

INTERVIEW

David Feldman

As tuition at both public and private universities has increased sharply in the past quarter-century — far faster than the general rate of inflation — the question of how to pay for undergraduate education has become increasingly angst-ridden for students and their parents.

How did higher education become so expensive? The question calls for systematic economic analysis. David Feldman and his collaborator Robert Archibald, both economists at the College of William & Mary, have sought to provide that analysis in a series of articles and in a recent book from Oxford University Press, *Why Does College Cost So Much?*

Feldman has been at William & Mary since arriving in 1989 from Colgate University as a visiting professor, a job that he took to be closer to his wife, then a medical resident at Virginia Commonwealth University Medical Center in Richmond. His early work focused on issues in international trade, macroeconomics, and economic history, often combining insights from all three areas. His research with Archibald on the economics of higher education likewise draws upon a number of subfields, including labor economics, in addition to the microeconomics of university admissions. David A. Price interviewed Feldman in his office at William & Mary in December 2010.

RF: Much of your early work was in international trade and finance. How did you become interested in the economics of higher education?

Feldman: My very first paycheck as a tenured member of the faculty here was reduced in the 1990 statewide pay cut that the governor authorized. So my first interaction with being a state employee was having my contract be signed for one thing, and then having my paycheck be for less, because the governor just arbitrarily cut state salaries. That was my introduction to higher education finance and the beginning of my interest in it.

I didn't become a researcher in it right away. But 1990 was a state budget crisis, and that stimulated all sorts of discussions around here about the appropriate role of the state in funding higher education. Over the following decade, what we observed was that state support for universities here followed a downward roller coaster trend. When times were good, the state share would rise back up, but it never quite got to the level of the last peak. And then the next budget



crisis would come, and state support would fall, and times would get good, and it would come back up, but not quite as much. When I came, the state supplied over 70 percent of our operating funds, and I think it's now down to something in the 30s. That's a rather startling change in a little over 20 years.

My co-author, Bob Archibald, made the switch before me; he had started thinking seriously about financial aid. We actually began our co-authorship not on higher education issues, but on trade issues. But once he had begun writing with me, he then began interesting me further in the higher education side of things. We just got talking, and the rest is history.

RF: In the 26 years from 1980 to 2006, the real price of education has increased more than 100 percent. Some consider rising tuition to be evidence of irresponsibility on the part of university administrations. But you found that during the past half-century, the trend in the real price of higher education has been very similar to that of the services of highly educated professionals, such as physicians and lawyers, including a sharp acceleration in real prices starting around 1980. How do you account for that acceleration?

Feldman: The acceleration starts around 1980. What we find, which won't come as a surprise to any labor economist in the country, is that the acceleration in college costs was timed almost perfectly to the end of what Claudia Goldin and Bob Margo called the "Great Compression" — the period in which the income distribution in the United States became compressed in the middle. That was a period, basically 1940 to 1980, when the United States was as middle class a country as it has ever been. The gap between the 90th percentile of the income distribution and the 10th percentile was as narrow as it had ever been. In fact, in the 1970s, that gap continued to narrow, until by the middle of that decade it was as low as it had been in the 20th century. But starting in the late 1970s and early 1980s, a number of things came together to cause the costs of colleges and universities — as well as of all industries that use a significant amount of highly educated labor — to start to accelerate compared to other things.

We don't have anything in particular to add to the story that labor economists have developed, but we find the most persuasive explanation is Claudia Goldin and Lawrence Katz's race between technology and educational attainment. Basically, for the first 75 years of the 20th century, the supply of highly educated people — or changes in the supply of highly educated people — had outpaced changes in demand. Due to capital-skill complementarity, the demand for highly educated people had been steadily rising over the course of the century, but for much of the century, the supply increased even faster.

This was the period in which we had the push for universal high school completion and a skyrocketing increase in the number of people coming out of colleges and universities. But in the mid- to late-1970s, attainment stagnated. We peaked with the number of people getting high school degrees at around 75 or 80 percent, and male college completion rates stagnated. Female college completion rates continued to rise, but increasing numbers of college-educated women weren't going into the labor force. In the same period, the demand for highly educated people continued to rise, as it always had, and if anything, the computer revolution of the past 40 years has accentuated that trend.

So the earnings of people with a college degree, relative to people with a high school degree, just took off. That's mirrored for people with advanced degrees, the kind of terminal degrees that college professors, and doctors and lawyers, have. Any business in which a substantial fraction of its employee base is highly educated is going to feel these cost pressures. Some businesses can more easily shed those people in favor of machinery or other things, but many of the personal services industries cannot do that and remain

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the kind of services that they had been. So you see, in many of the medical specialties, legal specialties, education — all education, in fact, not just higher education — these industries have seen their cost structure just accelerate.

