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New Dangers in Old Traditions:
The Reporting of Economic Performance
in
Colleges and Universities

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This paper is about the way colleges and universities describe their economic performance -- their economic well being -- to themselves, their board and faculty members, the public. It does two things:

One is to describe a growing suspicion that while fund accounting has long been an irritant to those dealing with college finances, it's in the process of becoming downright dangerous, as the circumstances of colleges and universities change.

So the other is to give a broad picture of a different way of describing our economic performance -- what's being called "global accounts."

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I. FUND ACCOUNTING

The convention in college accounting--- indeed, the requirement -- is to use Fund Accounts. The activities of the college are divided up into little individual firms, each of which has its own accounts -- balance sheet and income statement (known as "Fund Balances" and "Statement of Changes in Fund Balances"). These little firms are differentiated by purpose -- one for endowment affairs, one for plant and equipment, one for current spending, and so on. They're like the envelopes my mother used to separate the food money from the clothing and entertainment money and the savings. The justification for keeping these funds separate in a college is stewardship. Recognizing that much of the money a college gets comes from donors or legislators who have definite purposes in mind, fund accounting provides a way of monitoring the college's performance against those donors' desires. So fund accounting has a useful role to play.

But there are serious problems with using fund accounting to describe the economic performance of a college. They are two and they're closely related.

Most important, <u>fund accounts are simply very hard to understand</u>. Seven or more little fictitious firms are described, each with its separate Fund Balances and Statement of Changes of Fund Balances and, central to the confusion, with a set of flows and obligations between and among them in the form of mandatory and non-mandatory and temporary transfers and loans and borrowing that leave the IOUs issued by one part of the college in the asset portfolio of another part. Nowhere is this all put together to tell what the college, us a *whole*, has been up to.

The result is that without, literally, years of effort and experience, ordinary mortals

like board and faculty members and, indeed, administrators, can't make a lot of sense of fund accounts -- they can't get from them a picture of what's going on in the college as a whole.

Which leads to the second problem. The result of this incomprehensibility of our accounts is the natural one -- that we've cut the issue down to size by focusing on only part of the college's economic activity -- the operating budget and endowment -- as if it were the whole thing. We can't get our minds around that complicated description of the whole economic situation so we do the next best thing by understanding a part of it. But it's only part. And it's a manipulable part. At Williams, to take the example I know best, the operating budget over the years has included only about 2/3rds of the college's total economic activity -- the rest is, one way or another, "off budget" and what is included in the budget can, within wide limits, be changed at will. As for the endowment, it includes about half the assets of a rich college -- and none of its liabilities.

At some level, everybody knows this. Despite the fact that newspapers report the budget deficits and surpluses of the major universities as if they were news, everybody knows that they're not the whole story -- that there are mysterious other resources being got and spent by the college with names like "unavailed endowment earnings" and "gifts to plant" and "bond sale proceeds." But it's never clear where or how much.

Which brings me to my worry. These economic mysteries may be tolerable in ebullient times that bring more resources and expanded staff and more programs and higher salaries in colleges and universities. But when times turn stringent, as they certainly have in the past few years, such obscurity is too easily seen as obfuscation -- evidence of hanky

panky by the administration or board that's intended to wring unnecessary concessions from one group on campus or another, or from taxpayers. We've got a whole generation of faculty (and young administrators) who have never seen anything but the lush nineteen eighties and a larger number who have persuaded themselves that the expansions of the eighties were normal. And public institutions have to contend with legislators who are trying to survive in a period of generalized tax revolt -- "Read My Lips". The fundamental challenge to college administrations over the next few years, arguably, will be to induce a highly resistent community to understand that there's an economic reality within which they'll have to live -- one that may include "downsizing" and "restructuring" and the biting all sorts of personally painful bullets. This is not an atmosphere in which obscurity about total institutional resources will be helpful.

It's possible that in a time of more rigid institutional hierarchies, suspicion of the mystery-resources that are hidden by fund accounting might have been limited to grumbles in the Faculty Club or legislative cloak room. But we are increasingly people whose first automobiles carried "Challenge Authority" bumper stickers, and we're less likely to be simply glum and docile in the face of "restructuring." Wide participation in these decisions, invited or not, seems inevitable. And it's not reasonable to expect people to become competent in deciphering the economics of fund accounting. So the only recourse of administrations, really, has been to say "trust us," when every community instinct is not to.

So fund accounting has, in this worried view, moved by force of the changing circumstances of higher education from being an issue of bookkeeping to impinging importantly on university morale and governance.

Before looking at the alternative to fund accounting, let me be clear that the quarrel here is not with fund accounting, **per se.** It is with the use of fund accounting as the **primary** way of describing the economic performance and circumstances of an institution. Fund accounting is undeniably useful: responsible stewardship is important in nonprofit institutions that depend on the charity of donors and taxpayers -- we have an obligation to monitor the use of those resources with care. But it's the tail wagging the dog if we use those stewardship accounts as the primary description of how the college is doing.

