THE EFFECTS OF A CHANGING FINANCIAL CONTEXT ON THE UNIVERSITY OF CALIFORNIA

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LARGE TRENDS IN CALIFORNIA

At the beginning of the 21st century, California's fiscal problems are consistent with the trends identified by Ray Sheppach (2003), the Executive Director of the National Governor's Association. Despite a relatively mild recession, California has experienced a fiscal crisis caused by two structural factors: an eroding tax basis and an explosion in health care costs.

Also consistent with national trends, the percentage of the State budget going to higher education, including the University of California, has been declining over the past four decades, and the current fiscal crisis has led to more budget cuts and tuition & fee increases over the past four years. As we will argue in the next two sections, the changing nature of the economy and the demographics of the state have increased the importance of higher education, but State appropriations to the University of California have declined.

More Important to California's Economy and Quality of Life

Economic Trends

Since statehood in 1850 California's economy has evolved from the natural resource-based economy of the 19th century to a manufacturing economy in the mid-20th century to our current knowledge-based economy. With a diversified industry base and particular strength in aerospace and entertainment, per capita personal income in California was 15 to 20% above the national average in the 1970s. Above

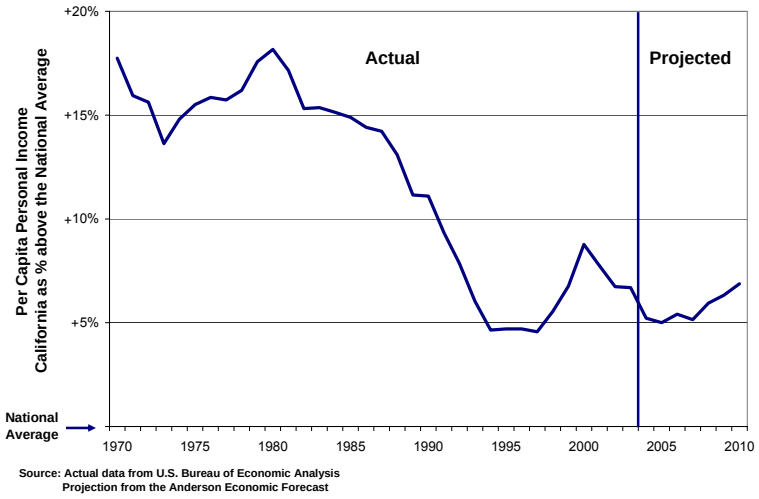

Figure 1. California per Capita Personal Income as a Percent above the National Average

average income meant higher standards of living and a tax base that was able to support education, transportation, and a "safety net" of social services.

As shown in Figure 1, however, there are now clear signs that California has lost much of its comparative advantage. With the downturn in the aerospace industry, Californians suffered more than those in most states during the long and deep recession of the early 1990s. While there was some recovery during the Internet boom period of the late 1990s, California was also hit particularly hard when the Internet Bubble burst in the spring of 2000. Policy makers in California realize the need to stimulate job creation to reduce unemployment rates, but restoring California's comparative advantage means not just more jobs, but more well-paying jobs.

With the shift to a knowledge-based economy, more of a product's value is added *before* and *after* manufacturing by professionals and managers who typically have advanced levels of education and skills. As a result, employers are willing to pay an "education premium" for these workers. As the national data in Figure 2 show, incomes are higher and unemployment rates are lower on average for those with more education. Even though the small sample size does not permit the Bureau of Labor Statistics to produce these data by state, it is reasonable to assume that these relationships hold in California, as well. Therefore, the only way to raise average income in California is to move more of our workforce to the more advanced levels of education on the right side of Figure 2.

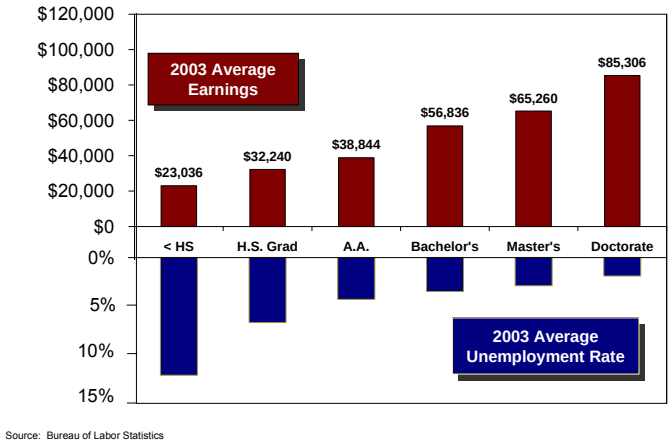

Figure 2. U.S. Average Earnings and Unemployment Rates by Level of Education

The University of California has always been important to the economy and the quality of life of the state's citizens, but it is even more important today with the shift to more of a knowledge-based economy. As a result, there is increasing interest from business and government leaders in technology transfer and the production of what Peter Drucker (1959) called "knowledge workers." These professionals and managers are not only the life-blood of knowledge-based industries, but also the ones who add the most value to products and services in all industries.

The Bureau of Labor Statistics aggregates hundreds of occupations into eleven major categories. As Figure 3 shows, the fastest growing occupational categories in California are professional and managerial jobs. In the early 1980s one-fourth of all jobs in the state were in these two categories. Today they represent one-third of California's jobs. Most of these jobs require at least a baccalaureate degree, and many require a Master's or doctorate. But, California's four-year colleges and universities have not been meeting the needs. A study conducted by the Public Policy Institute of California (Betts, 2000) estimates that only half of the college graduates hired in California, filling new positions and replacing those who leave, were educated in our state.

