Preliminary

"Higher Tuition, Higher Aid, and the Quest to Improve Opportunities For Low Income Students in Selective, Public Higher Education"

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Higher Tuition, Higher Aid, and the Quest to Improve Opportunities For Low Income Students in Selective, Public Higher Education

Rising costs and substantial fluctuations in state fiscal policy over the course of the last two decades create a sharp tension between objectives of excellence and the mission of providing collegiate opportunities for state residents from all backgrounds for selective state universities. With increased claims on state coffers from programs like Medicaid and persistent voter pressure for reduced tax burdens, colleges and universities have not been successful in using the rhetoric of "long-term benefits associated with investments in higher education" to increase substantially resources from state sources in good economic times. In bad economic times, public universities are increasingly hard hit as education is one of the few discretionary items in state budgets (Kane and Orszag, 2003). Faced with the realities of limited funding from public sources in the 21st century, public colleges and universities in many states have been forced to re-examine the traditional balance between public subsidy and private tuition payments.

In Virginia, the selective public colleges and universities have taken proactive steps to change the "terms of trade" with the state in the last year. Faced with stagnant state funding and severe cutbacks during economic contractions, selective public institutions in the state of Virginia are shifting to high tuition coupled with high student aid. Under the Restructured Higher Education Financial and Administrative Operations Act [SB 1327 and HB 2866, "Restructured Higher Education Act"][1] public colleges and

[1] When this initiative was unveiled in January of 2004 by the leaders of the University of Virginia, William and Mary, and Virginia Tech, it was known as the "Commonwealth Chartered Universities and Colleges Act." As discussions progressed, the reference to the participating institutions as "charter" universities was formally dropped, though the description continues to appear in many background documents.

universities in the state of Virginia may have new latitude to enter into a "contract" with the state in which greater autonomy in tuition-setting and in purchasing is granted in exchange for a somewhat smaller expectation of future state support. Loosely coupled with this initiative is a new emphasis on increasing the opportunities for students from modest economic circumstances to attend the state flagship institution. The University of Virginia has put forward an aggressive plan known as "AccessUVa" to increase public information, recruiting, and need-based financial aid for low income students.

What is unambiguous in the discussion to date is that, with more autonomy, these selective public institutions including the University of Virginia will raise "sticker price" or posted tuition, particularly for the in-state students who currently receive substantial discounts. In short, the selective public universities propose to adopt a "high tuition, high aid" model to raise revenue and provide access to low-income students, while increasing the overall level of resources available to promote excellence in teaching and research. Even in the absence of higher tuition, low income students are dramatically underrepresented at the University of Virginia and the other selective public universities in the state, raising concerns that yet higher tuition would further reduce opportunities. Can a high tuition strategy really increase opportunities for low income students?

The first part of this paper shows how variation in tuition levels and state funding at the University of Virginia over the course of the last decade have brought about a call for a restructuring of the state-university financial arrangement. The second section sets forth the "terms" of the "Restructured Higher Education Act" and AccessUVa, discussing how these policies are likely to affect "sticker price" and price net of financial aid for students from various economic circumstances. [Note that while both graduate and undergraduate education are affected by the “Restructured Higher Education Act”, the focus of this analysis is on undergraduate education.] The third section turns to the evaluation of these policies in the context of the broad discussion of the tradeoffs associated with “high tuition, high aid” public policies. Whether the “Restructured Higher Education Act” coupled with AccessUVa can yield improvements in long-term financial stability and enrollment of low-income students through a high-tuition, high-aid strategy is the key question.

Several caveats necessarily preface this discussion. First, while the legislation has been approved by the General Assembly and is set to become law on July 1, 2005, state universities have yet to negotiate management agreements with the state or implement the provisions of such agreements.[2] Institutions like the University of Virginia that are pursuing the highest level of autonomy must negotiate management agreements with the Secretary or Secretaries designated by the Governor prior to November 15, 2005 and these agreements must be approved by the General Assembly in the their 2006 session; the full provisions will not come into effect until July 1, 2006. Thus, there is considerable room for change. Second, the analysis below focuses specifically on the tuition revenue and financial aid components of the legislation; many other significant dimensions of the legislation for the operation of the university cover employment and contracting relations. Finally, the impact of the legislation with respect to the University of Virginia is the subject of the analysis that follows; there may be potential lessons for tuition and aid policy in other states.

