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Financing College in Hard Times: Work and Student Aid

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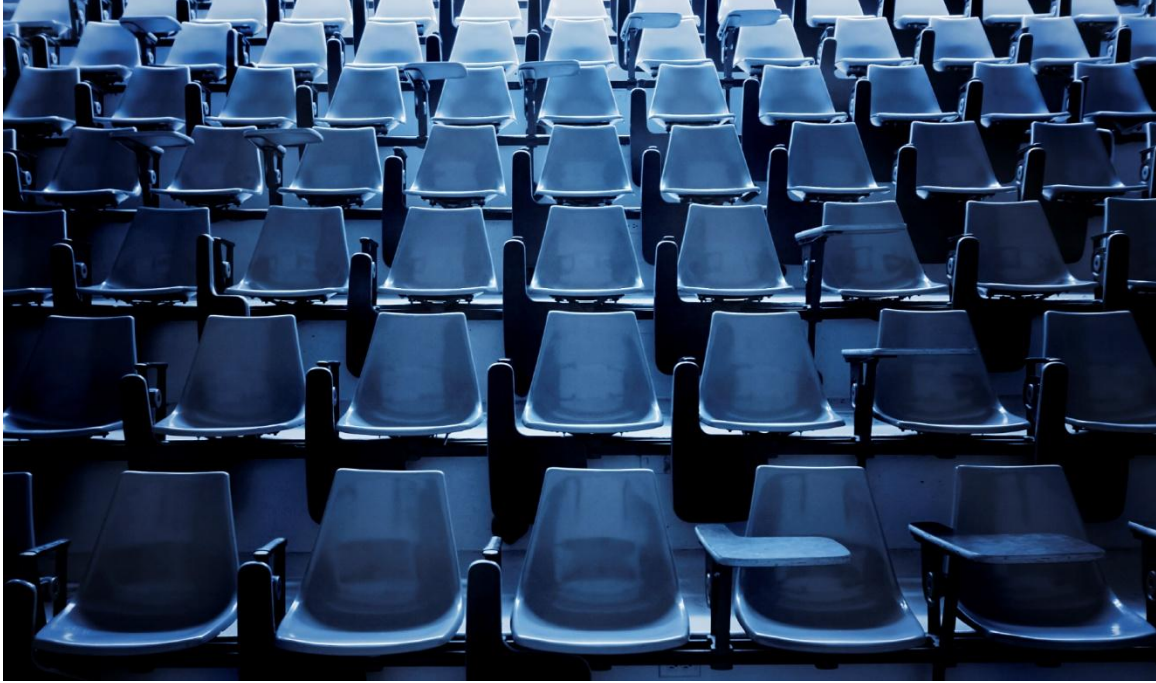
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Financing College in Hard Times:
Work and Student Aid



THE CSU CRISIS AND CALIFORNIA'S FUTURE

The Third in a Series of Reports
Civil Rights Project/Proyecto Derechos Civiles at UCLA

May 2011

The CSU Crisis and California's Future: A Note on the Series

This report is the third in a series of reports designed to analyze the impact of the fiscal cutbacks on opportunity for higher education in the California State University system, the huge network of 23 universities that provide the greatest amount of BA level of education in the state. The CSU has a much larger undergraduate student body than the University of California system and educates a much larger group of Latino and African American students. Many CSU students are first generation college students struggling to get an education in difficult times.

The studies were commissioned under the direction of the Civil Rights Project/Proyecto Derechos Civiles (CRP) at UCLA. Though the CRP is a research center at UCLA and the UC system has its own severe challenges, we decided to organize and publish a series of studies of the CSU because we have had a long-term focus on access to college for all. This has been one of our central concerns since the CRP was founded 15 years ago at Harvard (it moved to UCLA in 2007); the CRP has produced five books and commissioned many studies on issues of affirmative action and college access. We are convinced that California is in the midst of a full-blown crisis of college access and completion, and that this crisis threatens the future of the state and its communities.

The series was produced for very low budgets and involved considerable contribution of effort by the authors and editors. The basic idea was to produce a series of reports analyzing available data or data that could be collected for a low cost and try to present a number of independent assessments of impacts on various aspects of this large system. We followed our customary procedure of issuing a call for research on a variety of important questions, soliciting proposals from interested scholars, and sending the research proposals to outside experts in the field for review before commissioning authors to prepare reports. The draft reports were discussed at a roundtable on the UCLA campus, which led to suggestions for editing.

The research costs were shouldered by the CSU Faculty Association, the Ford Foundation, and the Civil Rights Project. Though the Faculty Association has a very strong interest in a number of these issues, the Association had no role in commissioning or evaluating the studies. They respected the traditional scholarly process we require from all funders of Civil Rights Project research. This series will be available for reading at civilrightsproject.ucla.edu and we grant all interested instructors or other groups the right to reproduce these reports without any payment of royalties or permissions, so long as authorship is appropriately credited. Authors have final control of their own manuscripts and the opinions expressed in them are the conclusions of those authors.

We understand, of course, that the state of California and many of its institutions are in a full-blown financial crisis and that very difficult and damaging decisions have been made. There are many cuts that threaten the welfare and the future of vulnerable communities in California. Our studies address only one major part of those problems and they arise from a clear awareness that the only secure way into the middle class of California's future is higher education. Our hope is that these hard decisions will consider the depth and danger of the cuts, their long-term impacts, and what may be done to preserve the promise of a vital set of California institutions.

The Civil Rights Project



Proyecto Derechos Civiles

Financial Aid

May 2011

***The State University Grant Program and its
Effects on Underrepresented Students at the CSU
by Jose Luis Santos***

***Higher Tuition, More Work, and Academic Harm:
An Examination of the Impact of Tuition Hikes on the Employment
Experiences of Under-represented Minority Students at one CSU Campus
by Amy Leisenring***

Please find these reports at:
www.civilrightsproject.ucla.edu

Financing College in Hard Times: Work and Student Aid

Foreword by Gary Orfield

College is as necessary for a young person today as high school was a half century ago. As we have globalized the economy, and shipped overseas so many of the industrialized jobs that once provided mobility for workers with relatively low educational levels, with many more good jobs like those in construction disappearing in the housing depression, young people face a harsh reality—education or the threat of poverty. Although graduation from high school is absolutely necessary, it is no longer a ticket into the middle class and some post-secondary education has become essential. In previous generations, we expanded free public high schools when it became essential for young people's futures. In the 1960's and 1970's, it appeared that we were also going to continue to greatly expand very low-cost college education. In California, community colleges were still free and the state university system charged an amount for tuition that students could easily earn. Campuses across the state practiced affirmative action and reached out to increase enrollment of students from California's growing nonwhite communities.

Unfortunately, in the late 1970s and early 1980s the situation radically reversed, setting up a trend that is now culminating in a drastic reshaping of college finance. College costs began to go up much faster than family incomes, the state's priorities shifted to prison expansion and tax cuts, and policy makers transferred a larger and larger share of the costs to the students. Unlike high schools, college now became defined increasingly as a private good that students should pay for. All students, of course, cannot pay the same in a state with profound gaps in income and wealth among its various communities. Affirmative action was prohibited by Prop 209 and state policy makers promised to make up for some of the problems with special outreach and support programs, but their funds were also cut. For the many students and families without resources to pay the higher costs, financial aid was the key to their children having a chance for college. If financial aid is inadequate or too complicated to be understood and to work, then the educational tools essential for the present generation of students are going to be rationed on the basis of class and color. This would be a fundamental threat to the California dream.

The studies released today show two very important things. The first is that students react to soaring costs by working more, often by working far too much (their families are often themselves in serious economic trouble in the Great Recession, which is far from over in California). Some employment during college is not harmful and working on campus can often connect a student more deeply with college. But there is a serious tradeoff if students work too much. When that happens, then they cannot study as much or as well as is necessary, so they learn less and their grades and chances of completion are impacted. For years the

research has suggested that going *beyond* about fifteen hours per week, about equal to two full days of work, is harmful to academic success. We see, however, that many students are far beyond this point and a significant number are trying to both work full-time and study full-time, something that puts unreasonable pressure on students and seriously cuts deeply into the value of college education and a student's chance of success. We have to commend students for the tremendous effort they are making, but also to recognize that this situation is harmful and involves tremendous stress at a time students have extremely important things to do, namely finding and preparing for a career and their adult lives. Students loaded up with debt and with their families in trouble are making hard choices and sometimes sacrificing their future. Public policy should not be designed to force students to choose between over-working to pay for their education or giving up hope for education and good careers. Working too much clearly harms their education, and a high percentage of students, as one of the studies shows, are giving up on careers that would contribute greatly to their families and our society.

The second finding is that during this time of fiscal uncertainty, students facing big bills for college need more help. What they encounter, instead, is a complex pattern of financial aid programs that aren't doing the job of making college opportunities available to all who are interested and qualified, especially to the most underrepresented students in the state. The financial aid programs include federal (Pell Grant and guaranteed student loans), state (Cal Grant), and campus (SUG grants) sources of aid, which students need to combine with what they and their families can pay and/or borrow. The Pell Grant has grown since 2008 but is likely to be frozen or to shrink after the budget battles currently taking place in Washington. California is in an extremely serious fiscal crisis. The SUG, financed with a portion of student tuition income, is now a critical resource for more than a third of CSU students. Clearly as tuition and other costs of college continue to rise rapidly, it is urgently necessary that this program be maintained, in spite of fierce pressures on campus budgets, and that it be well targeted and coordinated with Pell and Cal Grant to try to keep college available to the many young Californians who simply cannot afford the rising costs. (Future reports will discuss the important roles of outreach and counseling in helping students and families, frightened by soaring costs, try to figure out ways to go to college and stay in college in very difficult times).

The reality of California's society means that the crunch is particularly threatening to Latino and African American students, whose families were struggling before the economic collapse and the parade of tuition increases, and who are now often facing grave economic threats and reversals. Students from these groups represent the majority of potential college students in the state and are central to California's economic and social future. These students face far steeper barriers to college than the baby boomers did thirty to forty years ago. When a student, capable of finishing college and performing well in a needed job, gives up on college because she cannot see any way to pay the bills, the consequences will be played out 40 years into the future, not only for the student but for his family, for the economy and for the

community where he lives. On the aggregate, we are thinking of very deep and long-lasting damage to a state of great importance that is failing to educate its new majority. We should not sacrifice the state's basic commitment to offer our youth a real opportunity for higher education in the process of patching up solutions to short term budget issues, yet that is what we are doing. There are enduring consequences that should be central concerns in the decisions we make in Washington, in Sacramento and on our own campuses.

**Higher Tuition, More Work, and Academic Harm:
An Examination of the Impact of Tuition Hikes on the Employment Experiences of
Under-represented Minority Students at One CSU campus**

*By
Amy Leisenring*

Introduction

Students facing both economic problems at home and rapid increases in the cost of college confront a variety of challenges. This study explores how students on one CSU campus understand the consequences of the state's budget crisis and their experiences with jobs, as well as the impact that working has on their academic success.

In 1960 the California Master Plan for Education dictated that all students should have access to some form of higher education regardless of their economic status (UC Educational Relations Department, 2007). 50 years later, the state's promise is very much in doubt. During the past four decades the state has decreased its contribution per student. In 1967 the state paid approximately 90% of a student's education while today it pays approximately 64%. Since 1990, once adjusted for inflation, state spending per student has dropped by half and will fall more this year. College costs for students and their families have risen much faster than family incomes or inflation rates. The purpose of this paper is to explore the impact of recent budget cuts on Latino, African American, and American Indian students, and how they see recent tuition and fee increases. In addition, this paper serves to explore URM student experiences with paid employment and how working in school has affected their academic success. As additional cuts are scheduled, college degrees are becoming less accessible and the system appears to be raising increasing barriers to the state's majority of Latino and African American youth.

The California State University system (CSU) has been hit particularly hard by the state's withdrawal of funding for public education. With 23 campuses and approximately 433,000 students, the CSU—the "middle" tier of the CA higher education systems—has become the nation's largest university system. This system has faced severe budget cuts in the last decade, particularly within the last several years: in the 2008-2009 and 2009-2010 academic years, the CSU system experienced \$1.4 billion in cuts (California State University, 2009). These cuts have led to a 1691% total increase in tuition and fees from 1978 to 2010, which far outpaces the national average (California Faculty Association, 2010). In 2010 the CSU imposed a mid-year tuition increase and another 10 percent increase in the fall.

According to a 2008 report by the California Postsecondary Education Commission, rising college costs have particularly impacted lower- and middle-income families. The percent of annual income that a low-income family would need to pay for college nearly doubled between 1975 and 2005. Low-income students and students from underrepresented minority groups in California enter college at lower rates compared to their peers, and graduate at lower rates than other students (Education Trust, 2004). While there are a number of things that impact low-income and minority students' likelihood of attending college and their academic success, once enrolled, financial issues are a central factor (see Swail, Redd, & Perna, 2003). A major issue is that the wages of lower-income and middle-income workers have fallen far behind the rising costs of college tuition. A college degree is simply becoming less accessible to low-income students in California.