RF: Presumably salaries are a very high share of the overall costs of a university.

Feldman: Indeed. Some people have pointed out that faculty salaries have not risen astronomically.

But often these people look only at salaries, not at salaries plus benefits. Faculty compensation has increased considerably since 1980 when you add salaries and benefits together.

To some extent a faculty member is not a perfect cog; you can't just take a faculty member in the English department and put him or her to work in investment banking, of course. But there is a shared labor market, the labor for highly educated people. And ultimately changes in the return to higher education filter through to all degree categories.

RF: Don't government subsidies of tuition, such as subsidized student loans, play a role in rising tuition?

Feldman: Oh, they certainly could, and it is the common wisdom. But two things need to be clarified here. First, even if it led to a higher list price, it might lead to a lower net price for students. Second, the whole notion that "it's all econ 101" relies on the idea that the supply of higher education is upward sloping — that in order to get more places available, universities have to get a higher price for it. Actually, the bulk of the evidence suggests that this industry is pretty much a constant-returns-to-scale industry, so the long-run supply curve is essentially flat. The way we put it in the book, if you have a university of size 5,000 on one side of the river and there's a demand for 5,000 more places for students, you can build a university on a vacant piece of land on the other side of the river, that duplicates everything that university 1 did, and do that largely without changing the cost structure. You could provide the same education for 5,000 more students on the other side of the river simply by duplicating the plan.

If you look back over the last 50 years, that's largely what's happened. The numbers of students who are being put through American universities dwarfs the number 40 years ago. And this increased number of places that we have available for college students has not meant that we've slid along an upward sloping supply curve. We have been able to build totally new universities and university systems without affecting cost per student at any given university. So what

we're actually concerned with is the reasons why that flat supply curve itself is drifting upward over time. That's the force for rising costs, this flat supply curve drifting up over time. What we suggest is that the prime impact of government subsidies is not to raise tuition, but to increase the number of places available.

RF: Wouldn't you expect technology to bring productivity gains to higher education? Why hasn't this happened?

Feldman: Actually, it has. If you look around a university campus today, you will see many things that look quite different than the way they looked 30 years ago. Technology has had an impact on higher education that's basically the same as the impact it's had everywhere else. A simple example is secretaries and typists. If you look around a college campus, what you will see is that the number of secretaries and typists in comparison to when I was a student in the 1970s is way down. When I was a graduate student at Duke, we had two or three departmental secretaries, and a small army of typists. Those typists typed my tests, they typed my papers, they did all my typing for me. We more effectively do much of our own work that once was done by this army of typists.

It's something you observe everywhere in this economy. The number of people whose job categorization is keyboard worker or typist has just gone through the floor. It's in higher education, it's everywhere. That's the substitution of relatively low-cost technology for relatively high-cost labor.

But what we argue is that this is not the dominant way that technology affects higher education. The primary impact of technological change in higher education is less on reducing our costs and more on improving or changing what we do. To a certain extent, colleges and universities are first adopters. We tend to be first adopters of new technologies out there, and we don't do that because of its cost-reducing impact. We do it because it's what our faculty needs in order to do their research. It's what our students need in order to become fully conversant in the new techniques that are reshaping the work world that they're going to move into.

A lot of people tend to think that the impact of technology is only in the natural sciences, and this is quite wrong. It may be more important in a dollars and cents sense in physics and chemistry, but new techniques have changed the way the economics department teaches. Our students have to be quite conversant in Stata and SAS and other econometric packages. People in architecture have to be fluent in computer-assisted design; people in history departments often have to be familiar with computerized database analysis that would have been impossible 30 or 40 years ago. So the kinds of techniques that we adopt aren't necessarily adopted with an eye to lowering the cost of what we provide.

RF: Is it difficult to assess the role of technology in the cost structure because it has changed the product?

Feldman: Correct — we're not measuring the same thing. It's not as though our output is a pound of potatoes. It's almost impossible to measure the value of the output except retrospectively, many years in the future, looking back at whether or not we succeeded in preparing students for what they need to know.

Our traditional measures of productivity are way too crude to handle many things, like personal services. Not only that, we're a multiproduct firm: We produce research, we produce public service, we produce graduates at the undergrad and grad level.

RF: There's a popular perception, at least, that workers in the for-profit sector are working harder today than they were 20 or 30 years ago, and that this trend has passed academia by. Do you think that's true?

Feldman: There may be something to it if you go back 60 years. But over the last 20 or 30 years, no. I don't think that's a very accurate thing to say. There is no good data that support the often politicized perception that faculty members don't do any work — that faculty members teach six to nine hours a week, and twiddle their thumbs for the rest of the day.