II. GLOBAL ACCOUNTS

An alternative way of describing the economic performance of a college grew, literally, out of the frustrations of one of those typical faculty-administration-student committees -- The Committee on Priorities and Resources at Williams -- that was supposed to advise the college on its economic policies. It quickly became clear that PhD economists with training in accounting simply couldn't make ready economic sense of the numbers. The conviction grew increasingly strong that we **should** be able to see -- easily -- the answers to simple questions like how much the college took in in a given year and what it did with it. What came of the effort to answer those questions was a reorganization of our economic information that proved useful at Williams and can help, too, at larger and different places. There's every indication that it will travel well.

There were two overriding objectives in this reorganization of the college's economic information -- two guiding obsessions. That it be **clear** and that it be **complete** So the new system really is the direct result of fund accounting's problems -- if fund accounting

information is intractable and balkanized, we wanted to devise a way of telling the story that was accessible and encompassing -- that described the whole of the college and did it simply, a "global" description of the institution's economic fortunes. The two things fund accounts aren't. So, "Global Accounts."

We wanted to wind up with a set of accounts that answered the question: "Did the year's activities make the college better off or worse off, economically?" When the global accounts are used as the basis of an economic plan, that question becomes "Willthe behavior and policies we're considering now make the college better off or worse off in the future?" Harvard's recently remodelled financial report pose it as a similarly basic question: "Did Harvard have a good year or a bad year?2"

I should note my considerable delight in Harvard's radical change in its economic reporting because it is so clearly in the same spirit as these global accounts and with the same purposes. Harvard didn't go as far -- in the direction of clarity and completeness -- as do global accounts, but they had a good deal more at stake in changing the system. So these global accounts can be seen as going all the way -- as the end-point in the process toward which Harvard is moving. Clearly, Harvard's decision will make it easier for the rest of us to make these kinds of changes. As of their March '92 financial report, these ideas suddenly became a good deal less academic and a lot more practical.

Now let me try to give you a quick picture of the global accounts; to describe their major features -- the implications of this assiduously simple-minded approach -- and the kinds

² Harvard University, *Financial Report to the Board of Overseers of Harvard College For the Fiscal Year 1990-91.* Cambridge: The Harvard University Press; 1992. p. 4.

of policy questions they lead to, both as global <u>accounting</u> of past performance and as a global <u>economic plan</u> that describes the future impact of current decisions. (There is a detailed description of them in the summer issue of *Planning*³.)

Three quite simple Econ 101 questions structure these accounts:

- 1. How much did the college take in during the year --from all sources?.
- 2. What did it do with that money?
- 3. What effect did all that have on its real wealth 4 -- in total?

That's it. For the whole of the college, taken all together, year by year.

The emphasis on creating a <u>complete accounting</u> takes us farther than might be expected, however. Income comes into a college by many routes, reported in many funds and the route often depends on local accounting traditions. And current spending is usually spread throughout the funds; much in the current fund, but some in the plant fund and often more in the endowment fund. Ferreting these out is neither easy nor impossible.

But the biggest impact on a system of accounts of the determination to be complete is in the accounting of wealth and saving (as changes in wealth). It is there that conventional accounting leaves out the most with its focus *onjinuncial* wealth and relative disregard of *physical capital* wealth.

Global accounts address the neglect of physical wealth by (a) reporting the value of

³ Gordon C. Winston, "The Necessary Revolution in Financial Accounting," *Planning for Higher Education*, Summer 1992, pp. 1-16.

^{4 &}quot;Wealth" is not the happiest word here. It accurately describes the institution's stock of resources, but it connotes ease and luxury. Harvard uses "equity" and, of course, "net worth" is the for-profits phrase that describes it. In this paper, I'll stick to "wealth" and "net worth," but with acknowledged discomfort and a hope for advice on a better alternative.

plant, equipment, and land in its current, replacement value rather than its historical book value (b) reporting its actual depreciation during the year and (c) recognizing that that depreciation is a current cost of production. While the proper accounting of capital costs in non-profit institutions is a subject in itself⁵, knowledge of these three facts is essential before we can answer the "Are we better off or worse off?" question, or know how much our education costs. These are the changes Harvard has made in its economic reporting (even though doing it added \$77 million to reported operating costs and led to a \$42 million reported deficit). The fact Harvard has recognized -- the fact that's embedded in the global accounts -- is that using up one's physical capital is an unavoidable current cost of production and failure to recognize that fact, in full, will lead inevitably to an understatement of the current costs of education and potentially, down the road, to an accumulation of deferred maintenance.⁶

In keeping with the Econ 101 simplicity of the global accounts, <u>saving</u> is, as in Econ 101, just the difference between total income and total current spending for the year. Saving can take either a financial form -- adding to money in the bank or financial investments -- or

⁵ My "Why Are Capital Costs Ignored By Colleges and Universities and What Are The Prospects for Change?" Discussion Paper No. 14, The Williams Project on the Economics of Higher Education, Williamstown, MA, July 1991.

