportation and health infrastructures. Given the short amount of time these current governments have been in existence and the other competing demands for their funds, their progress is remarkable.

Systems in which the Student/Family Have Primary Responsibility

Canada

The United States and Canada are fairly unique in that their systems look to the student and parents first for financing the cost of instruction as well as living expenses. Canadian institutions do receive their "main operating funds in the form of an annual grant from the provincial gov-

ernment" (Watson, In press), funding that is determined by a formula; however all institutions charge students tuition. Both countries provide a need-based financial support package of loans and grants to students. Canada's loan program is interest free to the student until the student graduates and is employed. Interest on the loan is then charged at the market rate on the remaining balance. As in the United States, part-time students in Canada qualify for minimal aid, receiving, if anything, funding towards direct costs only (Watson, In press).

The Canadian graduate student, however, will find aid more accessible than his U.S. counterpart. No parental support is expected for the graduate student, and financial support in the form of publicly- and privately-funded scholarships and fellowships, in addition to provincial grant and loan aid, is readily available.

Because they derive less support from their respective federal systems, the higher education systems in Canada and the United States are the most autonomous of those reviewed, with individual institutions having control over resource allocation, admissions standards, curriculum development and degree requirements. Each is subject to some federal regulation (e.g., affirmative action), but this regulation is minimal compared to systems to be reviewed later.

United States

In general, the cost of attending an institution, public or private, is higher in the United States than in any other country. Because the United States provides less federal and state support than other countries, the overall cost to the student and parent is also higher than anywhere else. Johnstone (1986) studied five countries to compare the division of cost (tuition and living expenses). He found that the average cost to a parent and student attending a public institution in the U.S. 1985 was $4,739 (89 percent of total cost), compared to $2,342 (71 percent of the total) in the United Kingdom, $2,284 (85 percent of the total) in France, $3,774 (86 percent of the total) in the former Federal Republic of Germany and $3,033 (62 percent of the total) in Sweden. U.S. higher education is more expensive primarily because of the extensive facilities and administrative support services not typically found in other systems (Johnstone 1989). While placing primary responsibility on the parent and student would appear to other countries to be a significant weakness, the overall system appears to have some advantages.

For example, of all systems, the United States and Canada have the highest participation rates of 18- to 24-year-old cohorts, 59 percent and 55 percent, respectively (Behar, In press). The sheer size of the system, which can accommodate all who are eligible to attend, accounts for some of these percentages. Further, both countries operate open access segments, community colleges, which reduces the loss of enrollment due to competition (see, in contrast, the United Kingdom).

In addition, both systems enroll greater proportions of women, low-income and disabled students, in part because of federal and state/provincial financial aid, but primarily because of institutional diversity and autonomy. With federal financial support often comes federal regulation (as in the case of Vietnam); the United States has perhaps traded financial support for greater autonomy and access.

Systems in Which Governments have Primary Responsibility

I have organized countries whose postsecondary systems receive primary funding from the central government into two groups—those whose governments also control the public educational system (Vietnam, Brazil, India, and Ethiopia) and those that delegate some, if not all, control to the institutions (South Africa, Spain, United Kingdom, the Netherlands, Finland, Japan, and Italy). Where available, figures describing the percentage of a country's gross national product directed towards postsecondary education (see Table 2), the percentage of the population enrolled in postsecondary programs, and the numbers of institutions are provided.

Governmentally funded and controlled systems

Vietnam. Of all the countries reviewed, Vietnam offers the best example of a system that is completely funded and controlled by the national government. As of 1988, 130,000 students out of a population of 64 million, or .02 percent, were enrolled in Vietnam's 70 higher education institutions, composed of universities, teachers' colleges, and colleges of engineering, agriculture, forestry, fishery, economics pharmacy, medicine, culture and arts. Sixty-four of these institutions offer graduate programs in the sciences from which 796 have graduated since 1976. Since 1975, control of the system has rested exclusively with the Ministry of Education and Training, to the extent that there are no private institutions; institutions derive their funding solely from the Ministry, and the Ministry regulates not only admissions standards but also the curriculum down to each course syllabus.[1] Students proceed through structured undergraduate programs with nationally-administered final exams at the end of each year. Students do not pay tuition but are expected to pay for their living costs. Scholarships are granted to students on the basis of their performance during the year prior to the award (Thiep, In press).

Although higher education institutions have existed in Vietnam since the 11th century, the transition towards mass education did not begin until the war ended in 1975. Even then, until 1987 "the function of higher education was to train cadres for governmental offices and specialists for the state...graduates were assigned jobs according to government economic planning" (Thiep, In press). Unlike other countries, Vietnam has not yet exceeded its educational capacity.

As long as the country can continue to generate funding, the government is committed to expanding access to higher education.

Brazil. While Vietnam permits no competition with its national system, other nationally funded and controlled systems do permit private institutions to develop. Brazil is an example of a country in which, despite its nationally funded and controlled public sector, 70 percent of its 1.5 million students enroll in private institutions (Schwartzman, In press) compared to 22 percent of total U.S. enrollment in 1988 (National Center for Education Statistics 1990). Although institutions of higher education appeared in Brazil in the 1800s, it wasn't until after World War II that Brazil developed a federal system of universities. Private institutions emerged in the 1960s and captured the majority of enrollments as the federal system ran out of space for qualified applicants (Schwartzman, In press).

Attendance at public universities is free, and admission is granted on a competitive, space available basis once a student has passed a national and difficult entrance exam. Schwartzman (In press) notes that attendance at a private (expensive) secondary school is believed to be necessary to pass the postsecondary entrance exam. Therefore, access is generally limited to those who can afford to attend private secondary programs, and even then, there is not enough space in the public system to accommodate all who pass the exam. Brazil is experiencing a high dropout rate from public secondary programs, thus the number of students eligible to take the entrance exam is not as high as it could be. Graduate education at the public institutions is free, and graduate students receive a two-year fellowship to cover living expenses.

While the Federal Council of Education regulates public university quality, curriculum and entrance requirements, and provides the majority of the funding for public institutions, public institutions are free to solicit support from the private sector. Private institutions, on the other hand, receive no direct federal subsidies, and charge tuition, the maximum of which is regulated by the federal government. As a result, private institutions tend to concentrate on less costly programs (i.e., not the sciences, which require laboratories and equipment). The federal government does provide a student loan system for students who choose to attend a private institution, and approximately 25 percent (200,000) of those attending private institutions receive a loan (Schwartzman, In press).

Because few students can afford to prepare for public higher education or pay for private higher education, Brazil faces several problems. First, as most countries, Brazil is facing a period of cost containment. If it intends to continue to offer free tuition and loans, it will need to encourage public institutions to seek other sources of funding in addition to federal support. It might also raise or remove ceilings on tuition at private institutions, which would increase their funding base but would also increase the competition for admission. At the same time, students

demand either more funding to attend private institutions, or more space in public institutions. Further, the public secondary school system needs to improve so that its graduates are better qualified for admission to public higher education. Until then, higher education aggravates rather than mitigates socioeconomic differences in Brazil.

India. Both Brazil and Vietnam are examples of moderately-sized, nationally-funded systems. The nationally-funded system in India, however, is much larger, and it faces additional problems because of its size. The world's largest democracy and second most populous country, India is considered a developing country with 69 percent of its work force in agriculture. Based on the number of institutions, India's postsecondary education system is twice as large as the U.S. system, with 146 national universities and 6,949 state colleges affiliated with those universities, 3,900 privately managed colleges affiliated with the national universities, and 15 independent colleges. The national University Grants Commission and state governments provide matching maintenance and development grants to the national universities and affiliated colleges for goals set by the national government. The independent institutions also receive grants from the state governments to cover salaries and building operation. With so much national and state funding and so little accountability, there is little incentive for institutions to efficiently manage the funds they receive (Behar, In press).

Universities can be established only by an act of parliament, and colleges, whether privately or governmentally controlled, must conform to the curriculum established by the government in the university to which it is affiliated (Behar, In press).

Admission is based on completion of 12 years of secondary school, successful completion of a state-administered entrance exam, and successful completion of institutional entrance exams. Quotas are set for members of castes so that they do not exceed the proportion in which they are represented in the general population.[2] In 1989, 6 percent of the 18- to 24-year-old age group, or 4.2 million students, were enrolled in universities (Behar, In press). By comparison, 36 percent of U.S. 18- to 24-year-olds were enrolled (National Center for Education Statistics 1990).

A minimal tuition fee is charged, which accounts for only 25 percent of instruction. Students are expected to pay for the low tuition and living expenses, although in some states women pay no tuition.

The focus of most programs is in the humanities and social sciences, and very few students participate in technical training programs. As a result, Behar (In press) notes that the unemployment rates of graduates is high. He believes that this problem is a symptom of a larger problem yet to be addressed in Indian educational policy—the country's goals for higher education are focused on the perpetuation of status, not on quality, equitable access or workforce needs. Higher education will become increasingly irrelevant to the Indian population (hence the low participa-

tion figures) unless the curriculum is restructured to include more vocational training. With such a large system, Behar observes that the national distribution of funding may be the only reasonable management strategy, but without quality controls or an articulated responsibility for addressing workforce needs, institutions have no incentive to improve their programs.

Spain. Interestingly, Spain's funding situation and problems are very similar to Brazil's and India's. Spain's public sector of 30 universities is completely dependent on the central government for funds that are allocated on the basis of the number of students and programs in an institution.[3] Each public institution's curriculum is approved by the central government, but staffing decisions are delegated to the institutions (Garcia-Garrido, In press).

Spain's public institutions grant admission to those who are older than 18, have completed 12 years of secondary school and have passed the national entrance exam; however, admission becomes selective by virtue of institutional capacity. While some countries focus enrollments on 18- to 24-year-olds (Japan, for example), Spain has made gestures toward opening its system to the older student. The secondary school requirement is waived for students 25 and older who pass a separate entrance exam.

Approximately 1 million students participate in public higher education each year, and in 1986, about 90,000 students graduated from undergraduate programs. Some public institutions charge low tuition ranging from $350 to $500 per year. Students who choose to attend the private universities are eligible for nationally-funded grants to pay for tuition and living costs. (Garcia-Garrido, In press).

Like Brazil and India, Spain is experiencing an imbalance between workforce needs and the traditional postsecondary education curriculum. As a result, unemployment, currently affecting 20 percent of the population, hurts graduates as well. Each of these three national systems needs to explore vocational curricula to a much greater extent than they have.

Ethiopia. Ethiopia, the oldest continuing nation-state, enrolled .45 percent of its 18- to 24-year-olds in 1988. Like India's, this participation figure appears low, but in the context of a continent with the lowest average per capita income in the world, in which most higher education institutions were founded after World War II and in which eight out of 51 countries have no universities, Ethiopia demonstrates slow but consistent progress. Until Mussolini left Ethiopia in 1941, there was no public system of higher education (Wagaw 1990). Now there are three universities, five technical colleges and four colleges in the country, all of whose curricula are set by the government to avoid duplication. Admission is dependent on the availability of space, the completion of 12 years of secondary school with an adequate grade point average and successful completion of an entrance exam (Ayano, In press). Regular tuition is free and the government provides full scholarships to cover students' living expenses. Some universities

offer extension programs at regular degree-granting programs offered in the evening for which tuition is charged.

Like Brazil and India, Ethiopia struggles with developing its higher education system in the context of competing economic demands. Budgetary priorities have had to focus on rebuilding health and housing infrastructures as well as education, and on primary and secondary education before postsecondary education. Although Ethiopia increased its expenditures on higher education by 31 percent in 1982, inflation and a doubling of enrollments resulted in an overall decrease in funding. Ethiopia has therefore sought assistance from foreign governments and international associations for recurrent and capital costs (Wagaw 1990).[4] Ethiopia will maintain its practice of providing full funding for postsecondary education as long as it can continue to diversify income to the central government, particularly by revising its tax structure.

Relatively autonomous institutions

The fact that one's national government is looked to first for funding a system of higher education does not always mean that the system is also controlled by the national government. The following countries represent positions on a continuum of autonomy, with South Africa on representing the most minimal autonomy and the United Kingdom representing the greatest autonomy.

South Africa. South Africa's institutions have the least amount of autonomy in this group, primarily because of segregation within the country and the government's need to control it. Unlike Brazil, India or Spain, South Africa has explicitly linked its educational goals to its workforce, a philosophy that is evident in the structure of its higher education system. The country hosts 12 technikons (vocational colleges), 70 teachers' training colleges, and numerous scientifically-oriented universities,[5] all nationally funded (Steyn, In press). Each offers advanced degrees as well as undergraduate diplomas and certificates. The Ministry of Education has four departments, each of which oversees the budget for each of the four cultural groups (whites, asians, blacks and coloureds). Each institution has a council that administers the funds and sets educational priorities through its academic senate with governmental approval. The percentage of the country's gross national product that is devoted to postsecondary education increased from .32 percent in 1965 to .69 percent in 1983 (Steyn, In press). Comparable figures for the United States are 1.8 percent in 1964 and 2.6 percent in 1983 (National Center for Education Statistics 1990, 184).

Like most other countries, entrance requires completion of secondary school, passing an entrance exam, and meeting institutional requirements that must have the government's approval. In 1987, 300,000 students enrolled in South Africa's postsecondary system, or 7.7 per 1000 of the total population (Steyn, In press).

A primary difference between South Africa's system and those described earlier is its attention to and incorporation of vocational training. In addition, the segregation of the educational system, which dictates that certain institutions serve specific cultural communities, requires some duplication of resources, a situation that does not exist in other systems (even in India, where members of different castes attend the same institution). Therefore, the GNP figure given above must be interpreted in the context of a duplicative system.

The Netherlands. The Netherlands uses a funding system similar to that of South Africa. About 90 percent of the privately-founded but state-controlled 13 universities, 87 vocational colleges, nine accredited colleges and one open university get their funding from the state based on enrollment and program costs. Individual institutional councils allocate the yearly allocation autonomously, with the exception of salaries, which are set by the civil service scale (Frijhoff, In press). In 1986, 1.55 percent of the country's gross national product was allocated for higher education (Frijhoff, In press).

Beginning in 1982, all students under 30 received a basic grant with a need-based supplement throughout their postsecondary education to cover instructional costs and living expenses. When the demand exceeded the supply in 1988, the policy changed. Now students are eligible for aid for six years from the time they first enroll. If they wish to attend for a longer period, they pay substantially higher tuition (McDaniel 1990). Demand continues to increase, and the government is considering lowering the age limit to the basic entitlement to 26 years of age.

Graduate students are almost universally employed by their sponsoring institution during their program, either in research or teaching, thus supplementing the undergraduate instructional staff.

Approximately two-thirds of the Netherlands' high school graduates, or 16 percent of those 18- to 25-years-old (compared to approximately 35 percent of U.S. high school graduates) attend postsecondary education. In 1987, 40 percent of them were older than 24, making up 6 percent of the part-time university enrollment and 25 percent of the vocational college enrollment (Frijhoff, In press). In the U.S., comparable figures include 67 percent of total enrollment; 53 percent of four-year enrollments and 74 percent of two-year and vocational enrollments (National Center for Education Statistics 1990, 72). The primary problem with the Dutch financing system is that demand exceeds funding. The country anticipates that enrollment demand will continue to rise and is very concerned that the current entitlement structure will not be able to meet it. Because the country is committed to an entitlement process it will probably divert some enrollments into part-time programs and reduce those entitlements, rather than introduce across-the-board entitlement cuts.

Further, as demand increases, concerns about employment increase. Approximately 85 percent of all medical, humanities and social science graduates are hired by government-funded ser-

vices (Frijhoff, In press). As Frijhoff notes, the health of the government will affect not only the method of education funding but the future of the system's graduates as well.

Finland. There are many systems in which the national government has the primary funding responsibility, in which individual institutions are relatively autonomous, and in which there are varying degrees of institutional privatization. For example, Finland's system emphasizes equal education for all citizens, and as such charges no tuition and provides either a need-based study grant or state subsidized loan for students' living expenses (Kuikka, In press). All of Finland's institutions were taken over by the state during the 1970s and 1980s, yet institutional autonomy remains in issues related to teaching, research, budget allocation and curriculum. Finland's 20 universities received all of their funding from the parliament, which has guaranteed increases to them through 1996 (Kuikka, In press). As a result, the proportion of the country's gross national product that is invested in higher education has been steadily increasing—from .61 percent in 1985 to .7 percent in 1988 (Kuikka, In press).

About 12 percent of Finland's 30,000 high school graduates enter college after passing the national entrance exam and meeting individual institutional criteria. Of these students, approximately 8 percent graduate. Time to degree remains problematic: it often takes six to seven years to complete a degree because of rigorous course requirements. Given its commitment to student financial support, the Finnish government is interested in reducing the length of time to degree in the hopes of seeing more students graduate (Kuikka, In press).

Finland's vocational education system is equally developed and is generally locally funded. Students age 20 and older who are unemployed or have never had vocational training have precedence in this impacted system. By 1986, Salminen (1988) reports that 93 percent of all 20- to 25-year-old (non-college) workers had received vocational certificates, and that 400,000 students enrolled in that same year. One-third of the vocational institutions are financed through the state; one-third are financed through local municipalities; and approximately one-third are privately owned and financed. To ensure job security while enrolled in a vocational program, students may apply for a study leave to retain their jobs for two years, without salary. In addition, students who are at least 30 years old (and who meet other employment requirements) may apply for a grant program initiated in 1987, which provides 20 percent of a qualified employee's gross salary (Salminen 1989).

Finland's primary concern is similar to that of Japan—a decreasing pool of young workers and, consequently, an aging workforce (Salminen 1989). Unlike Japan, Finland is anticipating this problem by structuring vocational programs to encourage the retraining of older workers.

Sweden. Sweden's system is similar to Finland in that no tuition is charged, and all students are eligible for a national grant (which represents 5.8 percent of the total cost) and a subsidized loan to finance living expenses. Because of the substantial national contribution, parents are not

expected to contribute anything towards the student's support, nor is the student expected to work while enrolled. The loan amount is based solely on the student's income and assets; for both the loan and the grant to continue, the student must demonstrate satisfactory progress from year to year. Loans may be deferred for up to two years after education stops, and students have a limited time in which to complete the repayment.[6] Loans are deferred when one's income drops to a certain level. Initially, the country found that 5 percent of its borrowers default, but once adjusted, the actual default rate fell to about 1 percent (Morris 1989). The United States' default rate is approximately 10 percent (Cronin 1987).

Aside from the taxpayer burden, the primary limitation of the Swedish and Finnish systems is their size: like the U.S. model, they were designed for dependent students who would live at home, with minimal living expenses. With students older than 25, many of whom are going into postsecondary education for retraining, now occupying more than 50 percent of Swedish enrollments, the allowance for living expenses has proven inadequate, and some students now work part-time (Morris 1989). Some argue that the program itself is not to blame but that students have come to expect a standard of living higher than originally intended. Others argue that older students who are often married with children need more aid to maintain a minimal standard of living, a situation for which the original loan program was not designed.

Japan. Japan offers an intensely competitive combination of both nationally and privately supported institutions. The national ministry provides full financial backing to its 229 national universities and junior colleges, and provides research money to its 854 private universities and colleges and 2,675 private special training colleges. "Private sector universities receive 63 percent of their income from tuition fees, whereas national universities receive 63 percent of theirs from the state" (Hough, In press, 2).