As the California Postsecondary Education Commission report (2008) points out, while in the 1960s and 1970s, students were able to cover part or most of their education costs with part-time and/or summer jobs, this is no longer the case. Nationally, the number of students who work for pay while enrolled in college classes has increased in the last several decades (Hughes & Mallette, 2003; Orszag, Orszag, & Whitmore, 2001). Recent studies have found that approximately three-quarters of college students now work while going to school (ACE, 2006; Hughes & Mallette, 2003). Further, the percentage of students who work full-time has also increased. A study by Orszag, Orszag, and Whitmore (2001) found that the number of students working full-time increased from 5.6 percent in 1985 to 10.4 percent in 2000. According to the Student Expenses and Resources Survey conducted by the California Student Aid Commission, during the 2006-2007 academic year, approximately 73% of part-time and full-time students in the CSU system worked for pay for an average of 24 hours a week. Forty percent of these students reported working over 25 hours per week on average.

While research studying the impacts of working while in college on students and their success in school is surprisingly limited, there is some evidence that limited part-time student employment may actually be beneficial to students, particularly if they work on campus. Research shows that for students who work fewer than 10-15 hours a week, employment may facilitate learning (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1998), provide work experience that helps students secure future employment (Orszag et al., 2001), and lead to slightly higher grade point averages (Orszag et al., 2001). However, the existing research uniformly paints a different picture for students who work more hours. The negative impact of working longer hours (anywhere from 16-20 hours to over 35 hours, depending upon the study) for students include: inhibited cognitive development (Pascarella et al., 1998); lowered grades and GPA's (Kulm & Cramer, 2006; Orszag et al., 2001); limited class schedules and choices (King & Bannon, 2002; Orszag et al., 2001); limited participation in both extra-curricular and social activities (Kulm & Cramer, 2006); limited library access (Orszag et al., 2001); limited study time (Kulm & Cramer, 2006); and an increased likelihood of dropping out of college (American

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Council on Education, 2006; Orszag et al., 2001). If financial obstacles force students to work too much, their education suffers significantly.

Studies show that minority students work more than other students (American Council on Education, 2006; Longerbeam, Sedlacek, & Alatorre, 2004). More than half of dependent African American, Hispanic, and American Indian students come from families whose income is less than \$30,000 (King 1999). Too much work is an important factor impacting their lowered persistence rates, as the percentage of low-income students who receive a bachelor's degree by the time they are 24 is less than 10 percent (Mortenson, 2001). According to Swail, Redd, and Perna (2003) six-year bachelor's completion rates for African Americans and Hispanics are lower than for whites and Asians at four-year institutions.

Utilizing a multimethod approach, this study explores the effects of recent tuition and fee increases on undergraduate underrepresented minority students (URM) at one of the CSU campuses.

Methods

This study is based on data collected via both brief surveys and in-depth interviews with undergraduate students at one of the CSU campuses. This campus is one of the largest of the CSU system and is situated in a large metropolitan area. As of fall 2009, approximately 22% of the students at this university were URM (4% African American, .5% American Indian, and 17% Latino). Less than half of all first-time freshmen who entered in 2003 had graduated within 6 years (45.8%) and the persistence rates for underrepresented minority students are lower.

Surveys were disseminated at the end of the spring semester in 2010. Instructors in the university's required written communications course and all instructors teaching in one social sciences department were asked to participate and those agreeing either distributed the survey in class or asked students to respond on-line. A total of 352 students took the survey in class and another 147 took it online. All survey responses were anonymous.

Out of the 499 sampled, 33% were URM. Of those, 59% were Hispanic/Latino, 16% were African American, 2% were American Indian, and 23% were bi-racial/multi-racial with at least one URM background. Over three-quarters (80%) were between 19 and 25 years of age and 70% were women.

The survey explored how students finance their college education and how recent fee increases have impacted them. Students reported their work experiences during the semester and how they believed working impacted them (see Appendix A for survey instrument).

The data is supplemented by in-depth individual and focus group interviews conducted with sixteen URM students between June of 2009 and April of 2010.¹ Students were recruited via flyers posted around campus and class announcements and received a \$10 gift card. Five of the students were African American, six were Hispanic/Latino, one was American Indian, and four were bi-racial/multi-racial.

Results

Both the survey and interview data for this project reveal that the impact of the budget crisis for students at this campus and their families has been severe. A large majority of students are working well beyond 15 hours a week. Many report having to work additional hours due to recent fee increases. As a result of the increase in hours spent at work, students report a number of negative consequences, such as taking longer to graduate, lacking time for school work, lowered grades, an inability to access resources on campus, experiencing stress and exhaustion, and even considering dropping out of school altogether.

Survey Data

Students were asked about the means by which they pay for college. 57% of students reported that they worked for pay.¹ Additionally, half of students reported receiving some type of financial aid, 40% of students reported receiving financial assistance from one or more family members, just over a third of students reporting taking out loans (36%), and 12% reported receiving some type of scholarship. Over half of the students (57%) reported paying for college by more than one of these means.

TABLE 1: Demographics and Background Information for Survey Sample (N = 163)

| | Percentage |
|---|------------|
| SEX | |
| Female | 70 |
| Male | 30 |
| RACE | |
| African-American | 59 |
| Hispanic/Latino | 16 |
| American Indian | 2 |
| Bi-racial/Multi-racial | 23 |
| AGE | |
| 19-25 | 80 |
| 26-30 | 11 |
| 31 and older | 9 |
| MEANS OF FINANCING COLLEGE | |
| Worked for pay | 57 |
| Received financial aid | 50 |
| Received financial assistance from family | 40 |
| Took out student loans | 36 |
| Received a scholarship | 12 |

More than nine-tenths of the students reported being negatively impacted by recent fee increases (Table 2). Nearly half (47%) reported that recent fee increases have “very negatively” impacted them and 44% more said they had been “somewhat” negatively impacted. Students who reported harm were asked about the ways in which they were negatively impacted (see Table 2). The most common response reported by these students is that their family has been financially burdened (49%). Additionally, 44% of the students reported having trouble paying their tuition, 44% reported having to work more, and 30% reported having thought about dropping out of school. “Other” responses given by students as to how fee increases have negatively impacted included: having trouble paying cost of living expenses, having to take out additional loans, being unable to buy books for school, and being unable to save for graduate school. Very similar findings were reported in another a large survey in the recent Civil Rights Project report *Squeezed from All Sides*.

TABLE 2: Impact of Recent Fee Increases

| | Percentage | |
|---|------------|----|
| How have recent fee increases impacted you? (N=163) | | |
| Very negatively | 47 | |
| Somewhat negatively | | 44 |
| No impact | 8 | |
| Somewhat positively | 0 | |
| Very positively | 1 | |
| In what ways have recent fee increases negatively impacted you? (N=148) | | |
| I have had trouble paying tuition | 44 | |
| My family has been financially burdened | 49 | |
| I have had to work more hours | 44 | |
| I have thought about dropping out of school | | 30 |
| Other | 7 | |

Eighty-six percent of students reported working for pay at some point during the semester (see Table 3). These students were asked about the number of jobs they held at the time of taking the survey. The majority of students (76%) reported having one job, while 19% held two jobs, 2% held three jobs, and 2% of students reported having lost their job at some point during the semester. As Table 3 indicates, students reported working anywhere from one hour per week to 56 hours per week. The average number of hours worked by students was 27 hours per week, far above the threshold at which academic damage was likely to occur. The vast majority of students who reported working for pay worked over 15 hours a week (83%) and over a quarter of the students (36%) who reported working for pay worked over 35 hours week.

TABLE 3: Work Experiences

| Percentage | |
|--|----|
| Have you worked for pay at any time during the current semester? (N =163) | |
| Yes | 86 |
| No | 14 |
| Average hours worked per week (N=140) | |
| 1-10 | 6 |
| 11-15 | 10 |
| 16-25 | 34 |
| 26-35 | 23 |
| 36 or more | 26 |
| Have you had to increase the number of hours worked at any point in the past two years due to increases to student fees? (N=140) | |
| Yes | 59 |
| No | 41 |
| Average hours increased work per week due to fee increases? (N=82) | |
| 2-5 | 17 |
| 6-10 | 33 |
| 11-15 | 16 |
| 16-25 | 15 |
| 26-35 | 6 |
| 36 or more | |

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The students who reported working for pay were also asked if they have had to increase the number of hours they have worked at any point in the past two years due to tuition and fee increases at the university. Over half of these students (59%) reported having to increase the number of hours that they worked (see Table 3). Students were asked how many more hours they had to work per week, on average, due to tuition and fee increases. Students reported having to increase their work hours. The average number of increased work hours of students per week was 15. As Table 3 shows, over one-quarter of the students (30%) reported having to increase their work hours over 15 hours per week due to tuition and fee increases. These students were faced with the hard choice between working too much and not being able to continue their schooling. They chose to work more.

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Finally, students who worked for pay at any time during the current semester were asked if working while going to school has negatively impacted them in any way. 89% believe that working while going to school has negatively impacted them (see Table 4). Over half of these students believe that because of their work it will take them longer to graduate (62%). Nearly nine-tenths (86%) say they haven't had enough time for school work and 70% think their grades have been hurt. Three out of five students report that they haven't been able to take classes they need due to their work schedules (60%), and they haven't been able to access needed resources on campus (65%).

TABLE 4: Negative Impacts of Working While In College

| | Percentage |
|---|------------|
| Do you believe that working while going to school has negatively impacted you? (N=140) | |
| Yes | 89 |
| No | 11 |
| In what ways do you believe working while going to school has negatively impacted you? (N=125) | |
| It will likely take me longer to graduate | 62 |
| I don't have enough time to devote to my school work | 86 |
| My grades have not been as good as they could be | 70 |
| I have been unable to take classes that I need because they don't fit into my work schedule | 60 |
| I don't have time/availability to access resources on campus that I would like to access (library, instructors' office hours, advising, support services on campus, etc.) | 65 |
| Other | 10 |

Interview Data

The in-depth interviews help to provide additional insight into some of the common themes that emerged from the survey data. The two central findings that emerged from the in-depth interviews are: (1) tuition increases have been detrimental for both students and their families; and, (2) students have found it very difficult to balance work and school, particularly given rising tuition costs.

Many students spoke about the challenges of being told right before the semester started that they had to pay higher fees or face being dropped from all of their classes. Even students whose tuition was mostly or fully covered by financial aid were impacted by this as the university expected the students to come up with

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the funds for the fee increase before many students' financial aid was processed. One 21 year-old African American student discussed how hard it was for her to come up with approximately \$400 out of pocket: "I ended up paying my [tuition] increase [with] my rent money.....I had to talk to my roommate. It was this whole complication of my rent or my education.....it was very stressful because it was like, 'do I have somewhere to live or do I pay tuition?' Because if my classes get dropped, the likelihood of me getting into those classes [again] is slim to none."

Similarly, a 19 year-old Latina student explained her reaction when she learned of the tuition increase: "...I thought I was going to drop out this semester because when that additional \$300 and something that every student had to pay showed on my account, I flipped out. I was like, 'This is it. I can't go [to school] no more. I don't have that with me. I have a deadline. I can't pay that right now.'" Yet another student—a 22 year-old African American woman—said that for the past two semesters due to budget cuts she has not been able to buy her books on time and it "sets her back" because she cannot do the reading. She stated: "I'm always behind. [The professors are] lecturing on that first chapter and they're on the second chapter by the time I get the book so I'm trying to play catch up."

More than a few of the 16 students discussed the ways in which rising tuition costs and increased fees have impacted their families, many of whom were struggling themselves due to the recession. One 21 year-old American Indian student stated that her father has been struggling to pay for her tuition:

"My dad pays for my school but because it's been so expensive lately and the economy has been so bad, he's been charging my tuition on his credit card. [Before] the fee increase if I needed anything, I could go and ask him for a little bit of extra like \$50 or \$100. And now because it's so tight the \$400 is just more than my family can already afford. He used to help me out at the beginning of the semester with books and stuff and now he doesn't any more."

Several other students spoke of the guilt they felt in having to ask their families for even more money each semester as fees and tuition costs continued to increase.

The families of several students were having such a hard time that the students were helping their parents out financially. For example, a 21 year-old Latina spoke about having to work between 25 and 40 hours each week to help support her family after her father lost his job and she, her parents, and her four brothers and sisters all moved into her grandparents' house. She stated, "My parents have always been bad in debt with money so they can't take care of me. They don't pay for my school and they don't pay for my books...Tuition and books are not cheap so I have to find a way to pay for it on top of helping my parents out."