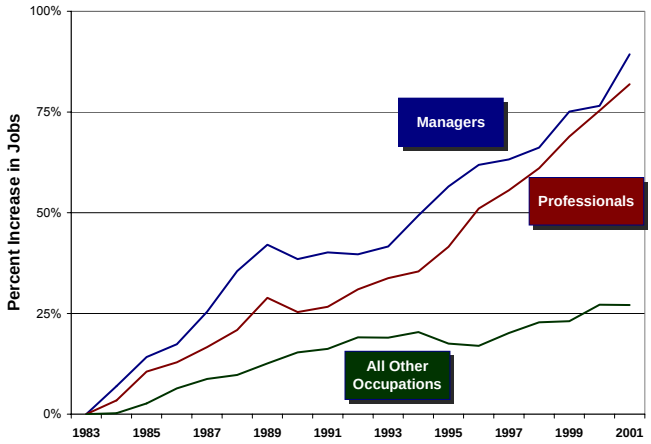

Figure 3. Percent Increase in California Jobs by Occupational Category

Demographic Trends

California is a growing state, and more of its citizens will want and need a university education for those professional and managerial jobs. The state's population grew from 24 million in 1980 to 37 million in 2005. State demographers estimate continued growth to 44 million in 2020 and 52 million by 2040. These are impressive growth figures, but the shift in the ethnic composition of the population is even more dramatic. Over that 60-year period Hispanics will increase from 19% of the total population to 50%, Asians will increase from 5% to 13%, while non-Hispanic Caucasians will decline from 67% to 26%. The percentage of

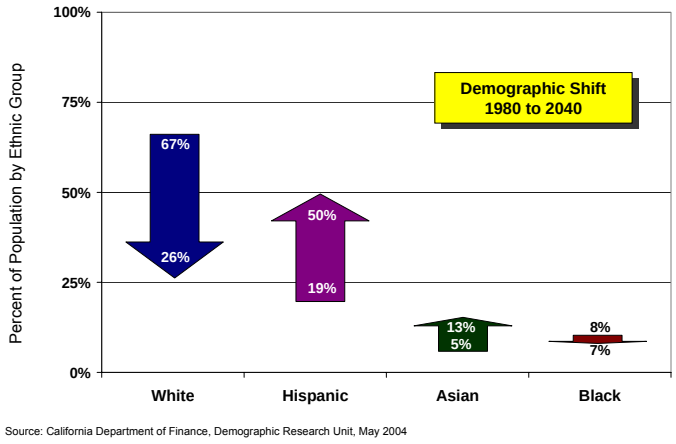

Figure 4. Change in the Ethnic Composition of California's Population between 1980 and 2040

African-Americans will remain the same (8% and 7% respectively, see Figure 4).

Demographers have forecast sharp growth in the number of high school graduates during the current decade. Called "Tidal Wave II," this bulge moving through the public schools reflects not only the echo of the baby boom but also high birthrates and immigration levels in California. Figure 5 shows two forecasts for the number of high school graduates in California. The 1998 series was available when the University's long-range enrollment plan was developed. The most recent projection reflects even greater growth with a plateau, not a dip, after 2010.

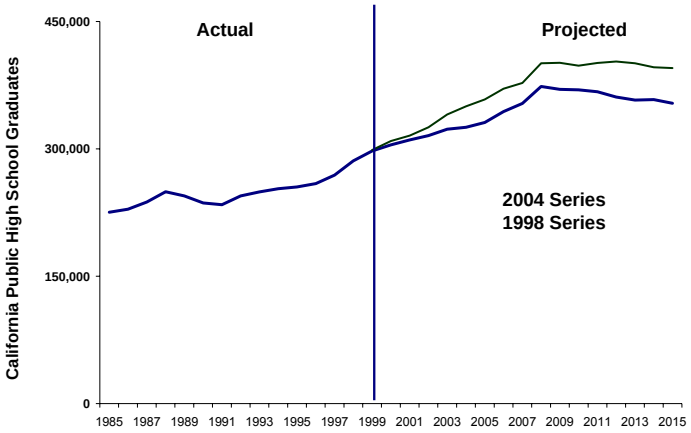

Figure 5. Two Forecasts of California High School Graduates

Actual enrollments have grown even faster than those envisioned in the University's long-range enrollment plan because the demographers underestimated the actual growth in high school graduates and because a larger percentage of those who meet the University's eligibility requirements are applying for admission to the UC campuses. As a result, the University is hiring faculty and constructing new facilities as fast as possible. However, the UC Board of Regents has expressed concern about the ability to maintain quality during this period of unprecedented growth, and that was *before* the economic recession and the onset of California's current fiscal crisis. Therefore, the Regents have been monitoring a series of qualitative benchmarks and early warning indicators during this period of rapid growth.

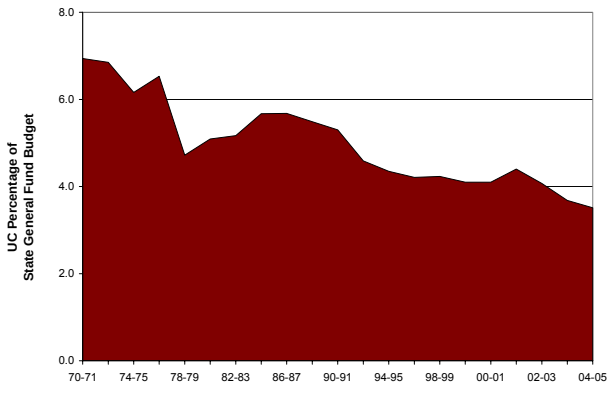

Figure 6. University of California's Declining Share of the State General Fund Budget

Less Taxpayer Support for Higher Education

When looking at levels of taxpayer support for higher education it is important to separate the short-term effects of the business cycle from long-term trends. As shown in Figure 6, higher education's lower priority is not simply the effect of California's current fiscal crisis. The

decline in the University of California's share of State General Fund expenditures from 7% to 3.5% has occurred over the past 35 years. During this period taxes have been cut and other spending priorities, such as prisons, health care, and social service programs, have consumed a larger share of State spending. For example, the sharpest drop occurred in 1978 — the year voters approved Proposition 13, which lowered property taxes and required the State to backfill the lost school revenue with State General Funds.

The economic recessions at the beginning of the 1980s, '90s and the current decade resulted in declining State revenue and less support for higher education. In fact, testimony before the Assembly Higher Education Committee last fall indicated that higher education typically is cut more than average during economic downturns, and receives above average increases during better periods but does not catch up to past levels. Politicians justify this pattern because colleges and universities, unlike many other State programs, have an alternate revenue source (i.e., tuition & fees).

During each of the last three economic downturns in the early 1980s, '90s and the current decade, the State appropriation to the University of California fell behind (see Figure 7). The blue line in Figure 7 is the Higher Education Price Index, which reflects increasing prices for college and university spending, analogous to the CPI for consumer spending. The red line in the graph is the amount of core financial support (State appropriation, tuition & fee revenues, and other UC General Funds) per student.