In addition, the government funds at least in part the 2 million students—approximately 40 percent of the 18- to 24-year-old cohort enrolled in 1989 (Clark 1992, and Kobayashi, In press). Although it provides a subsidy to students, it differentiates between public and private enrollments. In 1985, the government on average spent $5,212 per privately enrolled student compared to $10,258 per publicly enrolled student (Hough, In press, 2). (The estimated United States aggregate federal aid in 1986 was $3,059 for a student attending a private four-year institutions and $3,774 for the student attending a public four-year institution.[7]) In 1982, the subsidy to students was frozen, and because tuitions have risen as much as 50 percent since then, greater financial responsibility is falling on students, most of whom use loans to make up the shortfall. Initially, these government-subsidized loans were offered interest-free, but when costs exceeded expectations in 1984, the government instituted a 3 percent interest rate. Japan currently offers several loan plans scaled to income: interest-free for low-income families, 3 percent for higher-income

families, and an additional loan at 6.5 percent interest for students enrolled in high-cost programs like medicine (Woodhall 1989).

While general curricular standards for the national institutions are set by the Japanese government, individual institutions set admissions standards and quotas and are autonomously governed. Because attendance at the national institutions is free, admissions standards are individually set, and employment status is closely linked to institutional status, admission to the national universities is intensely competitive.

Partly because the country has transformed its economy from an agricultural to a postindustrial nation, and partly because of the reputations of the quality of training throughout the Japanese postsecondary education system, unemployment is not a problem for the Japanese graduate. Approximately 80 percent are employed upon graduation, and 10 percent go on to graduate school (Kobayashi, In press). In 1988, 71 percent of United States' graduates were employed the year following graduation, whereas 13 percent had enrolled in either graduate school or a second undergraduate program (National Center for Education Statistics 1990, 132).

Japan's system demonstrates the way a national financing system that funds only the elite (public) institutions creates a competitive system, effectively eliminating students' choice. Those who aspire to a certain career believe they must attend specific institutions. If they fail to be admitted, they still have many other institutions from which to choose, but few that will virtually guarantee them the career path they had intended.

Another distinction is that, unlike any of the other countries discussed, Japan's educational system is founded in an essentially monoethnic, monolingual culture.[8] In terms of its ability to run an efficient educational system, it has a distinct advantage over other countries whose constitutions require them to conduct bilingual education or provide segregated systems.[9] Japan's narrowly-focused system does have its limitations, which will be discussed in a later section.

The United Kingdom. The United Kingdom enrolls less than half of the students Japan enrolls and provides full governmental grants to students for both instructional and living expenses. According to Hough (In press, 2) only one university should be considered truly private, whereas another 46 are "nominally independent institutions but are in fact increasingly controlled by the Universities Funding Council." No student contribution is expected; parents are expected to contribute on the basis of ability to pay, and their expected contribution is deducted from a student's government grant (Bruce 1985). Attendance is closely tied to socioeconomic status; Hough (In press, 1) notes that "one-third of the children born into middle-class homes produce 80 percent of all university students." The program cost, which began at $434 million, had risen to $1,423 million in 1987; equivalent figures in the U.S. are $2 billion and $24 billion, respectively (Student Financial Aid, In press, 3).

Institutions are funded through government grants, which are based on enrollments up to a maximum (Hough, In press). Until 1991, the government distinguished between its universities and the polytechnics; polytechnics received approximately two-thirds the funding of a university. Because of increasingly vocal dissatisfaction from the polytechnics, all institutions are to be funded equally; however, some are skeptical about the system's ability to maintain this level of financial support (Hough, In press).

Trends in International Populations and Economies

Most countries are experiencing a shift from rural to urban concentrations of population. This shift both reflects and creates changing economic and workforce needs, to either more industrial or post-industrial systems. As a result, as is the case in the United States, successful higher education systems are perceived as those with the flexibility to incorporate new technology and new curricula. Funding will need to be directed not only to improving student access but also to retrofitting laboratories, classrooms and materials in light of these rapidly changing demands. Some researchers suspect that national funding will shift into the maintenance of higher education's physical plant and away from student support, wherever possible.

A second trend will also strain current funding strategies: Most countries will continue to experience an increased demand for access to higher education, both as industry's expectations for educational levels of employees rise, and as the eligible populations increase. Countries that currently provide full funding for students, either through low or no tuition or through full grants, will soon find the demand exceeding the availability of funds, as in the Netherlands. Countries will then have to decide whether to limit admission, reduce national support, institute fees, or initiate some combination of these. The exceptions to this trend are Japan, Finland, and to some degree, the United States. Japan enrolls approximately 40 percent of its available high school graduates, and that population is expected to decrease dramatically over the next 20 years. This contraction of traditional students could dramatically affect institutions' funding as "the tuition fee is one of the major, or in some private institutions almost the single source of income" (Kobayashi, In press, 2). Unless Japan begins to incorporate adult students—a negligible population in current enrollments—female students and disabled students, it may find its institutions admitting less academically prepared students to fill enrollment gaps (Kobayashi, In press).

Future Trends for Higher Education Financing

Regardless of the country, federal funding "is the means through which access to higher education is achieved" (Merisotis 1991, 33). The dilemma for most countries appears to be just how much of the burden can be shifted between the national government and the student without disabling either the economic or educational systems. Most countries are cautiously shifting some burden to students through loans, but the primary burden still remains with the national governments. Further, countries are in the early stages of soliciting additional funding from private industry. Although the United States' use of private industry is uneven (occuring most often within the community college system) and immature in its development, compared to the countries reviewed its use appears extensive.

Some argue that the goal of balanced funding of higher education is to equalize opportunity and access among students, create an equitable sharing of costs based on benefits among sectors and strengthen institutions (Hansen 1989). Placing the primary responsibility on the national government strengthens institutions at the expense of institutional autonomy. National funding can also equalize access provided the system is large enough, and ironically, size appears to be the critical issue for most federally-funded systems. Unable to keep up with the demand for higher education, these countries now look to shift some of this responsibility elsewhere.

While most governments are looked to first to fund postsecondary education (except vocational training), the student and parent are also required to contribute, at least to living expenses, in most countries except the United Kingdom and Scandinavia. The United States and Canada reverse the priority and look to parents and students first. In addition, where financial assistance is provided to students for their share, loans subsidized by the government are being introduced or expanded. Income-contingent loans, which are standard in Scandinavian countries, are increasing in popularity universally.

Both changing populations and changing economies contribute to the dominant movement in higher education finance—diversification of funding sources. We will soon witness, as is already happening in the United States, greater emphasis on student loans rather than grants, an increase in student-faculty ratios, greater solicitation of support from philanthropy and industry, and from students in the form of fees, and an increased interest in enrolling overseas students who will pay full fare (Clark 1992).

Similarly, countries are expected to continue to "reduce the level of public subsidies for higher education and shift more of the financial burden of tuition or maintenance to students and their families" (Student Financial Aid, In press, 3). This trend is clearly evidenced in the U.S., where loans have supplanted grants as the major form of support.[10] The former West Germany replaced grants with loans in 1984; Australia in 1989; and the United Kingdom in 1990. Woodhall's 1983 World Bank

report found that more than 50 countries have implemented student loans within the last twenty years (Cronin 1987). How these loans are implemented continues to vary country to country, although all of the countries reviewed provide a longer grace period prior to beginning to repay a loan than does the United States (Cronin 1987). However, as Johnstone (In press) notes, "government" subsidies are really taxpayer subsidies, which appear in most countries not only in the form of assistance with living expenses but also in the form of public tuitions set well below the actual cost of instruction (as is the case in the United States, Canada, Japan and India).

Concurrently, we will see an increased interest in privatization of some sectors of higher education. Although some countries resist giving private institutions equal status with national institutions because of their concern about quality (Japan, with respect to its private vocational schools, for example), some, like Brazil, may find that as demand for public education exceeds space, private institutions appear to meet the demand. In countries where national standards apply only to nationally-funded programs, concerns about disparate levels of quality will appear.

In conclusion, the Achilles heel of international funding models appears to be a failure of most systems to diversify in a number of ways: to include funding for vocational training; to include a variety of income sources; and to include a variety of student populations. Interestingly, the World Bank recommends that governments continue to reduce their role in financing vocational education and transfer the responsibility to employers and the private sector, as Finland has done (Wilms, In press). Countries are in varying stages of recognizing and responding to what will soon be a shortage of funds and a shortage of vocationally-trained workers. No one has mastered the problem, although countries with smaller enrollments appear to be making gains by retaining the bulk of responsibility with the national system for both higher education and vocational programs, and by instituting flexible, income-contingent loan programs with long grace periods for repayment. How countries with larger enrollments will manage remains to be answered.

Further, while most countries, both developing and established, fund higher education through their national governments, a wide range of institutional autonomy accompanies those funds. In some countries, the national government controls every aspect of higher education, down to approving books on a syllabus. In others, individual institutions are free to set all policies except those related to salary, as faculty are considered civil servants. Generalizations about the strengths and weaknesses of nationally-funded systems are difficult to make, then, other than that institutions give up some autonomy when the national government funds their program. Two critical questions remain: Could these institutions survive without that national support, and would students be able to afford postsecondary education? Few of the countries reviewed are in favor of dramatically shifting the burden to students; they fear substantial consequences of lower attendance rates, which would have a debilitating impact on their economies, and less stable institutional income.

NOTES

1. Although since 1987, individual institutional admissions criteria have been permitted provided they meet national standards (Thiep, In press).
2. Separate fellowships are available for members of "scheduled castes and tribes" in India, and campuses have constructed separate hostels to house them (Behar, In press).
3. There are four private universities in Spain, all run by the Catholic Church.
4. Current dollar figures for foreign aid are not available; however, Wagaw (1990, 113, 145) reports that between 1952 and 1962, the U.S. gave $2.15 million to a joint fund for Ethiopian colleges and that the U.S. Agency for International Development in 1969-70 contributed more than $1 million Birr towards the cost of furniture in the new technical education building at Haile Selassie University.
5. A precise number of scientifically-oriented institutions in South Africa was not available.
6. Students under the age of 36 have until their 51st birthday to repay the loan, while older borrowers have 15 years in which to repay the loan (Morris 1989, 89). Borrowers pay 4 percent of their income until the loan is repaid (Woodhall 1989).
7. Comparable figures for the United States are difficult to find because aid is awarded on the basis of income and costs and is often presented by income without any relative percentages.
8. The U.S. offers some education in Spanish and English. Canada by governmental decree offers instruction in French and English. Finland offers instruction in Finnish and Swedish, etc. In addition, each of these countries is home to significantly diverse ethnic populations, each presenting a greater diversity of educational goals and needs than is found in Japan.
9. This observation is not meant to imply that there is no value in multicultural countries, only to point out the impact of Japan's cultural history on its ability to educate its population.
10. Grants accounted for 66 percent of all student aid in 1970-71, 80 percent in 1975-56, and only 47 percent in 1987-88 (Student Financial Aid, In press).

APPENDIX

Table 1

Country	Cost of Student Living: Room, board Living costs	Cost of Student Living: Books, supplies educational costs	Cost of Instruction: Tuition/fees	Cost of Instruction: Public & Institutional funds
United States	Student/parent*	Student/parent*	Student/parent*	Institution/state
Canada	Student/parent*	Student/parent*	Student/parent*	Province
Vietnam	National	National	National	National
United Kingdom	National/parent	National	National	National
Brazil (public)	National	National	National	National
(private)	Student**	Student	Student**	Institution
India	Student	Student	Student (low)	National
Spain (public)	Student***	Student***	Student***(low)	National
(private)	Student***	Student***	Student***	Institution
Ethiopia	National	National	National	National
South Africa	National	National	National	National
The Netherlands (6 year limit)	National	National	National	National
Finland	Student**	Student**	National	National
Sweden	Student**	Student**	National	National
Japan (public)	Student**	Student**	National	National

Key: *combination of subsidized loans and grants; ** subsidized loans; *** national grant

Table 2

Comparative Enrollment and Investment in Higher Education

Country	Percent of GNP spent on H.E.	Percent of 18-24 population enrolled (1986)	1985 Higher ed. funding as percent of all education $
United States	2.6 (1983)	49	39.4
Canada	1.9 (1985)	46	28.8
The Netherlands	1.55 (1985)	28	26.4
Japan	1.0 (1985)	19	21.4
United Kingdom	.9 (1985)	19	19.8
Sweden	.9 (1985)	20	12.3
Brazil	.7 (1985)	9	19.6
South Africa	.69 (1983)	.07	N/A
Finland	.61 (1985)	11.6	N/A
India	.6 (1985)	8	18.7
Spain	.4 (1985)	24	14
Ethiopia	N/A	.45	N/A

Sources: All 1985 data are taken from Hauptman et al (1991). *Higher Education Expenditures and Participation: An International Comparison.* American Council on Education Research Briefs, Vol. 2 (1).

1983 data are taken from the following: South Africa—Steyn, In press; United States—Watson, In press.

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Problems in Coordinating Federal Student Assistance with Other Federal Income Support and Human Resource Programs

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Problems in Coordinating Federal Student Assistance with Other Federal Income Support and Human Resource Programs

Lawrence N. Gold

INTRODUCTION

People who are financially needy, who have lost their jobs, have disabilities, or who are members of particular groups such as veterans and Native Americans, may be eligible for more than one form of federal assistance if they pursue education and training at the postsecondary level. A disabled single parent, for example, might be eligible to receive subsistence payments through Aid to Families with Dependent Children (AFDC) and Food Stamps, and might also receive support for her education and training through the Title IV student aid programs as well as the federal vocational rehabilitation program.

As this paper will show, the terms of program eligibility and the processes for receiving aid differ substantially from program to program, and in some cases even conflict with one another. There is little coordination among initiatives. Even within a single program, eligibility criteria and processes may differ dramatically from state to state, or even from caseworker to caseworker.

Put together, these inconsistencies can constitute a time-consuming, difficult, sometimes insuperable obstacle course for potential beneficiaries and a major hindrance to coordinating services efficiently. Through an investigation of practices in five human service programs—Food Stamps, AFDC, Job Training Partnership Act (JTPA), vocational rehabilitation, and veterans educational benefits—this report will examine some of the chief hurdles to coordination, the attempts of some officials to straddle them, and the consequences of these policies to individuals and families. Areas will be delineated for prospective recommendations by the Commission for improved program performance.

Finally, the report will look at a broader, related concern—the extent to which a variety of laws, program guidelines and administrative practices in federal human service programs serves to discourage beneficiaries of these programs from pursuing postsecondary education. Despite the fact that postsecondary graduates rarely require further income support or training from the federal government, programs such as welfare and vocational rehabilitation often seem hostile to higher education for their clients. The Commission may wish to assess whether, and how, it might choose to weigh in on issues of this nature.

Case Study: Food Stamps

The Food Stamp program provides coupons (Food Stamps) to supplement the food-buying power of low-income households. The Department of Agriculture's Food and Nutrition Service administers the program nationally. The program is administered locally by the state welfare agencies. The federal government pays for approximately one-half of the cost of running the program, while the states and some local governments pay the rest.

In 1991, the program provided more than $17 billion worth of Food Stamps to an average of 22.6 million people a month. In general, a family may be eligible for Food Stamps if its available income is no more than 30 percent above the government-determined poverty level. People usually apply for Food Stamps at the state welfare office, where they complete an application and are interviewed. The eligibility process varies from state to state. In general, a formula is used to determine eligibility and allotments much like an income tax return (i.e., income minus a list of deducted items that will not be counted as income).

Applicants who also want to pursue postsecondary education face three particular hurdles: First, the program imposes extra eligibility requirements on students. Second, any educational expenses paid by the student are not excluded from his or her income in assessing eligibility. Third, a portion of any Title IV financial aid received by the student, even loans, may be counted as income for Food Stamp purposes. These impediments are exacerbated by inconsistent program administration and documentation requirements.

Special Eligibility Requirements for Students

The law imposes special requirements on individuals seeking Food Stamp assistance who also want to attend school. These requirements, enacted out of a concern that college students from affluent families might qualify for aid, have been updated a number of times over the years, most recently in 1991 (P.L. 102-327).

Under the Food Stamp Act (7 USC 2015(e)), physically and mentally fit students between the ages of 18 and 50 enrolled at least half-time in an institution of higher education must meet certain requirements in addition to the financial needs test. In order to qualify for Food Stamps, students must either be:

1. Assigned to or placed in an institution of higher education through JTPA, the Food Stamp employment and training program, section 236 of the Trade Act of 1974 or a similar state or local program approved by the Agriculture Secretary; or
2. Employed at least 20 hours per week, *or* participate in a state or federal work-study program during the school year; or

3. A parent with responsibility for the care of a dependent child under age 6, or a dependent child above age 5 and under age 12 for whom adequate child care is not available; or
4. A single parent, enrolled full-time in an institution of higher education, with responsibility for the care of a dependent under age 12; or
5. Receiving AFDC or enrolled in the Work Incentive Program (WIN) under Title IV of the Social Security Act.

These requirements may have been designed to prevent wealthy college students from taking advantage of the Food Stamp program, but, as a practical matter, the effect has more often been to prevent Food Stamp recipients from going to college. A recent study (Rosen, 1986) found that "categorical Food Stamp prohibitions against postsecondary education enrollment prevent the vast majority of Food Stamp recipients from attending college. One in 500 recipients (0.2 percent) meets the program's stringent test for college enrollment."

The employment requirements are particularly problematic for a number of reasons. For one thing, individuals who work a 20-hour week, as required, usually need to reduce their course load to accommodate their work hours, which only has the effect of causing them to stay in school—and to need Food Stamp support—for a longer time.

Second, and not surprisingly, it is often impossible for these individuals to obtain 20-hour-per-week jobs. Under the existing rules, people who cannot find a 20-hour-per-week job will lose their Food Stamps if they try to go to college, but they will continue to receive Food Stamps if they forego college and simply remain unemployed at home.

Third, with limited College Work-Study funding, many people certified as eligible for the program by their colleges are not able to receive benefits, even if they are ready and willing to work. Their only alternatives, under existing rules, are to forego benefits to stay in college, or to forego college and continue receiving Food Stamps. It is hardly surprising that they more frequently choose to retain the Food Stamps and defer the education.

Income Deduction Rules

In assessing eligibility, the program allows applicants to deduct a number of items from their income. These include: (1) a standard cost-of-living deduction; (2) an earned income deduction; (3) dependent care deductions (not to exceed $160 per dependent); and (4) a qualified medical deduction.

People who wish to become students, however, cannot deduct from the income calculation any of their own money that they spend on tuition, fees, books and other college expenses. Since monies spent on education are not available for general support purposes, it can be

argued that documented personal expenditures for education ought to be included among the deductible items.

Coordination With Title IV Aid

Section 479B of the Higher Education Act says that funds received by students under the Title IV financial aid programs should not be counted as income for the purposes of other federal programs if the aid is made available by the institution to cover tuition and mandatory fees, books, supplies, transportation and other miscellaneous personal expenses (other than living costs) such as laboratory costs for chemistry majors.

Any Title IV financial aid that *cannot* be attributed to these expense categories counts as income because it is assumed that this money can be applied to room, board or child care. Even obtaining a student loan, which must be paid back, will count against an individual's Food Stamp eligibility unless it can be demonstrated that the loan was entirely applied to the expense categories designated in the Higher Education Act.

The new Food Stamp law provides two ways to determine how much of the aid is earmarked for educational expenses and how much should be counted as income. Either the institution must provide a written certification to the Food Stamp office of how funds are intended to be used or, if the institution does not do this, students can seek an exclusion based on retained receipts. Students may also provide verification when they disagree with the institution's delineation of expenses.

The new provision has not had time to be fully implemented, but improvement is hoped for because the previous administration in this area was marked by conflicting policy memos from the national office and tremendous variability in state practice. As a New Mexico program policy specialist noted in a recent study, "Because...there is very little guidance on what should be allowed, much is left up to the states, and to a large extent the caseworker, and then it depends on what side of the bed the caseworker got up on... Quality control reviews cases and very rarely finds a correct case (Gold 1990)."

Even with clear direction and the best of intentions on all sides, disparities are inevitable among local Food Stamp caseworkers and campus financial aid officers in figuring out which school-related expenses to exclude from income, and which to count, in assessing Food Stamp eligibility.