The vast majority of the 16 students reported having a hard time balancing going to school full-time and working 25 or more hours a week. While some of them

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stated that they liked their jobs and enjoyed working, they reported wishing that they could reduce the number of hours they worked each week so that they could have more time for school and for finding more balance in their lives. A 22 year-old African American student who worked 40 hours a week at an overnight shift in a group home for troubled girls said that she loved her job but balancing it with a full course load took too much out of her and left her exhausted. She said that because she lives paycheck to paycheck, she's forced to focus more on money and work, which results in her "losing sight" of the fact that school should be more important than work.

A big issue for students was feeling as if they either didn't have enough time to study or that they were too tired after going to school and work all day to be able to concentrate. This was the issue faced by one 21 year-old African American student who worked two jobs for a total of about 35 hours a week. On Tuesdays and Thursdays she took classes all day. On Mondays, Wednesdays, and Fridays, she usually worked at her two jobs from 10:30 in the morning until 9:30 at night. She stated, "...on the days I don't have class I'm getting home at 9:30 and by then I've had a whole day of work, I'm exhausted. My eyes can't even look at a computer screen or a book. So it's hard to study, especially getting [an assignment] on Tuesday that [the instructor] wants due on Thursday." Because this student also worked at one of her jobs on Sunday afternoons, Saturdays and Sunday nights were her only real study time. She said, "And it's kind of like I wish I could have more time to actually study because I'm cramming in a whole bunch of reading for the week in a couple of hours at a time." This student, who had a 2.9 GPA at the time of our interview, said that she felt like her grades would be better if she didn't have to work so much.

Another student, a 22 year-old biracial (African American and Latino) male, also spoke of the ways in which work had negatively impacted his GPA: "My GPA was a 4.0 that first year and then I started working and then it slowly started going down, down, down, all the way down to where I'm at like 2.5, 2.3, something around there. So, I mean, I've seen the difference because of all the responsibilities I had to pick up as I was going to school." This student said that while he values school, he has to work because his mom is a single parent who takes care of his teenaged sister and is unable to help him much financially. He spoke of struggling to balance his course load, his 25 hour-a-week job, and the 16 hour-a-week internship he was required to partake in for his major. He said he felt he could "do a whole lot better" in school if he didn't have to work.

Students also spoke about the difficulty they had in obtaining assistance from on-campus resources and/or attending their professors' office hours due to their work hours. Many students said that they schedule back-to-back classes on the days when they are on campus to accommodate their work schedules, making it difficult--if not impossible--to receive help with their school work if they need it. A 24 year-old African American student explained,

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“A lot of the professors assume that the students have time to go to office hours or the writing center or whatever.....in my case my classes are back-to-back-to-back. Sometimes the office hours are during a class or I can't go because I have to work or do some intern hours. So although I want to go to my professors and say, 'I'm struggling with this concept, can you help me?' I can't. The only other way I can possibly do it is through email but then they say, 'Go to [my] office hours.' But I can't go to office hours. It's a struggle.”

While almost all of them believed it was important to prioritize school over work, many of them found it was difficult to do so. While some students had jobs in which their bosses/managers understood the demands of being in college, other students struggled with the fact that their bosses/managers expected work to come first. One 19-year old Latina student stated: “[My job] wrote on the application: ‘Make sure that you schedule your school, social life, everything around work because work is a priority.’ And school is telling me, ‘Make sure that you manage everything else, your work, your social life, everything else around school because school is a priority.’” Students who receive contradictory message like this have a hard time deciding what to prioritize. They know school is important to their future, yet they have to work to pay for school and for their living expenses.

Discussion and Conclusions

Latino, African American, and Indian students at this CSU campus believe that recent fee and tuition increases have negatively impacted them in multiple ways. These students and their families clearly feel the burden of the rising costs of a CSU degree. Particularly disturbing is that fully 18% of the 163 students surveyed reported considering dropping out of college as a result of rising tuition costs. As previously discussed, the persistence rates of URM students at this campus have historically been lower than those of other students. It is disheartening to think that rising costs will only increase this gap.

This study also shows that a high percentage of URM students at this CSU campus work while going to college. Eighty-nine percent of students who were surveyed reported working for pay while attending college. This percentage is higher than rates reported in prior studies, such as the 2006 American Council of Education report (based on data from the 2003–04 National Postsecondary Student Aid Study) which found that 78% of African American and Latino students and 75% of American Indian students work while going to school.

Also of concern is the number of hours the students surveyed for this study reported working. Over half of the students reported having to increase the number of hours they work per week due to rising college costs. As previously discussed,

research demonstrates that working less than 15 hours per week may be beneficial for students but working over 15 hours a week is often detrimental for students. Eighty-three percent of students surveyed for this study reported working more than 15 hours per week and 69% reported working more than 25 hours per week. Given prior findings about the effects of working more hours per week, it is not surprising that the majority of the students surveyed reported believing that their academic progress and success have been negatively impacted by their paid employment.

Interviews showed that many of these students face extreme financial pressures. Their families are often not in a position to support them and they find it necessary to work a lot of hours to supplement the assistance they do receive from family members, financial aid, scholarships, and/or loans. The students often find it very difficult to balance their demanding work and school schedules and believe that their grades suffer as a consequence. For these students, who often report living paycheck to paycheck, coming up with an extra few hundred dollars each semester can be a formidable task. They are forced to make difficult choices about what to prioritize and often must take care of financial concerns at the expense of academic success. The choice to work more, which many see as their only way to stay in college, has clear academic costs.

In sum, the door appears to be closing on California's Master Plan for Education, as a college degree is clearly becoming less and less accessible to many of the state's working class and under-represented minority residents. The sacrifices that are now required of many of these residents that would enable them to finance and attend college may be too great. This is particularly ironic at a time when there have been increased national efforts to address both the under-representation of URM students in postsecondary education and the lower persistence and graduation rates of URM students who do enroll in college. In the end, the rising costs of college in California will likely end up serving to re-segregate public higher education in California.

References

American Council on Education (2006). Working their way through college: Student employment and its impact on the college experience. Retrieved January 10, 2010 from <http://www.acenet.edu/AM/Template.cfm?template=/CM/ContentDisplay.cfm&ContentFileID=1618>.

California Faculty Association. (2010). *News Release*. Retrieved April 19, 2010 from <http://www.calfac.org/home>.

California Postsecondary Education Commission (2008). *Who can afford it? How rising costs are making college unaffordable for working families*. Retrieved March 25, 2010 from <http://www.cpec.ca.gov/completereports/2008reports/08-10.pdf>.

California State University (2010). *Final Budget Summaries*. Retrieved January 18, 2010 from <http://calstate.edu/budget/final-budget-summaries/>.

Education Trust, 2004. *Empty Caps and Gowns: New analysis reveals deep problems in the graduation rates at four-year colleges and universities, but finds that some institutions do a much better job graduating their students than others*. Retrieved March 25, 2010 from <http://www.edtrust.org/dc/press-room/press-release/empty-caps-and-gowns-new-analysis-reveals-deep-problems-in-the-graduatio>.

Hughes, P., & Mallette, B.I. (2003). A survey of student term-time employment: Choosing subpopulations for further study. *Journal of Student Financial Aid*, 33(3), 41-62.

King, J.E. (1999). *Money matters: The impact of race/ethnicity and gender on how students pay for college*. Washington D.C.: American Council on Education.

King, T., & Bannon, E. (2002). *At what cost? The price that working students pay for a college education*. Washington D.C.: United States Public Interest Research Group.

Kulm, T.L., & Cramer, S. (2006). The relationships of student employment to student role, family relationships, social interactions, and persistence. *College Student Journal* 40(4), 927-938.

Longerbeam, S.D., Sedlacek, W.E., & Alatorre, H.M. (2004). In their own voices: Latino student retention. *N.A.S.P.A. Journal*, 41, 538-550.

Mortenson, T. (2001). Trends in college participation by family income: 1970-1999. *Postsecondary Education Opportunity*, 106, 1-8.

**Higher Tuition, More Work, and Academic Harm:
An Examination of the Impact of Tuition Hikes on the Employment Experiences of Under-represented Minority Students at One CSU campus**

Orszag, J.M., Orszag, P.R., & Whitmore, D.M. (2001). *Learning and Earning: Working in College*. Upromise, Inc. Retrieved January 10, 2010 from <http://www.brockport.edu/career01/upromise.htm>.

Pascarella, E., Edison, M., Nora, A., Hagedorn, L., & Terenzini, P. (1998). Does work inhibit cognitive development during college? *Educational Evaluation and Policy Analysis*, 20(2), 75-93.

Swail, W.S., Redd, K.E., & Perna, L.W. (2003). Retraining minority students in higher education: A framework for success. *ASHE – ERIC Higher Education Report 30*, 2.

University of California Educational Relations Department (2007). *The California Master Plan for Higher Education in Perspective*. Retrieved March 25, 2010 from <http://www.ucop.edu/acadinit/mastplan/mpperspective.htm>.

Appendix: Survey Instrument

TITLE: Research Project Examining Experiences of Working Students at San Jose State University

PRINCIPAL INVESTIGATOR:

Dr. Amy Leisenring
Department of Sociology
San Jose State University

You are being asked to participate in a short research project. The purpose of this study is to understand some of the experiences of working students at SJSU and the ways in which recent fee increases have financially impacted students. By completing the following questionnaire you will be providing valuable information for this important topic.

If you are not at least 18 years of age, please do not complete the questionnaire—just return in blank.

To participate in this project you will need to fill out the attached questionnaire. This questionnaire will take you approximately 5-10 minutes to complete. It is completely anonymous—you are not asked to provide your name or any other identifying personal information. No one will know what your answers to the questions are. The results of this study may be published but no information that could identify you will be included.

Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose not to participate in the study. You do not have to answer any questions that you do not wish to answer and you can withdraw from the study at any time. Your willingness to participate in this research and your questionnaire responses will have no impact on your grade in this course. There is no compensation provided for participation in this project.

Questions about this research may be addressed to the researcher conducting this study, Dr. Amy Leisenring, at (408) 924-5756, or at amy.leisenring@sjsu.edu. Complaints about the research may be presented to Dr. Yoko Baba, Chair of the Sociology Department at San Jose State University, at (408) 924-5334. Questions about a research subjects' rights, or research-related injury may be presented to Pamela Stacks, Ph.D., Associate Vice President, Graduate Studies and Research, at (408) 924-2427.

Higher Tuition, More Work, and Academic Harm:

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Please remove this cover sheet and keep it for your own records. By agreeing to participate in this study, it is implied that you have read and understood the above information. Please do not write any identifying information on the questionnaire.

Please put a mark next to the choice that best represents your answer to the following questions:

1. What is your sex?
 Female
 Male

2. What is your current age? _____

3. What do you consider to be your race/ethnic background?
 White
 Hispanic/Latino
 Black/African-American
 Asian
 American Indian
 Biracial/Multiracial (please specify): _____
 Other (please specify): _____

4. Did you transfer to San Jose State University from another college or university?
 Yes, from a community college
 Yes, from another 4-year university
 No

5. What semester/year did you first begin taking classes at San Jose State University? (For example, "Fall of 2008"): _____

6. What semester/year do you anticipate graduating? (If unsure, please make best guess): _____

7. How do you pay for college? (Please check all that apply to you):
 I receive financial aid.
 I take out student loans.
 I have a scholarship.
 I receive financial assistance from family member(s).
 I work for pay.
 Other: _____

8. How have recent fee increases at San Jose State University impacted you?
- Very negatively (Please go to question 9)
- Somewhat negatively (Please go to question 9)
- No impact (Please skip question 9 and go to question 10)
- Somewhat positively (Please skip question 9 and go to question 10)
- Very positively (Please skip question 9 and go to question 10)
9. In what ways have the recent fee increases at San Jose State University negatively impacted you?
- I have had trouble paying my tuition.
- My family has been financially burdened.
- I have had to work more hours.
- I have thought about dropping out of school.
- Other impact(s): _____
10. Have you worked for pay at any time during the current semester?
- Yes (Please go to question 11)
- No (You do not need to answer any other questions. Thank you.)
11. How many jobs do you currently have? _____
12. How many hours a week, on average, did you work this semester? _____
13. Have you had to increase the number of hours you have worked at any point in the past two years due to increases to student fees at San Jose State University?
- Yes (Please go to question 14)
- No (Please skip question 14 and go directly to question 15)
14. How many more hours are you working a week, on average, due to increases to student fees at San Jose State University? _____
15. Do you believe that working while going to school has negatively impacted you in any way?
- Yes (Please go to question 16)
- No (You do not need to answer any other questions. Thank you.)
16. In what ways do you believe working while going to school has negatively impacted you? (Please check all that apply to you):
- It will likely take me longer to graduate.
- I don't have enough time to devote to my school work.
- My grades have not been as good as they could be.

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- ___ I have been unable to take classes that I need because they don't fit into my work schedule.
- ___ I don't have time/availability to access resources on campus that I would like to access (library, instructors' office hours, advising, support services on campus, etc.)
- ___ Other(s): _____

THANK YOU VERY MUCH FOR COMPLETING THE QUESTIONNAIRE AND PARTICIPATING IN THIS IMPORTANT RESEARCH PROJECT.

