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QUO VADIS? – PUBLIC COLLEGES AND THEIR FUNDING

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ABSTRACT
This paper reviews the current debate about the motivation, adequacy and distribution of funding for public colleges. Although the debate has been ongoing for some time, it has become especially heated in recent years due to serious budget problems in many states. In addition, the paper outlines significant trends in higher education which appear to be a reaction to the increasing tuition costs, demographic changes and expectations of employment from a college education. It is expected that the trends in distance education growth, part-time attendance, competition from for-profit colleges, lower subsidy from the state, stagnant population, the lack of college-ready matriculants, and the demand for increased efficiency will forever change the public college landscape in the next decade or two.

Keywords – higher education, public college funding, trends in college instruction;

1. FUNDING SOURCES FOR COLLEGES
Due to tax revenue shortfalls in many states, recessionary periods have brought about a serious debate about the funding of public services including higher education. (Hood, 1996) (Wellman, 2008) Although many states concede that an educated workforce is a requirement for a healthy and resilient economy, the debate centers on exactly how much the state should fund higher education and exactly how it should be done to be fair to taxpayer and student alike. (Abel & Dietz, 2009) (Selingo, 2003) (Zemsky, 2003) Caught in the middle of this debate and under fire for not producing evidence that both taxpayer and student are getting a good deal for their respective contributions is the public college itself. Administrators are accused of enjoying bloated salaries and reckless spending while faculty and staff are criticized for protecting their union-gained pensions and above average salaries in the face of widespread joblessness and fewer jobs with pension benefits in the private sector. We review the major funding sources for a public college which are – state, local taxes, tuition and fees and other. The other category includes receipts from endowment proceeds, federal grants, and auxiliary profit-making businesses that the college may operate such as cafeteria, child-care centers, sports activities and associated paraphernalia, bookstore, dormitories, etc.

1.1 State Funding
This source of revenue for the public college has been a reliable income that has been traditionally associated with keeping tuition and fees low in comparison to private colleges. (Salazar, 2006) States have considered this subsidy to colleges as simply an extension of the public school funding in the K-12 grades. Some states even label the aggregate public education subsidy as a K-20 continuum of education funding. During recessionary periods, however, state funding of education has come under scrutiny and questions have been raised as to what the appropriate level of public funding should be. (Alexander, 2000) In terms of priority, states have conceded that K-12 funding is more important than higher education and so the scrutiny has been more severe on the funding level of public colleges. (Koch, 2008) Several questions have arisen in the review of the public funding of higher education. First, how many colleges should a state have? This question is important because there is a perception that the cost of providing the capital for buildings and other infrastructure can be high if student enrollment cannot support it. That is, the region being served by the public college does not have the population base to sustain a relatively constant source of college-bound students.

1.2 Local Taxes
Local financial support for public colleges has been more pronounced for the first two years of higher education and such support has led to a proliferation of “community or junior colleges.” There are approximately 1200 community colleges in the country, the vast majority of which are public institutions. The historical origin has been that such colleges offer two year extensions of the study for graduates from local school districts. Initially, the goal was to provide post secondary education to students who would otherwise not qualify to enter traditional four year institutions. (Hudson, 2008) Further, the course of study was to be focused on training or workforce development rather than general education. The aim was job...
training or to prepare the student for practice oriented career in the trades such as plumbing, carpentry, welding, etc. or in technician assignments such as electronics, refrigeration, radio operators, etc. Over the years, many colleges added the goal of preparing students for entry or transfer to a four year institution in order to complete a baccalaureate course of study. A third mission was also added, namely to offer courses for self-improvement or enrichment, especially for retirees or home-bound residents of the community. Such courses may or may not earn college level credit but were seen as worthwhile since the learning center could easily accommodate them. Communities were eager to support the two year school through local levies in either property tax or a sales tax partly because the college was seen as an economic engine in providing jobs for residents and attracting students from the surrounding area. Further, more educational opportunities for the local residents, especially its youth, formed a stimulus for regional economic development.

1.3 Tuition and Fees
In 1980-1 states provided 45% of public college revenues while tuition and fees contributed 13% while in 1995-6 states chipped in only 35% and tuition and fees went up to 19%. (Campbell, 2005). This revenue stream is definitely user driven and is an important factor on the road to privatizing the public college. (Morphew & Eckel, 2009) Tuition is subject to more variability than any other funding source. First, students have to be recruited and retained so that they can complete their payments. The dropout rate affects the revenue collection enormously since many students pay tuition and fees on some form of time payment plan. It is not uncommon for colleges to have a large aggregated receivable for non-payment of tuition and fees from students who are never heard from again. Of course, if the student decides to come back to school, re-admittance is contingent on clearing up the receivable. The concept of a public college is grounded on the principle that educational opportunities constitutes a public good for the citizens in the region it serves. That is why the residents are willing to absorb the self-imposed tax in order to fund the college to some degree and, in that way, lower the tuition for those who will attend.