⁶ The recently mandated depreciation accounting of FASB 93 is, arguably, a step in the wrong direction -- it is certainly a step in the other direction from the global accounts. A college could scrupulously follow the FASB rules for a decade -- setting aside an appropriate amount for depreciation each year -- and wind up with far more deferred maintenance than funds to do something about it. The problem is their (understandable) reliance on book values for the capital stock. These historical costs typically so understate the current, replacement values of plant and equipment that the depreciation calculated on them understates real depreciation seriously. Nor does FASB require that depreciation be shown as an operating cost -- it need only be a downward adjustment to an already understated value of the capital stock.

a physical form -- adding new buildings or property or lab equipment. Both of these kinds of assets are measured in global accounts by the same yardstick -- current market value for financial assets and current replacement values for physical assets. So they can be added together to get (adjusted for liabilities and deferred maintenance) a picture of the institution's total net worth -- the whole of its wealth in both financial and physical forms.

At Williams in 1991, to give some sense of magnitudes in accounting for all of a college's wealth, to \$309 million of financial wealth was added \$335 million of physical capital wealth, making the college's total wealth some \$644 million. Judging from Harvard's reported figures, its \$5.9 billion of financial wealth was only part of a total wealth of \$8.2 billion⁷. Impressionistic figures from Yale⁸ also suggest that physical capital wealth just about doubles -- even for these kinds of wealthy private institutions -- reported financial wealth. And of course, the poorer the school, the larger the share of its wealth will be in the form of physical capital.

So in global accounts, a year's *saving* is the thing to watch. More income or less current spending increase the year's saving. Saving increases the college's wealth. Dissaving decreases it. And since these are complete, exhaustive, global measures, anything that increases income increases wealth; anything that increases current spending, reduces wealth. Anything that simply changes the <u>form</u> of wealth, leaves its total level unchanged.

⁷ Note that this is capital measured (a) at replacement cost (b) reduced by accumulated deferred maintenance -- as in the Williams numbers. Too, all financial assets are included, not just endowment.

⁸ Henry Hansmann, "Why Do Universities Have Endowments?" *Journal of Legal Studies*, vol. XIX, January, 1990, pp.3-42.

So, for example, if a college uses \$10 million of quasi-endowment to build a \$10 million dormitory, its total wealth is unchanged -- the form of its wealth is changed (as are future income and costs), but not the total amount. If the college borrows to build that dorm, both physical and financial wealth are changed, but, again, not the total. If too little is spent on maintenance of plant and equipment, total wealth falls as the market value of physical wealth goes down. If current spending goes up, wealth goes down; if income goes up, wealth goes up. These are simple but immensely important facts about economic performance.

Most basically, saving allocates resources to future generations, spending allocates them to the present generation.

Global accounts describe the impact of the college's actions on its total real wealth.

The proverbial bottom line of global accounts is just that -- the effect of a year's activities on the college's total real wealth.

Where does that leave the usual bottom line of conventional accounting -- operating budget budget deficits and surpluese? There *isn't* an operating budget in the global accounts.

Operating expenditures -- as a centrally important part of costs -- are reported, but the fiction of an operating budget, *per se*, is abandoned as being more misleading than helpful.

Operating expenses are reported prominently and should be closely monitored to see if they exceed or fall short of projected spending. But the fiction of a budget deficit or surplus, resulting from the arbitrary assignment of some part of income to an operating budget under the name of "operating revenues", can best be done away with as arbitrary, manipulable, and meaningless.

So much for global accounts as an economic description of a year's activities: as accounting of the past.

As the basis for an economic plan, or projection of the future, global accounts are particularly useful. A global economic plan is a quite simple extension, taking advantage of the two fundamental tautologies of accounting: (1) that a year's saving equals income minus current spending, always, and (2) that net worth at the beginning of the year plus saving has to equal net worth at the end of the year. These two facts fit neatly into a spreadsheet to drive a nice, simple economic planning model. It's not a financial equilibrium model -- though it can show that, it's more than financial and less than equilibrium. It's certainly not an optimizing model. It's really, simply, as a consistency model -- it makes the constraints and the implications of plans, policies and behavior dynamic in order to answer the general question, "If you do that now, what will the future will look like?"

The global economic plan we've used at Williams is grounded in actual performance in the most recent years, it makes explicit intended behavior and anticipated circumstances and it describes their implications for future saving and wealth. We used two years' historical base, the current year's budgeted performance, and a description of the future plans, behavior, and circumstances we thought reasonable. From that, we generated their implications for saving and wealth over the next three years (we also looked ten years out to see whether anything subtle was going on that didn't show up immediately). So the planning exercise began with recent history that set its initial levels of income and spending and described recent trends in growth and it projected the implications of the plans, policies, and circumstances we were thinking of.