[2] The legislation was introduced on January 21, 2005 as House Bill 2866 and Senate Bill 1327. The legislation was passed by the Virginia House of Delegates on February 21, 2005 and by the Virginia Senate on the next day. On March 31, 2005 Governor Warner introduced amendments to the legislation and returned it to the General Assembly for approval. On April 6, 2005, both the Senate and House passed the legislation. The legislation will take effect July 1, 2005.

I. State Appropriations and Tuition Policies in the Last Decade: Evidence of Underfunding

The Virginia Case

For the University of Virginia, more than a decade of fiscal uncertainty and cycles of “boom” and “bust” have been a clear motivation for a change in the relationship with the state. Cyclical fluctuations in Virginia have been particularly sharp owing to the structure of state politics and the cycles of the local economy. With a one-term limit on the governor’s tenure, tuition policy has been used as a potent and symbolic political lever.[3] Moreover, with a growing high-tech sector in the DC corridor, Virginia benefited substantially from the tech boom but also experienced a more painful contraction in 2000 and 2001 as the tech boom faded and the events of September 11, 2001 touched the Virginia area.

That the University of Virginia has been “underfunded” over the course of the last decade is not just administrative rhetoric, but a reality borne out by the data assembled by the State Council of Higher Education of Virginia (SCHEV, the coordinating board for higher education in the state). With a stated goal of maintaining the salaries of public colleges and universities at the 60th percentile of peer group norms, the University of

[3] In the mid-1990s, then-Governor George Allen found that a tuition freeze at public colleges and universities was particularly attractive to middle-income voters, as he was able to portray leaders of public colleges and universities as raising the price of higher education out of reach of middle-class students. The next Governor, James Gilmore, ran on a platform of cutting taxes and providing greater affordability of higher education and went yet further to push through legislation effectively requiring tuition cuts of 20 percent at public universities in Virginia. Proposals for cutting tuition (and taxes) were able to generate considerable bipartisan support in the General Assembly, as both Republicans and Democrats found political appeal in the argument of “a cheaper college education as the best way to elevate the poor and middle class.” (Timberg, 1998)

Virginia has fallen short in all but one year since this policy was articulated in 1989 (Board of Visitors, Finance Committee, February 3, 2005, p. 18).

Appropriations from the state combined with revenues from student tuition and fees are the primary sources of support for broad-based education and general expenses at the University of Virginia and other public institutions in the state. Both variables have been subject to cyclical variation as well as political intervention. The trend in state general fund appropriations to the University of Virginia is shown in Figure 1, represented in constant (2004) dollars. Over the interval from 1988 to 2004, real state appropriations fell from nearly $185 million to about $120 million. Within this interval, funding cycled to a similar low of about $126 million in the academic year beginning in 1995 before rebounding to a local peak of $172 million in 2000.

If one thinks of the state appropriation as having characteristics similar to an endowment payout for a private university, the implication is that year-to-year variation in the state appropriation has been larger than the realized variation in endowment returns for private universities. At a 5% real rate of return, the fluctuation in state funding would imply a decline in endowment value from $3.45 billion to $2.39 billion between 2000 and 2004, which is an appreciably larger swing than observed by most market funds. What is more, rather than incurring the full weight of year-to-year fluctuations in endowment, private universities generally “smooth out” cyclical fluctuations with spending rules which provide for additional spending in tough years countered by additional saving in more robust periods.

The overall impact of the decline in the real value of state appropriations is magnified when considered in the context of rising overall higher education costs. Figure

2 illustrates the trends in state appropriations relative to education and general expenditures at the University of Virginia, which covers the core current operating and academic expenditures including faculty salaries. Visible is the marked drop in the state-supported share from about 62% of education-general expenditures in 1988 to only about one third in 2004; the reduction is yet more marked when the full University of Virginia current budget is used in the denominator. The evidence would seem to support an often repeated quip among public university administrators that their institutions have gone from "state-funded to state-supported to state-located."