For example, should lunch in the middle of a school day be considered a "miscellaneous" educational cost, in which case it does not count against Food Stamp eligibility, or as a living expense, which counts as income for Food Stamp purposes? Or, if someone receives a $2,400 Pell Grant to attend a school where the tuition is $1,500, should the remaining $900 be considered an allowance for books and transportation, in which case it does not count against Food Stamp eligi-

bility, or should $400, or $500, or $600, be counted toward books and transportation with the remaining amount considered a living cost allowance, in which case the remainder counts against Food Stamp eligibility?

Questions of this sort arise all the time and certainly will continue to do so as long as the law distinguishes between "educational" and "living" expenses and applies a portion of student financial aid to both categories.

Case Study: Aid to Families With Dependent Children

Under the Aid to Families with Dependent Children (AFDC) program, the federal government provides matching grants to the states for the purpose of making subsistence payments to poor families in which at least one parent is deceased, absent or incapacitated, or the main wage earner is unemployed. Authorized under Title IV-A of the Social Security Act, the program is administered by the Department of Health and Human Services, but there is a great deal of state autonomy concerning eligibility and benefit levels.

In August 1991, AFDC served about 4.5 million families or 13.5 million people, two-thirds of whom were under age 18. In 1990, AFDC benefits totalled $18.5 billion, of which $10.1 billion was federally paid. Potential AFDC recipients apply for the program at state welfare offices, where caseworkers assess eligibility and describe the conditions under which aid may be received.

During the 1970s and 1980s public policy observers and politicians on both sides of the aisle began to realize that funneling small subsistence payments to welfare mothers would not help them or their children permanently break the cycle of poverty. A consensus developed that the welfare system should be reorganized to foster long-term self-sufficiency by placing AFDC recipients directly in jobs or in education and training.

AFDC and Postsecondary Education

Prior to the Family Support Act of 1988, most AFDC recipients were required to tell their welfare caseworkers of any education and training activities in which they were engaged. If the caseworker found that the education and training was not approved by the state for AFDC, the welfare recipient could be told to choose between abandoning the training and losing AFDC benefits. In addition, a small federal program (WIN) provided funds to support approved training.

At that time, the states had flexibility to approve higher education as a training option for AFDC recipients. However, in practice postsecondary education was rarely approved and often opposed. As a matter of policy, many states did not allow higher education altogether; others provided little information about it and tended to allow only short-term, job-focused training.

Studies found that AFDC recipients who wanted to pursue postsecondary training, particularly individuals who wanted to attend a four-year college, generally were told that their goals were educationally unrealistic and fiscally irresponsible. In some ways, this resistance may seem surprising. For one thing, student aid was available to meet tuition costs. For another, it has been demonstrated that welfare recipients who get a college education almost never return to public assistance. (In fact, studies show that the most important characteristic of women able to earn an adequate income is a high level of education.)

Why, then, the antipathy to postsecondary education? Most important, it seems, is the fact that it takes a comparatively long time to go to college, and as long as the welfare system rewarded quick closure of cases, welfare workers were sure to promote short-term options such as low-level jobs and narrow training, and to frown on longer-term options like postsecondary education. As a result of these practices, welfare recipients—even those with a better-than-average education background—rarely considered postsecondary education an option, and those who attended college often hid the truth from their caseworkers.

The 1988 Family Support Act was enacted "to revise the AFDC program to emphasize work, child support, and family benefits...[and] to encourage and assist needy children and parents under the new program to obtain the education, training, and employment needed to avoid long-term welfare dependence."

The act created a new JOBS program, which greatly increased federal funding for state-approved education and training activities, and it established a right to child care for those in such training. In terms of postsecondary education, the law made significant changes.

1. If the individual was in a postsecondary program before enrolling in the welfare JOBS program, the education would be considered a "self-initiated" JOBS activity. If the welfare officer agreed with the student that his or her course of study constituted an appropriate training program, the individual would have a right to complete the training without losing AFDC benefits. AFDC would *not* have to contribute to the person's educational expenses under these circumstances but would be obligated to provide child care, transportation and other ancillary services that were not otherwise provided for (as described below).
2. Postsecondary education was explicitly listed as one option to which the state, *at its discretion*, could assign welfare recipients for training under the JOBS program. In this case, JOBS funds could contribute to the individual's educational expenses as well as providing child care, transportation and ancillary services.

It should be noted again that the law says only that the states *may* consider college as "satisfactory participation in the program." The provision imposes no obligation on the states to

approve postsecondary training, and the law in general does little to alter the basic ethic to get people off the welfare rolls quickly.

Regulations issued in 1989 by the Department of Health and Human Services attempt to further discourage the postsecondary option. The regulations preamble, for example, declares that "[s]horter programs leading to specific occupational goals are preferable to longer education programs that may have far less specific employment goals (Federal Register, Vol. 54, #197, October 1989)."

State-reported data indicate that there has probably been an increase in permitting postsecondary education for AFDC recipients since enactment of the 1988 law. (How much of an increase is impossible to say, because the data prior to 1988 are extremely sketchy.) A few states report 10 percent, 20 percent, or even more of their AFDC recipients in approved postsecondary activities. (The data do not show whether this constitutes short-term or long-term postsecondary training.)

However, in the absence of a more affirmative legal mandate to approve college, more positive regulations or a change in the ethic of quick case disposition, most experts still consider it unlikely that state approval practices for higher education will change dramatically under the new law.

Student Aid and AFDC

Section 507 of the Higher Education Amendments of 1968 provided that "[f]or the purpose of any program assisted under Title I, IV, X, XIV, XVI, and XIX of the Social Security Act, no grant or loan to any undergraduate student for educational purposes made or insured under any program administered by the Commissioner of Education shall be considered to be income or resources."

At the same time, as noted above, Section 479B of the Higher Education Act of 1986 exempts only the portion of Title IV made available for tuition, fees, books, supplies, transportation and miscellaneous personal expenses when determining eligibility "under any program funded in whole or in part with federal funds."

Both provisions currently have legal force; the question is how to interpret them. Under one interpretation, the more restrictive language of Section 479B would apply to eligibility determinations under all federal programs *except those Social Security Act programs specified in the earlier statute.* Under this interpretation of the law, Title IV student aid benefits would not be counted toward AFDC eligibility, because AFDC is one of the Social Security Act programs specified in the earlier statute.

However, in June 1991, HHS put forward another interpretation. Under the HHS interpretation (45 CFR Part 233), the more restrictive language in Section 479B should apply to Title IV vis-

a-vis all other federal programs, including AFDC, and the earlier blanket exemption applies to any Education Department program *other than a Title IV program*. Under this construction, about the only Education Department program exempted as income for AFDC purposes is a small program to encourage minority participation in graduate education.

As a result of the HHS ruling, welfare recipients today must document their education-related benefits under Title IV grant and work-study programs in the same way as do Food Stamp recipients. Unlike the Food Stamp program, however, HHS regulations explicitly exempt loans received under Title IV or any other program as income or resources in determining AFDC eligibility. Earlier regulations left it up to the states to decide whether or not to exempt loans, but an adverse court decision prompted the blanket exemption. Non-federal sources of public or private aid may or may not be counted as income at the state's discretion.

As noted in the section on Food Stamps, there are continual, and inevitable, disparities among welfare caseworkers and campus aid officers in determining which school-related expenses to count in assessing welfare eligibility and how to apportion aid among the allowable categories. As Dunkle (1988) notes, "Two AFDC recipients attending the same college, with the same income, the same number of children, the same educational costs, the same student aid funding, and even the same caseworker" can wind up being treated differently under the eligibility system now in place.

Case Study: JTPA and Related Programs

The Job Training Partnership Act (JTPA) of 1983 provides jobs, education and training to help low-income youth and adults, including displaced workers, find "permanent self-sustaining" employment. JTPA is funded entirely by the federal government and operated through the states and local delivery systems. About $3.6 billion was expended in fiscal 1990 to enroll about 2.1 million participants.

Most JTPA funds reach the states as block grants. The states, in turn, are responsible for the allocation of funds to "service delivery areas" (SDAs). The SDAs contract with employers and organizations such as public schools, trade schools and community colleges to train people for jobs in the local economy. Spending decisions within the SDA are made by a private industry council (PIC) consisting of representatives of business, government and labor (but generally dominated by business).

Use of Student Aid by JTPA Participants

JTPA law permits SDAs to assign participants to training in a postsecondary institution. The law also states (sections 141(b) and 107(b)) that JTPA funds can only be used to provide services

"in addition to those which would otherwise be available." Thus, if a JTPA enrollee is assigned to a postsecondary institution, and the enrollee is also eligible for some form of Title IV student aid, the two forms of aid can contribute to the training.

Pell Grants. People who enter into postsecondary training under JTPA may also be eligible for a Pell Grant if they meet the Pell Grant financial need criteria, if the training institution is certified for Title IV participation, and if the educational program is at least six months (or 600 clock hours) long.

In recent years, Department of Labor administrators have issued guidances that encouraged the SDAs to (1) have qualified participants apply for a Pell Grant and thereby employ Pell Grant funds to offset JTPA outlays; and (2) promote greater coordination between JTPA and student aid to address concerns about overlapping funding and double billing. In this regard, the SDAs were encouraged to assure that:

1. Student aid eligibility determinations are made known to the SDA;
2. Schools do not receive JTPA funds to pay for training and then an overlapping payment through the Pell Grant for tuition and fees to cover the same training; and
3. Prospective JTPA participants agree to release student aid information to the SDA that would otherwise be confidential under the Higher Education Act.

A special complication arises in cases where JTPA programs use performance-based contracts. These are contracts under which schools receive full payment only after participants have successfully achieved outcomes specified in the contract. In an arrangement of this nature, students are not liable to return any tuition or fees to the school if they fail to complete the training or achieve the desired outcomes. This differs from the typical student-school relationship presupposed by the Pell Grant program, under which the student is personally liable to pay tuition up front and can get back only part of the tuition if he or she drops out toward the beginning of the course.

Because students are not paying tuition in the usual sense when they participate in a performance-based program, the Labor and Education Departments both have ruled that the Pell Grant computation for these students should not include tuition and fees. In this case, the Pell Grant can only cover the nontuition educational and living expenses (such as books and transportation) specified in Title IV. This restriction does not apply to contracts that are not performance-based, in which tuition and fees can be assessed under normal payback rules and, therefore, the Pell Grant can cover these expenses.

Campus-based/Loan Programs. The Labor Department has issued advisories to the SDAs about coordinating SEOG and College Work-Study with JTPA that roughly parallel the Pell Grant advisory. Loans pose more of a problem. The Department cannot prohibit JTPA trainees from obtain-

ing loans if they meet the requisite criteria. However, the Department has advised SDAs about the loan repayment problems of those who move into entry-level jobs and has urged the SDAs "to consider these implications... in putting together a program of financial assistance which may result in burdensome obligations for the participant upon program completion."

The Labor Department published draft guidelines in January 1991 (Federal Register Vol. 56, No. 2) to address a variety of JTPA-student aid coordination issues and to remedy confusion in the field, particularly about whether or not tuition expenses could be offset by the Pell Grant. The guidelines were controversial from the outset, with some believing that they went too far in encouraging the use of Pell Grants to offset JTPA expenses and others expressing concern about the capacity of SDAs to monitor student aid behavior. The Department has submitted to OMB a revised draft, which is under review.

Finally, although serious attempts have been made to integrate student aid and JTPA, it should be noted that relatively little JTPA training goes on at the postsecondary level. Most of what does take place by way of postsecondary education is based in short-term proprietary school programs rather than in longer-term community college programs.

A number of conditions serve to discourage community college participation. First, the people making most local funding decisions—the business-dominated private industry councils—often voice distrust concerning the practical payoff of long-term training in terms of usable on-the-job skills. Second, a number of localities restrict their JTPA programs to an "open entry/open exit" model—that is, a program in which individuals can be added to a class or drop out at any point in the process. This, of course, is contrary to the way in which community colleges typically operate. Third, in many localities JTPA operates on a strict no-credit system in relation to community colleges. In fact, adults who wish to return for advanced training often find they cannot receive credit to which they might otherwise be entitled for their earlier JTPA work.

The Trade Adjustment Assistance Program

The Trade Adjustment Assistance for Workers (TAA) program, first authorized under Title II of the Trade Act of 1974, provides cash payments (called trade readjustment allowances, or TRAs) as well as support for training to workers who lose their jobs, or whose hours of work and wages are reduced because of increased imports. In fiscal 1991, about 60,000 workers received $71 million in benefits.

Usually, TRA benefits are paid only to workers who participate in a training program approved by the state unemployment office, which administers the program. The state agency first attempts to find no-cost training for the individual. If that is not available, the agency can enter into training agreements with public or private providers, which can include postsecondary

institutions. As in the case of JTPA, the question then arises of what to do if TAA trainees are also eligible for a Pell Grant or SEOG.

The Labor Department evolved a three-part policy to deal with this issue (General Administrative Letter 1-88, US Department of Labor, Employment and Training Administration, December 2, 1987), which states:

1. If the Pell Grant is applied entirely to tuition and fees, and none of it is disbursed directly to the student, then no part of the Pell Grant is deducted from the individual's TRA benefits, TRA benefits may continue to full term, and any costs of training not covered by the Pell Grant shall be paid with TRA program funds.
2. If only part of the Pell Grant is retained by the institution for tuition and fees, and the rest is disbursed to the student, weekly TRA benefits are reduced by the amount of the Pell Grant that is disbursed to the worker.
3. If the entire Pell Grant is disbursed to the student, and the student is therefore responsible for paying the costs of training and other related expenses, the TAA agency may choose either (a) to consider the portion of the Pell Grant devoted to tuition and fees as a "direct payment" for training, in which case TAA will pay only for approved training expenses above and beyond that level or (b) to consider the Pell Grant an all-purpose payment to the worker, in which case TAA will pay all training expenses, but the individual's weekly TRA benefits will be reduced by the amount of the grant funds received by the worker.

TAA administrators report that the 1987 policy standards may be needlessly complex, and, in any event, that there is widespread confusion in the field about implementation. A revised policy advisory is currently under development.

Job Training 2000

Finally, it should be noted that the President's fiscal 1993 budget proposal put forward the Job Training 2000 initiative, designed in part to "streamline the maze of federal job training programs currently dispersed across numerous federal agencies and create a one-stop shopping center to serve individuals and employers more effectively."

One of the announced aims of the initiative is to coordinate the local delivery of more than $11 billion in vocational/technical education services currently provided under JTPA, Perkins postsecondary vocational training, the Adult Education Act, and Food Stamps employment and training, as well as Pell Grants and Guaranteed Student Loans.

Details of the plan are still under development by Administration officials, but the intention is to try to coordinate most education and training services through the JTPA system of SDAs and PICs. Job Training 2000 also envisions the creation of a new training voucher program, presumably

replacing some or all existing programs in this area. Some $2 billion in vouchers to participate in PIC-certified programs would be issued, which would cover up to 90 percent of the cost of training. As previously noted, it is envisioned that Pell Grants and Guaranteed Student Loans would be coordinated with new and existing programs, but specific plans have not yet been developed.

Case Study: Vocational Rehabilitation

The Federal Rehabilitation Act of 1973, as amended, provides matching grants to the states (80 percent federal/20 percent state) to establish vocational rehabilitation (VR) programs that meet the "needs of individuals with handicaps so.. [they] may prepare for and engage in gainful employment to the extent of their capabilities." In FY 1991, almost 1 million clients were served by the program, and about $1.6 billion was allocated to the states.

The program is administered at the federal level by the Rehabilitative Services Administration (RSA) in the Department of Education. Federal law mandates that state VR agencies provide evaluation, counseling, training and job placement. The training may take place at a postsecondary institution. In fiscal 1989, RSA reported that about 11 percent of VR participants were being trained at the postsecondary level, at a cost of about $115 million.

Most of the details in carrying out VR programs are left to the states and set out in state policy plans. Under VR, disabled individuals go to a local office of the state VR agency, which assesses the individual, determines the most appropriate form of training and provides funds, if necessary, to support it.

Three factors determine eligibility. First, the individual must fit in one of the legally-set categories of physical or mental disability. Second, the disability must present a "barrier to employment" (an applicant may be sent to a hospital or private doctor for an evaluation of employability). Third, there must be a reasonable expectation that training services will result in employment. In some states, financial need is assessed as an eligibility criterion.

Coordination of VR and Student Aid

For disabled students attending postsecondary institutions, the VR program intersects with Title IV financial assistance programs in three ways. First, the Rehabilitation Act requires that training services in higher education institutions cannot be paid for with VR funds *until a maximum effort has been made to secure grant assistance from other sources to pay for the training.*

Second, after this step is taken, VR funds can pay for: (1) special costs for services related to the individual's handicap that are needed in order for the student to attend school; (2) financial need not covered by other sources; and (3) any form of self-help aid (loans and employment) indicated in the financial aid package.

Finally, the Higher Education Act (sections 411F(5) and 472(8)) requires that the "cost of attendance" computation for financial aid purposes should include "expenses related to a student's handicap" that are not provided for by other assisting agencies.

Officials of the RSA and the Office of Student Financial Assistance at the U.S. Department of Education have developed a number of memoranda of understanding over the years, most recently in August 1991, "to form working principles... on the coordination of financial aid for VR clients attending postsecondary institutions." The following procedure has been agreed to:

1. The VR client applies to the educational institution for student financial aid as a condition of receiving VR training services. The college financial aid administrator determines the student's allowable expense budget exclusive of costs related to the student's handicap, as well as the amount of expected family contribution.
2. Based on this information, the institution determines the initial awards of student financial assistance and notifies the student and the VR agency. (The Education Department recommends that state VR and college officials develop a shared form for this purpose.)
3. The VR caseworker identifies special costs for services related to the client's handicap that are needed to enable the student to attend school. If comparable services and benefits are not otherwise available, VR dollars may be committed to: (a) these handicap-related costs (b) financial need unmet by Title IV student assistance or (c) any form of self-help aid (loans and employment) indicated in the financial aid package. VR communicates this information to the school on an agreed-upon form.
4. The financial aid administrator adds to the costs of attendance any expenses related to the student's handicap identified, but not provided, by VR, and determines the student's financial awards based on the revised costs.

Interviews with a number of federal officials, campus aid officers and VR administrators indicate that these procedures work in the field about as well as can be expected, given the legal complexities. Two types of problems were reported. One concerned student loans; some states require that students avail themselves of Title IV loan assistance before VR funds are committed. States are entitled to do this under the law, although most states do not follow this practice, and RSA discourages it. Problems also arise when there is not enough time between the submission of the student's application and the beginning of classes to process materials back and forth between the college and the VR office; one official indicated that a few months are needed to do the job properly.

Approval of Postsecondary Education

Coordination aside, states vary greatly in the extent to which they permit VR beneficiaries to be trained at the postsecondary level. While some states make extensive use of postsecondary education, the *Campus Roadblock* study (Gold 1990) found that the states and local VR counselors, hungry for quick closure of cases and perhaps underestimating the potential of their clients, often made it difficult for VR applicants to get college-level training.

The VR program is structured in a way that rewards states that employ the quickest possible training options. VR clients employed for at least 60 days constitute what the RSA calls "Twenty-Six Closure," which means that the case is closed and the client is "rehabilitated." Assessing a state's number of case closures is one criteria for evaluating the success of the state's VR program. As Jay Rochlin, executive director of the President's Committee on Employment of People with Disabilities, put it in *Campus Roadblock*, "The VR system is driven by closures—that's how they are evaluated and that is how they are funded."

Counselors, too, are evaluated on their number of case closures. Bill Butler of the National Network of Learning Disabled Adults said, "Counselors must receive a certain number of closures to get good grades. They have a lot of latitude and this flexibility allows them to say no to clients."