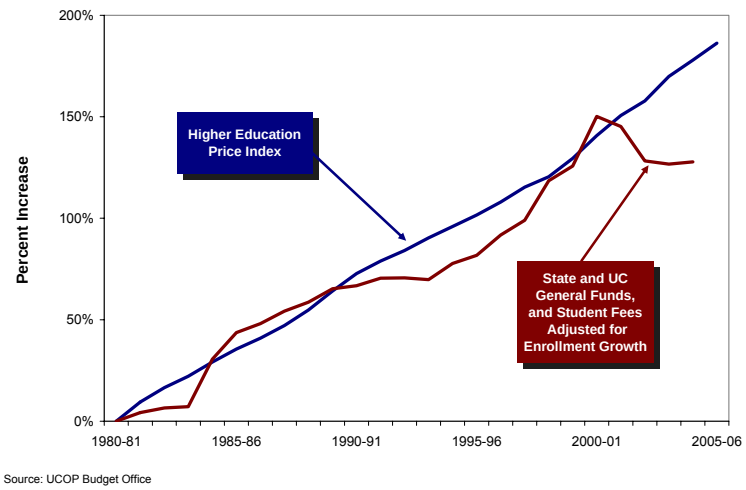

Figure 7. University of California Funding Lags during Recessions and Catches Up When the Economy Rebounds

In the early 1980s after Proposition 13 had passed, State funding did not keep pace with the high rates of inflation at that time and salaries fell behind the market. In the mid-1980s Governor Deukmejian made a conscious effort to provide catch-up funding for public higher education, but there were more budget cuts during the long and deep recession of the early 1990s. Once again tuition & fees were raised to offset a portion of the cut (approximately one-fourth). During the economic boom period of the late 1990s Governor Davis provided catch-up

funding and blocked student fee increases, but there have been severe budget cuts and sharp fee increases again over the past four years.

Californians have been proud of the state's "no tuition" policy, even though what the University of California calls student fees are now as high as tuition at other leading public universities. The boom and bust nature of student fee increases in California, shown in Figure 8, tracks the business cycle. During periods of economic growth governors and legislators have bought down fee increases. In contrast, student fees have been increased sharply to offset partially the budget cuts during economic downturns. Over the long term, however, student fee increases are approximately where they would have been if they had been adjusted annually for the growth in California's per capita personal income.

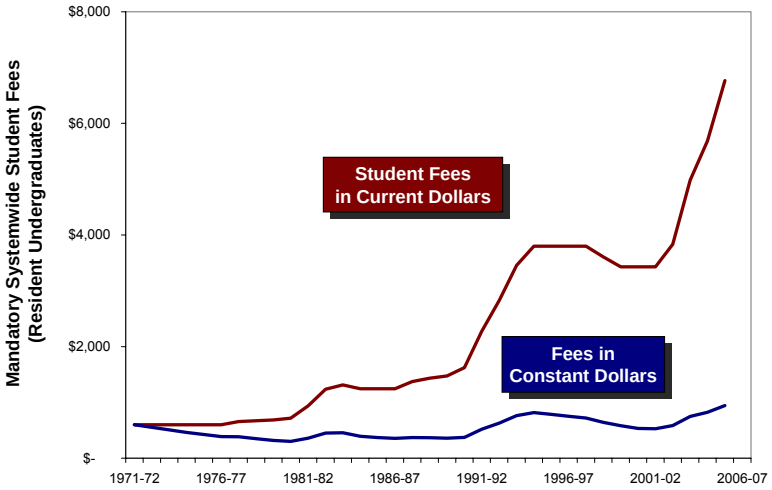

Figure 8. U.C. Undergraduate Fees in Current and Constant Dollars

SHORT-TERM EFFECTS OF CALIFORNIA'S FISCAL CRISIS

What Caused the Current Fiscal Crisis?

California's recession early in the current decade was relatively mild and short lived. Why then, was the State thrown into a fiscal crisis? Even though the state was hard hit by the energy crisis, it did not cause the fiscal crisis because the State sold bonds to create the cash to purchase long-term energy contracts at lower rates. Because ratepayers will be paying back these bonds for many, many years this action by the governor and the legislature, in effect, took the energy crisis off the State General Fund books. Rather than the energy crisis, California's fiscal crisis was caused by the Internet Bubble.

During the late 1990s high tech companies offered stock options to attract scientists, engineers, programmers, managers and executives. While the Internet Bubble was rising, many employees made more on their stock options than their salaries, and investors experienced extraordinary gains on their investments in these companies. Because capital gains and stock options are

taxed as ordinary income in California the State General Fund experienced extraordinary growth.

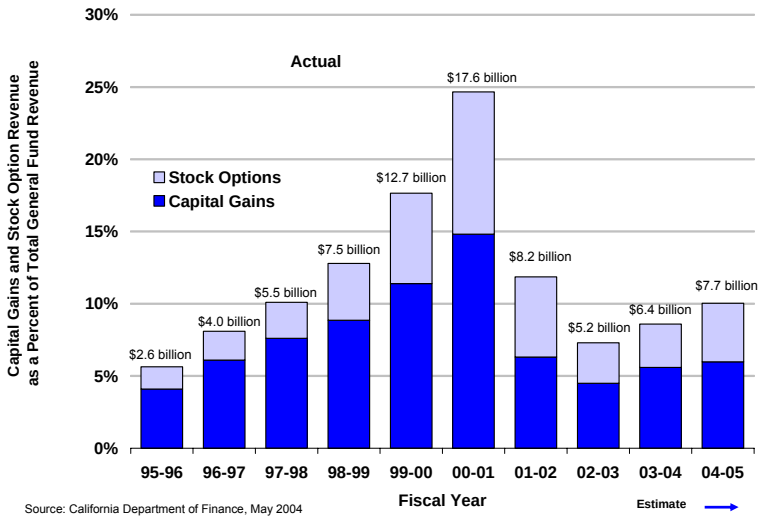

Figure 9. California's Loss of Capital Gains and Stock Options Revenue

As Figure 9 shows, Capital Gains and Stock Options Revenue was only 6% of the State General Fund in 1995 but had grown to 25% at the peak in 2000. Unfortunately, too much of this temporary revenue increase was spent for continuing programs and services. When the Internet Bubble burst, Capital Gains and Stock Options Revenue declined precipitously. Between 2000 and 2002 the State General Fund lost $12.4 billion in revenue from this source. This sudden drop in State General Fund Revenue couldn't have happened at a worse time for higher education, which was trying to expand at unprecedented rates to accommodate the increase in high school graduates, commonly called "Tidal Wave II."