1.4 Other Funding Sources
Some colleges have established an affiliated foundation for the purpose of raising money for capital improvements, endowed chairs in specific fields, and scholarships. However, foundations at public colleges have not seen the success in establishing endowments that private schools have enjoyed. (Strout, 2004)
Auxiliaries include businesses developed by colleges for the convenience of students such as bookstores, cafeterias, etc. These businesses have been shown, by and large, not to be money-makers for the college and frequently are out-sourced to entities that have developed efficiencies and size so that such service businesses can be profitable.
Finally, a frequently untapped source of revenue are federal agencies and private foundations who frequently solicit grant proposals with the aim of furthering a specific cause such as increasing graduates in medical, nursing and associated STEM fields. These grants often come with restrictions such as the program thus started has to be absorbed by the college over time and its continued funding must come from another source. However, these grants allow the college to pay for needed equipment, lab refurbishment, additional teaching staff, etc. In general, these grants can be supplemental funding to offset temporary setbacks in funding from the state or local taxes. Research contracts that entail delivery of new findings, patents, or data gathering and analysis form yet another source of revenue for colleges. However, these contracts or grants are awarded selectively only after stiff competition from many public schools seeking the same grant and they do take time away from tenured faculty (Salazar & Kumar, 2004)

2. TRENDS – What does the future public college look like?
In order to understand what the future holds for higher education in this country, one has to stop and understand several demographic factors that will shape that future. Following are some undeniable trends that will extend their influence into the role of the public college in America.

2.1. Slow or no growth in population.
America has always been a nation positioned for economic growth partly because it could count on a growth in its workforce. First, the efficiency of farming and ranching freed up a rural population to migrate toward industrial jobs found in metro areas. The world wars of the last century brought women into the workplace when the male population was occupied in military service. In the last fifty years, an immigrant population has helped bolster the science and engineering ranks when those graduates decided to stay
and work here. However, more recently these sources of additional workers have started to dry up. Although the population of the US has continued to increase, it has done so with legal and illegal immigration so it is possible that the country may soon face the worker shortages that Japan and western European nations have already experienced. In fact, 33% of the US growth in population is due to immigration and is expected to climb to 86% in 2050, primarily due to post 1992 immigration. (US Census Bureau) The lack of population growth will translate into flat college enrollment or possibly a decline for many colleges. The public college enrollment in the US was 14.9 million in 2010 and is projected to be 16.9 million in 2019 yielding a yearly increase of a mere 1.38%. If declining enrollment happens for many schools, there will be increased competition for students among the existing schools leading perhaps to a wave of consolidations or closures. Already there is competition to attract under-represented groups such as blacks and Hispanics to attend college in order to make up for the declining enrollment of the traditional white matriculants.

2.2. For profit competition, accreditation
Competing for students is an aggressive newcomer to the higher education scene – the for-profit college. Once denigrated for their “drive through” education or as mail order diploma mills, several for-profit colleges have become forces to be reckoned with. The University of Phoenix, possibly the most notable of such colleges, had enrollment hit 224,880 in 2007, several times larger than the nearest public competitor (IPEDS). Even their lack of accreditation, often seen as differentiation from a public college, has been solved by simply purchasing a failing small private college. Their marketing departments, often outspending the academic segment, pulls in students who are led to believe that a college education is possible by simply putting the expenses on a virtual credit card – their loans. Although Congress is already looking into the predatory practices of such for-profit colleges, it is unfair to say that they have nothing else to offer. The colleges have established methods for accelerating the curriculum by using cohort studies, short term concentrated courses and instructors with extensive “practice-oriented” experience rather than those with “research” backgrounds. Despite the crackdown on college-loan loading practices, these colleges will attract and retain students who want a fast track to job training in a high paying field. In the end they will draw college bound students away from public colleges.