Postsecondary education, of course, is usually not the fastest way to train people and close cases, even if it may offer the best prospect of long-term self-sufficiency. Not surprisingly, then, pressures for quick closure can drive counselors to disallow or discourage postsecondary education, especially for students with serious handicaps who require extensive services.

Vocational assessments conducted at the local level usually deal with the client's ability to "handle tools" or "physically do certain things," while scholastic aptitude is not typically explored and college is rarely mentioned unless the client brings up the subject. Program practice varies considerably. The more overtly job-focused the training, the better the likelihood that it will be approved. At the college level, Sharon Mistler of the Endependence Center of Northern Virginia reported in *Campus Roadblock*, "They don't like to fund philosophy degrees, and while one counselor may allow someone to study anthropology, another counselor may not. The regulations allow either."

Case Study: Veterans Educational Benefits

The Department of Veterans Affairs administers three programs that provide educational benefits to veterans and their families.

The Dependents Educational Assistance Program (DEAP) provides monthly payments for education and training to the spouses or children of POWs, MIAs or veterans dead or disabled for

service-related causes. The Veterans Educational Assistance Program (VEAP) provides monthly education or training payments to people who served more than 180 continuous days since 1977. Service members make monthly contributions while on active service, up to a maximum of $2,700, to participate.

New contributions to VEAP were curtailed in 1987, when the Montgomery GI Bill went into effect. The Montgomery GI Bill now provides monthly education and training benefits based on the length of time spent on active or reserve duty by members of the Armed Forces who began their service since 1985 (as well as some Vietnam veterans). Service members contribute about $1,200 toward their benefits during the first year of service.

The veterans educational benefit programs do not count other forms of financial aid, whether from Title IV or other federal or non-federal sources, in determining an individual's eligibility or the size of benefits.

However, the amount of veterans benefits received by an individual can affect eligibility for Title IV assistance. The way in which veterans benefits are counted differs between the Pell Grant program and the other Title IV programs. The rules also differ between aid applicants from families with incomes of about $15,000 or less, who fill out a simplified financial aid application, and other aid applicants, who fill out a more complete statement.

Pell Grants. For applicants who fill out a complete student aid application, one-half of any benefits received under the Dependents Educational Assistance Program (DEAP) will be counted as untaxed income in determining the individual's Pell Grant eligibility. For the lowest-income applicants who fill out a simplified Pell Grant application, none of the DEAP benefits are counted.

Any aid received under the other two DVA educational assistance programs—VEAP or the Montgomery GI Bill—are not counted, in whole or in part, toward Pell Grant eligibility. On the other hand, any noneducational benefit programs funded by DVA are counted as unearned income for student aid purposes.

Other Title IV Programs. Essentially all DVA benefits are counted in determining eligibility for the other grant, loan and work programs. They are counted either as part of the family contribution formula, or in another part of the aid application as a financial resource.

In short, half of DEAP benefits are counted toward Pell Grant eligibility (but only for those who do not fill out the simplified applications); VEAP and Montgomery GI Bill benefits do not count at all towards Pell Grant eligibility; and all DVA programs count in one or another part of the formula towards eligibility for the other Title IV programs.

New Policy Directions

Amid the tangle of laws, regulations, guidelines, and administrative idiosyncracy that pervade our case studies, two overarching themes emerge. The first theme is that the jerry-built nature of federal program requirements creates an obstacle course that can prevent the neediest students from seeking higher education and can impede the efficient use of federal resources.

In the case of Food Stamps and AFDC, relatively arcane distinctions between one kind of educational cost and another can mean the difference between food for the family, on the one hand, or a decent education on the other. Taking a loan, which must be paid back, can make a Food Stamp recipient appear too "rich" for further support.

In the case of job training programs, expenditure decisions turn on whether aid checks went to the student or the school, or whether the school was paid at the beginning of the training or the end.

Aid applications seesaw a minimum of three times between rehabilitation counselors and campus aid officers in an Alphonse and Gaston game of who-will-get-the-other-program-to-pay-for-benefits-before-I-have-to, and a portion of GI benefits count towards student aid eligibility for one program but not another and for some beneficiaries but not for others.

The second theme emerging from the case studies is an antipathy toward permitting human service program beneficiaries to participate in postsecondary education, an antipathy that is sometimes reflected in law but more often in administrative practice. We saw how the push to produce short-term results, to close cases quickly, often leads caseworkers to discourage postsecondary education, or to prohibit it altogether. This may be exacerbated by an underlying attitude that welfare, Food Stamps, JTPA and rehabilitation beneficiaries should keep their sights low and their aspirations modest.

If a decision were made to reverse these trends—to streamline services and encourage a more positive attitude toward postsecondary education in federal human resource programs—there are a number of ways in which current laws, regulations and program practices could be changed to achieve this result. Some of them are outlined below.

Smoothing the Obstacle Course

The following seven proposals serve as a smorgasbord of ideas to coordinate the relationship between student aid and other programs. While some proposals are more technical than global in tone, their combined impact on individuals and families could be considerable:

Automatically Grant Student Aid Eligibility to Beneficiaries of Other Federal Human Service Programs. It is generally accepted that the student aid system must know about, and count, any benefits an individual receives under government aid programs, whether for subsistence (such as AFDC or

Food Stamps) or training purposes (such as JTPA and vocational rehabilitation), in determining eligibility for Title IV grants or loans. To do otherwise would streamline the delivery process, but it would also mean that important sources of support would go uncounted.

Rather than not counting benefits altogether, it has been suggested that the student aid programs consider eligibility for certain poverty-based human service programs, such as AFDC or Food Stamps, as granting automatic eligibility for Title IV aid. Under this plan, beneficiaries of these poverty-based programs would simply indicate that fact at the top of their student aid application (certified by the appropriate agency), and they would qualify for aid.

Advocates of the plan point out that there is a 92 percent conformance between AFDC and Pell Grant eligibility. Thus, they maintain, any danger of providing student aid to the wrong people is far outweighed by the benefits of streamlining the eligibility process.

Despite its attractiveness, the automatic eligibility idea has been opposed both by the U.S. Department of Education and by Congressman William D. Ford, chairman of the House Education and Labor Committee. The Department opposes the idea because AFDC eligibility criteria vary greatly among the st tes, and, thus, there would be no guarantee of uniformity in eligibility determinations under this procedure. Congressman Ford opposes the idea because he believes political support for federal student aid would diminish if the programs were seen as "another welfare program" rather than as an investment in educational opportunity.

Instead of automatic eligibility, the House version of the 1992 Higher Education Amendments institutes a "bypass" on the student aid form. Under this procedure, individuals who do not utilize the 1040 long form, or who receive an earned income tax credit, would be able to certify this on their student aid application and, after so doing, would not have to provide most of the remaining income and assets data on the form.

Stop Counting A Portion of Student Aid Toward Eligibility for Other Programs. We've repeatedly discussed the impact of section 479B of the Higher Education Act—the section that specifies that only the portion of Title IV student aid that can be specifically attributed to tuition, fees, books, supplies, transportation and miscellaneous personal expenses should not be counted toward eligibility for other federal programs. Any portion of student aid that cannot be attributed to these purposes counts against eligibility for other programs.

This provision has come under sharp attack in recent years. Opponents have suggested, first, that the amount of money the government saves by disallowing these costs is insignificant compared to the accounting nightmare the rules inevitably generate for program administrators and beneficiaries alike.

While savings to the government are negligible, they maintain, the difference between $100 more or less in AFDC or Food Stamps can make a mighty difference to individuals—the differ-

ence, according to studies of client behavior, between people pursuing an education and putting that option aside. Because both student aid and AFDC cover such a small proportion of financial need anyway, they say, why pretend that a few more dollars in student aid render a welfare recipient too "rich" for her AFDC benefit? Why not tilt the policy balance a little towards education?

The House version of the higher education reauthorization bill takes this approach, and it states simply that Title IV student aid will not count toward eligibility for other federal programs. As long as the student aid system provides some support for room and board along with direct educational expenses, however, there will be opposition to discounting student aid on grounds that it amounts to double-dipping.

Set National Standards for Defining Eligibility Terms and Accounting Costs. Short of not counting student aid toward eligibility for other income support programs, it has been suggested that Congress itself could set, or permit the Education Department to set, specific national standards designating exactly which student aid expenses can be counted on the "educational cost" side of the ledger and which on the "living cost" side of the ledger. Today's legal standards clearly leave endless room for disparity and idiosyncratic administration.

Under this option, someone at the local level, presumably the campus financial aid officer, would have the last word in deciding what portion of student aid counts toward what kind of expense. The law would have to make clear that the financial aid officer's determination on this point is not subject to reversal by caseworkers or counselors of other programs (although it would be subject to audit, as all financial aid actions are, by the U.S. Department of Education.)

Along similar lines, it has been suggested that eligibility determinations could be streamlined if the definition of key terms in the various human service programs, terms such as "financially disadvantaged" and "poverty" and "displaced worker," were examined as a group and common definitions adopted across programs.

Assure that Student Loans are Not Inappropriately Substituted for Other Forms of Income and Training Support. The arguments against counting Title IV aid toward eligibility for other subsistence and training programs apply with particular force concerning student loans. As shown, HHS has discontinued its practice of counting student loans as income for purposes of AFDC, but loans can still be counted as income in the Food Stamp program. We've also seen that local JTPA and vocational rehabilitation officials are able, in effect, to require that their postsecondary enrollees take loans before obtaining funds from their programs, although federal officials maintain that this practice is relatively rare and is discouraged.

Nevertheless, two steps could be taken to clarify matters. The first is to assure by law that Title IV loans are not counted as income, in whole or in part, in determining eligibility for other federal programs. The second is to require that Title IV loans be made available to beneficiaries of

other federal subsistence and training programs *only after they have received the aid to which they are entitled from those programs*, and only up to an amount which covers any remaining gap between these forms of aid and the individual's cost of attendance.

Create New Mechanisms to Coordinate Federally-Supported Training And Relate Them To The Student Aid System. The President's Job Training 2000 initiative represents a major commitment to better coordinate federally-supported vocational/training programs. Two key mechanisms are proposed to do this. The first is creation of a new training voucher program, which might supplant some of the approximately 25 education and training programs operated by the federal government today. The second is greater Private Industry Council involvement in developing training initiatives at the local level and in coordinating federal programs.

Program consolidation, in and of itself, could be expected to partially smooth the obstacle course described on these pages. In addition, if the elements of Job Training 2000 work well after a period of experimentation, it might be worth investigating whether PIC-coordinated training vouchers could even replace Title IV aid programs altogether as the best way to support students who take postsecondary training below the associate degree level. A number of higher education officials have argued for years that the structure of Title IV suits the college campus, and that a differently-designed program would better address the needs of noncollegiate postsecondary education.

Count Veterans Benefits the Same Way As Other Programs. The veterans educational benefit programs are a key exception to the general principle that we count all education and training benefits in determining an individual's student aid eligibility (see the first option, above). By all accounts, the only basis for the differentiation was Congress' desire not to seem to be taxing veterans, although it can be argued that veterans benefits should be treated differently because they are earned—earned by service and earned because participants make small contributions to qualify for the program.

Some policymakers on and off Capitol Hill are arguing, however, that DVA benefits ought to be counted in the same fashion as other governmental benefits. While this would not make eligibility easier for veterans, it would bring the treatment of veterans programs into conformance with the treatment of other sources of assistance.

Count Student Aid Uniformly vis-a-vis Department of Labor Training Programs. We've seen two examples of inconsistent treatment of student aid under Department of Labor training programs. In JTPA, we found that payment of tuition costs by the Pell Grant can depend on whether the training contract is performance-based or not. We found that student aid benefits count against TAA eligibility based partly on whether the check goes to the student or the institution. Uniform treatment of aid under both programs would streamline the eligibility process considerably.

Treating Postsecondary Education Positively

The second theme that emerged from the case studies was an antipathy toward allowing human service program beneficiaries to take part in postsecondary education, especially at the collegiate level. This is often justified on grounds that most participants in federal income support and training programs are not prepared for postsecondary education, and that they owe it to society to get off the dole as quickly as possible, even if it means lowering their aspirations.

In response, higher education proponents argue that, while most AFDC, Food Stamp or JTPA participants may not be ready for postsecondary education, some *do* have the ability and motivation to enter and succeed in postsecondary education. If they do, it is thoroughly worthwhile to give them a chance to complete their training, because education is the single most decisive factor in preventing a return to income dependency.

Supporters of this position maintain that decisions about the kind of training to allow for each individual cannot be left solely in the hands of AFDC caseworkers or VR counselors who are under constant pressure to close cases quickly. One alternative would be to state by law that any accredited and government-certified postsecondary course of study would automatically be considered allowable training under AFDC, vocational rehabilitation and similar programs. Another possibility would be to keep decision making in the hands of the welfare and VR systems, but to place upon the state the burden to prove that an accredited and certified postsecondary training program is not satisfactory, and to require that program beneficiaries be informed of the postsecondary option. (Both these proposals presuppose much tighter regulation of proprietary institutions, as called for in the higher education reauthorization proposals making their way through Congress.)

Finally, we found that the 20-hour-per-week work requirement imposed on Food Stamp recipients in postsecondary education either (1) forced Food Stamp recipients who get jobs to receive Food Stamps longer than they otherwise would or (2) required those who could not find jobs to discontinue their education in order to keep receiving benefits.

Many organizations maintain that the student work requirement has shown itself to be counterproductive and should be abandoned. Along the same lines, it has been proposed that Food Stamp recipients be permitted to allow any of their own documented educational outlays from their income for Food Stamp purposes.

Conclusion

Few of the options outlined in this section come without financial or philosophical costs. Granting automatic student aid eligibility to welfare and Food Stamp recipients would occasionally result in students getting aid for which they would not otherwise qualify. Not counting student

aid against eligibility for other federal programs could, in some circumstances, result in students receiving double payments toward their living expenses.

Setting national standards for determining education costs would sometimes prevent local officials from responding flexibly to individual circumstances. Not counting loans as income for other programs, and using loans only after other sources of funding are made available, would place more of the educational burden on society than on the individual. And permitting all federal income support and training participants to pick postsecondary education as their training option might allow an occasional manipulator of the system to receive more support than he or she deserves.

There are costs and benefits on all sides of these issues. In the end, the attractiveness of individual options depends in large part on one's basic predisposition: whether one thinks it is worth some cost to take a chance on people in school, or whether one believes it is worth the occasional lost student to ensure that reliance on federal income support is as limited as possible. Both these viewpoints have their merits; this paper cannot resolve them. What it has tried to do is offer a better picture of the programmatic landscape and to clarify the issues.

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NEED ANALYSIS AND DELIVERY: OPTIONS AND ISSUES

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NEED ANALYSIS AND DELIVERY: OPTIONS AND ISSUES

Ruth Beer Bletzinger

SUMMARY

The mission statement of the National Commission on Responsibilities for Financing Postsecondary Education identifies "determining the need for structural change in the current division of responsibilities for financing postsecondary education" as part of its primary charge. Need analysis and the delivery system by which federal financial aid dollars are channelled to students constitute basic structural components in the division of these responsibilities. The current need analysis consists of two formulas prescribed by statute—the Pell Grant Formula and the Congressional Methodology—that estimate ability to pay based on income and asset information supplied by students and their families. The delivery system is based on multiple data entry (MDE) contracts between the Department of Education (ED) and private need analysis servicers that provide for the collection, processing and transmission of these applicant data to ED, students, institutions and states.

Commissioners have expressed an interest in identifying alternative need analysis and delivery structures. One option under consideration by the Commission for revamping the need analysis formulas is to eliminate treatment of assets entirely. In its place, need analysis would rely on income alone to determine the ability of students and their families to pay for the cost of postsecondary education. As an alternative to the current delivery system, the Commission is exploring the feasibility of substituting the MDE-based application process with a system that uses the Internal Revenue Service (IRS) as the source of data for need analysis.

This paper evaluates these two options for modifying need analysis and the delivery system. The examination shows that the current impact of assets on calculated expected family contribution is small for most applicants due to structural features in the need analysis formulas. Changes to the formula proposed by the Senate and the House during the current reauthorization of the Higher Education Act will result in even smaller impacts. The analysis also demonstrates that an IRS-based delivery system presents a set of problems that could create complexity and delays in the delivery of financial aid to students. Specifically, data would not be sufficient nor timely enough to drive the need analysis formulas. Resolution of these problems is likely to prove time-consuming and costly.

INTRODUCTION

A systematic approach to calculating the need of students in order to distribute aid has its roots in the early 1950s, prior to the availability of significant federal funds for direct student assistance, when private institutions were looking for ways to award their own funds in an equitable fashion. Since then, need analysis and delivery have evolved to address the philosophical, political and operational requirements for federal and state financial aid programs as well as for institutional programs.

The 1970s marked a watershed in the development of both need analysis and delivery through two major events. First, in 1972, Congress established the Pell Grant program, initially called Basic Educational Opportunity Grants (BEOG). At the time, private need analysis servicers had competing need analysis formulas that produced varying family contribution figures. Despite the variation in results, these figures determined eligibility both for the federal programs that were then in place and for private funds. As a consequence, the same student could have a higher or lower calculated family contribution depending on the need analysis servicer accepted by the institution, which translated into differences in levels of assistance. Rather than relying on one of the existing need analysis models, Congress wrote a separate need analysis formula into law to distribute Pell Grant funds.

Second, in response to these circumstances, the National Task Force on Student Aid Problems (hereafter called the "Keppel Task Force" in reference to its chairman, Francis Keppel) produced a set of recommendations in 1975 that resulted in the emergence of a consensus need analysis model that became known as the "Uniform Methodology." While acceptance of this model by the financial aid community did not end the use of competing need analysis formulas, ED based its benchmarks for certifying need analysis servicers on family contribution figures generated by the Uniform Methodology, thereby imposing some conformity in the assessment of ability to pay for federal funds (Berkshire, Hauptman & Hayes, undated, 2). However, Pell Grant funds continued to be awarded on the basis of a separate formula as required by law.

Distinct application forms for federal, state and institutional funds existed during this period. According to the Keppel Task Force's *Final Report*, students were sometimes required to complete as many as seven applications that contained similar and differing data elements. In addition to contending with a diverse set of complicated questions, applicants then had to forward these forms separately to as many agencies and organizations (Keppel 1975, 31).

As a conscious outgrowth of producing a unified need analysis formula, the Keppel Task Force made recommendations that led to simplification of the application process through the

development of the "Common Form" (ibid.). The Common Form collected a combination of data that were needed to determine eligibility for federal funds (including the Pell Grant program) as well as for institutional programs, and permitted the collection of data used by individual states. The goal was to prevent students from having to complete multiple forms to be submitted to multiple parties. Instead, the student and family would complete a single form to be sent to a need analysis processor, which in turn would transmit the data to the federal government, institutions and states.

Structure of the Current Need Analysis System and Treatment of Assets

The now-defunct Committee on Need Analysis and Delivery (CONAD) of the National Student Aid Coalition, which consisted of members from different sectors of the financial aid community, took on the responsibility for changes to the Uniform Methodology. Modifications were grounded in a series of assumptions and principles that had been articulated by the Keppel Task Force. Among these was the notion that assets as well as income must be taken into account in calculating family contribution. According to the Task Force's *Final Report*, "...both income and assets are considered to provide the most complete index of the family's ability to pay" (Keppel 1975, 22). The *Final Report* also states:

> Since assets contribute to the financial strength of the family, it is important to include them when assessing the family's ability to pay. A strong net assets position indicates greater capacity to finance postsecondary expenses out of current income, and greater access to financial resources in general (ibid., E-7).

CONAD maintained this principle throughout its deliberations (Berkshire, Hauptman, & Hayes, undated, 3). Many members of the financial aid community would continue to agree with this tenet today.

