NCES report is to some extent also supportive of the argument — it is not enough A pat on the back, a citation of excellence, a commemorative plaque, a public display of thanks for a job well done, or even improved work conditions and greater control over one's environment are not enough to motivate good people to enter education when they find it difficult to maintain a reasonable standard of living (excluding the unusual cases in wealthy districts) Once teacher pay becomes reasonably competitive with other occupations and careers, teacher "burnout" and complaints about a hostile environment will be greatly reduced

In sum, improvements in nonmonetary benefits are welcome and are likely to improve teacher morale and performance. But the bottom line is remuneration. Without financial incentives, good men and women will select law, medicine, business and other areas paying decent wages, rather than go into teaching. As a report by the Carnbegie Forum on Education and the Economy (1986) very clearly indicates, the gap in salaries between teachers and, say, accountants, is correlated with the dramatic increase in women selecting majors in business at the expense of elementary and secondary education during the past 20 years. While some improvements in teacher salaries have been made during the 1980s, there is a long road ahead before the trend can be reversed. Unless society is willing to reallocate educational resources from less productive to more productive educational inputs, a reversal of the trend *will* require additional resources

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Keeping College Affordable: Government and Educational Opportunity. By MICHAEL S. MCPHERSON and MORTON O. SCHAPIRO. Washington, DC: The Brookings Institution, 1991.

GOOD BOOKS on higher education are hard to find For that reason, this book — a good one — deserves considerable attention

This book has three major sections. There is an insightful empirical analysis of higher education finances This is followed by a thoughtful and balanced discussion of policy options. Finally, there is a quite radical set of proposals representing the authors' guide to reorganising higher education finance and, maybe, the entire structure of the sector

The major empirical chapters deal with today's most discussed issues of higher education finance. Chapter 2 provides a nice picture of enrollment and finance in higher education over the postwar period. The changing picture of student support is set out in an illuminating way. The analysis since the mid 1970s provides details of how school costs and financing interact with family income This analysis relies chiefly on the American Freshman Survey. It thus offers a different view from the more commonly used Current Population Survey (CPS), trading a non-representative sample of students for a more complete treatment of independent students for whom parental incomes are unavailable in the CPS. The picture that emerges is one of U-shaped net costs to students: a steady fall during the 1970s is balanced by a sharp and steady rise during the first half of the 1980s.

The relationship between college costs and enrollments rates is the subject of Chapter 3. McPherson and Schapiro present new econometric evidence about how tuitions affect enrollment using aggregate panel data from 1974 to 1984 on white enrollment rates by income and sex. This analysis demonstrates the particular sensitivity of the low income population to price changes for schooling. There is, however, one aspect of the analysis that escapes attention. The period 1974 to 1984 is one of rapidly rising income advantage for college completers, yet changes in benefits never enter into the analysis of college attendance decisions Neither are the large changes in unemployment rates of the period, even though these would be expected to alter the opportunity costs of college attendance. The omission of these factors might well be explained by the limited data available, but it is difficult to accept that they were not an important ingredient in the attendance picture.

Chapter 4 is a very interesting discussion and analysis of institutional behavior The simple question, raised to national debate in recent years, is whether the form and level of student aid directly affects the tuition and behavior of colleges and universities In simplest terms, they find that schools respond, but they do so in quite different ways than the public discussion has suggested.

Chapter 5 considers details of the attendance pattern, specifically concentrating on what is happening at elite schools. Their findings are fairly straightforward, even if the policy implications related to them are not First, high quality students (those with high SAT scores) have roughly unchanged access to elite schools even though tuition charges have risen noticeably. Second, middle and lower income students of lower quality have less access to elite schools These findings are clear, but become a bit muddied when intertwined with a variety of potential policy issues The central policy ambiguity is whether all students, regardless of income or ability, should have equal access to expensive elite schools.

The final empirical chapter provides various projections of the future of college costs The results here are fairly clear· under plausible scenarios, college costs will not become an immediate crisis Nevertheless, costs will become increasingly important for non-aided students.