How Did It Affect the University of California's Budget?

Even before California's current fiscal crisis, many of the UC Regents expressed concern about the University's ability to maintain quality during this period of rapid growth. That concern grew to alarm as each Governor's Budget contained more

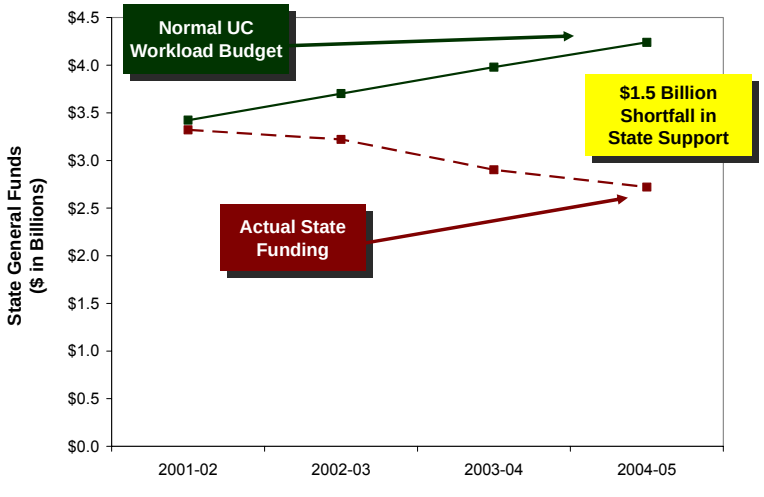

Figure 10. Actual State Funding for U.C. in Comparison to a Normal Workload Budget under an Agreement with the Governor

cuts and as the governor imposed mid-year cuts to help the State adjust to lower revenue estimates. Over a four-year period the State appropriation to the University of California *fell* by 15% while enrollment *grew* by 19%. Instead of rising to $4.2 billion to pay for enrollment growth and adjust for inflation, the UC State appropriation fell to $2.7 billion (cf., Figure 10). In spite of the sharp student fee increases shown in Figure 8, less than one-third of the $1.5 billion shortfall shown in Figure 10 was offset by tuition & fee increases.

Figure 11 helps to make sense of these large numbers by comparing what it costs to educate a student today with the cost in 1985 ─ before the long, deep recession in the early 1990s and the current fiscal crisis. All the numbers in Figure 11 are in today's dollars.

In 1985-86 it cost approximately $9,000 to educate a UC student. After adjusting for inflation that number would be approximately twice as large in 2004-05. In the mid-1980s most of the money came from the State appropriation, which is the blue portion at the bottom of each bar. Over the last 20 years the State dollars per student have declined from $15,100 to $9,120. Student fees have increased substantially to offset some but not all of the loss of State dollars. As a result, we are spending $2,650 less now than we were in 1985-86 to educate a student. It is *not* that the University's costs are spiraling out of control. Students are paying more today solely because the State subsidy has declined.

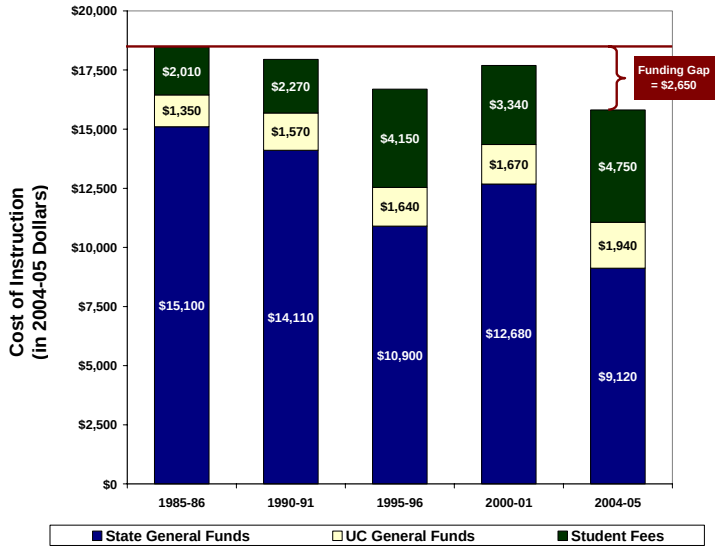

Figure 11. The $2,650 Funding Gap in Resources Available to Educate a University of California Student

How Did UC Adjust to the Budget Cuts?

The UC Board of Regents and the President tried to minimize the effect of the budget cuts on the educational program by cutting administration, State-supported research, and public service programs first. They also raised out-of-state tuition and student fees to offset most of the direct impact on the educational program. As California's fiscal crisis entered its fourth year, however, this strategy collapsed and all parts of the budget were eventually affected. Consequently, faculty and staff salaries fell behind the market,

academic support budgets suffered, facilities budgets were not adjusted for higher energy costs, the deferred maintenance backlog grew, and graduate student support levels did not match those of peer institutions.

Over the past four years the University has looked for greater efficiencies to make more effective use of its limited State funding. For example, Academic Support budget cuts have affected its libraries. But, the University took advantage of being a multi-campus system and utilized technology to improve access to its library collections. The California Digital Library allows students and faculty from every campus to request articles from more than 7,000 journals available to UC scholars online. These articles are delivered electronically to the desktop, rather than by trucks driving between campuses.

As shown in Figure 12, interlibrary book loans have increased from 44,000 to 106,000. However, the electronic delivery of research journal articles has skyrocketed from 1.2 million to 6.4 million. The cost-effective California Digital Library has been a great success, but there is an important lesson to be learned from this project: the University is now reaping the benefits of investments in technology made in better times. The campuses have identified some other cost-saving measures that cannot be implemented because the University does not have the resources to make the necessary up-front investments.