2.3. Commuting, parking, part-time workers
College expenses have increased faster than the cost of living, a trend that has not been controlled and is not expected to flatten out. (Cohen, 1998, pp 368-9) Undergraduate tuition, room and board at public colleges for the 2008-9 year was estimated to be $14,060 while it was $31,267 at private institutions. See Table below. (IPEDS)

<table>
<thead>
<tr>
<th>Year</th>
<th>4 year private</th>
<th>4 year public</th>
<th>Delta</th>
<th>Delta %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SY81</td>
<td>$13,670</td>
<td>$6,233</td>
<td>$7,437</td>
<td>54%</td>
</tr>
<tr>
<td>SY91</td>
<td>$20,926</td>
<td>$8,288</td>
<td>$12,638</td>
<td>60%</td>
</tr>
<tr>
<td>SY01</td>
<td>$26,426</td>
<td>$10,463</td>
<td>$15,963</td>
<td>60%</td>
</tr>
<tr>
<td>SY02</td>
<td>$27,202</td>
<td>$10,926</td>
<td>$16,276</td>
<td>60%</td>
</tr>
<tr>
<td>SY03</td>
<td>$27,653</td>
<td>$11,378</td>
<td>$16,275</td>
<td>59%</td>
</tr>
<tr>
<td>SY04</td>
<td>$28,520</td>
<td>$12,143</td>
<td>$16,377</td>
<td>57%</td>
</tr>
<tr>
<td>SY05</td>
<td>$28,998</td>
<td>$12,618</td>
<td>$16,380</td>
<td>56%</td>
</tr>
<tr>
<td>SY06</td>
<td>$29,061</td>
<td>$12,882</td>
<td>$16,179</td>
<td>56%</td>
</tr>
<tr>
<td>SY07</td>
<td>$29,990</td>
<td>$13,272</td>
<td>$16,718</td>
<td>56%</td>
</tr>
<tr>
<td>SY08</td>
<td>$30,778</td>
<td>$13,429</td>
<td>$17,349</td>
<td>56%</td>
</tr>
<tr>
<td>SY09</td>
<td>$31,267</td>
<td>$14,060</td>
<td>$17,207</td>
<td>55%</td>
</tr>
</tbody>
</table>

Tuition has been used to make up for shortfalls in state or local funding or for simply filling in the gap between traditional public funding sources and actual expenses. As a result students have found it more and more difficult to cover the tuition and fees in addition to other educational expenses such as books, supplies and living expenses. The majority of college students now work part-time (or even full-time) in order to cover expenses that are not paid by scholarships or loans. The route taken then is to work on a
part-time basis and extend the period of college attendance to six to ten years. Hence, the metric of the number of students graduating with a baccalaureate in four years is largely outdated. New retention and graduation metrics are needed to reflect the result of increased tuition and fees. Compounding the problem of increasing college expenses is the need to commute to work and to a college, especially in metro areas. This means that such commuting expenses are subject to car expenses, parking hassles and the high price of fuel.

2.4. User based funding
Student payments of tuition and fees at public colleges constitute a user-based payment for services rendered. Most colleges have traditionally used a single tuition charge for a course regardless of what it costs to offer that course. Of course, this practice allows for infinite flexibility for the student to form his/her schedule without having to worry about price differences in courses. However, this means that some departments are being subsidized by others whose costs for offering courses are relatively low. Uniform pricing practices are inherently unfair and do not yield desired efficiencies in the service providers. High demand, high return professional programs such as law and business already have become self supporting at some colleges by charging cost-based tuition. (Zussman, 2005, p. 120)

Another problem with state funding of public colleges has been that it is like handing a blank check to the institutions even with the restriction that the funding be dedicated to instruction and some administration. This funding benefits both needy and well-to-do students alike. There are state services in which the benefit of public funding is enjoyed by rich and poor alike – state parks, state highways, etc. However, the costs of higher education, akin to the costs of medical services, have risen dramatically and public opinion has tended to limiting subsidy of such costs to a more controlled level. Control has been achieved in the K-12 sector by passages of state laws such as Proposition 13 in California and Proposition 2.5 in Massachusetts which limit the increase in taxation for the funding of public education. Another form of control can be realized by the issuance of vouchers or scholarships directly to students that can be redeemed at any state college. Already the federal government far exceeds states in funding student aid programs that includes grants, loans and tax benefits. (Gladieux, King & Corrigan, 2005, p.164) Vouchers have the added advantage that underperforming colleges will be penalized by student migration to colleges that offer good educational value for the money.(Koch, 2008)