Tuition, the other major source of operating support for the University of Virginia does move countercyclically, but variations have not been sufficient to offset fully declines in state appropriations. While tuition is by statute a variable under the control of the Board of Visitors, the political realities have been far different. Moves to raise tuition by an institution outside the expectations of the governor and the state legislature can be countered with retribution in appropriations. What is more, "tuition" has at times been used as a political variable. Figure 3 shows the nominal and real trend in tuition and fees at the University of Virginia over the last two decades. What is visible is considerable real variation, including the recent five year period in which tuition and fees were reduced by 20%, frozen, and then increased by nearly 28%.[4] Surely, many other public

[4] Leonard Sandridge, Executive Vice President and Chief Operating Officer of the University of Virginia, in a talk to the faculty, notes: "Let me give you a history here--1996-97, we were required by the state to have zero increase in tuition. 1997-98, the state required a zero increase in tuition. 1998-99, a 1.2% increase required by the state. Get this one: 1999-2000, a tuition rollback of 20% for undergraduate in-state students. In 2000-01, a zero percent increase. 2001-02, a zero percent increase. By 2002-03, things are in pretty desperate condition around here. People are complaining about not being able to get classes, so the state gives us a formula that they tell the public is a 5% cap on tuition, but they don't tell you about the fine print. We applied that and the tuition and fees-- The tuition component was up about 28%, but when you combined it with fees which didn't go up that much, we went up 21%. That was really a state formula and then this last year, tuition went up 23%. I got to tell you, gang, that's no way to run a railroad that way. We

universities have faced similar cycles, though the case of the University of Virginia is extreme.

At least at the University of Virginia, sharp fluctuations in posted tuition rates do not appear to have had a significant impact on enrollment demand.[5] In 2004, the University of Virginia received over 15,000 applications and made offers to less than 40% of these candidates. The University has consistently faced circumstances of excess demand, like other selective public and private universities, and changes in tuition price at the undergraduate level bears little overall relation to enrollment levels. Of course, demographics and the increase in the size of the college-age cohort are partly at issue, yet there is a substantial positive correlation between real tuition and the number of applications received for both in-state and out-of-state students. How demand – conditional on both family income and student achievement – can be expected to adjust with changes in tuition is a key question to be considered in evaluating the new policies governing net price at the University of Virginia.

For the University of Virginia, the *status quo* funding arrangement undermines institutional objectives because it limits the level of resources available for academic purposes while also increasing the volatility in funding. It is both the low level of resources and the uncertainty in funding which have limited institutional advancement. The effects of the level of resources should be obvious: if resources are used efficiently, adding resources increases output along dimensions of quality or quantity or both. The effect of uncertainty in funding is, perhaps, somewhat more subtle but no less significant.

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can't together accomplish what you expect and ought to expect from this place without having some ability to manage resources better than that. That's what this proposal for charter is all about."

[5] It should be noted that –unlike states such as California – a "low tuition" policy is relatively new at the University of Virginia. Only a decade ago, in-state tuition at the University of Virginia was nearly $1,200 higher than at peer public universities (*Cavalier Daily* 10/19/2000).

Universities facing significant uncertainty may not make long-term investments with high expected returns either because the institutions are credit constrained or because they are risk averse. Either way, the institution puts aside an investment with a positive expected return.

It should be no surprise that resource constraints produced visible effects on faculty hiring, class size, and course availability in the last decade. Commenting after deans froze hiring during the 2001 budget crisis, the student newspaper at the University of Virginia recorded the comments of various chairs of major departments [*Cavalier Daily*, 11/28/2001]:

> Department heads are charged with adjusting plans to implement the freeze as directed by the deans. Many share the deans' fears concerning class number and size.
>
> "We have way too many students for the number of faculty," Fatton said of the government and foreign affairs department.
>
> He said three hiring searches for the department were canceled. That translates into 12 to 15 more courses that will have to be absorbed by the current faculty through larger class sizes or fewer course offerings.
>
> "Seminars aren't really going to be seminars," he added. "It affects the quality of the teaching."
>
> Economics Department Chairman David Mills said six searches initially were halted but that funding was restored to recover three.
>
> "Classes will be larger than ideal next year, and larger than they were a few years back ..."