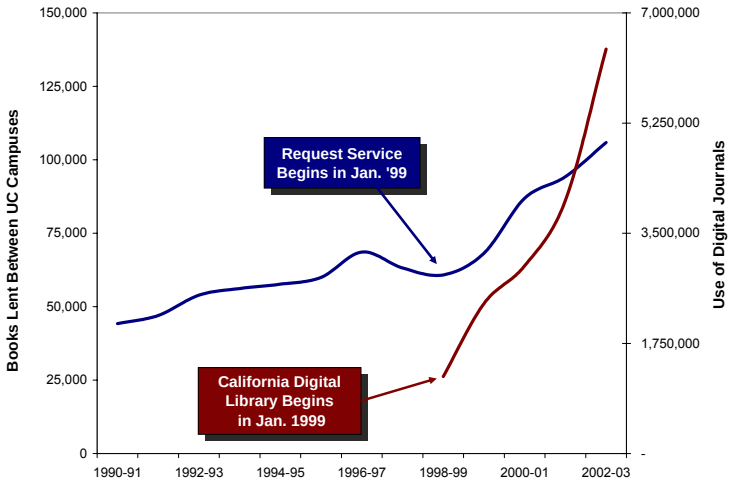

Figure 12. Library Resource Sharing among U.C. Campuses

The University has also taken steps to streamline and reduce costs in its business operations:

- **Strategic Procurement Initiative**: This initiative leverages the enormous buying power of a multi-campus system to lower costs from vendors. In addition to better prices, this initiative will allow the University to buy goods and services more efficiently and to monitor prices more closely.

- **Information Technology Procurement**: The University has greatly expanded its coordination of computer hardware and software procurement, which will save our departments significant dollars each year.

- **Debt Restructuring**: The University took advantage of historically low interest rates to refinance over $1.1 billion in outstanding bonds for capital projects. This initiative will provide substantial savings in debt service over the next 32 years.

In short, the University of California has taken a number of steps to streamline its administrative processes and leverage the power of a multi-campus system. Nevertheless, there is simply no way to compensate for the cumulative effects of cuts shown in Figures 9 and 10, even with the sharp student fee increases shown in Figure 8.

HOW DID THE RECENT BUDGET CUTS AND FEE INCREASES AFFECT UC'S EDUCATIONAL PROGRAM?

As the national data in Figure 13 show, state appropriations today comprise a smaller percentage of total revenues at public colleges and universities (from 40% in 1970 down to 32% in 2000). This national trend is even more dramatic for research universities, like the University of California, which have federal funding for large research programs, and other revenues in their medical centers and auxiliary enterprises. The State General Fund appropriation as a percentage of total UC revenue has declined from 41% in 1970 to 27% in 2000 and 19% today. That percentage is even lower at some other leading public universities (approximately 8% at the Universities of Michigan and Virginia).

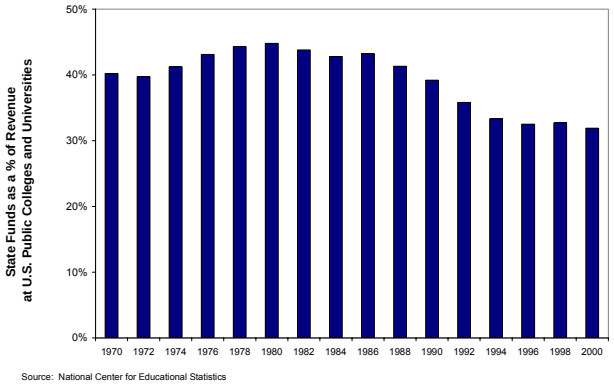

Figure 13. State Appropriations as a Percent of Total Revenue at U.S. Public Colleges and Universities

Correspondingly, a declining portion of state budgets are going to higher education, and tuition & fee increases are not fully compensating for the shortfall in revenue. Private universities have larger endowments and higher tuition. As a result, the gap in available resources between public and private universities is growing. Some (cf., Ehrenberg, 2000) have concluded that:

- Faculty recruitment & retention have been affected by low faculty salaries at public universities, which are well behind those of the privates.
- Public universities have substituted non tenure-track faculty for ladder rank positions to save money, which also has consequences for the quality of the educational experience.
- Budget cuts at public universities have led to higher student/faculty ratios and larger class sizes, which affect the quality of undergraduate education.
- The growing gap in support for graduate students and academic support services, such as libraries, reduce the quality of the educational experience at public universities and affect their ability to recruit the best graduate students, and
- Less state subsidy and higher prices could be prohibitive for low-income students and will squeeze middle class families.

As demonstrated in the first two sections of this paper, the long-term national trend toward a declining percentage of the state budget going to higher education is also true of California, as is the short-term budget cutting at the beginning of the current decade. Indeed, the devastating impact of the collapse of the Internet Bubble has arguably been harder on California's technology-heavy economy than other states. Had the state's loss of revenue resulted in proportionate cuts to higher education, the impact on California's colleges and universities would have been catastrophic ─ changing in fundamental ways the very nature of the institutions.

The catastrophe was avoided, however, when the voters agreed to borrow billions and shift much of the financial impact to future generations. While not catastrophic, the University of California has nevertheless experienced very large budget cuts. As UC President Dynes (2005) said, the shortfall of $1.5 billion in State funding

> *"has affected the quality of a UC education because the University has less money to spend on each student. The $2,650 funding gap means larger classes, less time with faculty outside the classroom, fewer library resources, and more obsolete equipment. It also means that students are paying a larger share of the cost of their education and getting less for it."*

In the remainder of this section we will examine whether the effects of these fiscal forces on the University of California are consistent with the national trends for public universities.

Has Faculty Recruitment and Retention Been Affected by Lagging Salaries?

UC Must Hire 7,000 Faculty Between 1998 and 2010

Faculty demographics reflect a combination of retirements and separations, as well as new hires. The period of rapid expansion of student enrollment to accommodate Tidal Wave II has also been a period of increased retirement of UC faculty.