THE STATE UNIVERSITY GRANT PROGRAM AND ITS EFFECTS ON UNDERREPRESENTED STUDENTS AT THE CSU

by
José L. Santos

Executive Summary

Although the Master Plan for Higher Education calls for tuition free affordable college education to all qualified California students, the fiscal reality of the State has made this compact extremely difficult to fulfill. Over the last decade, the California State University (CSU) system has sustained a substantial decrease in state general funds and, as a result, has sought to offset these decreases by increasing tuition and fees by over 166 percent. In addition to tuition fee increases, other costs associated with college-going, such as housing and books have been outpacing inflation and the median household income. This means that college affordability is at risk, and nationally, financial aid awards are not keeping up with the rise in costs of college attendance.

College affordability and access to student aid programs are often critical elements in the college decision-making process for students from traditionally underrepresented communities. CSU's State University Grant (SUG) is a major institutionally supported, \$320 million student aid program, serving one-third of its student body. The SUG is designed to provide additional financial aid options for low-income underrepresented students. It consists of setting aside some tuition revenue generated from increases and redistributing them as subsidies to a large group of students.

This study explores how the SUG program helps to maintain affordability for higher education and helps us understand who benefits from this program. This study reviews the National Postsecondary Student Aid Study: 2008, as well as other publicly available data from the CSU system and California Postsecondary Education Commission. The data reveals that in the last twenty years there has been a proportional increase of students from underrepresented minorities benefitting from SUG awards, particularly Mexican Americans and Other Latinos. Students from middle-income families have a growing share of SUG awards, while the lowest income groups have seen a proportional decrease. Most importantly, the data shows that students who do not receive state or federal financial aid have benefited the most from SUG in 2008—a key finding in this analysis. This exploratory study finds that the CSU's SUG program is doing a "good job in holding students receiving it relatively harmless to fee increases: it only acts as a fee increase "offsetter" and not as a need-based "targetter." Although it covers fee increases for these students it does not cover other expenses that make up the total cost of attendance.

As the fiscal crisis in California deepens and CSU responds by increasing tuition and fees, policy-makers should tighten the linkage between the SUG program and state and federal need-based aid programs, as well as much better inform nontraditional college applicants so that they are not kept from enrolling by the increased “sticker shock” of rising tuition now and for years to come. Moreover, policy makers should consider increasing state funding for this program so that it can prominently help those students with the greatest financial need. In a state with extreme income inequality and flat or declining wages and wealth for many families, but where middle class status is increasingly limited to college graduates, this is an urgent priority.

Policy Outline

This policy paper explores the State University Grant (SUG) program at the California State University System and its effects on underrepresented students. In the last ten years, fees at the California State University (CSU) system have more than doubled from an average of \$1,839 to \$5,198. The SUG program has helped to mitigate the effects of increased fees over the years for all race/ethnic groups as it has been used as a band-aid to limit such fee increases for recipients. It turns out that the SUG may act as a *de facto* fee discounting mechanism that generally applies equally to various race/ethnic groups. In short, the SUG acts as a non-targeted aid program given that the average award amount does not vary widely by race/ethnicity, income, and among institutions. As fees continue to rise, this policy paper makes the case for the importance of redesigning the SUG into a targeted aid program that awards need-based aid to the neediest students.

The SUG program was originally created by the California Legislature in the Budget Act of 1982, and then adapted by the CSU Trustees’ State University Fee Policy of 1993. Under the Trustees’ policy, one-third of fee revenues are dedicated to this SUG program; thus, it acts as the *de-facto* instrument of fee discounting in the CSU system for eligible students. For fiscal year 2009/10, the CSU system budgeted \$320,461,000 for the SUG. Of that, \$286,676,000 (89%) originates from fee revenuesⁱ. This means that the CSU receives only two-thirds of tuition increases with the rest going to subsidize students getting the SUG. The current program is administered as a need-based financial aid award for eligible undergraduate and graduate students throughout the CSU campuses to cover a portion of the State University Fee, which is the equivalent of the system-wide mandatory feeⁱⁱ. Under the current guideline, students who applied before March 2nd of the calendar year, with an Expected Family Contribution (EFC) of \$800 or less and not receiving a Cal Grant, or any other tuition grants are eligible to receive SUG awardsⁱⁱⁱ. That is, it does not aim to provide additional aid to the needy students receiving the other grants, even if they have additional need, and provides aid to students in a wide variety of circumstances whose parents have limited resources. Each campus, however, has some discretion about how the funds are used and the CSU publishes very little specific data about the beneficiaries. Individual campuses are allowed to

make individual decisions on how to award the monies based on their internal award policies and priorities^{iv}.

There is no systemwide data on SUG awards but they range extensively. For example, the awards range from \$900 to \$4,200 depending on enrollment and classification. In order to find out the exact range one would have to check each individual campus for a consistent time period and a consistent unit of analysis to come up with either the average award amount or nominal award amount. At CSU Bakersfield the SUG represents 14.7 percent of total aid administered in 2009/10, with an average award amount of \$3,932 per recipient. I have received different years based on different reports at different campuses and the data is not consistent at all. The typical full-time annual SUG award for 2010/2011 at Chico State is \$4,230. Unlike the figure for CSU Bakersfield, this figure for Chico State is not an average. Research on this is ongoing, and I can report on the average SUG award by campus on a later date as the data becomes available.

CSU State University Grant Policy Context and Introduction

When a state government is forced to balance its budget in fiscally challenging times – as California recently has due to its multi-billion dollar structural deficit, higher education is a perennial loser as it is one of the core state-funded businesses that can raise much of its own revenue through tuition and fees, grants and contracts, and private donations to offset temporary and permanent budget shortfalls. However, there is an inevitable trickledown effect that budget shortfalls have on students at public colleges and universities that should be considered.

There has been a large long-existing gap between what public colleges receive as income from the state and what they must spend to cover costs. Nationally, one can predict with almost absolute certainty that as state governments cut funding for higher education, state colleges and universities must raise tuition and fees, and ratchet up other revenue-raising activities to offset such decreases and increased costs. This is also true for California. When state governments decide not to tax the public to support higher education they implicitly decide to tax the students.

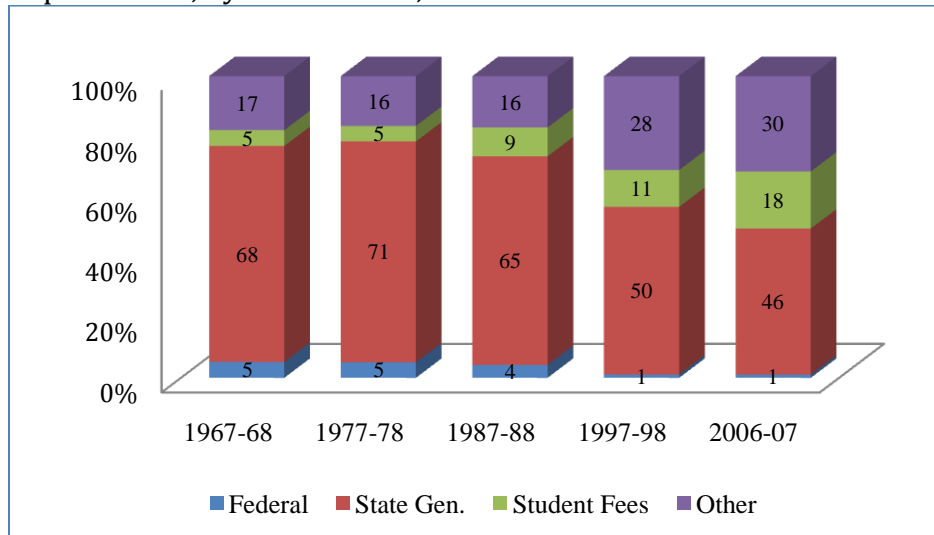
This growing gap between state colleges' income and their expenditures can be attributed to two concurrent realities: 1) public colleges have seen a steady decline in the percent of total income they receive from the state; and 2) College expenditures (costs) are outpacing overall state government funding. Nationally, there have been dramatic changes over a 20-year period in state funding for public institutions of higher learning. Government investment in public universities as a proportion of current-fund revenues has declined and has resulted in institutions' search for new revenue streams led by tuition and fees, grants and contracts, and private gifts (Santos, 2007).

Revenue streams for public institutions of higher education nationwide from 1986 to 2006 have seen an 18 percentage point decline in the proportion of current-fund revenue provided by the state. During the same 20 year period, tuition and fees rose sharply by 3 percentage points, endowment income rose by 3 percentage points, while income provided by private gifts, grants and contracts remained steady. During the same period, from 1986 to 2006, nationwide public college expenditures increased by 66 percent, while government funding grew by only 43 percent—these percent increases reflect 2006 constant dollar increases. This gap has widened over the last two decades (Santos, 2007).

California State University (CSU) System

In the last twenty years, proportional shares of state general fund in the CSU's operational expenditures declined by 43.6 percent—these percent increases reflect 2006 constant dollar increases, while in a ten year period income from grants and contracts and others increased by 96 percent, and student fees jumped 103 percent. This trend illustrates a remarkable shift from state support that is in decline, versus extramural funding and student fees that exhibit a large increase. This has serious implications within this system. As CSU continues to increase revenue-generating activities, it begins to redefine itself as a system dependent on the research revenue-generation game, whereby faculty who have an increased capacity to raise revenue through their research activities are hired, then they in turn recruit students who can assist the hired faculty in their research. These are students with ever-increasing higher standardized test scores, GPAs and the like—they are not necessarily large numbers of underrepresented minorities, low-income students, and academically marginal students (see figure 1).

Figure 1: Percentage Distribution of California State University Current Operation Expenditures, by Fund Source, Fiscal Years 1967-68 to 2006-07



Source: California Postsecondary Education Commission, Fiscal Profiles 2006, Display 24; Author's Calculations

Affordability in California

In the past decade, the cost of attendance at a California State University campus has increased at a much faster pace than inflation and median household income. Tuition and fees at the CSU system rose by 166 percent between 2000 and 2009, while inflation rose by 25 percent and median household income rose by only 16 percent (California Postsecondary Education Commission [CPEC], 2011). In the same time period, low-income families at about \$31,000 in annual income saw a decline in their earnings by 6.5 percent after adjusting for inflation, while families who made about \$230,000 a year still saw a miniscule increase of 1.5 percent after adjusting for inflation (CPEC, 2011). Clearly low-income families are disproportionately disadvantaged in terms of college affordability. The confluence of increased higher education costs exceeding leading economic indicators such as inflation and median household income, and the loss of real wages, creates a sad reality of less purchasing power for families in low-income brackets—thus, college is disproportionately less affordable for them. Their children need more and more aid if college is to be a real possibility.

Recent fee increases and the \$500 million budget cut in early 2011, as well as anticipation of further cuts to the CSU budget for 2011-2012 fiscal year, are expected for the first time in the history of CSU, to put student fee revenues as the major source for per FTES funding at the CSU system. As college affordability faces a great challenge, government sponsored financial aid programs also face a grim future. The Cal Grant program faces difficult pressure to tighten its eligibility criteria. In the federal arena the Republican controlled House of Representatives