During the reauthorization of the Higher Education Act in 1986, the Congress decided to replace the community-based Uniform Methodology with a statutory model. Known as the Congressional Methodology, it was largely derived from the Uniform Methodology with some alteration. As a result of Congress's action, the Higher Education Act provides for two need analysis models—one for the Pell Grant Program and the other for the remaining need-based programs authorized under Title IV of the Act. The structure of the models is very similar and follows the design of the Uniform Methodology in that both income and assets are taken into account, a set of offsets or allowances are subtracted from these components, and the remainders are subject to taxation rates in order to compute expected family contribution figures.

Perhaps most germane to the Commission's interest in this area is that the Congress underscored its intent in the 1986 reauthorization to reduce complexity in need analysis and the application process for low-income applicants by introducing the "Simplified Needs Test" into both models. Based on the rationale that certain populations have few, if any, assets, the Simplified Needs Test eliminates consideration of all assets—liquid and non-liquid—for students and their families with adjusted gross incomes below $15,000 who file simple federal tax returns (i.e., 1040A or 1040EZ forms), or who are not required to file federal tax returns. As a result, there are fewer data elements for eligible applicants to complete.[1]

Congress is continuing to make adjustments to the need analysis models as part of the reauthorization of the Higher Education Act that is now in progress. In addition to integrating the Pell Grant formula and the Congressional Methodology into a single need analysis model to calculate family contributions for all financial aid programs under Title IV—that is, for the Pell Grant program as well as remaining need-based loans and grants[2]—Congress plans to extend and refocus the approach it took with the Simplified Needs Test to assist middle-income populations.

The Senate, for example, raises the adjusted gross income cap for eligibility under the Simplified Needs Test to $50,000, which effectively removes all assets from consideration in calculating family contributions for those who meet the criteria. In addition, AFDC recipients automatically would be assessed a family contribution of zero. The House bill redefines the Simplified Needs Test to apply to dependents students and independent students with dependent children who do not file 1040 tax returns and whose incomes are at or below the level for eligibility of earned income credits, which is approximately $22,000 for the 1991 tax year. In addition, both the Senate and House have proposed the elimination of non-liquid assets for other groups of applicants, although the provisions differ. The Senate bill would modify the need analysis formulas by removing equity on principal residences and family farms from consideration for students and their families with adjusted gross incomes of $50,000 or less, regardless of the type tax return filed. The House bill goes further by entirely excluding the equity on principal residence, family farm and small family business from the formulas for all applicants.

Structure of the Current Delivery System

The current delivery system has also emerged from recommendations developed by the Keppel Task Force. In its *Final Report*, the Task Force presented an evaluative framework composed of a set of questions that implicitly identified the characteristics that should be embodied in any student financial aid delivery system. Two of the characteristics that are particularly relevant to this discussion include (1) one application form by which students can apply for federal,

state and institutional aid and (2) the ability of the system to provide timely and sufficient output from the data collected on the application to determine awards from such an array of programs.

The delivery system operates today by permitting students and their families to complete an application form through one of the need analysis servicers that have MDE contracts with the U.S. Department of Education (ED). The data used to calculate contribution figures for the Pell Grant formula and the Congressional Methodology are transmitted by the MDEs to another contractor that serves as ED's Central Processing System (CPS). The CPS performs the calculations and sends the processed data back to the MDEs, which in turn generate a document—the Student Aid Report, or SAR—that is sent directly to the student. The student then submits the SAR to the institution for consideration of Pell Grants. Institutions are able to use the document to determine eligibility for the other Title IV funds as well. With the exception of the student bringing the SAR to the institution, parameters for the time it takes for each stage of processing are mandated by the MDE contracts. In practice, the MDEs and the CPS have been able to adhere to the parameters for the most part.

States and institutions also are able to obtain processed federal data in roster form directly from the CPS either in hardcopy or electronic formats. MDEs can provide these data as well as so-called non-federal data that may be collected on the application to states and institutions to assist them in determining eligibility for non-federal financial aid programs.

Many states and institutions base awards for their own financial aid programs on the federal data alone, whereas others require supplemental information that is collected on the same form as the federal data. A few states and institutions also have students complete a separate form.[3] Nonetheless, the delivery system for the most part permits applicants to fill out one form to be considered for federal, state and institutional assistance with output that is available on a timely basis to the parties that need the information.

In addition, the delivery system provides for an electronic data exchange (EDE) sponsored by the Department of Education. The program allows postsecondary schools to send and receive data via electronic transmission directly to and from the CPS. Approximately 3,500 postsecondary schools take part in one or more of the four "stages" of the EDE program, which includes electronic submission of federal applicant data and receipt of the processed information that permits schools to produce the SAR. These stages constitute an electronic analog to the operations in the paper-driven application process. Institutions may participate as individual entities, which requires ED certification for each stage. Alternatively, they may also contract with other organizations, such as MDEs, that can serve as "destination points" for the schools.[4]

The current delivery system has minimized the need for multiple application forms and it supports the collection, processing and transmission of applicant data that largely coincide with

federal, institutional and state awarding cycles. However, at least three specific concerns have been raised during this reauthorization. First, institutions must use the SAR itself to determine Pell Grant awards; they are not permitted to make final awards using any other output document that the MDEs or CPS produce. Because students sometimes do not submit their SARs to the institution until after prescribed deadline dates, these individuals must forgo benefitting from a Pell Grant for that academic period. A second issue revolves around the application fee structure. Current law states that no student or parent shall be charged a fee for applying for federal aid, but some of the forms that collect federal data collect state and institutional information as well for which students pay a fee. The major consideration is whether these charges deny students their statutory right to free processing. Third, the reapplication process is viewed as redundant and burdensome. Under the current system, students must complete an entire application every year, even for those data that do not change, adding complexity and expense to the system.

In response to these issues, the Senate and House reauthorization bills contain proposals intended to improve the current delivery system. The House bill would permit institutions to award Pell Grants based on MDE output documents, even in the absence of the student submitting the SAR. In addition, MDEs could only charge students for the marginal costs of collecting, processing and transmitting non-federal data, although it is possible that the House language may not permit the non-federal data to be collected on the same form as the federal data.

The Senate bill does not have comparable language with respect to the SAR. However, it does address the matter of charging fees to applicants by requiring organizations that bid for MDE contracts to "provide estimated marginal costs of collecting and processing" state-specific data. The Secretary also is authorized to enter into contracts with states to "assist...with the collection of data required to award State grants." Further, the Senate bill expressly permits federal, state and other non-federal data to be collected on one form, but the federal data must be separated from the non-federal and identified as the "Free Application for Federal Student Aid."

Both the Senate and the House contain language that would require the Secretary to implement a streamlined reapplication process. Notably, ED already is attempting to reduce the burden on students who reapply for federal funds by initiating streamlined electronic reapplication for the 1992-93 award year through its existing electronic student application process. Although applicants would continue to provide financial information annually, they would only have to update the demographic data. ED is planning to implement a similar paper-based process for 1993-94.

ANALYZING TWO PROPOSALS

The National Commission is interested in analyzing the effects of entirely eliminating assets from the calculation of expected family contribution and of substituting an IRS-based delivery system for the current system that uses contractors to collect, process and transmit information either through a need analysis servicer or directly to and from ED's Central Processing System. The evaluation of excluding assets from the need analysis formulas centers on four key questions:

1. What are the arguments in favor of maintaining assets in the computation of expected family contribution?
2. What are the arguments against inclusion of assets in the computation?
3. How are assets currently treated and what is their impact?
4. How would the Senate and House reauthorization change the treatment of assets?

Similarly, two key questions also drive an assessment of replacing the current delivery system:

1. Can the IRS system as it exists deliver sufficient data to drive the need analysis formulas? and
2. Can the IRS provide timely data for delivery of federal, state and institutional funds?

Eliminating Assets from Need Analysis

Arguments For Maintaining Assets

Members of the financial aid community are concerned about eliminating assets—even home equity—from the need analysis formulas. Their hesitance rests on the potential loss of sensitivity in the formulas if assets are removed. Grounded in the traditional belief expanded by the Keppel Task Force and CONAD that achieving an equitable index of family ability to pay requires an evaluation of both income and assets, the underlying principle is that two families with the same income but different assets are not in the same financial position to contribute to educational costs. The assumed effect of removing assets from the formulas, then, would be to deflate the calculated family contributions for families that could afford to contribute more than the computed amount. As a result, financial aid funds would be redistributed from lower-income students to students from higher-income families.

Arguments Against Inclusion of Assets

Perceptions about treating assets in the need analysis formulas are changing in Congress and within the financial aid community primarily due to current economic conditions, which are represented by several factors. These include:

- Increases in the costs of tuition that have outstripped increases in income, making it more difficult for middle-income families to pay for educational expenses;
- An explosion of property values during the 1980s that created home equity values against which individual families could not afford to take out second loans to finance college costs; and
- Loss of employment among middle-income as well as lower-income families as an outgrowth of the recession, placing a strain on any assets that families may have accumulated.

Congress is responding to the economic circumstances facing middle-income families, in part, by adjusting need analysis formulas. As described in the introduction to this paper, both the Senate and House reauthorization proposals incorporate—albeit to different degrees—elimination of certain non-liquid assets. The financial aid community, too, is aware of the stress on all families, irrespective of income, as they try to meet educational costs without jeopardizing their own financial stability. The College Scholarship Service's Council Committee on Standards of Ability to Pay underscored the financial community's awareness in a recent discussion paper that treats the proposals in the Senate and House bills to remove home equity. Although the Committee does not recommend dropping home equity or other assets from need analysis, the group states:

> Times *are* tough [italics in original]. Correctly or incorrectly (and it's an arguable point), many middle- and upper-income families—and their elected representatives—regard assessment of their home value as a major reason why they have difficulty paying for college bills (College Scholarship Service 1992, 6).

Current Treatment of Assets and Their Impact

The current need analysis formulas compute contribution from assets by identifying net values, subtracting reserves or allowances against these values, and subjecting the remainder to an assessment rate. In the Congressional Methodology, the remainder undergoes an additional assessment in combination with the contribution from income for parents of dependent students and for independent students with dependents.

The Pell Grant formula and the Congressional Methodology structure the treatment of assets differently. For parents of dependent students, married independent students, and independent students with dependents, the Pell Grant formula subtracts a set of reserves against four categories of net assets—$30,000 against net value of home, $25,000 against net value of other assets,[5] $80,000 against net value of business, and $100,000 against net value of business and/or farm. Total reserves are capped at $110,000 if the family owns just a business, and at $130,000 if the family owns a farm whether or not they own a business. Reserves are not applied against the assets of dependent students or single independent students without dependents.

The Congressional Methodology does not include separate allowances by category of assets. Instead, the formula adds the net values of all assets together to create a "total net worth," except that the portion of the net value of businesses and farms included in this sum is determined by subjecting the full value of the net business and farm assets to a set of marginal taxation rates. The "asset protection allowance"— which is tied to the age of the older parent in the case of a dependent student and to the age of the student in the case of an independent student (whether married or single)—is then subtracted from the total net worth. The asset protection allowance increases as age increases along two scales—one for parents and students who are married, the other for parents and students who are single. For example, if the older parent is 50 years old, the asset protection allowance in 1992-93 is $43,800 for a two-parent family, and $31,400 for a one-parent family. If the parent is 60, the allowances are $59,100 and $40,600, respectively. An independent student who is 26-years-old receives an asset protection allowance of $2,300 if married, and $1,700 if single. If the independent student is 29-years-old, the amounts are $9,000 and $6,700, respectively.

Tables 1 through 5 show that a large proportion of the dependent students and their families who report assets have net values that approximate or are even less than the reserves and allowances provided in the need analysis formulas. For example, two-thirds of the dependent student applicants own homes. The average equity is $41,442. However, 41.7 percent of these families have equities that are less than $25,000; and 71.3 percent have equities that are less than $50,000. Very few dependent applicants (approximately 10 percent) have business or farm assets. Although the average value is $39,768, 58.3 percent of this group have business and farm assets that are worth less than $25,000; and 75.2 percent show values that are less than $50,000. A similar pattern holds true for the 18.4 percent of the dependent applicants who report investments.[6] The average net value in these instances equals $33,270, but the amounts are under $15,000 for 53 percent who own investments and under $50,000 for 82.4 percent. Cash savings is the most frequently reported asset.[7] Even though almost 70 percent of dependent applicants indicate having such assets, the average amount for these families is $4,633. Not surprisingly, more than 80 percent have cash savings of less than $5,000.

The tables also indicate that most independent students have no assets at all. For those who do, the net values appear to be considerably lower than the Pell Grant reserves against assets and can be higher than the Congressional Methodology allowances, depending on the marital status of the student. In the case of home equity, only 14.6 percent of the independent student population owns a home. The equities average $15,728, with 79 percent reporting values under $25,000 and 93.7 percent reporting values under $50,000. Even fewer independent students own businesses and/or farms (1.2 percent) or have investments (3.24 percent). The average net value for busi-

ness/farm assets is $13,644, with 83.4 percent reporting net values of less than $25,000, and 91.4 percent reporting less than $50,000. The average net value of investments is $9,384, with 56.8 percent owning less than $5,000, and 83 percent owning less than $15,000. Although 42.4 percent of independent applicants report cash savings, the savings average only slightly more than $1,000, and almost all of these students (more than 96 percent) have less than $5,000.

The data in these tables indicate that the home is the most frequently reported asset among applicants and that equities generally are higher than net values reported in other categories of assets. It also appears that for most applicants—whether dependent or independent—assets in the other categories are very limited. Further, the Pennsylvania Higher Education Assistance Agency has found that for dependent applicants and their families the average net value of assets is only $4,000 exclusive of home equity. Consequently, the values of net assets and their distribution among applicants in combination with the structure of the need analysis formulas (i.e., large reserves/allowances and assessment rates that take a very small portion of the remainder—usually 5 percent or less) result in many applicants having no or very small calculated contributions from assets. According to recent data, 53 percent of the applicants in a 1990-91 sample have no contributions from assets under the Congressional Methodology (College Scholarship Service 1992, 5). It is likely that for all applicants, the percentage who have positive contributions from assets is even smaller.

Table 1

Average Value of Net Assets Report by Applicants, 1990-91

Average Net Values of Assets	Dependent	Independent
Home Equity	$41,442	$15,728
Business/Farm	39,768	13,644
Investments	33,270	9,384
Cash Savings	4,633	1,008

Table 2

Distribution of Equity on Home Assets Reported by Applicants, 1990-91

Value of Home Equity	Dependent	Independent
$0	2.39%	9.67%
$1 – $24,999	39.26	69.36
25,000 – 49,999	29.60	14.63
50,000 – 79,999	16.08	4.06
80,000+	12.67	2.27
Percent of Total Applicants	67.51	14.57

Table 3

Distribution of Equity on Business/Farm Assets Reported by Applicants, 1990-91

Value of Business/Farm Equity	Dependent	Independent
$0	2.71%	5.18%
$1 – $24,999	55.55	78.19
25,000 – 49,999	16.93	8.05
50,000 – 79,999	10.09	5.72
80,000+	14.71	2.87
Percent of Total Applicants	9.95	1.21

Table 4

Distribution of Equity on Investments Reported by Applicants, 1990-91

Value of Equity on Investments	Dependent	Independent
$0	1.72%	3.65%
$1 – $4,999	24.68	53.12
5,000 – 14,999	26.60	26.25
15,000 – 49,999	29.41	13.38
50,000+	17.59	3.60
Percent of Total Applicants	18.42	3.24

Table 5

Distribution of Cash Savings Reported by Applicants, 1990-91

Value of Cash Savings	Dependent	Independent
$1 – $4,999	80.24%	96.38%
5,000+	19.76	3.62
Percent of Total Applicants	69.48	42.39

Source: National Computer Systems, Inc. for the U.S. Department of Education, 1990-91 Sample Data Base

How Proposals Would Change Treatment of Assets

The Senate and House proposals for an integrated need analysis methodology would continue to structure the treatment of assets in the same general way as the current formulas. That is, the formulas presented in both bills would subject the amount obtained from subtracting reserves or allowances from the net value of assets to an assessment rate in order to derive contribution from assets. However, differences among the two proposals and the current formulas exist, as the introduction to this paper suggests. Specifically, the Senate bill would eliminate home and family farm assets for families with adjusted gross incomes of $50,000; the House bill would remove home, family farm and family business assets for all families without regard to level of income and include an "educational savings protection allowance" against assets in addition to the asset protection allowance. The Senate bill's simplified needs test proposal would disregard all assets—liquid and non-liquid—from consideration for applicants with adjusted gross incomes of up to $50,000 who file simple federal tax returns or who are not required to file, and would assume automatic zero contributions from income and assets for AFDC recipients. The House proposes a simplified needs test that assumes a zero contribution for dependent applicants and independent applicants with dependents whose level of income would qualify them for an earned income tax credit.

The effects of all of these provisions on expected family contributions and costs were not available at the time of this writing. However, ED's Postsecondary Analysis Division has estimated that the average expected family contribution would decrease in comparison to the Pell Grant formula in current law by an average of $125 with the elimination of home and farm assets for families with adjusted gross incomes of $50,000 or less—which includes 90 percent of the 1992 applicants (Rhind 1992, 32)—and by an average of $273 if home, farm and business assets are removed for all applicants. Based on the average value of net assets and the distribution of those values, it is possible that the expected family contributions for many applicants—presumably those from low-income and perhaps even middle-income families—would not change, or would change minimally.

The Congressional Budget Office (CBO) *Staff Memorandum* seems to corroborate this conclusion. CBO estimates that 30 percent of the dependent applicants under the Senate bill and 35 percent of the dependent applicants under the House bill have home or farm equity values that are greater than the Pell Grant formula reserves against assets. The same is true of 5 percent of the independent students under both proposals. This means that 70 percent of dependent applicants with adjusted gross incomes of $50,000 or less, 75 percent of all dependent applicants and 95 percent of independent applicants already have equities on their homes and farms that do not exceed the reserves (ibid., 32-33).

CBO also has found that fewer than 5 percent of the applicants with adjusted gross incomes of $50,000 or less have other assets (i.e., exclusive of home and farm) that are above the Pell Grant formula reserves. That is, 95 percent of the applicants in this group have other assets below the specified reserves (ibid., 34).

The College Scholarship Service estimated the impacts of discarding home equity in the Congressional Methodology using a 1990-91 sample of parents of dependent students (College Scholarship Service 1991, 23). In these simulations, calculated parent contributions decreased by an average of about $200 or less for adjusted gross incomes up to $15,000, by nearly $300 for adjusted gross incomes between $15,001 and $20,000, and by slightly under $400 for adjusted gross incomes between $20,001 and $25,000. The reductions in parents' contribution became more pronounced at income levels above $25,000. For example, the average drop in calculated parents' contribution approximated $650, $700 and $850 for adjusted gross incomes between $25,001 and $30,000, $30,001 and $35,000, and $35,001 and $40,000, respectively. At levels between $40,001 and $70,000, the decline in average parents' contributions ranged from approximately $900 to almost $1,350. Above adjusted gross incomes of $70,000, the dips in calculated parents' contributions averaged more than $2,000.

Although there would be some shifts, these and other data presented in this paper suggest that expected family contributions for low-income families and for many middle-income families probably would not be greatly affected by eliminating non-liquid assets, because the formulas already discount a significant portion of these assets. However, higher-income families with more sizeable assets would probably benefit more from lower expected family contributions than under the current formulas.

CBO estimates the cost to the Pell Grant program of eliminating home and farm equity is $300 million in both the Senate and House bills for 1993 (Rhind 1992, 32-33). The Senate bill's simplified needs test provisions, which are expected to increase costs by less than $100 million, are incorporated in these estimates. The proposals for the simplified needs test in the House bill were not included in the estimates of removing home and farm assets, but are anticipated to cost $650 million. In addition, including an educational savings protection allowance against assets would add under $100 million to the Pell Grant program (ibid., 35). ED's Postsecondary Analysis Division has assessed the potential impact of eliminating non-liquid assets in the Senate and the House proposals on the Stafford Loan and Supplemental Loan for Students (SLS) programs. Their analysis indicate that costs would rise in 1993 by $22 million if home and farm equity were removed according to provisions in the Senate bill, and by $53 million if the House bill's provision for removing home, farm and business equity were implemented.