If you want to look at evidence, you need to go to the Bureau of Labor Statistics, for instance, and look at the establishment survey, or other data sources, on the average workweek for the economy as a whole. If you actually go and look at data on the average workweek, over the last 30 years, it has fallen: from about 38 to 39 hours per week to 34 to 35 hours per week, among workers in general. So the idea that the higher education sector is inherently full of lazy, unmotivated people and the private sector is full of dedicated people working ever longer hours doesn't seem to be borne out at all in the actual national data.

The data we have suggest that as the nation has become more affluent over long stretches of time, 40 to 50 years, people have taken part of that affluence in the form of higher leisure, so shorter workweeks. Those are the facts.

RF: Does the institution of tenure reduce faculty productivity?

Feldman: Tenure is a very complicated subject. I think a lot of people think about tenure using the quaint old story about academic freedom. But I think most economists actually look at tenure as an economic institution. It's a way of solving a set of incentive problems that are out there. One of the problems is that you have faculty members who are being asked by universities to specialize in something that's fairly narrow. One thing that gives the faculty member the incentive to do what the university wants, which is risky specialized research ventures, is the security that if the world turns against them 10 years from now — they're looking at problem Y, and problem Y stops being important or gets solved — the faculty member isn't just dismissed while they're trying to retool to solve problem X. So in a sense,

what the institution of tenure does is that it helps faculty members to invest in risky ventures that are of value to the university.

Does tenure raise costs? I think it actually reduces costs. Tenure is compensation in a nonmonetary form as opposed to in a monetary form. Other things equal, if you give a person job security, part of that is in lieu of a higher salary.

RF: You write about the decline in what is called “state effort” — appropriations per \$1,000 in personal income — in support of state universities. You found that on average, state effort has gone down 40 percent from its peak in the 1970s. Yet state budgets generally have soared during that time. Why has higher education’s share of state spending been shrinking so much?

Feldman: That’s a complicated issue as well. And a lot of people have weighed in on it. Clearly the first place to look is at what states are actually spending their money on. Those categories are ones like corrections, Medicaid, roads, and K-12 education. These are things that are muscling higher education out of the budget.

Over the past 35 years, states have shown that they are far more willing to endure the political problems that come with allowing tuition to go up than they are willing to endure the political problems that come from raising taxes. Increasing taxes: anathema. Increasing tuition: bad, but not as anathema as raising taxes. And unlike things like the prisons, you can’t charge the prisoners for their rent. But you can charge the college students for their education. So states have found it more palatable to allow universities to cover more and more of their increasing costs by direct charges to families, rather than cough up additional state revenues in order to keep those charges down.

This is not a Virginia issue, this is nationwide. The pattern of declining state effort is nationwide.

RF: Has undergraduate education become a more national market than it was a generation ago?

Feldman: Much more so, yes. At the average university — this is true at public universities, it’s true at private universities — if you look at the percentage of the student body that comes from within the state, it’s gone down. The percentage of out-of-state students has gone up. Or if you look at it differently, if you look at the number of students who come from within a certain radius, not just within state, but just miles, schools now have to compete with schools

David Feldman

➤ Present Position

Professor of Economics,
College of William & Mary

➤ Previous Faculty Appointment

Colgate University, 1984-1989

➤ Education

A.B. (1978), Kenyon College; Ph.D.
(1982), Duke University

➤ Selected Publications

Co-author of *Why Does College Cost So Much?* with Robert Archibald, as well as numerous articles in such journals as the *Journal of Higher Education*, *Research in Higher Education*, *Review of International Economics*, *Economic Inquiry*, and *Southern Economic Journal*

that are farther away.

If you were to go back 40 or 50 years, for instance, and look at a particular geographic area, the number of schools that effectively had that market was fairly small. Each of those schools today has much less market power within that market. Two things tended to lock students into their more local network: One was transportation and the other was information. Transportation and information are now both very cheap in comparison to what they were 40 or 50 years ago. What that means is that people have the luxury of taking a wider view. And when they do that, it means that any given school, instead of having two or three or four other competitors, now has 20, 30, 40 other competitors.

RF: Students can look at universities farther away ...

Feldman: I’ve got a 17-year-old who’s doing that as we speak!

RF: ...and universities can look at students who are farther away. What has this meant?

Feldman: One of the things that it does is create better matching. Students can find a finer match for what they want than they could in years past, when both information and transportation were much more expensive.