Finally, let me suggest some of the facts about the college's economic performance on which global accounts will focus attention. At the most basic level, the information of these accounts is agnostic -- it can inform a whole lot of quite different policies -- but some things are easier to see than others. These are questions -- six of them -- that have helped focus policy discussions at Williams:

- 1. What was the <u>effect of the vear's activities</u> (and circumstances) on the college's total wealth -- how much did it save or lose?
- 2. How much did <u>inflation</u> erode the purchasing power of the college's wealth -- how much did it have to save just to offset the effects of inflation? Did it do it?
- 3. How much of their saving -- or dis-saving -- was in financial assets and how much physical asset? (Financial assets are seen to earn money; physical assets are seen to cost money.9)
- 4. Some of the gifts to the college were intended by their donors to <u>increase</u> the value of its wealth -- gifts to endowment and plant. Taking those donor intentions seriously means subtracting that amount out from total saving to answer: How <u>would</u> the college have done without those gifts?
- 5. How much did the wearing out of physical capital --depreciation -- contribute to the current costs of education?
- 6. How much of that depreciation was not met by spending on renovations and adaption during the year -- in other words, how much additional <u>deferred maintenance</u> did the college incur during the year?

⁹ This is part of current conventions, but see my Discussion Paper 14 cited above.

These questions suggest the kinds of facts about economic performance that are revealed by global accounts. In a global economic <u>plan</u>, these same questions are asked about some future date in consequence of policies under current consideration -- "If we maintain faculty salary increases at levels of the past three years without reductions in their FTEs, what will be the answers, three years from now, to questions 1-6?" or "If we expand dormitory space by \$10 million..." Etc.

III. CONCLUSION

Four brief comments may be useful in conclusion.

First, the global accounts are a direct reaction to the shortcomings and frustrations of fund accounting. Because fund accounts are opaque and balkanized, global accounts were designed to be clear and complete. Global accounting is intended to go all the way toward clarity and completeness. ¹⁰ as a logically consistent aggregate description of the college's economy. They're an idealized aggregate account, but one that's proved surprisingly workable -- a rare, practical ideal, it seems.

But, second, a college doesn't have to go all the way in order to benefit from the global accounts. It is useful to go only part way -- to sneak up on completeness while gaining in clarity, So a <u>Global Financial Account</u> reorganizes reporting of the financial side while sticking to a conventional treatment of physical capital wealth. That's what Williams has done. Alternatively, a college can do a global accounting of physical capital wealth

¹⁰ Once again, almost all the way. Important capital costs are, in this version of thaccounts, still left out (my Discussion Paper 14).

while treating the financial variables pretty conventionally. That's what Harvard has done.

A lot is gained by the full treatment, but this is a case where something is better than nothing

-- more clarity and more completeness, even if still short of ideal, are worth it.

Third. For the time being, at least, global accounting has to be an overlay, reported on top of conventional, audited, fund accounts. ^{II} It is unrealistic to expect accounting and auditing conventions to change as quickly as we -- for reasons of governance -- need our reported information to change. So global accounts can't replace fund accounts. A more enduring reason, perhaps, is the fact that, by staying simple, global accounts have to leave out a whole lot. We tried hard at Williams to keep the whole of the global accounts to a single page, printed landscape at that. So lots of more disaggregated information is needed for more specific purposes -- like stewardship and benefit management and department budgets and monitoring personnel costs and running academic programs and. Even here, though, when such sub-accounts are fitted into the aggregate framework, global accounts will show the implications of changes within them. Changes throughout the college will be connected.

Finally, a very practical fact. A global economic plan, in a Lotus or Excel spreadsheet, fits on a laptop computer that can easily go into meetings on downsizing and restructuring, or just into discussions of next year's operating expenditures. The economic constraints within which those discussions have to operate are made explicit. They're clear and understandable -- even intuitive -- without a whole lot of personal investment. So even

ll So Harvard has had to adjust the reported value of its capital stock back, in its financial accounts, to historical values.

"nonquantitative" members of a faculty or a board can see clearly what's at stake. Through them there is instant access to the implications of alternative policies and programs, or different circumstances.

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Clearly, there are some disadvantages to all this clarity. A familiar and comforting administrative discretion and control over economic information is obviously lost with the openness -- the transparency -- of global accounts. Many will see Pandora's Box. But aside from arguments in favor of an open management style, *per se, if* my worst suspicions are right, that loss of control will prove a small price to pay for a more realistically and completely informed -- and hence more effective, less suspicious, and less confrontational -- college as we face the hard job of scaling expectations back.