One possible explanation for the similarities in the CBO cost estimates for the Pell Grant program in the House and Senate bills and the difference in the ED estimates for the Stafford and SLS programs is that the proposed changes have less effect on lower-income families than on families with higher incomes. As a result, the income cap imposed by the Senate for eliminating certain non-liquid assets may generate fewer costs in the Stafford and SLS programs than the House proposals, which remove similar assets for all applicants.[8]

Using the IRS in Place of the Current Student Aid Delivery System

The Ability of IRS to Deliver Sufficient Data

The student aid delivery system has evolved over time into a structure that permits students to complete—for the most part—a single application form in order to apply for funds from a range of sources. The introduction describes the participants that make the system operational and how the data flow from one participant to the other to determine student eligibility for various financial aid programs. Replacement of the current system that centers on the IRS suggests an option that could simplify the application process, thus potentially eliminating the application form and providing for de facto verification of the data submitted.

A closer examination shows that despite the apparent elegance of using the IRS as the basis for the delivery system, implementation probably is impractical over both the short- and longer-term. Three reasons support this conclusion.

First, the federal tax form does not collect enough information to compute and transmit an expected family contribution or the data by which it is calculated. Of 49 sets of questions on the federal portion of the financial aid application, only 14 appear on the federal tax form. Missing items—exclusive of state-specific information that currently are collected simultaneously with the federal data—include information to determine dependency status of the student, year in college, the number in the household who are in college, the age and marital status of the student and parent, the full extent of untaxed income and benefits, assets (the previous discussion notwithstanding), and the names of the state agencies and institutions to which the processed data are to be sent.

Second, not all financial aid applicants file tax returns. According to information provided by ED, 16 percent to 17 percent of the applicant pool, or approximately one million applicants, are non-filers. An IRS-based system would have to devise a vehicle both to accommodate the non-filers of federal tax returns and to address the collection of necessary data that do not currently appear on the tax forms. In other words, an application would still be necessary, whether as part of the tax return or a separate document. Complexity and confusion for the applicants is likely,

because the form and its instructions would have to target students and their families who file tax returns; students and their families who do not file tax returns; students who file, but parents or spouses who do not; parents and spouses who file, but students who do not; and so forth. In addition, measures would have to be taken to assure that the system did not create barriers to access for low-income applicants and their families—who are often non-filers—due to difficulties obtaining the necessary documents or completing complicated forms. Moreover, an IRS system would have to develop mechanisms to address state-specific and institutional data requirements.

Third, the IRS does not currently have the capacity to perform the basic tasks required of any financial aid delivery system—that is, the collection, processing and transmission of applicant data. Retooling IRS systems to accommodate the requirements of a financial aid delivery system would probably take a very long time and would represent a costly transition. The Government Accounting Office has characterized IRS operations as "slow, and largely manual" (Rhile 1992, 1). The Commissioner of Internal Revenue has referred to IRS systems as "antiquated" and having to deal with "large and growing workloads" (Peterson 1992, 2).

IRS staff have further confirmed the limitations of its operation in the context of proposals for IRS collection of student loans by stating:

> Outmoded systems make it difficult for us to properly store, timely deliver or update information already in our system. If the IRS is to be charged with the collection of non-tax debts, we would need to begin planning for this as part of the Tax Systems Modernization (Bigelow 1992, 7).

The Tax Systems Modernization project has been under way since 1986 and, according to IRS officials, is probably halfway through its progress. The project is the third effort in 25 years to update IRS's antiquated systems, and it will have cost $1 billion by the end of FY 92, with another $1 billion likely to be expended in the next few years (Rhile 1992, 6). Incorporating student loan collections into the modernization project—or even into current systems—would require the IRS to "re-write software, design new processing routines in service centers, train staff in the service centers and Taxpayer Services sites...and inform and advise taxpayers about completing the return" (Bigelow 1992, 8). These issues correspond to the ones that would be encountered in creating an IRS-based financial aid delivery system. Just as the IRS anticipates that "start-up costs would be significant" for participation in income-contingent lending (ibid., 15), the same would probably hold true for student aid delivery. Currently, ED contracts with MDEs cost approximately $20 million annually. It is very possible that there would be no savings in changing over to an IRS system under the circumstances described. Given the progress of the modernization, such a change would take some time, which would require parallel and back-up systems during the transition.

Whether IRS Can Provide Timely Data

The need analysis formulas calculate family contributions based on income and asset information derived from the calendar year preceding the award year. Most applicants submit their forms between January and April before the beginning of the award year and generally receive notices of award between March and June, although processing continues throughout the year. For example, awards for 1992-93 are based on financial information representing the 1991 calendar year; students submit their applications at the beginning of 1992; and they receive award letters through the spring/early summer of 1992. In practice, this means that the peak period for the submission of financial aid applications coincides with the peak period for the submission of tax returns.

Under current conditions, it is unlikely that the IRS would be able to collect tax and financial aid data, identify those filers who are seeking student assistance, merge the information, transmit it for processing (or perform the need analysis in-house), and then forward the processed data to applicants, institutions and states. Even if IRS had more advanced systems in place, the timing of this scenario would be very difficult to accomplish at best. The result would be delays in the delivery of aid to students, probably impeding access for applicants from low-income and disadvantage backgrounds.

A more feasible arrangement would be to determine financial aid awards on the basis of data from the calendar year that precedes the award year by two years. However, financial data tend to be variable from year to year, resulting in changes in eligibility among applicants (Westat, Inc. & National Computer Systems, Inc. 1990). As a result, this approach would probably be unacceptable to parties within the financial aid community (i.e., ED, states and institutions).

REFERENCE NOTES

1. There has been some controversy about whether or not the Simplified Needs Test actually reduces complexity, because the instructions and the form may still be confusing to students. However, it appears that these problems with the Simplified Needs Test are surmountable, given the work of NASFAA and others to produce less complicated prototypes of the application form.
2. Although the Senate and the House are proposing to integrate the Pell Grant formula and the Congressional Methodology, each chamber has taken a different tact. The Senate is using the Pell Grant formula as the basis of integration, while the House builds an integrated model from the Congressional Methodology.
3. According to information obtained by the Advisory Committee on Student Financial Assistance from 46 states, 12 states make awards using federal applicant data only; 25 states continue to determine awards with state-specific data that are collected on one of the MDE forms, and nine states use a separate application.
4. ED has other electronic initiatives that include a tape and floppy disk exchange as well as direct electronic transmission for institutions to report corrections to the SAR and process Pell Grant payment vouchers. ED has also developed PC-driven software for institutions for other purposes, such as completing and submitting fiscal reports and applications for funds, and calculating expected family contributions in house.
5. The term "other assets" in the Pell Grant formula refers to cash, checking and savings accounts, real estate exclusive of family residence and investments.
6. "Investments" mean real estate excluding family residence, stocks, bonds, mutual funds, and so forth.
7. "Cash savings" refers to cash on hand and checking and savings accounts.
8. ED estimates for the Pell Grant program and CBO estimates for the Stafford and SLS programs are not included in this draft, because the ED Pell Grant figures were not public at the time this paper was prepared and CBO estimates for the Stafford and SLS programs could not be confirmed.

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The Final Report of the Vermont Task Force

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THE FINAL REPORT OF THE VERMONT TASK FORCE

INTRODUCTION

The Vermont Task Force was formed to assist the National Commission on Responsibilities for Financing Postsecondary Education with research and analysis. The group first convened in July 1991. The Vermont Task Force was composed of seven members who shared a wide range of professional experience and a commitment to postsecondary educational opportunities. The members were selected for their dedication to public service and their inherent interest in improving postsecondary funding for students in all socioeconomic classes and of all ages and abilities.

From July 1991 through May 1992, the Vermont Task Force met biweekly for three-hour sessions. Initially, each member of the group reviewed background literature on such topics as national demographics, financial aid programs, public service, adult learning, access, international comparisons, retention, early intervention, equity of opportunity, and costs. This information was historical as well as projective. Data analysis was included, as well as groundwork for long-term planning. Publishers of these reports include the U.S. Department of Education, National Center for Education Statistics, The Brookings Institution, American Council on Education, Economic Policy Institute, College Entrance Examination Board, Center for Demographic Policy, and the Rand Corporation, among others.

In November 1991, the Vermont Task Force submitted to the Commission a paper titled "A Summary of Major Proposals for Restructuring Postsecondary Educational Financing." This report was the result of an investigation of several postsecondary funding concepts. It was presented to the Commission with the hope of contributing to the Commission's objective of evaluating national policy and offering recommendations for restructuring.

This "Final Report of the Vermont Task Force" is designed to cover three related areas: problems with the current system, roles and responsibilities for financing, and a proposal for redesigning the federal financial aid system. In discussing the current problems the Vermont Task Force addressed seven specific areas: non-traditional students, complexity, quality and accountability, savings, borrowing, choice, and early intervention. The second section is an analysis of roles and responsibilities for the federal government, state governments, students, parents, business, and philanthropy. Finally, a postsecondary funding model is proposed to address some of the problems associated with the current system.

Problems With the Current System

There has been considerable change in higher education in the last 25 years. The composition of the student population has shifted, as has the distribution of enrollments in various colleges and disciplines, fueled by the growth of the community college sector. However, the national financial aid system for our students has not been adjusted to fit these significant changes and therefore, in many aspects, has failed to meet the educational objectives of the nation.

The Vermont Task Force approached these issues with two guiding principles: first, cooperation among parties who have a vested interest in Americans receiving postsecondary education or who are currently investing in that cause needs to be improved; and, second, access to postsecondary education for all Americans likewise needs improvement.

There are many parties who either invest in postsecondary education or who are the beneficiaries of that investment. The activities of these parties are poorly integrated at best. The first task of any restructuring of postsecondary finance is to identify who has responsibility for what and how meeting those responsibilities can be achieved efficiently.

In our view, access to higher education for all Americans is the goal of postsecondary education financing. Especially in the cases of African-Americans, Hispanics, and low-income populations, the record of access is poor. Baccalaureate degree attainment for white high school graduates increased slightly during the 1980s, while the rate for African-Americans dropped sharply (Mortenson 1991). The college enrollment rate for Mexican-Americans has declined over the past 18 years. The college enrollment rate for 18- to 19-year-old Mexican-American high school graduates equaled that of whites in 1974, but by 1988, it stood 22 percent below. The college enrollment rates of Americans from lower-income ranges rose between 1966 and the 1970s, but those achievements deteriorated during the 1980s. About 40 percent to 50 percent of the gains in higher educational participation by students from low-income families made between 1966 and 1975 were lost during the 1980s (Mortenson 1991).

The sections that follow will demonstrate how a costly, inefficient financial aid system is failing to address the needs of students and society.

Burgeoning Adult and Non-traditional Student Cohort Underserved

With the exception of the GI Bill, legislation expanding the role of the federal government in support of postsecondary students has had the traditional student, and the traditional paradigm, in mind. That student is generally understood to be 17 to 22 years old, financially dependent, and enrolled full-time in a program based on the acquisition of a diploma or certificate upon the

completion of a requisite number of credit hours. While such a traditional definition of the student population is still accepted by many colleges and universities, and by many of the ancillary support services, it is anything but the norm. According to Hampton and Ross (1992), more than 66 percent of the 17 million undergraduate students enrolled in public and private postsecondary institutions (including proprietary institutions) do not fit the definition of a traditional student. This non-traditional cohort is more diverse, showing a higher percentage of women and minorities than the traditional cohort. Members of this group are predominantly self-supporting (62 percent), live off campus, and have an average income of $25,000.

Between 1965 and 1988, the percentage of undergraduate students 22 years of age or older rose from 25 percent to 40 percent (Hauptman n.d.). During the same period, part-time enrollments rose from less than 25 percent of total undergraduate enrollments to more than 33 percent. More than half of all student aid recipients now qualify as financially independent, and one-third of all current college students are independent.

Further complicating the definition of the student in the 1990s and beyond are the increasing numbers of part-time graduate enrollments and non-degree and even non-credit enrollments in institutions of higher learning. This increase is motivated by the need of college graduates to stay current with new developments in their professional fields.

The shortcomings of the current system with regard to non-traditional students fall into several areas:

1. *The relative unavailability of aid for part-time students.* While eligible for some loan support, students attending less than half-time only became eligible for Pell Grants in 1986. This provision, however, has still not been funded.
2. *The unavailability of aid for non-matriculated students.* Eligibility for most forms of federal aid is predicated upon matriculation in an approved institution.
3. *The calculation of eligibility.* Need determination does not reflect the realities of adult life, including such considerations as opportunity costs (lost income) incurred by students taking a half-time or greater load, and living expenses of mature students with families.
4. *The high percentage of institutional aid given to traditional students compared to non-traditional students (95 percent to 5 percent).*
5. *Inadequate incentives for employer participation.* Themselves beneficiaries of employee educational efforts, employers are offered no immediate incentives to support employee training and education financially.

Full-time degree instruction designed to serve the needs of young adults will remain a major responsibility of postsecondary institutions. However, many colleges and universities, especially in

metropolitan areas, already serve increasing numbers of adult, first-time or pre-baccalaureate students, and will continue to do so. In addition, adults who have already completed degrees are returning to colleges and universities for purposes of professional growth and personal enrichment. These three groups, described as separate cohorts, are, in fact, overlapping and even interwoven. As we move into the 21st century, our federal support for students must account for this complex mosaic of motivations and the array of parties that benefit from lifelong learning opportunities.

A Costly, Confusing System That Deters Access

The current system of financial aid for postsecondary students is too complex. This complexity is most evident in the multiplicity of aid programs at the federal, state, and institutional level and in the student aid application and reapplication process (needs analysis).

Students must fill out aid applications that typically contain more than 100 questions, must reapply each year using the same lengthy form, and must often submit multiple applications for federal, state, and institutional aid programs. Research in other federal assistance areas suggests that lengthy forms and dense bureaucracy are barriers to applicants receiving the appropriate aid. A 1988 survey for the Southern Governors' Association found that at least 16 percent of all applicants for AFDC and Medicaid benefits were denied assistance due to application problems (Shuptrine and Grant, 1988).

As part of efforts to improve government efficiency during the Carter and Reagan administrations, various agencies began a series of quality control studies. In the area of Title IV (postsecondary student aid), a series of pilot studies beginning in 1978 determined that hundreds of millions of dollars had been erroneously awarded under the Pell Grant program due to inaccurate data from student aid applications. A 1986 quality control study conducted by the U.S. Department of Education found that approximately one-third of all Pell Grant recipients received incorrect awards due to erroneous information from student aid applications (Advanced Technology 1987).

Respondents to a recent survey found only the IRS tax forms and state tax forms more complex than aid applications (Shuptrine and Grant, 1988). Coupled with the increased dependence families have placed on student assistance for access to higher education, the system faces increased public skepticism and eroding public confidence.

The problems with need analysis are the result of conflicting, or at least competing, macroequity and microequity intentions—to fairly distribute federal funds for higher education among U.S. citizens while encouraging low-income access and institutional choice. Thus, the standard formula at the foundation of need analysis (Need = Cost – Family Contribution) represents an

attempt to measure the level of assistance needed for both access and choice. Any of a thousand comparisons will show the inequity of this formula. A 30-year-old student who earned $15,000 last year and wants to attend a state college with a yearly tuition of about $4,000 will receive substantially less aid than a 22-year-old student who lived away from home for the past two years and earned $10,000 at odd jobs last year but who wants to attend a private college with a yearly tuition above $20,000. In addition, the desire to assess need accurately and to assess need simply have been in conflict. More regulations have produced more complexity and less reliability, which affects such critical areas as access and choice.

A Call For Programmatic and Fiscal Accountability

Quality, within the realm of financing postsecondary education, encompasses five broad areas: 1) academic excellence (positive experiences and outcomes in all aspects of higher education related to faculty, students, research, facilities, and public service); 2) choice (reasonably comparable opportunities for learning across institutions, two-year and four-year, public and private, assuring that financial status not be a prerequisite to quality instruction); 3) product (measurable results that impact individuals and society in ways that are meaningful and intentional); 4) performance (on-going development and achievement by individuals and institutions) and 5) fiscal responsibility (programmatic efficiency related to design, implementation, and evaluation). Accountability mechanisms determine whether or not an institution or an individual meets the characteristics of these areas, assuring "quality" in higher education.

Accountability, within the realm of financing postsecondary education, links the funding of higher education to the benefits of higher education by examining whether or not financial aid programs result in efficient and effective use of scarce resources. Again, this should be measured on the basis of academic and fiscal performance. At a policy level, this requires that the philosophy and processes of the program are constructed with accountability in mind. At an institutional level, this requires that mechanisms be put in place to document "quality," from the various perspectives of students, faculty, facilities, and programs (to be provided to federal funding agencies as well as the general public). On an individual level, this requires that students take responsibility for their own academic performance (suggesting that financial aid is a right, not a privilege); again, this means that specific performance criteria be established and that assessment instruments and processes be implemented.

Currently, linkages between financial aid programs and issues of quality and accountability are ignored, most likely because of inherent political and other difficulties. Granted, it is not easy to measure quality or to design reasonable processes for accountability; it is even more difficult to

agree on standards that would serve as a basis for such assessment. However, individuals, institutions, and the government increasingly demand a return on investment. People want to know whether or not taxpayer support for the financing of higher education is an effective and efficient use of scarce resources. Current trends suggest that the time is right to examine ways to connect funding to quality of education.

One such connection that would increase an individual's accountability to the system is the service learning trend. Students involved in these programs are required to participate in service programs, either in exchange for aid or as a method of repayment. Such a system gives students a greater sense of involvement in aid programs and encourages them to be more accountable for their actions, as well as fostering an increased sense of social responsibility.

A number of social phenomena suggest that reforms of postsecondary financing are timely:

1. Funding K-12 education in a radically different way than higher education is no longer valid because a high school education is no longer sufficient in the job market (e.g., college experience is often required for jobs only because there are people applying who have those credentials).
2. Staying in school and getting a degree is linked to economic and social success (e.g., 80 percent of American prisoners never finished high school, and a person with a two-year associate degree is likely to make more money than a person with three years of undergraduate study who never finished a baccalaureate program).
3. Community colleges are playing an increasingly important role in American education (more than one-third of all college students attend two-year institutions, and the average age of the college student continues to rise, suggesting the need for ongoing attention to programs for independent students).
4. Because accountability is not addressed at the federal policy level, the public and media take the role of manipulating information and processes related to "quality control" in higher education, often politicizing accountability in a way that is destructive to teaching and learning (e.g., equating certain SAT scores with an individual teacher's or school's ability to perform).

In short, designing financial aid policy that requires students to take responsibility for their own performance (encouraging better performance and retention), that requires institutions to take responsibility for programmatic performance (encouraging more efficient and effective use of academic resources), and that requires the government to fund in accordance with quality control (encouraging public support for higher education and, probably, public education in general) makes the system accountable to itself as well as to social change.

Current System Discourages Savings

Several forces have been at work on the postsecondary financing system to make savings a much less significant part of meeting college costs today than in the past. These forces have played off each other in the following ways:

Beginning in the 1950s, parents did not start saving for retirement until all their children were out of college. Heavy financial sacrifice was expected throughout the extended family in order to send the younger generation to college. Statistically speaking, in the 1950s families covered 73 percent of the costs of higher education at public institutions and 94 percent of costs at private institutions. This percentage in both categories shifted to 70 percent, 82 percent in the 1960s, 44 percent - 47 percent in the 1970s and 37 percent - 52 percent in the 1980s (Kramer 1992).