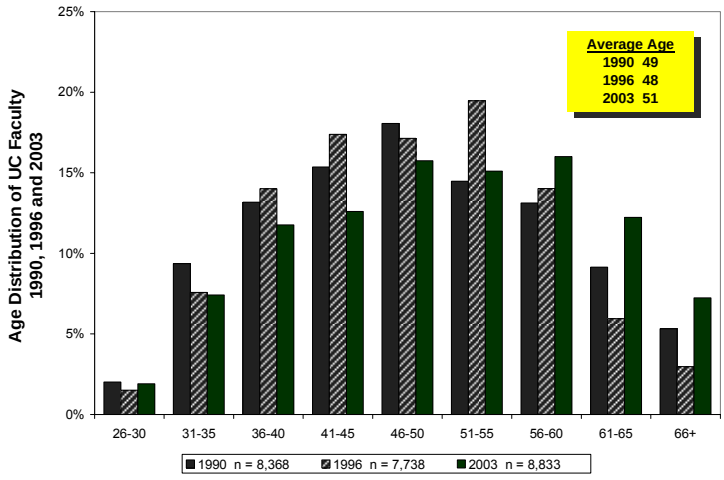

Figure 14. Age Distribution of University of California Faculty at Three Points in Time

Figure 14 shows the age profile of UC faculty. The 1990 profile was before the University offered an early retirement incentive program to eligible faculty and staff (Switkes, 2001). That program, offered between 1991 and 1993 resulted in the retirement of 2000 tenured faculty and caused the dip in faculty numbers and the drop in the average age reflected in the 1996 data in Figure 14. The solid green bars reflect more recent data on the age distribution of the faculty. The larger percentage of faculty over age 55 portends an increasing wave of retirements and the need for even more faculty recruiting.

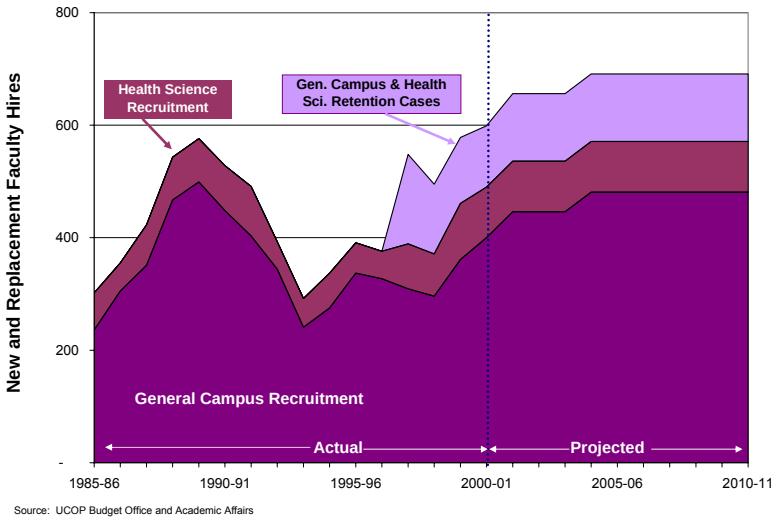

Figure 15. University of California Faculty Recruitment and Retention Plan

Since 2000, UC campuses have been recruiting faculty for both growth and replacements as fast as they can. The long-range enrollment plan assumed growth of 60,000 students over a twelve-year period (1998 to 2010) and called for

hiring 7,000 new faculty (an average of 585 per year). Figure 15 illustrates the model developed to estimate faculty hiring on the General Campuses and the Health Sciences. Not shown are the unprecedented 586 hires in 2003-04, a University of California record.

UC Faculty Salaries Are Below Market

Faculty salaries have fallen below market during California's fiscal crisis. According to the methodology developed by the California Postsecondary Education Commission, UC faculty salaries will be almost 14% behind those of its comparison institutions in 2005-06. The growing lag in faculty and staff salaries (See Figure 16) is one of the areas of greatest concern as a result of years of underfunding of the University's budget. No funds were provided for salary increases for 2003-04 or 2004-05, although those faculty who were eligible for merit increases[1] did receive them because the University made additional internal budget cuts.

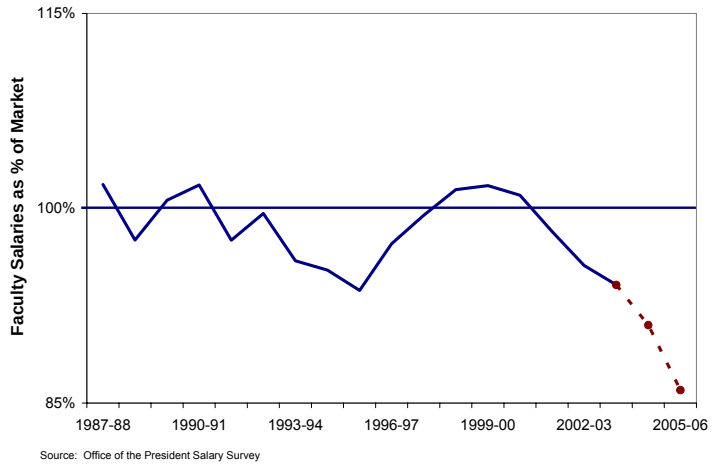

Figure 16. Average Faculty Salaries for the University of California in Relation to Those of Peer Universities.

There Has Not Yet Been a Significant Impact on Recruitment and Retention

Had the drop in UC faculty salaries relative to its peer institutions had an effect on retention, then one would have expected to see an increase in separations. However, with the exception of the increasing number of retirements noted above, the rates of separation for both Assistant Professors and tenured faculty continue to be very modest (varying between 1.0% and 1.3% over the past 4 years). But, the University's efforts to block faculty raids from competing universities have not been without cost. Matching outside offers of faculty being recruited by other institutions is very costly and causes unwelcome inequities in salaries among colleagues.

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[1] University of California faculty have a regular pre- and post-tenure review process that provides a detailed merit review every 2 to 4 years depending on rank. This review continues throughout all faculty members' careers and consists of an examination of their accomplishments in teaching, research and service by their department colleagues and the dean. On most UC campuses the file is then evaluated by a campus-wide faculty committee with final approval by the Provost. Advancement is not automatic (cf., Switkes, 1999).

The faculty recruitment and start up costs for new faculty are very high and the University's recruiting difficulties are compounded by the high cost of housing in California. However, UC campuses have continued to hire large numbers of new faculty, including a record number in 2003-04. The University of California continues to recruit excellent faculty for a number of reasons, among them is the fact that the University offers an excellent benefits and superior retirement package. This could change, however, because Governor Schwarzenegger has proposed major changes in public retirement programs, including the one offered by the University of California. If approved by the legislature or by the voters through the initiative process, these changes would seriously damage faculty recruitment and retention at the University of California.

Has the University of California Relied upon Part-Time Faculty to Cut Costs?