2.5. Distance Education
The growth of college coursework being offered through distance learning in the last 15 years has been phenomenal and there is no sign of the growth leveling off. Ehlers and Schneckenberg (2010) in their book "Changing cultures in higher education: moving ahead to future learning," cover the many changes being brought about in colleges in the US and abroad because of new distance learning technology and the growth of the internet. Over 97% of the public 2 year institutions offer distance education courses while 89% of the four year colleges do. Of all distance education offered in 2001, over 90% of it was done over the internet. (IPEDS) The availability of broadband internet service to the home and business at reasonable rates has probably been the biggest driver for the growth. Improved software for facilitating distance learning through the internet such as Blackboard and Wimba has also contributed to the growth. Whole degree programs in both the undergraduate and graduate level are now being offered by even tier 1 universities. The internet allows the remote student to be anywhere including international locations and much of the distance learning is done asynchronously, that is, the instructor and student do not have to be logged into the system at the same time. Distance learning allows the small college to compete with the large one in terms of offering competitive learning experiences. However, the “name recognition” of the better known school still has significant drawing power. We can assume the following factors are important to students: (1) No need to commute to campus several times a week; (2) No need for parking permits, catching a shuttle bus from the parking lot to the classroom; (3) No need to waste time on campus between classes, waiting for instructor, or learning that class has been cancelled; (4) No need to purchase expensive food on campus while waiting for classes.(Renes & Strange, 2010)

Also surprising is that faculty members who teach web-based courses also cite the same advantages. In fact, many prefer to work at home offices to eliminate unnecessary interruptions to their research and professional developmental work.

Another surprising aspect to the growth in distance learning is that students are willing to give up the “social” part of college life – meeting classmates, interacting on a personal level with faculty, advisors and administrators. In fact, students in distance learning programs are willing to pay more for distance education than for campus based instruction. Initially, the expense for the distance learning infrastructure
– software, servers to house the databases, technicians to provide login service to students and faculty, etc.- was being paid for by the fees charged for taking the distance education coursework. Should the growth in distance education continue, the inevitable set of questions arise – why have a campus with expensive infrastructure – buildings, dormitories, athletic fields, etc.? Why full time faculty members, with faculty offices and support staff? Why have student services, etc.?”

2.6. Jobs, jobs, jobs – instructors with experience

Another trend that is transforming college environments is the need for instruction that is “career” or “job” related. In the past, arguments were made for coursework that enriched the student or provided a “balanced” education. This meant that students were required to take courses in humanities, languages and social sciences to “round out” their education. Such coursework amounted to as much as a year of full-time college attendance. Students have complained that such coursework really did not get them a better job or made them more competitive in the workplace, the major reason, at least in their mind, for attending college in the first place. This has led to question the amount of public funding for humanities & associated liberal arts courses. (Knight, 2001)

An associated complaint from students and their employers alike was that coursework in their major field of study was too “theoretical” and not oriented to preparing the student for “practice” in the chosen career such as business, engineering, teaching, etc. A major difference between the coursework at for-profit schools and public colleges was that instructors at the former must have extensive experience in the practice of the field of study.

2.7. Developmental courses in math and English or college preparatory instruction

A major problem that has surfaced in college education is that many matriculants are simply not prepared for college. They do not have the basic reading and math skills to compete successfully in degree required coursework. At two year schools, 61% of incoming freshmen required at least one remedial course while at four year schools it was 25%. Students who take remedial courses have a poor graduation rate in 6 years – as low as 30% compared to 69% who never required remediation. (IPEDS) Courses that assist students to get to college grade level are labeled “developmental” and are taught often by graduate students or others who really do not have the background to understand how to help marginal or underachieving students who aspire to college work. These courses have two major negative effects – they take up college resources and they take up the time and money of students who now have to look forward to an extended stay in the college environment. Some of these students are not eligible to take college level classes until the second year of study. Many policymakers who influence college funding argue that these courses are the result of substandard secondary education and blame the failure of public schools in graduating students who do not possess a 12th grade level in reading and math.

2.8. Liberal arts are support for “professions.”

The study of language, literature, philosophy, and the arts at an advanced level dates back centuries to the early forms of a college or university. (Newman & Tillman, 2001) Over time, training for the professions such as law, medicine, engineering became part of the college curriculum. In recent years graduates from the departments in the liberal arts such as English, Philosophy, Languages, etc. have had to struggle to find employment despite having a college degree. (Knight, 2001) Often the jobs such graduates do find are not as financially rewarding as those in many fields associated with the professions. State policymakers have started questioning public funding of fields whose graduates do not qualify for job openings in the state. Although a college education in the professions does require coursework in the humanities and social science, the question is really how that coursework should be delivered – through full time instructors or adjunct teaching? Financial analysis of the cost of a full time instructor versus having adjunct faculty performing the same amount of instruction reveals that as much as a four to one ratio exists. That is, four courses or a full load by a full time faculty member could be taught for one quarter the cost by using adjunct faculty. Hence, it is possible for liberal arts instruction for the professions could be done for one quarter the cost since it is not necessary to use full time instructors for liberal arts courses.

3. REFERENCES


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