Since the end of the 1980s, real income has actually declined; at the same time that the cost of attendance has continued to increase significantly on a yearly basis. The average family income in 1987 was $40,720 for traditional students and $25,255 for non-traditional students. During the 1980s, personal income grew on an average of 75 percent. However, during the same period, the average cost of a four-year public institution grew by 95 percent, while the average cost of a four-year private college grew 120 percent (Merisotis 1991).

What further exacerbates this situation is the *perception* that college costs are much higher than they really are. Eighty-seven percent of the people interviewed in a recent Gallup poll felt that college costs will soon be out of reach for most people. Most of those surveyed overestimated the real cost of a college education by a factor of three (Kirshstein et al 1990). This erroneous perception has led to the pervasive belief that there is no use saving for college, since a family or individual could never save enough to defray the total costs.

In addition, some believe that having savings will jeopardize the student's or parents' ability to qualify for financial aid. This leaves many families ill-prepared to meet college costs and forces them to settle for low-cost colleges that may not meet the academic needs of the student. In reality, families that haven't saved are asked to pay only slightly less than those who have. For example, a family with a $64,000 income and $10,000 in savings will be asked to pay up to $11,220 for the first year. Without the savings, the required contribution would have been $9,700. For each dollar a family saves, it loses only $.06 in aid.

The creation of substantially subsidized loan programs over the years has also discouraged savings since the loan terms have been so attractive. As costs continue to rise and loan terms become less advantageous, parents and students may look at saving once again as a cost-effective means of financing education.

However, the 1980s created a generation of families that has already borrowed up to and, in many cases, beyond their ability to handle monthly payments before their children are college

age. Lenders and financial aid personnel have found that even those who have been able to save only have enough to cover the first semester. Refinancing houses, cashing in retirement plans, and home equity loans are all being used by families as ways of getting money for college. Non-traditional students usually do not have these resources available to them. It doesn't take long to realize that what the parents or students do not save, they will be paying interest on for decades to come, often well into their retirement. Many families and students do not have any of the borrowing resources listed above to which they can turn. In fact, college administrators find that some parents are still paying off their own college loans as their children prepare to go to college. This, of course, shifts the burden of college payments on the students to carry over into their adult life.

The trend from saving to borrowing has led to the removal of several major incentives for savings. Education-related expenses are no longer tax deductible, nor do families have access to 403b plans (voluntary, tax-exempt retirement plans from which an employee could withdraw funds without penalty, provided those funds were used for educational purposes). Interest deductions for second mortgages and home equity loans remain, if one can afford these financing plans to begin with.

Finally, the breakup of many "traditional" families, with original parents in over half of all families living separately, has created an asset battle in which the incomes of both extended families are taken into account and in which the contribution, or lack thereof, of one parent inhibits the efforts of the other. The loser tends to be the student.

Excessive Reliance on Guaranteed Student Loans

The Guaranteed Student Loan (GSL) program was initially designed to assist middle-income families by shifting some college expenses from parents to children. It was developed to complement the grants program, not to replace it. However, since 1965—particularly in the 1980s—there has been a dramatic increase in the emphasis on borrowing as a major component of financial assistance. Subsequently, the government has had to develop a complex system to assure money loaned up front. Because students do not have collateral, the government, as an independent source, guarantees its investment with assurances to lenders.

In 1992, the annual borrowing limits for the GSL were $2,625 for first- and second-year students, $4,000 for third- and fourth-year students, and $7,500 for graduate students. These limits do not reflect origination and guarantee fees, which actually reduce amounts. The limits on total amounts were $17,250 for undergraduates and $54,750 for graduate students. Currently, the interest rate during school and the first four years after school is 8 percent. After, it climbs to 10

percent. In 1975-76, loans made up 21 percent of federal aid, compared with 63 percent of federal aid in 1990-91 (College Board 1992).

The government pays for the security of the program, and it is costly. The government guarantees the market rate for the life of the loan and pays for the interest rate while a student is in school. Because special allowance fees fluctuate to short-term federal borrowing rates, student loans fluctuate as well. It is estimated that the GSL program costs the federal government between 30 cents and 50 cents on the dollar (Merisotis 1991).

Defaults cost the government $3 billion in 1991, compared to $200 to $300 million in the early 1980s. The cumulative default rate for students in 1990 was 14 percent (U.S. Department of Education 1991).

Until recently there was no system to prevent the lending of money to "high-risk" borrowers who were likely to default. The banks certainly had no incentive not to lend money, since they knew full well that the loan repayment was guaranteed by the government.

The costs of loans have not been calculated for inclusion in the current federal budget. Credit reform has begun to address this problem. One advantage to this form of accounting is that the government would have a more accurate estimate of how much the loan program costs.

Even when students are eligible for the full loan amount, they still may not have a viable choice to attend their preferred school; because of anticipated debt, students may be forced to make decisions that may not be in their best academic and professional interest.

The process of borrowing is complicated and makes the transition from high school to college difficult. Currently the borrowing program is locked into a complex system: complicated needs analysis, complexity of implementation, costs of securing the GSL, and high rate of loan defaults. The system was designed for up-front accountability. Because everything is so well entrenched, the program is resistant to change or adaptability.

Students are still considered a long-term and somewhat unreliable investment (lending agencies require a guarantee on their loan). The current loan program is inflexible with regard to repayment; that is, it does not consider the potential difference in financial stability between the first year and the 10th year out of college. In some cases, students or parents must repay loans to several lenders who work independently. When interest rates increased between fiscal years 1987 and 1989, the special allowance payment to lenders (to subsidize the guaranteed low interest rate) tripled (General Accounting Office 1992).

In the mid-1970s, federal and state aid to colleges increased. Ironically, loans kept up with inflation rates more closely than tuition increases (Kramer 1992). Currently, the burden is on the borrower, particularly with state and federal aid on the decline. Many students have attended college because of GSL assistance; however, the consequence of greater use of the GSL program and

the effects of a financial aid program highly dependent on loans have created much fiscal and administrative stress for the government. The GSL program is stuck with a centralized system of regulations and restrictions that has proven to be costly and inflexible. The shift to a borrowing system that offers little preparation for the consequences may adversely affect the government, the economy, and, most importantly, students.

Inequitable Treatment of Low-Income Students

The distinction between access and choice was not as important in the early 1970s when the current model was developed as it is now. Two significant changes have occurred: an increased diverse student population and an increased diverse range (costs and types) of post-secondary education institutions. Choice is constrained by the needs analysis process. Currently, assets are calculated in expected family contributions and therefore are not available for use by families to choose among institutions. The range of college costs is now significantly broader than 20 years ago, with some public institutions costing between $5,000-$6,000 per year (for tuition, fees, room, and board) and, at the other extreme, some private institutions costing above $20,000.

Twenty years ago, when the range of college costs was narrower and when the student population was less diverse, it seemed possible to allow students to choose the college they wished to attend and use those costs within the needs analysis formula. The government did not need to develop an aid policy that established clear distinctions between choice and access, because the financial implications were not, comparatively speaking, as great as they are in the 1990s.

When the student chooses one key variable in the needs analysis formula (cost), it does not matter if the second key variable (expected family contribution) is arrived at uniformly for all students. The system is already inequitable. One student's resulting need will significantly surpass that of another, not necessarily because of lower expected family contribution but because of the higher cost institution desired. Higher-income students aspire to higher-cost institutions, thus placing higher income students on a level playing field with lower-income students for financial aid. This is due to an inflated apparent need of higher-income students.

Lack of Information Prevents College Success

The level of college dropouts is a national problem of significant proportions. The U.S. Census Bureau confirms that there is significant correlation between the rate of college dropouts and family socioeconomic status; the lower the status, the higher the risk of students dropping out. Further, the unemployment rate of dropouts is extremely high (52 percent are either unem-

ployed or receiving welfare payments of some sort), resulting in a significant drain of national resources throughout their lives. Because critical jobs in our changing society require higher education for training, the loss of students puts the nation at risk for staffing high level jobs.

Vertical equity in the society demands that more significant interventions be made at earlier times for people of lower socioeconomic status.

Savings programs have been criticized for being more directly targeted to higher-income families because only those with disposable income can save for long periods of time before their children are ready to enter college. Furthermore, money alone has been shown to be clearly insufficient to ensure the success of poorer students even when they are admitted to college.

Indeed, because of family considerations and other determinants of disposable income, students from low socioeconomic status backgrounds are likely to attend two-year and vocational schools (when they go at all), rather than being able to afford the luxury of four years of education and the future earning power that brings.

Availability of financial aid is not sufficient to lower the dropout rate of low socioeconomic status youth. Programs that provide mentoring, counseling and other special services for young students help raise self-esteem and ensure overall success. Early intervention helps establish long-term patterns that can influence school performance and outlook on life beyond school.

Roles and Responsibilities for Higher Education Financing

The current system of higher education financing has carried this country through a period in which postsecondary education has gone from being an optional adjunct to high school to being a requirement for many of the new technical jobs that form the majority of opportunities for members of the adult society. In addition to changing work requirements, adult learners are facing increasing financial burdens. The implications are that comparative responsibilities and roles that different players in society can accept vis-a-vis financing higher education must shift over time. Any plan for financial aid reform must clearly delineate the roles and responsibilities for each contributor.

The following discussion assumes that students and families, state and federal governments, private and public postsecondary educational institutions, and businesses and philanthropy contribute to postsecondary financing. We offer some points pertaining to how and why these different sectors should interact to produce a fairer, less complex and more accessible postsecondary financial aid system for both traditional and non-traditional students.

Students and Families

As shown earlier, the changing nature of the higher education student population requires that any new financing system address the needs of dependent and independent students. Family and individual responsibilities for financing higher education ought to be defined on the basis of whether a student is classified as dependent or independent. Family income provides dependent students with a core financial contribution for access to higher education and extra contributions to enable student educational choice.

For independent students, the family of origin income does not enter into the core financial contributions to education. Primary family income often provides these funds instead. However, adult members of independent families may have responsibilities to children and spouses that lower their ability to contribute to educational costs. Extra contributions from either family source can further choice.

For any financial aid program, students and their families must retain the ultimate responsibility for discharging financial obligations incurred according to their contractual arrangements.

State Government

State governments establish and partially fund public higher education institutions, providing broad-based geographic and programmatic access for students. The level of state funding for public institutions and the quality of programs they support are perhaps the most critical and essential components of a state's responsibilities in higher education.

States, however, should also be responsible for disseminating information about and administering certain aspects of financial aid programs. In addition, state governments may establish state-based financial aid programs.

State governments have closer ties to regional populations and employment needs, and thus should provide important input into federal workforce training priorities, as well as decide how federal incentive programs are carried out.

At the local level, states have an important role in defining local workforce training needs and supporting the development of programs that serve those needs.

Through regional boards and state certification standards, states are responsible for monitoring the content and quality of specific programs at both public and private institutions within their jurisdiction.

Federal Government

The federal government must continue to take a central role in supporting financial aid for higher education for the following reasons:

First, at the most fundamental level, supporting access to higher education is in line with the democratic principles upon which the country is built. The federal government is the most central player with a view to protecting and promoting the interests of all geographic, ethnic, and economic groups. Of all the financing partners, it is the federal government that can provide crucial leadership, whether through offering encouragement and incentives to other partners or through its own actions. Thus it is in the best position to develop and oversee broad policies that ensure access to appropriate educational opportunities for all citizens.

Second, on a more pragmatic level, there are substantial public benefits that result from creating broad access to higher education opportunities. The public benefits include a general increase in the economic viability of individual citizens and an increase in literacy and workforce skills. An overall improvement of living standards is an obvious gain for society as a whole. Increased productivity and workforce sophistication is clearly important to the competitive position of the country. And finally, democracies are based on the belief that government functions better as its population gains knowledge and sophistication through education and increased literacy.

Third, due to its central role in society, the federal government can provide specific incentives for educational opportunities by encouraging other sectors to target specific populations or particular educational programs. This funding can support important national goals such as math and science education or minority engineering programs.

Fourth, the federal government can act as a coordinating agent to establish common parameters for the administration and dispersal of grant and loan funds. These parameters can then be followed and locally interpreted by states and institutions.

Postsecondary Educational Institutions

The responsibilities and roles of an educational institution vary with the type of institution—public, private, or proprietary. Dissemination of information and local financial aid program administration may be functions common to all three types.

Public institutions have the specific role of providing access to higher educational opportunities to a broad range of students. This is accomplished by delivering appropriate programs, providing institutional aid, and operating in a fiscally responsible and cautious manner. Public institutions provide the greatest programmatic and financial access for students. To do this, these institutions must make services available in ways that reflect the varying needs of traditional and non-traditional students.

Public institutions also have responsibilities to act in concert with businesses and/or philanthropic organizations to respond to workplace and student needs, and to create programs and funding mechanisms to serve them.

Private institutions are not bound by the same programmatic or financial constraints as public institutions. However, they may provide institutional financial support to further their own goals of program and student diversity. In addition, both private and public schools advise students about financial aid and administer public funds when appropriate.

Business and Philanthropy

Businesses are primary beneficiaries of student educational attainments. As such, they should (1) work cooperatively with higher education in defining and funding programs that address their specific needs (2) encourage ongoing professional development education opportunities through employee tuition reimbursement plans and (3) participate in early intervention programs to encourage preparation for higher education.

Philanthropists are free to pursue their private interests and goals related to higher education, with no specific public policy responsibilities. Thus, philanthropy can be a primary source of funds and initiatives for special interest programs and facilities. These private funding sources often provide the programmatic and student body diversity that is desired by both public and private institutions that have otherwise limited funding.

Philanthropy may also be a primary source of funding to enable choice for students of lower socioeconomic status. Need-blind admission programs are often dependent on strong college endowment programs.

Private funding may also support long-term early intervention programs in ways that are not possible with public funds. For example, private funds can be used to support a small, specially selected group of students through their public school and college years.

Distributing the Cost of Postsecondary Education: A Proposal to Redesign the Federal Student Aid System

Any redesign of the federal student financial aid system must confront the problems with the current system (as described above). This program proposal seeks to reduce complexity, promote quality and accountability, enhance savings, constrain students' increasing reliance upon loans, support early intervention efforts, and address the needs of non-traditional students. In addition, however, any proposal must also delineate the coordination of roles and responsibilities of the various parties involved in postsecondary finance. This coordination of roles—and distribution of costs—is the starting point for our proposal.

While many parties absorb some portion of the costs of postsecondary education in the United States, the majority of these costs are paid for by students, their parents, and taxpayers. Students pay directly for postsecondary education costs, as well as indirectly through loss of income while attending. Parents often pay direct costs such as tuition and fees for their dependent children, as well as absorbing indirect costs such as a portion of room and board and other expenses. Finally, all taxpayers absorb postsecondary costs in supporting locally- and state-supported public institutions, and state and federal financial aid programs.

In the majority of other Western countries, it is taxpayers who absorb most of the direct costs of postsecondary education through direct institutional support that results in low or no student tuition charges. In the United States, the states historically have supported public institutions at varying levels, and the federal government is a relative late-comer to the financing of postsecondary education—primarily within the past 30 years. The states' investment continues to be significantly greater than the federal investment in postsecondary education in the United States.

Thus, U.S. taxpayers support two public policy objectives for postsecondary education with their tax dollars: First, the majority of locally- and state-generated tax dollars forms the investment base in public postsecondary institutions, resulting in reduced (or below actual cost) tuitions for all students. Second, the majority of federally-generated tax dollars fund the federal student financial aid programs. The prospects for fiscal efficiency and the realization of public policy objectives (such as access to postsecondary education) are diminished because these two taxpayer-supported systems operate independently, and because much of the federal investment is expended in institutions of questionable quality and with negligible accountability. The publicly-supported institutions lobby for increased federal financial aid so that students can afford increasing tuition rates, and the proponents of the federal financial aid system contend that "out-of-control" tuition hikes at the state and local level jeopardize the integrity of the financial aid system. There are few fiscal incentives for either system to respond to the other.

To achieve an increased degree of fiscal efficiency and to promote access to postsecondary education, these two taxpayer investments need to be carefully linked, and there should be improvements in accountability for them. States should retain the responsibility and autonomy for supporting their public institutions through state appropriations, and the federal government should retain its responsibility to make some form of postsecondary education financially accessible to citizens who can benefit from college. However, these two roles ought to be mutually reinforcing—the states should seek to benefit from the federal investment that guarantees access to postsecondary education, and the federal government should seek to benefit from state investments that support institutions (and access) and reduce costs for students.

This linkage can be accomplished by considering the responsibilities and interests of the three

primary participants (or shares) involved in the financing of postsecondary education: state and local governments, the student and/or family, and the federal government. The state and local government share can be measured by the annual amount appropriated for public postsecondary education. The student and/or family share can be measured by the expected family contribution (EFC) based upon measures of annual income, not including assets. The federal share can be measured by the support of financially-needy students through federal grants. *This share should only be extended to students attending regionally-accredited and state-certified postsecondary education institutions.*

Currently there are five major federal student aid programs: two for grants (Pell and Supplemental Educational Opportunity Grants [SEOG]), two for loans (Stafford and Perkins), and the College Work-Study program.

Each program has its own unique history and characteristics. However, an efficient use of federal resources is more likely to be achieved through some program consolidation. For example, in order to administer the increased funding needed to support the federal grant program described in this paper, SEOG funds should be integrated with current Pell funding. If our federal grant proposal were implemented, and provided access to postsecondary education, continuation of two federal grant programs—one administered by the government and one by the colleges—would be unnecessary.

A very similar rationale applies to the two loan programs. The Stafford loan program is administered by the federal government, whereas the Perkins program (offered at a lower interest rate) is administered through the colleges. With a comprehensive grant program in place, there would not be as compelling a need for the highly-subsidized Perkins program, nor for the degree of subsidy in the current Stafford program. These funds should be collapsed into one loan program with two emphases as described later—subsidized loans for students unable to meet the total budget costs at the index level, and unsubsidized loans for costs beyond the index level for students with family income below a certain level.

The College Work-Study program has become an integral piece of the student financial aid system, and administration of these funds at the institutional level is essential. This is the one "campus-based" aid program that should continue to be campus-based.

Share One: State and Local Government

The re-design of the federal financial aid system should begin with a review of the states' investments in public postsecondary education and the numbers of students served through this primary investment. This does not and cannot mean that private postsecondary education will be ignored. In fact, private colleges will benefit if the state and federal investments are linked. One

key measure of the states' investments in public postsecondary education is the approximate cost to attend either a two-year or four-year public college. According to the College Board, these costs for 1991-1992 are as follows:

Table 1

Approximate Student Budgets, 1991-1992

	Public 2-year college	Public 4-year college
Tuition/fees	$1,022	$2,137
Books/supplies	$480	$485
Room/board*	$3,351	$3,351
Personal expenses*	$1,147	$1,147
Transportation*	$464	$464
TOTAL	$6,464	$7,584

*College Board data did not include amounts under these categories for public two-year colleges. For the purposes of this paper, the costs at the public four-year colleges were used for two-year colleges as well.

Source: College Scholarship Service. *Manual for Student Aid Administrators: 1992-1993 Policies and Procedures* (New York: The College Board, 1991), p.9.3

These amounts can be used as an *index* that reflects the average cost for a student to attend a public two-year or four-year public college, and as a measure of local and state share of support for postsecondary education.