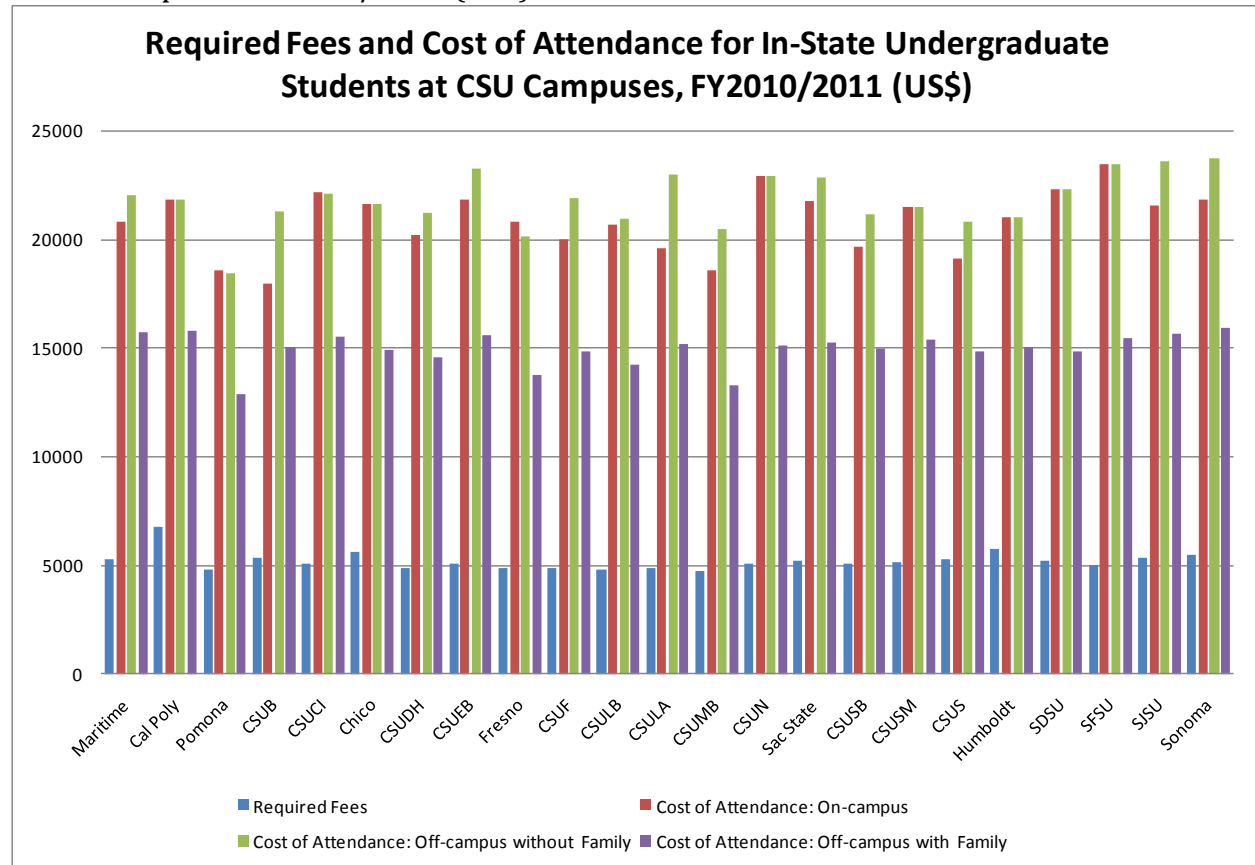
insist on reducing the maximum federal Pell Grant awards amount, as well as opportunities for second Pell Grant awards. The initial 2011 bipartisan budget bargain will prevent raises in the Pell Grant for years to come. Although, these policy debates still have some ways to go, it is clear that the role of institutional aid, such as the State University Grant is increasingly becoming more important and a reliable source for college affordability.

Overview of the Costs of Attending College –for CSU students

In the last ten years, fees at the California State University (CSU) system have more than doubled from an average of \$1,839 to \$5,198, generating public outcry and questioning CSUs and the State's long-standing level of commitment in providing accessible and affordable higher education. In response to public discontent, the state has charted a policy direction that aligns its Cal Grant program with fee increases at the CSU system in order to help offset such fee increases. Cost of attendance for CSU varies among those that live with their parents, on-campus, or off-campus. It also varies by institution to institution. According to the most recent 2010-2011 costs of attendance figures before financial aid, it costs between \$12,861 (Pomona) and \$15,948 (Sonoma) to attend a CSU while living with parents, \$17,983 (Bakersfield) and \$23,476 (San Francisco) for on-campus, and \$18,465 (Pomona) and \$23,712 (Sonoma) while living on campus (California State University Student Academic Support, 2010). Fees that make up one part of the cost of attendance vary as well. For example, Monterey Bay charges the least in fees (\$4,721) while San Luis Obispo charges the most (\$6,780).

Family income of students attending private institutions has always been relatively high; the family income of students attending public institutions has risen at a slightly faster rate in recent years (Pryor, Hurtado, Saéñz, Santos, & Korn, 2007). California has very large numbers of poor families as well as many who are more affluent. The ability of low- and middle-income families to absorb college prices fell during the past 25 years and income gaps grew rapidly between lower- and middle-income families than for upper-income families (Perna & Li, 2006). Nationally between 1978 and 2008, average family income declined by three percent (\$528 in constant 2008 dollars) for the poorest 20 percent of families, yet rose 15 percent (\$8,067) for the middle 20 percent and 78 percent (\$143,587) for the wealthiest five percent of families (College Board, 2009).

Figure 2: Required Fees and Cost of Attendance for In-State Undergraduate Students at CSU Campuses FY 2010/2011 (US\$)



Source: California State University Student Academic Support Office (2010)

Student aid has not kept pace with rising college prices, students who are more “price sensitive” are opting out of the four-year institutions, and more families are making decisions based on the best available aid package a college may offer. A link between student financial aid, as well as type of aid, and college choice and persistence, is well established by many previous studies (Hossler, Braxton, & Coopersmith, 1989; St. John & Noell, 1989; St. John, Paulsen, & Starkey, 1996). Hence, more than ever, availability of financial aid programs to a broader range of students is needed to maintain CSU’s and the state’s long-standing commitment to college affordability.

The college choice process is characterized as a multifaceted sequence that involves development and predispositions to attend college, the search for potential colleges and universities, and the choice among competing institutions (Hossler, Braxton, & Coopersmith, 1989). Financial aid is important to the college choice process (Hossler, 2000; Hossler, Braxton, & Coopersmith, 1989; Hossler, Schmidt, & Vesper, 1999; McDonough, 1997) and has been shown as particularly relevant to student preference when choosing between first and second choice institutions

(Chapman & Jackson, 1987). This decision-making process is further marked by differences among racial and ethnic groups (Kim, 2004; St. John & Noell, 1989) and by income level (Avery & Hoxby, 2003), and is influenced by loan aversion behavior by minority students and families (St. John & Noell). Grants and work-study are the most desirable form of financial aid for students of all backgrounds (St. John, 1990). In the 1980s, as federal policy shifted to loans from grants, African American students were more negatively affected by this shift than Whites (Kaltenbaugh, St. John & Starkey, 1999). Black families typically have much more negative experience with lenders and black graduates typically receive lower wages, making it harder to repay loans.

Presently, in addition to government sponsored financial aid programs, such as the Cal Grant and federal Pell grant programs, the CSU offers an institutional aid program known as the State University Grant (SUG). Under the state administered Cal Grant program, 20,405 CSU students^v received Cal Grant A or the tuition grant in fiscal year 2007/2008, while approximately 115,438 students^{vi} were projected to receive the SUG during the same fiscal year. Based on the enrollment projection of that year^{vii}, fewer than 40 percent of full-time equivalent students are covered by either Cal Grant A or the SUG. The Civil Rights Project's 2011 survey report, *Squeezed from All Sides*, shows that most students on one major CSU campus were experiencing severe financial stress even before the two 2011 tuition increases.

Since SUG alone serves nearly one-third of full-time equivalent students at the CSU system, it is important to understand its various award policies established at the campus-level and how the program is mitigating the financial needs of students. It is imperative to examine how various student populations benefit from this institutional aid program with close attention to underrepresented minorities. As state appropriations to CSU continue to decline as a percent of CSUs overall expenditures, commitment to access and affordability shifts more and more to the institutions themselves. As a result, it is equally important to explore what student populations are served by the SUG program, particularly how this program ensures affordability and access for traditionally underrepresented minorities in this era of fiscal distress.

Research Questions:

The underlying research questions of this paper are guided by the literature on tuition discounting practices mostly found in private universities but now found more and more in public colleges and universities across the country (Baum & Lapovsky, 2006); and the effects of such practices on overall student diversity on college campuses (Redd, 2000). Tuition discounting refers to the practice of offering some students a subsidy to lower their net tuition payments. For this paper, the following questions were posed:

1. *How has the need-based institutional student aid program (SUG) maintained higher education affordability?*
2. *Who benefits from the SUG?*
3. *In the last 20 years, have there been any changes with respect to who benefits from the SUG?*

Specifically, the paper examines how the SUG program serves students from different socioeconomic and racial/ethnic groups, as well as how that student population has changed over time is examined. Also, how the SUG has changed over time and how such changes differ among various student groups is explored.

Methods and Data

In addressing the research questions, the study consists of descriptive and trend analysis using the publicly available data generated from the Financial Aid Database, CSU's in-house student-level financial aid database and other sources and data produced from CSUs Division of Analytic Studies *Statistical Abstracts* reports. The data that was examined dates back to 1989, as the Trustees' policy to set aside one-third of the State University Fee revenues for the State University Grant program was adopted in 1993 so this study examines its impact.

In order to understand how SUG may impact affordability for students, descriptive data from the Statistical Abstracts 1997/1998 and 2007/2008 was examined. The Statistical Abstract is an annual report that is compiled by the Division of Analytic Studies at the California State University Chancellor's Office that contains a series of cross-sectional tables of campus enrollment, student profiles and other institutional data of the California State University system. Each Statistical Abstract has historical data for selected variables. For this paper, historical data from academic years 1988/1989 to 2007/2008 was gathered based on information in the Statistical Abstracts 1997/1998 and 2007/2008. In addition to the data from Statistical Abstracts, descriptive data from the California Postsecondary Education Commission was included. Additionally, data from the National Center for Educational Statistics' National Postsecondary Student Aid Study 2008 (NPSAS: 2008) was examined to estimate the profile of students who received the SUG. NPSAS: 2008 is the national-level representative sample of college students and it also contains a representative sample of California students and institutional segments. Data on total aid packages of CSU students by background characteristics was not available.

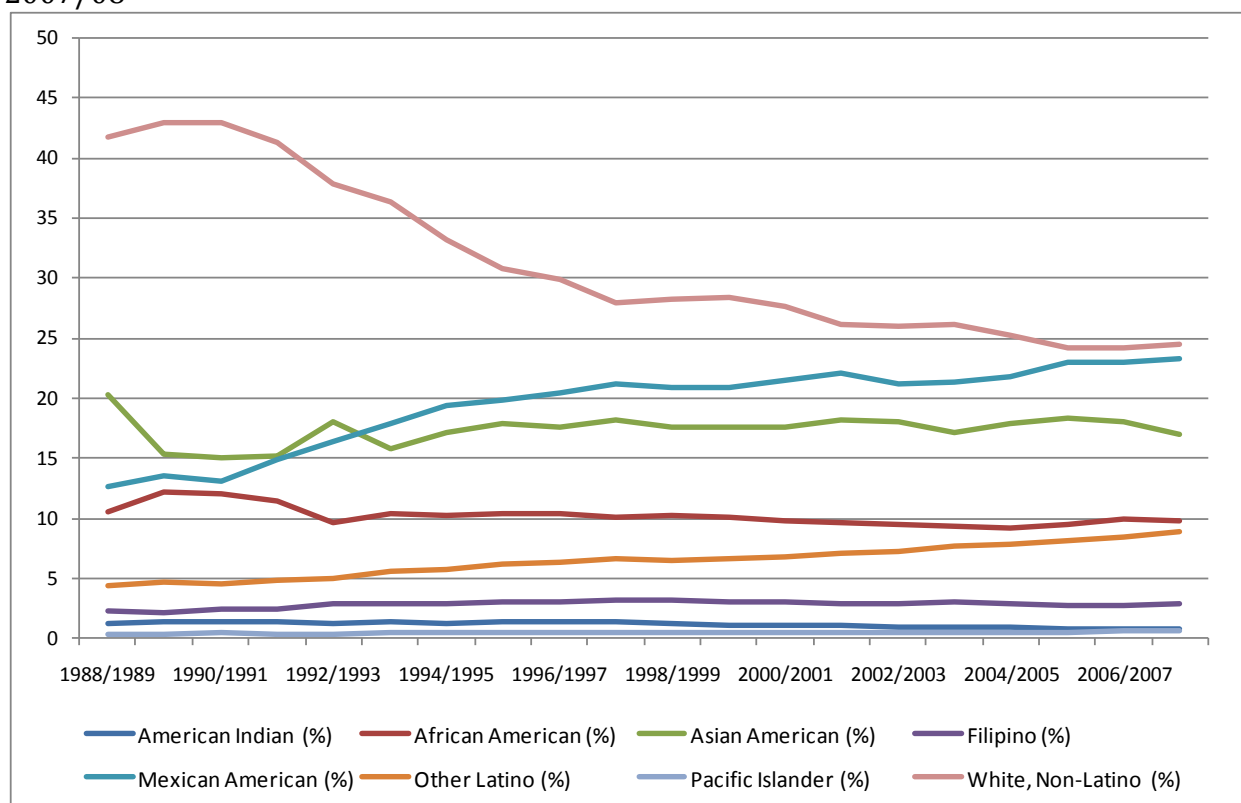
Since SUG is only awarded to undergraduate students who are either U.S. citizens or permanent residents, this paper only focuses on demographic data of those students that are available in the Statistical Abstracts. All percentages reported in the analysis were computed based on raw numbers found in the Statistical Abstracts and calculated based on the appropriate total number of undergraduate students, excluding nonresident aliens.

NCES's Power Stat Version 1.0 was used to compute National Postsecondary Aid Study, 2008 (NPSAS: 2008) data. For this paper, the analysis selected those respondents who were enrolled in the California State University system and Colleges, which is a response code within the California Institutional Segments variable.