Chapters 7 and 8 provide some of the clearest, most dispassionate analyses of policy issues and options that I am aware of. Perhaps because most analyses of higher education are done by people who are directly affected by the outcomes, the majority of policy options superimpose strong beliefs, wishful thinking, and the like on the analysis. McPherson and Schapiro's analysis guide us through the issues and options in an enlightened and insightful way. It should be the starting point for anybody thinking about financial policy in higher education.

The final chapter of the book goes to the really big issues. They come out with a flat and unequivocal recommendation for federalization of higher education student finance. This conclusion, which obviously goes far beyond their empirical analysis or even their prior chapters on policy options, really stands apart from the rest of the book. I personally subscribe to parts of their argument — the lessening of current public–private distortions, the applications of general fiscal federalism arguments for doing income redistribution at the highest level of government, and so forth On the other hand, I think they too cavalierly dismiss issues such as the impact of continuing federal deficits This chapter, which surely will be very controversial, is thought-provoking — but it is also a conclusion that goes well beyond the prior analysis.

This book is essential reading for anybody who wants to understand student financing in higher education It is careful, it is insightful and it provides invaluable help in framing the issues.

At the same time, while a bit unfair to the authors, I cannot help but point out my problem with virtually all analyses of the economics of higher education. This exceptional book follows one bit of tradition in higher education work. It never says anything about quality, the measurement of output, or the production function for higher education. The closest it comes is to separate elite colleges and universities from the non-elite or to separate public and private. Are these good summary indicators of quality or performance? Clearly the economics of higher education must address these issues at some point

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Financing Higher Education in a Global Economy. Edited by RICHARD E. ANDERSON and JOEL W. MEYERSON. New York: American Council on Education/Macmillan, 1990. 152 pp. $27.95 (cloth).

THIS VOLUME contains papers presented at a conference sponsored by the Forum for College Financing. There are eight papers plus a brief introductory chapter by the editors. The book is part of the American Council on Education/Macmillan Series on Higher Education, a series that contains several timely and interesting pieces of work.

In the first chapter Richard Anderson links higher education with the economy in a clear and insightful way. He predicted that federal and state assistance to higher education would decline — a prediction that, unfortunately, turned out to be right. William Massy next turns our attention to financing research, a topic that his long experience at Stanford makes him unusually well suited to discuss. This piece represents one of the relatively few looks at a very important topic. Massy conjectures about differences in indirect cost recovery rates between private and public universities and goes on to talk about alternative ways for the federal government to support university research. This chapter will engage a wide variety of readers, especially with the backdrop of Stanford's subsequent problems with the federal government

Frank Campanella discusses how to fund instruction. He presents a number of simple but sensible suggestions relating to monitoring faculty salaries at the institutional level. These include ways of comparing salaries with other institutions and making proper inflation adjustments He also turns to more controversial areas such as cost and productivity studies as well as to equipment budgeting The chapter is aided by a number of interesting examples from his own experiences at Boston College.

After these three chapters, the volume turns to a series of papers on credit, debt and student loans Robert Forrester contrasts the attitudes toward debt shown by three universities — Harvard, Brown and Kentucky Arthur Kalita discusses the tax implications of debt instruments. Daniel Heimowitz explains the basic principles of credit analysis and enhancement. Douglas Wofford discusses the advantages and disadvantages of mortgage-backed student loans. These four chapters differ greatly from the first three in both content and tone. While presumably of much more narrow interest than the others, they are easy to understand and they discuss topics that have important implications for institutional finance.

The volume concludes with a paper by Anthony Knerr that returns to a more far-reaching and general concern — the impact on our nation's colleges and universities of a growing imbalance between expenditures and revenues. He suggests ways that higher education could respond to a predicted tightening in the financial situation of most institutions of higher education.

Curiously, despite the title, there is precious little in this volume about how the global economy affects higher education. In addition, the combination of four chapters of broad interest (the first three and the final one) and four chapters dealing with the narrower questions of debt, credit and taxation, makes for a strange group of papers to appear under a single cover. Still, the book contains some good work. In particular, Massy's chapter on research financing will, I hope, stimulate further thought dealing with this crucial topic

This conference was held at a time when U.S higher education was still thriving and my guess is that many people in the audience thought that the doom and gloom predictions by several of the authors were overly pessimistic. Unfortunately, most public and private colleges and universities throughout the nation know all too well that the fears of even the gloomiest of seers have been realized.

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