But there are other aspects. One of the things that we’ve observed is that the nationalization of the market has led to increased prosperity of the elite. Instead of Harvard, Yale, and Princeton competing for the best of the Northeast, we have Harvard, Yale, and Princeton, oh, and Stanford, competing for the best of the nation. So what we have observed at our most elite universities is that their selectivity has gone up over time. There’s debate about what’s happened to selectivity at the rest, but there’s not a whole lot of debate about selectivity at the elite. The elite are now more selective than they have ever been. So there’s a concentration of talent that has occurred as the best students who used to go to largely regional universities now can aspire to Harvard, Yale, Princeton, and the better small liberal arts programs.

RF: Now that higher education is a national market, do you see it becoming a more global market?

Feldman: It has become global. And many of the same forces that I’ve just been talking about in the national market are also driving the internationalization. Somebody from Shanghai or Bogota can aspire to go to school at the University of Kansas, or Yale, for two reasons: The cost of

transportation has gone down, and the cost of information has gone down, so they, too, can look beyond the national university system of their country. At the same time, the American university system has for many years been the gold standard.

Likewise, the demand for education — it may be an investment, but it's an investment where there's a big cost. In the United States, it can be financed by borrowing. It's much less easy for somebody in the developing world to access capital markets and borrow for an education. As incomes have increased in various parts of the developing world, a class of people has developed who can actually finance that education in advance, in cash. So clearly, the development of the oil economy in many parts of the world, the development of an elite in many parts of the world, have led to families with enough income and assets that they can buy an American education by writing a check. This is a group of people that is adding to the pool of aspirants who want to get in. So we're already there.

The U.S. higher education system is still the most welcoming to outsiders. We speak English! How many foreigners in China are going to choose to go to a German-speaking university in Germany? There are some; I've met them, actually. But the numbers who have the German language skills, or the Italian language skills, or the French language skills, are very small in comparison to the numbers who have English language skills. So the demand for coming to the United States and Great Britain is quite high.

RF: Do you think there are other countries that offer a better model than ours for structuring the system of higher education here?

Feldman: I don't know that I want to make a complete declarative statement, yes or no. Different systems of higher education have different advantages and disadvantages. On balance, I think ours works better than most other systems do, for many reasons. Here's one that I really like to highlight: We have a system of higher education that is the best in the world at giving people second and third chances. I don't think that's a benefit to be underestimated. There are an awful lot of people in this world who don't grow up until they're 25, and in the United States it's very easy for them to go back to school. In Germany, if you are not college material when you're 11, then you don't get tracked into the "gymnasium." It's very, very difficult for you to move into the elite in German society.

Ours is a much more individual-based system. Somebody who was a hamburger flipper at McDonald's who says, "This is a dead end, I don't want to do this the rest of my life," simply takes the savings that they've squirreled away and goes to a two-year community college and gets the skills, and then decides whether or not to transfer those skills to a local university and get their four-year degree. We have a lot more flexibility in our system than in most other systems in the world, and I think that's of great value.

RF: Let's talk about international trade in general for a moment. As you know, international trade as a share of GDP declined far more sharply during the latest recession than in past recessions. What is going on there?

Feldman: I wish I could tell you! I don't know. This is not your garden-variety recession. This is not an inventory-driven process; this is driven by financial market meltdowns and financial market uncertainty. And I would venture to speculate that a recession driven by those two things probably affects trans-border contracts and trading more than it does internal ones — for many reasons, one of them having to do with risk. If you increase the risk of foreign investment, if you increase the risk of contracting with foreigners with products in their currency, for instance, and there is a real risk of significant ruptures in currency values, what you do is you create home-market bias. You make the risk of dealing internally within your own borders low compared to the risk of dealing externally with foreigners. So I would imagine that one of the things that you would observe is that an increasing home bias would tend to diminish the relative importance of trade and economic activity. That's just a guess.

RF: Who were your main influences in your development as an economist?

Feldman: On the personal side of things, when I was a young professor at Colgate, we hired a guy from the University of Pennsylvania named Robert Margo, one of the premier economic historians in the country. I was just learning the business, and he was the one who essentially helped me to understand how to think about research questions, how to pose an interesting question, how to think about managing a question, how to think about modeling and forming questions that a reasonable person could test.

In parallel to that, the other influence is my thesis adviser, Ed Tower. Tower's influence was to show me the value of probing deeply. Most thesis advisers are not hands-on. It's, "Hey, come back in three months time when you've got three-quarters of it to show me." That wouldn't have worked for me. And fortunately, that's not how Ed Tower worked. Ed Tower wanted to talk to you at breakfast every week. "So what are you thinking about?" And we would have a conversation. And he would ask questions, and push, basically until you would give up and say "uncle." That would teach you exactly what you didn't know, and where your modeling, where your intellectual apparatus was just not grappling with the problem. So those are two personal influences who helped me to understand what it means to be a professional economist. **RF**

Editor's Note: Our originally scheduled interview with Joel Slemrod of the University of Michigan will appear in the next issue.