Findings

Over a twenty-year period, the proportional share of Asian American and White, non-Latino decreased approximately by 3.3 percentage points and 17.2 percentage points, respectively. While the proportional share of Mexican Americans and other Latinos increased by 10.7 percentage points and 4.5 percentage points, respectively. (See Figure 3) For African Americans, the proportional share decreased by almost one percentage point. To put this in context it is important to compare this moving share during this time period with the shifts occurring in the racial/ethnic undergraduate student composition.

Figure 3: Demographic of State University Grant Recipients, by Race, 1988/89 - 2007/08

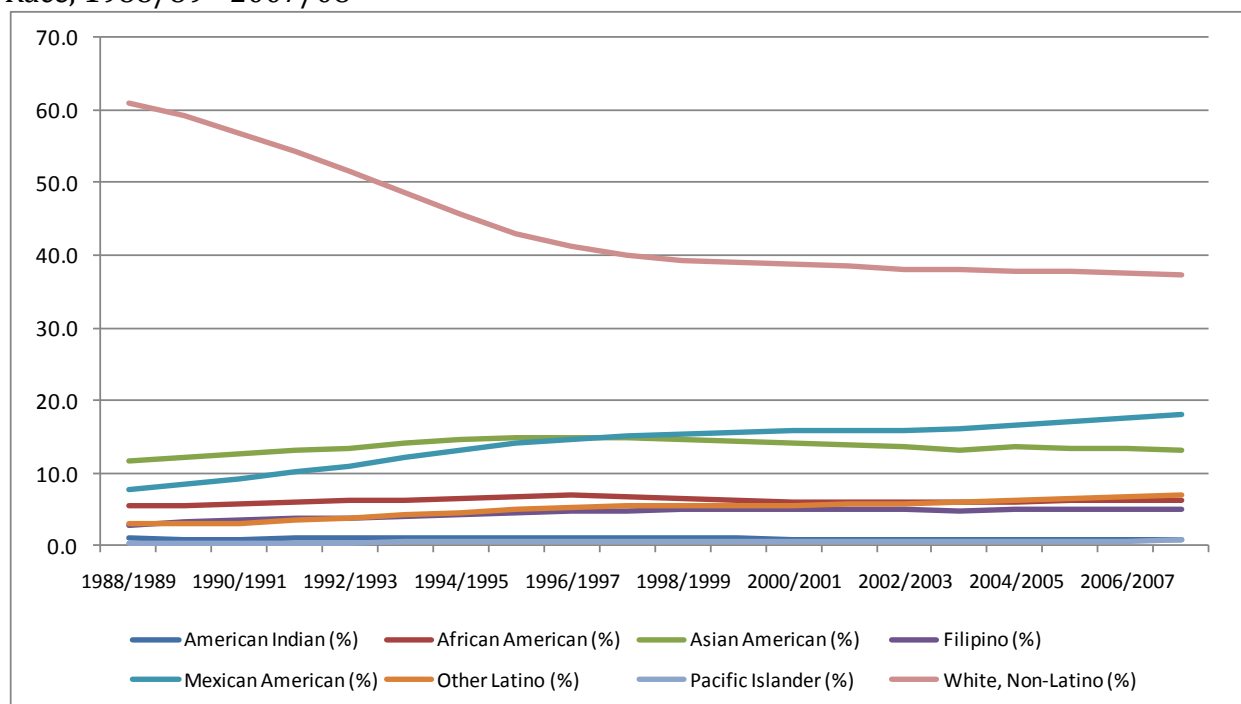


Source: CSU Statistical Abstracts 1997/1998 and 2007/2008

The underlying reality is that the composition of California's population of young people and undergraduate students in the CSU system changed dramatically

during those two decades. The proportional share of Mexican Americans and other Latino students increased by 10.3 and 3.9 percentage points, respectively, while the proportional share for White, non-Latino students declined by 23.8 percentage points. (See Figure 4) Thus the SUG program kept pace with the undergraduate growth for Mexican American and other Latino students. In addition, this analysis shows students from racial/ethnic minority backgrounds are proportionally overrepresented in receipt of the SUG award across all groups.

Figure 4: Demographic of Undergraduate U.S. Citizens or Permanent Residents, by Race, 1988/89 - 2007/08

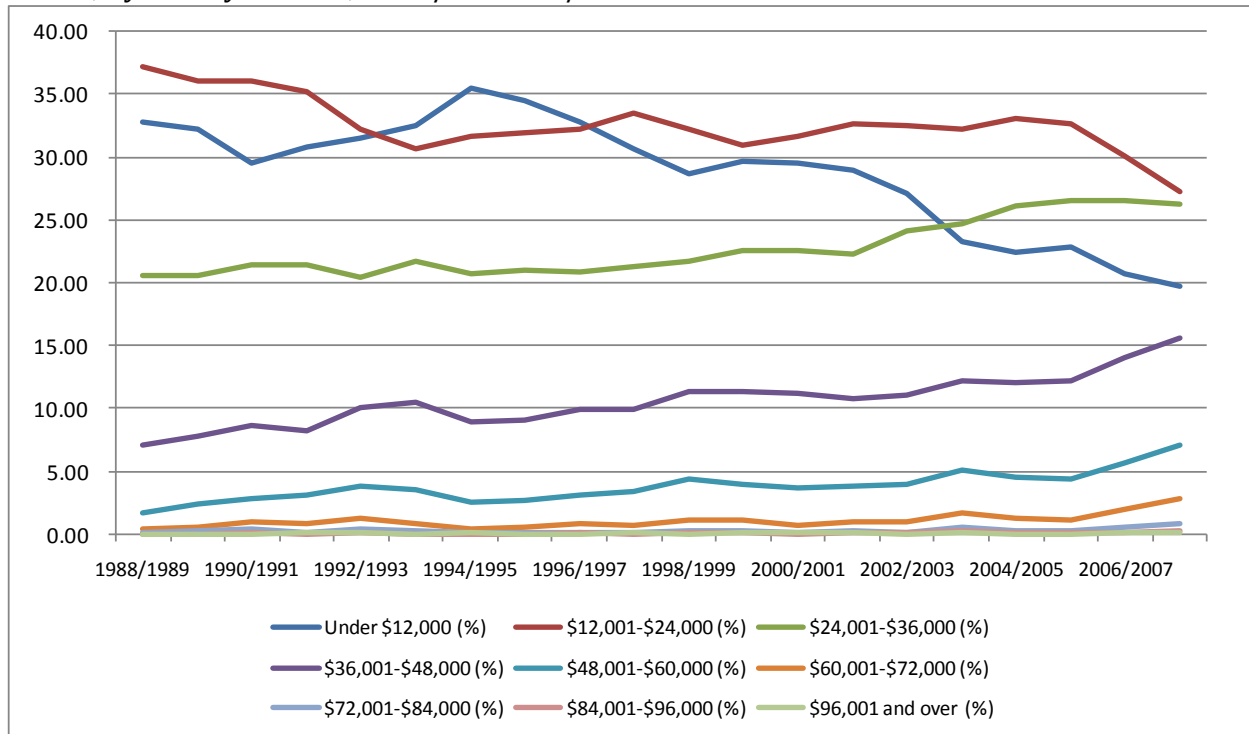


Source: CSU Statistical Abstracts 1997/1998 and 2007/2008

Proportionally more students from low-income backgrounds were awarded the SUG than those from higher income backgrounds, students from middle income (\$36K-48K & \$48K-\$60K) are barely making their proportional shares (or even underrepresented). This pattern holds for both dependent and independent students. Tables 5, 6, 7 and 8 show SUG recipients and overall demographics for dependent and independent students. That is, in 1988-1989, 32.8 percent of dependent students (income group under \$12,000) received the SUG compared to 31.9 percent, representing a less than one percentage point overrepresentation. However, when academic year 2007-2008 is examined, 19.7 percent of dependents students (income group under \$12,000) received the SUG compared to 11.4 percent, representing an 8.3 percent overrepresentation of this low income group. In short, this suggests that proportionally more students in the lowest income brackets are served by the SUG program than twenty years ago. The same pattern holds for independent students in Figures 7 and 8. Because the data from CSUs Statistical

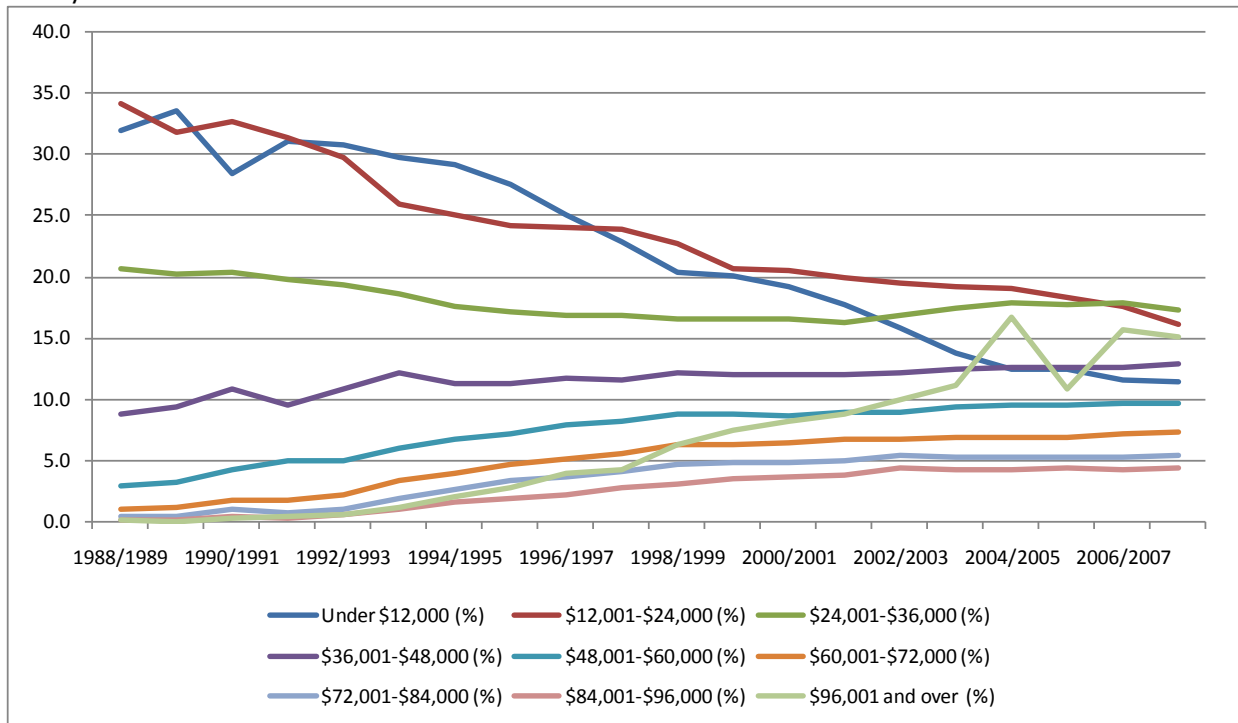
Abstracts only breaks down the student population by income groups adjusted for inflation, the highest concentration of SUG recipients appears to have shifted over to the next income groups (i.e., \$12,001 - \$24,000 and \$24,001 - \$36,000) over the twenty-year period.