To test this hypothesis, payroll records for General Campus faculty (excluding the Health Sciences) were analyzed for several years. As shown in the table below, the percent of regular faculty has remained steady for more than 20 years. The University of California has *not* reacted to the budget cuts by hiring a larger percentage of lecturers, instructors and other temporary faculty.

Table 1
The Mix of General Campus Faculty
in the University of California

	1981	1985	1990	1995	2000	2004
Regular Professorial Faculty	79%	79%	81%	80%	78%	80%
Lecturers, Instructors and Other Temporary Faculty	21%	21%	19%	20%	22%	20%

Have the Budget Cuts and Fee Increases Affected the Educational Experience?

In the mid-1960s, the University's budgeted student/faculty ratio was 14.5 to 1. In the early 1970s it increased to 17.6 to 1 where it stayed for nearly 20 years. During the budget cuts of the early 1990s, it rose to 18.7 to 1. The University's student/faculty ratio is higher than the average of the four public comparison universities and much higher than those of the four private comparison schools.

During California's recent fiscal crisis governors twice proposed increases in the student/faculty ratio and made associated cuts in the University's budget totaling $70 million. However, the UC Board of Regents chose not to implement those increases in the student/faculty ratio. Instead, the President was directed to cut

campus budgets on a temporary basis and develop a multi-year plan to restore the $70 million.

In addition, campuses have made it a high priority to provide students with the classes they need to graduate. Campuses made a commitment to add 1,000 lower division classes and instituted a program of freshman seminars to address concerns about large, impersonal classes. In addition, increased use of summer session and increased participation of regular faculty in summer session teaching have made it easier for undergraduates to complete their programs of study on time.

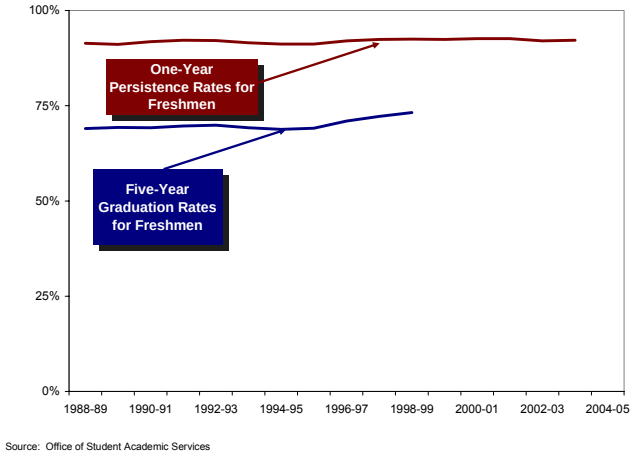

Figure 17. Persistence and Graduation Rates of Students Who Enter the University of California as Freshmen

The success of these and other efforts can be seen in persistence and graduation rates (Figure 17). Nearly 92% of the entering freshman class returns to enroll in the second year. The 5-year graduation rate of approximately 73% of entering freshman has increased slightly over the past 10 years. It is important to note, however, that students are taking fewer quarters to complete their degrees and the 4-year graduation rate has increased more than the 5-year rate. In a perverse way, increasing fees seem to have encouraged students to complete their studies more rapidly.

Have Budget Cuts Affected the Ability to Recruit the Best Graduate Students?

Prior to the onset of California's fiscal crisis there was concern about the University's ability to recruit the best graduate students. Therefore, the President appointed a Commission on the Growth and Support of Graduate Students to study the problem and develop recommendations. The Commission (2001) found the most serious problem to be in doctoral fellowships. Those applicants who were offered a fellowship by a UC campus but chose to attend another university typically received an offer from the competing institution that was a net $2,000 higher than the UC offer.

In response the University of California took a number of steps to close the gap. Over the next four years, however, the fees for graduate academic students almost doubled ($3,609 in 2001-02 to $6,897 in 2005-06) and there was widespread concern that UC offers were falling further behind. However, a

follow-up study found that the fellowship offers accepted by those choosing to attend another university were still approximately $2,000 higher than the offer from a UC campus, apparently because those competing institutions were also facing budget problems.

Have Tuition Increases Affected the Enrollment or Academic Performance of Undergraduates from Low-Income Families?

In accordance with the Master Plan for Higher Education, the University of California sets its eligibility requirements to serve the top 1/8th of California high school graduates. Enrolling these students is predicated on students and their families being able to afford a University of California education. Affordability translates into a combination of the cost of attendance and available financial aid.

The University of California's financial aid programs are designed to make UC financially accessible to all students through a combination of part-time work during the academic year and work during the summer, borrowing, parental contribution in accordance with their ability to pay, and then federal, state and UC grants and scholarships. For example, the University expects no family contribution from students with family incomes of $20,000 or less. Families with parental income of $60,000 are expected to contribute less than $6,000 per year. For these families, the rest of the on-campus cost of attendance of $22,100 comes from students' work and borrowing plus federal, state and/or University grants.

Students from very low-income families are eligible for Pell grants. In each of the past few years, UC campuses have received national acclaim for enrolling a high percent of Pell recipients who are generally low-income students. Despite the sharp increases in undergraduate fees, almost one in three UC students are Pell recipients. As shown in Figure 18, UC figures are much higher than those of other leading research universities.

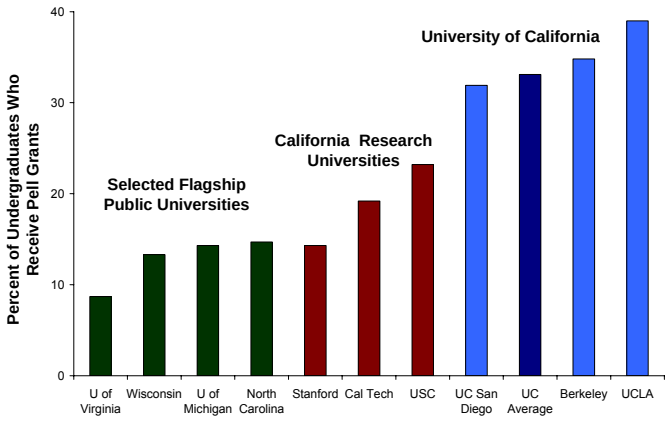

Figure 18. Percentage of Undergraduates Who Are Pell Grant Recipients at Selected Leading Universities

Enrolling low-income students does not necessarily mean that they will be able to stay in school and graduate. A recent presentation to the UC Board of Regents

by Provost MRC Greenwood (March 2005) addressed this concern. She demonstrated that first year persistence rates of 84% for low-income students (for families with incomes of less than $40,000) were the same as those for middle-income and high-income students. Low-income students took a little longer to graduate, but graduation rates after six years (74%) were similar to those for students from middle-income families.