However, the total expenses include two categories—personal expenses and transportation—that vary dramatically for the broad range of students attending the current variety of postsecondary institutions. Therefore, the index should include only those quantifiable direct costs over which institutions have some control or influence: tuition and fees, books and supplies, and room and board. This would result in the following 1991-1992 indexes:

Two-year public college	$4,853
Four-year public college	$5,973

The cost to attend public colleges ranges from the low tuition states of California, North Carolina, and Texas to the high tuition states of Pennsylvania, New Hampshire and Vermont. The use of an index within the federal financial aid system could respect the states' autonomy and still influence appropriate tuition increases and constraints. *To accomplish this, the cost index-*

es should be the median cost to attend a two-year and four-year public college in the United States. An index established at the mean, or average, cost would contribute to tuition increases at the state level. An index established at the median, or mid-point, of tuition levels of the 50 states would create incentives for those states with tuitions above the median to constrain their tuition increases, and it would create incentives for those below the median to increase their tuitions closer to the median. The use of this index would contribute to overall cost containment and fiscal accountability.

Share Two: Student and/or Family

The second share is the student and/or family contribution. This contribution should be proportional to the level of annual income. For dependent students this is a measure of parental income; for independent students this is a measure of the student's annual income, or if married, a measure of the student and spouse annual income.

This proposal suggests that the student and/or family contribution be calculated just upon measures of annual income (such as the adjusted gross income). Student and/or family assets would be excluded. There are a number of reasons for this: First, for most students eligible for federal financial aid, the portion of the family contribution drawn from assets is minimal. Second, the fact that some contribution is drawn from assets has created the perception that there is a significant disincentive for families to save. Ironically, it is very possible that what is lost by families in not saving is much larger than the actual amount of the family contribution drawn from assets. Third, with the disincentive to save removed, eliminating assets from the federal grant formula would generate additional savings for college. The elimination of the savings disincentive would likely generate more savings than tax incentives or government bonds. Fourth, and finally, there should be intergenerational limits on the responsibilities for financing postsecondary education. Parents should be expected to part with a portion of annual income for their children to gain access to postsecondary education. They should not be required to part with other assets such as retirement savings, their homes (through equity loans or second mortgages), other possessions, or their inheritance from the preceding generation. Access to higher education is both a public and private good, and the use of assets to gain access to education tips the balance too far in the direction of a private good; it places too great a burden on the family as a whole and parents in particular.

However, this does not mean that assets should not be used to offset postsecondary costs. Assets should be used by the family when students choose to attend a college with costs above the index. In other words, assets should be preserved for *choice*—more of a private good or benefit,

especially when compared to *access*, which is equally a public and private benefit. If a student has the financial resources to gain access to the median-priced public institution, then the social contract between the student and society has been realized. Should the student choose to attend a more expensive college, he or she should seek additional resources from the family and from other (nongovernmental) sources.

The College Scholarship Service estimates the following "expected parent contributions" based upon direct measures of annual family income for 1992-93:

Table 2

Annual Family Income and Expected Parental Contribution, 1992-93

Annual family income	Expected parents contribution
$24,000	$630
28,000	1,240
32,000	1,850
36,000	2,510
40,000	3,300
44,000	4,270
48,000	5,430
52,000	6,510

Source: College Scholarship Service. *Manual for Student Aid Administrators: 1992-1993 Policies and Procedures* (New York: The College Board, 1991), p.3.7.

Share Three: The Federal Government

A federal grant is the third share, which seeks to influence the state's share (share 1) and to respond to the student/family share (share 2). The federal grant should be large enough so that the sum of the student and/or parent contribution and the federal grant equals the investment of the state's share, or the median direct costs to attend a either a two-year or four-year public college. This arrangement guarantees that the three principal partners share the costs appropriately to achieve the desired public policy goals of access and efficiency. Looked at from another perspective, the program would work in the following manner:

Share #1: the state investment in postsecondary education, as reflected in the median cost
– Share #2: the sum of the parental and student contribution
= Share #3: the amount of the federal grant to provide access

For a dependent student with parental income of $32,000 attending a two-year college, the formula would work as follows:

Share #1: $4,853 median cost to attend public two-year college
– Share #2: $1,850 family contribution
= Share #3: $3,003 amount of federal grant

For a dependent student with parental income of $32,000 attending a four-year college, the formula would work as follows:

Share #1: $5,973 median cost to attend public four-year college
– Share #2: $1,850 family contribution
= Share #3: $4,123 amount of federal grant

In each case, the index of the median cost is the starting point. Subtracting the family contribution from the index yields the amount of the federal grant. If a student is attending a two-year college or less, the two-year public college median is used. If the student is attending a four-year college, the four-year public college median is used.

Using the median as the index and calculating family contributions based upon adjusted gross income simplifies the planning and budgeting of the federal grant, as illustrated in Table 3 (using just the four-year public college index):

Table 3

Index, Family Contribution, and Federal Grant

Annual Family Income	4-year College Index	Family Contribution	Federal Grant
$15,000	$5,973	$ 0	$5,973
24,000	5,973	630	5,343
28,000	5,973	1,240	4,733
32,000	5,973	1,850	4,123
36,000	5,973	2,510	3,463
40,000	5,973	3,300	2,673
44,000	5,973	4,270	1,703
48,000	5,973	5,430	543
52,000	5,973	6,510	0

As Table 3 illustrates, the maximum grant to a student attending a four-year college would be $5,973. Students with family income above $50,000 would not qualify for a federal grant. The grant should be portable and remain the same regardless of the cost or type of institution attended. If a student attended a college with below-median costs, the grant would be reduced by an amount equal to the difference between the actual cost and the median (or index cost). This emphasizes that the federal share is the *third* share, and follows the state share as reflected in the index level, and the family share as reflected in the family contribution.

Adjusting the Index

The index should be calculated every three or five years by listing the average cost to attend a public four-year college and a public two-year college in each of the 50 states. The median cost among all 50 states would become the index—one index for four-year colleges, and one index for two-year colleges. By using the median cost, the federal financial aid system would avoid being linked with the mean, or average, cost, which would contribute to tuition rate growth rather than restrain it.

The index should be adjusted during the intervening years by a measure such as the Consumer Price Index. This adjustment would serve as another incentive to restrain tuition rate increases.

Additional Student Costs

Any financial aid program must take into account two other kinds of costs for students. First, there are costs beyond the direct median costs of tuition and fees, books and supplies, and room and board. Second, many public and most private colleges charge direct costs that are higher than the public median cost. The challenge is to relate these costs to the financial aid formula. Table 4 contains the approximate costs—a total budget—of attendance for one year at a four-year public college in 1991-1992.

Table 4

Total Budget, 1991-1992

Direct costs	Tuition & fees	$2,137
	Books & supplies	485
	Room & board	3,351
	Sub-total	5,973
Indirect costs	Personal expenses	1,147
	Transportation	464
	Sub-total	1,611
Total costs		$7,584

The additional costs ($1,611) for transportation and personal expenses should be the responsibility of the student and/or family. These costs vary greatly among students, and are not under the control of the postsecondary institutions. With direct costs distributed among the federal grant, the family contribution and the state investment, the student could borrow the amount necessary to cover indirect costs or, since the federal grant has made no claim upon assets, use any available assets. This simplification would eliminate these idiosyncratic costs and would also guarantee that all students assume some financial responsibility for costs over which they have some influence. It also would make it simpler to establish the median index cost for this formula.

Additionally, if a student attended a public postsecondary institution with above-median tuition levels, he or she would have to use available assets or borrow to pay for the above-median cost. It would be readily apparent to all state policymakers how the state's public tuition charges stacked up relative to the national median. Some states might choose to keep their public tuitions relatively high, and to fund a state grant program for needy students to cover the remaining gap. Other states with high public tuitions might choose to increase their appropriations to public institutions in order to restrain annual tuition increases and to reduce the gap.

Some states might develop policies that combine both approaches, but regardless, the public policy objectives at both the state and federal levels would be clearer by linking federal student aid and the state investment in public postsecondary education.

Many students attend private colleges and higher-priced public colleges with costs significantly higher than the median-priced public college. The calculation to determine the federal grant for these students would be identical to the calculation for students attending a median-priced public college: The index cost less the family contribution equals the federal grant. Costs beyond the index amount would be the responsibility of the family (by using more income, by using assets, or by borrowing), the institution (through institutional aid), philanthropy (through grants), or employers (through educational fringe benefits).

The objective is to rely upon those sources with the greatest interest in students choosing to attend higher-priced institutions. The federal government, working in concert with the state and the family, has a clear interest in providing access to postsecondary education for all citizens. While it has some interest in supporting a diverse array of public and private colleges, the government's interest in choice is much less compelling than the provision of access. Sustaining the public/private diversity of postsecondary education in the United States should not be a primary objective of the federal student financial aid system. That diversity should be the objective of other players—students and their families, alumni, and the private sector. The federal government can, however, support the objective of diversity by awarding grants to students based upon personal income rather than income plus assets, and thus preserve assets for the exercise of

choice. For example, Student A with a family income of $40,000, attending a four-year college with direct costs of $10,000, would receive the same federal grant amount ($2,673) as Student B, who attends a median-priced public college with direct costs of $5,973.

Table 5

Students with Family Income of $40,000

	A	B
Direct college costs	$10,000	$5,973
less the EFC*	3,300	3,300
less the federal grant	2,673	2,673
Remaining cost	$4,027	0

* Note: EFC refers to expected family contribution.

Thus, the index would help determine the size of the federal grant. That grant could be combined with other resources to maintain access and promote choice. Following this approach, when a student attended an institution with higher-than-index costs (Student A), the student and/or family, the institution, and the private sector would become responsible for the remaining costs of $4,027. All participants would know the degree to which the federal government could and would support students, and students and families would have renewed opportunities to save and build upon their assets. They would know the degree to which institutions would need to restrain tuition increases, and they would know how private sources of student aid could be coupled with these other investments to promote diversity and choice.

Financial Aid and Student Categories

The complexity of the current student financial aid system results to some degree from attempts through needs analysis to differentiate among different types of students. Any efforts at simplification will require a financial aid system that reduces or eliminates such distinctions. The student distinctions that are relevant here are:

- full-time and part-time students;
- residents and commuters; and
- dependent and independent students.

Full-time and Part-time Students

The median cost should be the index that determines the size of the federal grant for all stu-

dents. Thus, the formula (index—EFC = federal grant) should be applied to all students. Full-time students should receive the full federal grant. Part-time students should receive a grant amount based upon the proportion of credits for which they enroll.

For example, a full-time student is defined as one enrolled in 12 or more credits per semester, or an average of 24 credits per year. A student with an EFC of $1,850 would be eligible for a federal grant of $4,123 to attend a four-year college. Were that student enrolled for six credits for two semesters, for a total of 12 credits, the grant would be calculated as follows:

12/24 credits x $4,123 grant (full-time) = $2,062 grant (half-time enrollment)

All students encounter tuition and fees, books and supplies, and room and board costs whether they attend full-time or part-time. Thus, for purposes of equity and simplicity, the indexes (for two-year or four-year public colleges) should be applied to all students, with the grant amount adjusted for enrollment status (number of credits divided by 24).

Residents And Commuters There should be no distinction between these two groups of students. Both incur daily living expenses for room and board—whether at a college dorm, in an area apartment, at home with their parents, or at home with their own families. The index includes the median room and board cost to attend a public four-year college. Including that amount in the formula for all students, regardless of where they live, would make the calculation of federal grants simpler and more equitable.

Dependent vs. Independent Students In our model, family and/or parental assets are not considered in determining the amount of the federal grant to reach the index level ($5,973 for the four-year colleges and $4,853 for the two-year colleges); it is correlated only with measures of annual income. The major question then is how to determine the level of income, and whose income to count. This is the only reason to distinguish between dependent and independent students. The following definitions seek to simplify the descriptive criteria for dependent and independent students.

Dependent students should include any student, full-time or part-time, who will be 23 years of age or under for any portion of the school year for which financial aid is sought, or claimed as a dependent on a parent's most recent tax return, regardless of age. (Exceptions to this definition would be married students, veterans, wards of the state, and parents with dependent children. Regardless of age, these students should be considered independent students.)

Because the index (or median) under our proposal is achieved as a result of the state investment, the family contribution from income, and the federal grant, there would be no

immediate claim on family assets. It would be more rational to establish an arbitrary, although reasonable, age level below which students are categorized as dependent. Thus, in terms of the financial aid system, parents would be expected to contribute, if able, an amount based upon a measure of their annual income. This is the foundation for some level of intergenerational support. Family support beyond this level should be the choice of students and parents.

Independent students should include any student, full-time or part-time, who will be 24 years of age or older for the entire period for which aid is applied and is not claimed as a dependent on a parent's most recent tax return. (This category should also include all married students, veterans, wards of the state, and parents with dependent children.) Income measure for independent students would be annual personal income (or family income, if married) for the year prior to attendance (AGI), as reported on the most recent tax return.

These definitions of full-time and part-time students, residents and non-residents, and dependent and independent students, attempt to reduce the distinctions among students and to treat students equitably. The profile of the postsecondary student body is now so diverse that efforts to further classify and sort students result in complex formulas that increase the likelihood of inequitable treatment. We can no longer assume that the 18- to 22-year-old dependent student is the typical college student. Thus, we need clear definitions and clear parameters describing the responsibilities of the parental generation.

Federal Loans

There should be two kinds of student loans, each with its own eligibility criteria. First, loans that are both subsidized and guaranteed should be available for students who need to borrow in order to meet the median total budget costs to attend a public four-year or two-year college. Second, loans that are guaranteed but not subsidized should be available for students who need or choose to borrow costs beyond the index level and whose family contribution is below 150 percent of the median index.

Subsidized and Guaranteed Loans

These loans should be available for students as resources beyond the federal grant and personal/family contribution to cover the median total budget costs. As an example, for a student attending a four-year college, the median index is $5,973. The family contribution and the federal grant added together equal this amount. However, the total budget (index plus personal

expenses and transportation) is $7,584. The remaining $1,611 is the student/family responsibility, and for those students without other resources, a subsidized loan would promote access:

Median total budget cost	$7,584
Family contribution and federal grant (index)	$5,973
Maximum subsidized loan	$1,611

For a student with an annual family income of $36,000, the total resources required would be:

Expected family contribution	$2,510
Federal grant	+ $3,463
Subtotal	$5,973
Subsidized loan	+$1,611
Total (direct and indirect costs)	$7,584

Using subsidized loans this way would allow the additional federal investment to be linked directly to state investments (by using the median index to cap the amount of the subsidized loan), the family contribution, and the federal grant, and would ensure that all four components were directed toward the goal of access.

Guaranteed Loans

These unsubsidized loans should be available to all students whose family contribution, based upon a measure of annual income (AGI), is less than 150 percent of the access index amount. The purpose of this loan program is to guarantee that loan funds are available to all students below a relative income level so they can afford to attend a college, public or private, with above-median costs when other sources of aid are unavailable. These loan funds should not be subsidized, because they go beyond the strict provision of access to postsecondary education. A less compelling public benefit prevails when a student chooses to attend a more costly college. The table below shows annual family income with the related expected parental contribution and the EFC as a percentage of the "access index."

Table 6

Annual family income	EFC	EFC as % Access Index
$24,000	$ 630	11%
28,000	1,240	21
32,000	1,850	31
36,000	2,510	42
40,000	3,300	55
44,000	4,270	71
48,000	5,430	91
52,000	6,510	109
56,000	7,650	128
60,000	8,820	148
64,000	9,700	162

Extending guaranteed loan dollars beyond the 100 percent range would make such loans available for a larger number of middle-income families in order to promote some choice as well as access. Using the current index, students whose family income is above $62,000 have an expected family contribution of $9,700. This level of family contribution represents 162 percent of the median index ($5,973), so these students would be ineligible for federally-guaranteed loans.

Loan Amounts

The maximum *subsidized* loan amount for each year should be related to the median total budget index, measures of family contributions, and amounts of the federal grant. The subsidized loan maximum should be calculated thus:

Median total budget—(EFC + federal grant) = Maximum Subsidized Loan

This approach underscores the primary purpose of the federal loan program to work in concert with the state investment in public institutions, the EFC, and the federal grant in order to provide access.

However, the federal loan program could also be used to promote choice. The maximum *unsubsidized* loan amount should be indexed to one-half of the difference between the median total budget for a public four-year college ($7,584) and the median tuition/fee and room/board costs of a private four-year college ($14,403):

$14,403 – $7,584 = $6,819 / 2 = $3,410

This formula would make up to $3,410 available annually in unsubsidized loans to all students whose family income is below $62,000. Those lower-income students who were eligible for the maximum subsidized loan amount ($1,611) would remain eligible for the maximum unsubsidized dollars as well.

Loan Administration

Discussion during the reauthorization of the Higher Education Act about administration of the Stafford loan program centered on two primary options—direct lending (in which the colleges administer the loans) or continuation of the federal administrative role. Another opportunity—state administration of the loan program—has received little attention.

By placing administration of the student loan program at the state level, the federal government could interact with 50 entities rather than 3,000-4,000 postsecondary institutions. By eliminating the role played by banks, the costs of non-profit administration should yield immediate savings. Additionally, guided by the federal government, states could develop regulations that clearly linked student loan amounts to the institution's student loan default rate. The federal government could then penalize a state that did not have its loan "house" in order. This would provide the necessary disincentive to stimulate the states to regulate and monitor the loan program.

Finally, states could use a percentage of the savings on administrative costs (that accrued from not needing to make a profit on the loans) to subsidize a portion of student loans that help the state to address other public policy objectives. States would be able to offer further discounts on loans for students who pursued careers such as teaching or nursing in rural or urban poverty areas.

Administration of the loan program at the federal level diminishes the potential benefits of a state's role, and administration of the program at the institutional level would lead to a wide array of administrative procedures that would be difficult to monitor, much less regulate. With the fees embedded within the loan program, all states should be able to develop the capacity to administer the loan program and improve its efficiency and impact.

Paying Back Student Loans

With loans administered at the state level, a state could offer students three options for payback of loans: payback similar to the current program (10 years of monthly payments that begin when the student has been out of college for a few months), income-contingent payback, or reduced or eliminated payback in return for public service.

The current payback system is uniform for all students, regardless of the student's career choice or expected annual income level. Quite simply, it is an inflexible system that is very remote for most students. The inflexibility contributes to high default rates. By locating the loan program

at the state level, the system would be closer to the institutions and the students, and it could offer greater flexibility in experimenting with a variety of payback plans. Additionally, it would allow a state to merge other resources with the loan program to reduce or eliminate loans for those students who pursued designated careers, or who completed a certain term of public service within their state. A state-administered loan program possibly could generate a significant decrease in the default rate at the same time it enabled the states to leverage loan funds to accomplish other related policy objectives.

Other Responsibilities: Institutions, Philanthropy, and Business

One benefit of a simple program that reduces the distinctions among students and guarantees access is that other players can target their resources, which improves overall efficiency.

Institutional aid, for instance could be aimed at the additional total budget costs or at total costs at colleges which must charge beyond the index level. Lower and lower-middle income students would know, as would the institutions, the size of the expected federal grant. Family resources, beyond the EFC calculated from annual income, could be saved for such costs as well.

Philanthropy could piggy-back on the federal grant system, and business could target its education dollars to capitalize on the federal (and state) investments. In some cases these additional dollars could be used to enhance choice, to supplement the expected family contribution, or to reduce loan amounts. The objective, however, of these additional investments can more readily be realized when based upon the foundation of the state, family, and federal investments.

Conclusion

This proposal seeks to gain greater efficiencies in the current student financial aid system by combining certain aid programs and by linking the major investments in postsecondary education with the compelling interests of the key participants. The proposal is also based upon the historical experiences and expectations for each participant to assume responsibility for a portion of the costs associated with postsecondary education, while fostering an environment to constrain cost increases in order to provide meaningful access. Any revisions to the current aid system must take into account the two predominant ways that taxpayers support access to postsecondary education—through local and state appropriations to public institutions and through federal support of student financial aid. These investments must be seen as complementary, not contradictory. Our proposal seeks to provide a framework that capitalizes on these investments and makes the investments at the state and federal level responsive to one another in order to create a more efficient and accessible system of postsecondary education.

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