Figure 5: Demographic of Dependent Students, who Received State University Grants, by Family Income, 1988/89-2007/08



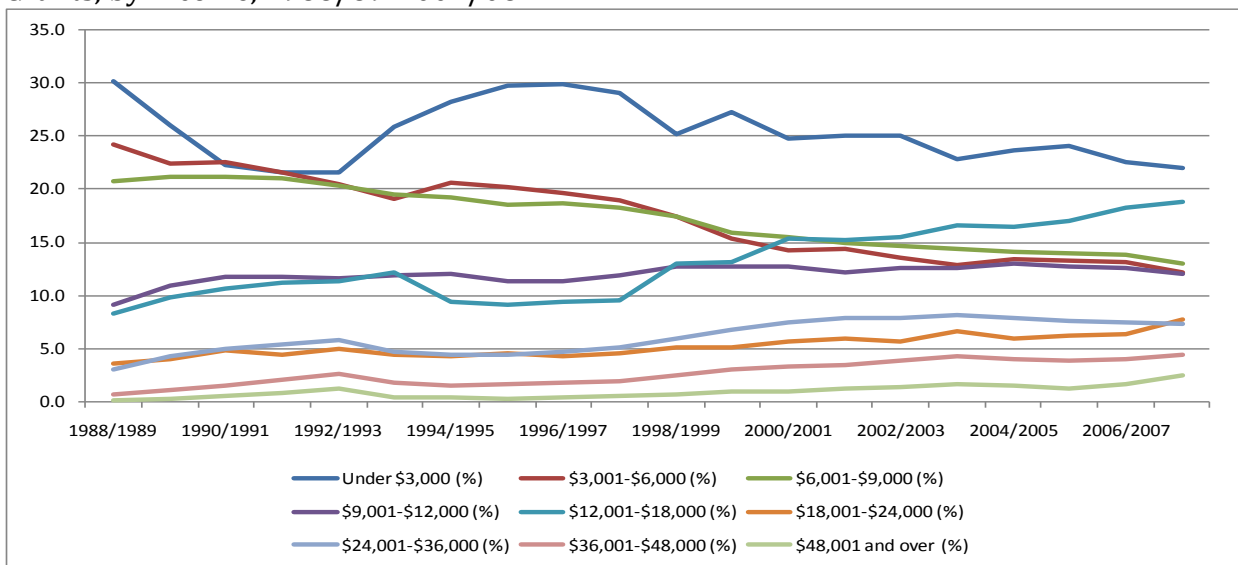
Source: CSU Statistical Abstracts 1997/1998 and 2007/2008

Figure 6: Demographic of Dependent Students, by Family Income, 1988/89-2007/08



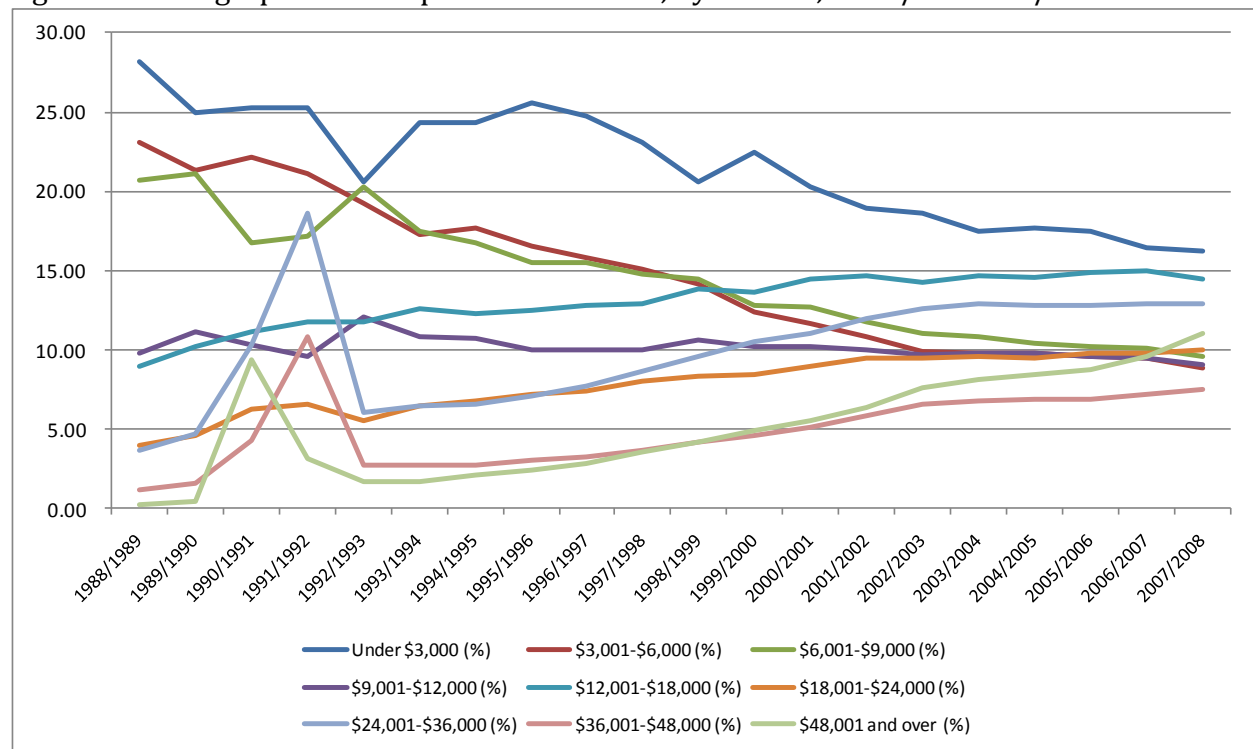
Source: CSU Statistical Abstracts 1997/1998 and 2007/2008

Figure 7: Demographic of Independent Students, who Received State University Grants, by Income, 1988/89-2007/08



Source: CSU Statistical Abstracts 1997/1998 and 2007/2008

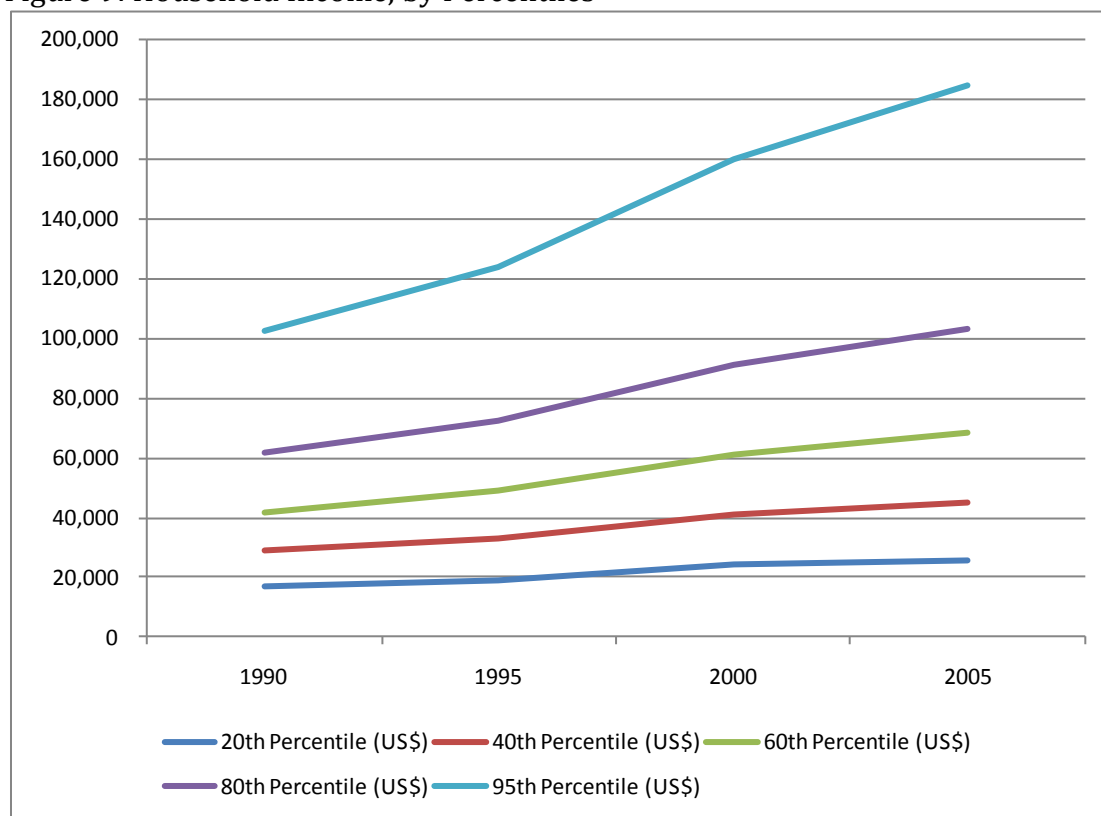
Figure 8: Demographic of Independent Students, by Income, 1988/89-2007/08



Source: CSU Statistical Abstracts 1997/1998 and 2007/2008

Household income has increased over the twenty-year period; thus, proportionally fewer students make up the lowest income groups. See Figure 9 However, it is clear that the SUG awards are concentrated on the lowest end of the income scale.

Figure 9: Household Income, by Percentiles



Source: California Postsecondary Education Commission, Report 08-10

In order to examine how race/ethnicity of students is related to income, the National Postsecondary Aid Study (NPSAS: 08) was examined. Table 1 shows that ethnic minority students are overrepresented in lower income quartiles.

Table 1: Student Demographic, by Income Percentile Groups, by Race/Ethnicity at California State Universities and Colleges

| | White (%) | Black or African American (%) | Hispanic or Latino (%) | Asian (%) | Others (%) |
|---|-----------|-------------------------------|------------------------|-----------|------------|
| Total | 43.80 | 5.40 | 26.80 | 17.60 | 6.40 |
| By Income Percentile | | | | | |
| Up to 25th Percentile | 33.90 | 8.70 | 28.30 | 23.10 | 6.00 |
| 25th to 50th Percentile | 39.00 | 4.80 | 33.40 | 16.80 | 5.90 |
| 51st to 75th Percentile | 48.60 | 3.20 | 27.00 | 15.00 | 6.20 |
| 76th to 100th Percentile | 58.20 | 3.40 | 17.50 | 13.30 | 7.60 |
| <i>Source:</i> NPSAS 2008 | | | | | |
| Computation by NCES PowerStats Version 1.0 on 7/14/2010 | | | | | |

The percentage of SUG recipients among all undergraduate students who are U.S. citizens or permanent residents has been consistent for the sixteen-year period since the last time the CSU Trustees adopted the new SUG policy in 1993 (Table 2).

Given the state of California's economy and the CSU system budget in the last couple of years, it is truly remarkable that the CSU system maintained a level of commitment to mitigating affordability for underrepresented and low-income students through the disbursement of the SUG awards rather than spending an increasing share of tuition income on other university expenses. Interestingly, the size of the SUG award as it relates to the overall cost of attendance at the CSU system has been strengthening over the years. Table 3 shows that in 2005, the average SUG award was 15 percent of the overall cost of attendance, which is three percentage points higher than the share in 1995 and eight percentage points higher than the share in 1990. This means, of course, that those students receiving the SUG as their only aid must cover, on average, 85% percent of their rising costs in other ways. Since to be eligible, their families must have very limited resources, that money must be largely found elsewhere or borrowed. A \$2,000 dollar award is a significant help but there was still \$12,000 of costs to be covered by 2005.

SUG plays a greater role in providing financial aid to students who did not receive state financial aid in 2008 (See Tables 4 and 5). Students who did not receive state financial aid received, on average, a larger amount of SUG than their counterparts with state financial aid. Compared to students who did not receive federal Pell grants, proportionally more students who did not receive state financial aid were awarded SUG in 2008 and the differences are even greater for underrepresented students, as well as students from lower income quartiles. This finding is consistent with the CSU system policy that the SUG awards are awarded to those students without state fee grants. That is, the SUG awards extend need-based financial aid beyond the state financial aid program.

Table 2: Total Number of State University Grants Awarded, 1988/89-2007/08

| | Number of State University Grants Awarded | Number of Undergrad uate U.S. Citizens or Permanent Residents Enrolled | Percentage of State University Grant Recipients (%) |
|---|---|--|--|
| 1988/1989 | 41,972 | 277,107 | 15.15 |
| 1989/1990 | 32,977 | 280,933 | 11.74 |
| 1990/1991 | 42,083 | 285,660 | 14.73 |
| 1991/1992 | 52,551 | 279,488 | 18.80 |
| 1992/1993 | 85,641 | 269,138 | 31.82 |
| 1993/1994 | 75,343 | 254,963 | 29.55 |
| 1994/1995 | 82,521 | 250,987 | 32.88 |
| 1995/1996 | 81,839 | 256,956 | 31.85 |
| 1996/1997 | 85,248 | 264,784 | 32.20 |
| 1997/1998 | 86,145 | 267,874 | 32.16 |
| 1998/1999 | 96,309 | 270,250 | 35.64 |
| 1999/2000 | 101,305 | 275,553 | 36.76 |
| 2000/2001 | 97,685 | 281,619 | 34.69 |
| 2001/2002 | 90,985 | 296,292 | 30.71 |
| 2002/2003 | 92,627 | 307,291 | 30.14 |
| 2003/2004 | 105,381 | 308,497 | 34.16 |
| 2004/2005 | 107,341 | 309,402 | 34.69 |
| 2005/2006 | 107,445 | 319,919 | 33.59 |
| 2006/2007 | 111,026 | 332,258 | 33.42 |
| 2007/2008 | 115,107 | 345,737 | 33.29 |
| <i>Source:</i> CSU Statistical Abstracts 1997/1998 and 2007/2008 | | | |

Table 3: Percentage of Average State University Grants in Cost of Attendance

| | Cost of Attendance (US\$) | Average State University Grant Awarded (US\$) | Percentage of Average State University Grant against Cost of Attendance (%) |
|------|---------------------------|---|---|
| 1990 | 7,286 | 499 | 6.84 |
| 1995 | 9,665 | 1,165 | 12.06 |
| 2000 | 10,849 | 1,231 | 11.35 |
| 2005 | 14,218 | 2,122 | 14.92 |

Source: California Postsecondary Education Commission, Report 08-10, CSU Statistical Abstracts 1997/98 and 2007/08