The University of California's enviable record in enrolling and graduating low-income students despite large student fee increases is attributable, in large part, to the availability of financial aid and what would be considered on the national scene as a "moderate tuition / high aid" policy. The State legislature has increased the amount of financial aid available through the Student Aid Commission and the University of California has increased its commitment of internal funds. Current Regental policy returns 25% of the increase in undergraduate student fees in the form of financial aid and these additional dollars have been targeted so that low-income undergraduate students have not been affected by the fee increases.

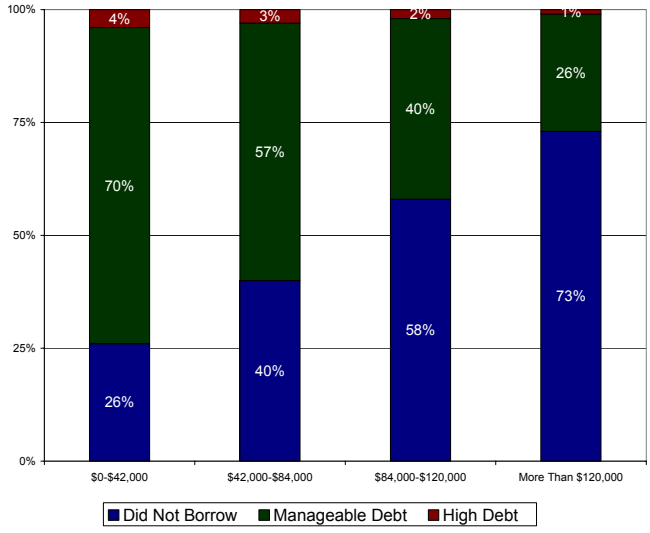

Figure 19. Debt Carried at Graduation by University of California Undergraduates by Income Level

As a result, low-income students are able to enroll and complete their degrees without accumulating large amounts of debt. Figure 19 shows the percentage of students who graduated in 2003-04 with no debt, manageable debt, and high debt at four income levels. In this chart, high debt is defined as debt requiring more than 9% of the average student's starting salary. As can be seen in Figure 19, many graduating seniors chose not borrow at all, even 26% of the low-income students.

Very few UC students graduated with high debt. Even among low-income students, only 4% graduated with high debt. In addition, repayment plans are available to help them manage their debt, including extended payment plans, graduated plans, and income-contingent plans. In short, access has been maintained for low-income students under the University of California's "moderate tuition / high aid" policy.

CONCLUSION

In the section of this paper on "Less Taxpayer Support for Higher Education" we said that it was important to separate the short-term budgetary effects of a bursting Internet Bubble from long-term trends in the funding of public higher education. The state of California has followed the long-term trend of governors and legislators giving a lower priority to higher education. For example, the percentage of the State General Fund Budget appropriated to the University of California declined from 7% in 1970 to 3.5% in 2004-05. Correspondingly, the State General Fund appropriation as a percentage of total revenue declined from 41% to 19% over that same time period.

The short-term pattern in most states of budget cuts to higher education during the recent economic downturn has also occurred in this state. California's loss of capital gains and stock options revenue was one of the worst in the nation and the resulting fiscal crisis led to reductions in State appropriations to the University of 15% over the past four years, while enrollments were growing by 19%.

The University of California took several actions to minimize the impact of these reductions in State funding. Despite sharp increases, student tuition & fee increases offset less than one-third of the total cut. Those additional tuition & fee revenues were, however, targeted and offset much of the impact on instructional programs, but there were large cuts in other areas. Steps were taken to streamline administrative processes to make better use of limited State funds. Also, the University utilized technology and leveraged the power of a multi-campus system to soften the effects on academic support budgets. Nevertheless, the quality of the educational program has been affected, and salaries for both faculty and staff are well below market.

To determine the effectiveness of the University of California's strategies we tested several hypotheses about the impact of budget cuts on public universities. We found that UC faculty salaries had fallen behind those of the privates but the gap had not yet affected recruitment and retention. Unlike the pattern at many other public institutions, the University had not substituted more non tenure-track faculty for ladder rank positions to save money. Even though governors in California had cut budgets and proposed to increase the student/faculty ratio twice, the University chose to protect the quality of the educational program by cutting budgets in other areas temporarily and establishing a long-term plan to restore the former budgeted student/faculty ratio.

In terms of students, we found that the tuition & fee increases at the University of California had had a larger impact on graduate than undergraduate students. Graduate student support, particularly fellowships for doctoral students, is behind market and the Academic Senate has made this a high priority. The impact of the tuition & fee increases on low-income undergraduate students has, however, been minimized by substantial increases in financial aid.

In short, the University of California seems to have avoided in the short run some of the more serious effects on the academic program of the loss of State funds. A new Compact with Governor Schwarzenegger ends four years of budget cutting and provides a floor for future budget increases. But, what about the long-term future? The Compact is not a contract or guarantee of future funding but rather a good faith effort by the governor to fund it and a good faith effort on the part of the University to meet the accountability elements. Agreements, like this one, have been broken in the past during economic downturns, and it could happen again.

Of course, this state faces a long list of other competing needs. Like the governors in other states, Governor Schwarzenegger is struggling with budget priorities, such as below average school funding and rising health care costs. And, future governors will be faced with a huge bill for health care and other social services when the baby-boomers retire.

On the other hand, California's economy, which is currently the 6th largest in the world, is well positioned for competitiveness in the 21st century with R&D-intensive industry clusters, like information technology and software in the Silicon Valley, aerospace in Los Angeles, and pharmaceuticals in San Diego. As the Chairman of the Federal Reserve Board, Alan Greenspan, said a few years ago, California's economy will go through its ups and downs but over the long term this state will do relatively well because it has more research universities than any other.

The ten campuses of the University of California are critical pieces of the fabric of higher education, which has been so important to the state's economy and quality of life. A decline in the quality of their educational programs and research enterprises would not be in the public interest and must not be allowed to happen.

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