Table 4: Percentage of Students received Institutional Need Based Grants at California State Universities and Colleges

| | All Students (%) | Students who did not receive Federal Pell Grant (%) | Students who did not receive State Need Based Grant (%) | Students who did not receive both Federal Pell Grant and State Need Based Grants (%) |
|---|------------------|---|---|--|
| Total | 22.30 | 3.50 | 18.40 | 3.10 |
| By Race | | | | |
| White | 13.70 | 2.80 | 11.50 | 2.50 |
| Black or African American | 36.90 | 6.80 | 34.50 | 6.90 |
| Hispanic or Latino | 31.90 | 3.70 | 25.90 | 3.50 |
| Asian | 25.90 | 3.60 | 22.80 | 3.70 |
| Others | 18.90 | 5.30 | 14.80 | 3.50 |
| By Income Percentile | | | | |
| Up to 25th Percentile | 45.50 | 3.60 | 41.50 | 3.80 |
| 25th to 50th Percentile | 26.20 | 9.40 | 24.80 | 8.90 |
| 51st to 75th Percentile | 6.90 | 1.90 | 6.20 | 1.60 |
| 76th to 100th Percentile | 0.50 | 0.50 | 0.50 | 0.50 |
| By Parent's Highest Education Level | | | | |
| Do not know | 39.30 | ** | 36.90 | ** |
| GED and/or Vocational/Technical Education | 32.80 | 6.00 | 27.90 | 6.00 |
| Associate Degrees and/or Some College Education | 21.30 | 2.80 | 17.20 | 3.00 |
| College Degrees | 15.90 | 3.70 | 12.90 | 2.30 |
| First Professional Degrees | 14.60 | 2.90 | 13.10 | 2.90 |
| Master's/Doctoral Degrees | 10.30 | 1.10 | 9.00 | 1.20 |
| ** Reporting standard not met | | | | |
| Source: NPSAS 2008 | | | | |
| Computation by NCES PowerStats Version 1.0 on 7/14/2010 | | | | |

Table 5: Average Institutional Need Based Grants Awarded at California State Universities and Colleges

| | All Students (US\$)* | Students who did not receive Federal Pell Grant (US\$)* | Students who did not receive State Need Based Grant (US\$)* | Students who did not receive both Federal Pell Grant and State Need Based Grants (US\$)* |
|---|----------------------|---|---|--|
| Total | 2,369.10 | 2285.00 | 2586.50 | 2449.90 |
| By Race | | | | |
| White | 2,177.20 | ** | 2398.80 | ** |
| Black or African American | 2,371.00 | ** | 2436.30 | ** |
| Hispanic or Latino | 2,419.60 | ** | 2646.00 | ** |
| Asian | 2,512.30 | ** | 2769.70 | ** |
| Others | 2,422.60 | ** | ** | ** |
| By Income Percentile | | | | |
| Up to 25th Percentile | 2,384.80 | ** | 2638.20 | ** |
| 25th to 50th Percentile | 2,344.40 | 2212.70 | 2524.20 | 2446.40 |
| 51st to 75th Percentile | 2,366.40 | ** | 2513.70 | ** |
| 76th to 100th Percentile | ** | ** | ** | ** |
| By Parent's Highest Education Level | | | | |
| Do not know | 2,496.90 | ** | ** | ** |
| GED and/or Vocational/Technical Education | 2,386.20 | ** | 2555.30 | ** |
| Associate Degrees and/or Some College Education | 2,489.00 | ** | 2771.30 | ** |
| College Degrees | 2,127.00 | ** | 2458.10 | ** |
| First Professional Degrees | ** | ** | ** | ** |
| Master's/Doctoral Degrees | 2,265.10 | ** | 2411.10 | ** |
| * Not including zero | | | | |
| ** Reporting standard not met | | | | |
| Source: NPSAS 2008 | | | | |
| Computation by NCES PowerStats Version 1.0 on 7/14/2010 | | | | |

Discussion and Conclusion

What all this means for current and future students of the CSU system is that they will have to pay more. That will have the unintended consequence of pricing out both enrolled and prospective students who are at the margins economically – that is, those traditionally underserved, such as Mexican Americans, Other Latinos, and African Americans who are generally lower-income and will be most adversely affected by fee increases. Because of the recent budget agreement in Washington, the Pell Grant, the largest federal need-based financial aid program, will not increase in the next several years as costs soar. The state’s fiscal crisis may also impact Cal Grants. The SUG is important in mitigating affordability for underrepresented and lower-income students. As postsecondary leadership attempts to shore up students at the margins, middle-income students and their families may be the other unintended casualties of such fee increases.

In addition, underserved students are most likely to be affected by CSU as they continue to provide access for the same number of students. This is now being played out by the most recent signal at CSU. The CSU turned away approximately 10,000 students in academic year 2009-10 citing its inability to continue to fund enrollments beyond what the state is providing based on the enrollment formula.

Fee increases don’t just price out those looking to enroll; they saddle enrolled students with increased debt. In this volatile and tight lending environment, students are faced with ever-more difficult decisions about taking on additional debt. Moreover, additional debt limits students’ ability to reap the benefits of a baccalaureate degree such as buying a home, starting a family, and in many cases opting for state desired public sector professions. All of these resulting outcomes have social and economic implications for California. The federal government stepped up its efforts to mitigate the tight consumer credit crunch as the sole and direct lender by passing the Student Aid and Fiscal Responsibility Act (SAFRA, 2010).

California mirrors the national trends in various ways but has managed to maintain its commitment to low-income students by enrolling a large percentage of such students as measured by Pell Grant eligibility—a remarkable feat that should be commended. In addition, based on the findings, the SUG has done a remarkable job in offsetting some of the fee increases. This commitment has remained steady irrespective of a national trend showing more and more states favoring financial aid policies that reward merit versus need, channeling much of state funding to more affluent families. For the most part, California has resisted this, but it is unlikely that it can continue much longer, given the trends in reduced state funding and increased costs that students will be expected to bear.

Continuing severe state shortfalls in college funding could lead to the full adoption of market-based practices with campuses fighting to generate revenue and

wean themselves from dependency on a state unwilling to provide funds. This market driven approach consists of changing the student mix (admitting more out of state, graduate, and international students and students not needing aid while admitting less in-state, undergraduate, and domestic students), further implementing differential pricing strategies (charging different fees for different schools—a practice that is currently employed), employing retrenchment strategies (realignment of schools, programs, and the like with the new financial landscape), to name a few of the strategies.

CSU is in a unique position in that the budget cuts of late have added fiscal anxiety throughout the system; however, it has remained committed to low-income students and underrepresented students through its SUG program. This was a welcomed finding of this paper and, as a result, the policy implication is that this is an institutional aid policy that appears to be helpful, and one that should continue and adapt to the changing financial aid need conditions. The current fiscal climate, however, can have the effect of eroding such a program if CSU has to make deeper cuts, charge higher fees, and use its net revenue increases for other purposes other than institutional aid. It is necessary and helpful to students to have an increased pool of available resources such as the SUG, particularly those at the margins exhibiting the greatest financial need and help defray the costs of attending college; however, students making decisions about going to college respond more to the sticker-shock price hikes of fees than they do to increases in aid. While maintaining and increasing (when possible) aid is a good start, the lack of available information, wide variation in academic preparation, and limited opportunities for access will still prevent ever-increasing numbers of students from enrolling in college.

The SUG is generally doing a good job in holding students harmless to fee increases as it acts as a fee increase “offsetter” and not as a need-based “targeter.” It needs to be effectively combined with other federal and state aid for truly needy students. As fees continue to rise, the rate and magnitude of future increases are likely to price out students at the margins—the most financially needy and racially diverse among us. In anticipation of this undesirable outcome the SUG may need to play a larger role as a targeted institutional aid program. In order to make a better assessment of the role SUG plays in mitigating fees combined with other financial aid sources, CSU should consider reporting the SUG awards along with other sources of financial aid by race/ethnicity, income levels, and campus. This would be useful way to easily determine who benefits and where the financial aid gaps lie. That is, this reporting format will be a useful policy tool to tightly couple tuition and fee increases with financial aid and target those students with the greatest financial need.

Policy Recommendations

- Strengthen and expand linkages of tuition setting policies with aid at both state and institutional levels. Currently the California Student Aid Commission

(CSAC) awards financial aid (Cal Grants) to financially needy students at public and independent 2- and 4-year colleges and universities. The state can act directly in helping to expand CSU institutional aid programs such as the SUG program for low-income students as a targeted aid program.

- Purposeful information campaign to mitigate “sticker shock” reactions along with viable evaluation of the effects of such campaign. One way that states try to mitigate recent increases in tuition and fees is to ratchet up their public information campaigns regarding scholarships and aid packages. However, we don’t know how effective such campaigns are in curbing students’ substitution behavior, such as opting to not go to a CSU because of costs and choosing instead to attend a local community college or an out-of-state school. Making students aware of targeted grant aid programs should go a long way in mitigating increased costs of attendance.
- Plan for future fee increases as far in advance as possible and inform students and their families so that they may anticipate such increases. Californians must be prepared for the inevitability of future fee increases; consider fee increases as “maintenance” or “cost of living” adjustments – as expenditures rise, students and their families will be left to make up the difference if the State does not sustain its level of support. The SUG appears to help mitigate affordability for low-income and underrepresented students but for how long? Clearly, institutions matter and the CSUs SUG program matters now and will matter more in a future consisting of greater fee increases.

References

- Avery, C. & Hoxby, C. M. (2003). Do and should financial aid packages affect students' college choices? In C. Hoxby (Ed.), *College decisions: How students actually make them and how they could*. Working Paper, National Bureau of Economic Research.
- Baum, S., & Lapovsky, L. (2006). *Tuition discounting: Not just a private college practice*. New York: The College Board.
- California Postsecondary Education Commission (2011). *College costs and family income: The affordability issue at UC and CSU*. Sacramento, CA: Author.
- Chapman, R. G., & Jackson, R. (1987). *College choices of academically able students: The influence of no-need financial aid and other factors*. New York: College Entrance Examination Board.
- College Board, (2009). Trends in college pricing. Washington, DC: Author.
- Hansen, W. L., & Weisbrod, B. A. (1969). *Benefits, costs, and finance of public higher education*. Chicago: Markham Publishing Company.
- Heller, D. E. (2005). Public subsidies for higher education in California: An exploratory analysis of who pays and who benefits. *Educational Policy*, 19(2), 349-370.
- Hossler, D., Braxton, J., & Coopersmith, G. (1989). Understanding student college choice. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research: Vol. 5* (pp. 231-288). New York: Agathon Press.
- Hossler, D. (2000). The role of financial aid and enrollment management. In M. Loomes (Ed.), *New directions in student affairs: No. 89*. San Francisco: Jossey-Bass.
- Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore: Johns Hopkins University Press.
- Kaltenbaugh, L. S., St. John, E. P., & Starkey, J. B. (1999). What difference does tuition make? An analysis of ethnic differences in persistence. *Journal of Student Financial Aid*, 29(2), 21-31.
- Kim, D. (2004). The effect of financial aid on students' college choice. *Research in Higher Education*, 45(1), 43-70.

- McDonough, P. (1997). *Choosing colleges: How social class and schools structure opportunity*. Albany: State University of New York Press.
- Perna, L. W., & Li, C. (2006). College Affordability: implications for college opportunity. *Journal of Student Financial Aid*, 36(1), 7-24.,
- Redd, K. E. (2000). *Discounting towards disaster: Tuition discounting, college finances, and enrollment of low-income undergraduates*. Indianapolis, IN.
- Santos, J. L. (2007). Resource allocation within public research universities. *The Review of Higher Education*, 30(2), 125-144.
- St. John, E. P. (1990). Price response in persistence decisions: An analysis of the high school and beyond senior cohort. *Research in Higher Education*, 31, 387-403.
- St. John, E. P. & Noell, J. (1989). The effects of student financial aid on access to higher education: An analysis of progress with special consideration of minority enrollment. *Journal of Higher Education*, 73(2), 189-236.
- St. John, E. P., Paulsen, M. B., & Starkey, J. B. (1996). The nexus between college choice and persistence. *Research in Higher Education*, 37, 175-220.
- The California State University 2010-2011 COST OF ATTENDANCE (Summary of Standard Student Expense Budget) (October, 2010). Retrieved from <http://www.calstate.edu/sas/documents/2010-11COA.pdf>.

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- ⁱ <http://www.calstate.edu/budget/fybudget/2009-2010/supportbook2/uses-financial-aid.shtml>
 - ⁱⁱ http://www.calstate.edu/SAS/fa_programs.shtml
 - ⁱⁱⁱ http://www.calstate.edu/SAS/fa_programs.shtml
 - ^{iv} http://www.calstate.edu/SAS/fa_programs.shtml
 - ^v http://www.csac.ca.gov/pubs/forms/grnt_frm/07-08PreliminaryGrantStatistics.pdf
 - ^{vi} http://www.calstate.edu/budget/fybudget/2007-2008/supportbook1/support_budget1.pdf
 - ^{vii} http://www.calstate.edu/budget/fybudget/2007-2008/supportbook1/support_budget1.pdf