The comments of the department chairs are not just idle speculation, but are reflected in demonstrable "excess student demand." In 2003, an extended story in the *Cavalier Daily* chronicled how the faculty hiring freeze created extraordinary excess demand in many departments:

> Economics, which currently has only 22 faculty members but awarded 419 bachelors degrees in 2002, also suffered tremendously from the freeze, Economics Dept. Chair David Mills said.
>
> “Not hiring for the last two years --- it’ll take a decade to work ourselves out of the problem that creates,” Mills said, adding that it is unclear how economics arrived at its present faculty shortage.
>
> “The numbers are way out of line,” he said. “How it got to be that way I don't know.”
>
> Mills speculated, however, that the shortage could be due to the inordinately popular nature of economics as a field of study at the University. The University has twice as many students majoring in economics as the University of California at Berkeley.
>
> “The combination of rapid, substantial and unexpected growth and interest in studying economics together with the dearth of resources for [the College of] Arts and Sciences to hire faculty” has created the problem, he said. “Our faculty is too low and the number of majors we have for the faculty is too large.”

Similar problems persisted into 2005 (*Cavalier Daily*, 1/31/2005):

> Unfortunately, this situation has been all too common this year, as the realities of budget crunches and professor shortages have been manifested through severe overcrowding in many of the University’s most popular courses. This overcrowding is not only a headache for many students, but also a detriment to the University’s quality of education and academic reputation.
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> The most direct consequences of the overcrowding of the courses are ultimately felt by students at the University. Indeed, because students in overcrowded departments are unable to enroll in many of their desired classes, large numbers of students have to fill out their schedules by roaming from class to class with a ream of course action forms and by joining electronic waitlists on ISIS [the course registration system at the University of Virginia]. Since this system offers little degree of certainty as to prospects for course enrollment, it is very difficult for students to plan their academic future.
>
> Moreover, because course overcrowding forces professors to give priority to students who need their class as a requirement for their major, students have difficulty enrolling in certain classes outside their major and the well-roundedness that is the foundation of the University’s liberal arts education is harmed.
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> While course overcrowding decreases the quality of education for current students, it also hurts the University’s academic reputation. Indeed, as accounts of overcrowding reach prospective students through word of mouth or through

> publications such a *The Princeton Review*, it becomes more difficult for the University to attract strong students. Thus, course overcrowding hurts the University's academic reputation and makes its diplomas less attractive commodities to graduate schools and future employers.

A striking observation in the case of the University of Virginia is the demonstrated student support for somewhat higher levels of tuition in the face of severe resource limitations. Editorials in the student newspaper have on more than one occasion taken the position that students would benefit from higher tuition levels. To cite a few examples:

> While increases in tuition aren't a substitute for better funding from the state level, students should shoulder the increasing burden equally. (10/19/2000)

More recently, the response to the stiff increase in tuition (11.2%) remained positive under an editorial of the title "A Prudent Tuition Hike" (4/10/2003):

> Students, who understandably aren't pleased to pay more for their education, usually meet tuition increases with lukewarm receptions. However, in this case, students should applaud the Board [of Visitors] for the tuition increases. In light of recent budget cuts, the Board's decisions were -- no pun intended -- right on the money.

That the "customers" are on the record supporting higher tuition charges in exchange for increased academic resources is a clear sign that the combination of budget crisis and tuition freeze distorted the provision of collegiate services.

Because research universities rely on relatively long cycles to build staffing and programs, the "start and stop" cycle of state funding for the University of Virginia had particularly deleterious consequences. Bill Johnson, an economist at the University, describes the impact of the funding cutbacks on the long-term quality of University programs in a *Washington Post* op-ed (2003):

> Greatness in a university is very difficult to attain and easy to lose. At bottom, as Jefferson knew, academic greatness requires recruiting and retaining top faculty members, and providing them an environment in which to flourish….. highly cyclical revenue sources mandating "stop-and-go" hiring policies make it tough to maintain, let alone improve, faculties, especially in the hard-to-hire fields so crucial for national prominence. Truly outstanding scholars are scarce and difficult to hire. Moreover the best people are attracted to departments with able colleagues, so a department can collapse if a few leading faculty members leave. And, as Humpty Dumpty proved, it is hard to put the pieces back together again.

Thus, it is the inefficiency and erosion of quality caused by the "feast and famine" funding cycles that is a primary impetus for the exploration of a structural reform in the relationship between the University and the state.[6]

Public universities in Virginia are not alone in struggling with constrained levels of state support for higher education and limits on tuition increases, combined with considerable year-to-year uncertainty. Over the last 15 years, these constraints have made it more difficult for flagship state universities to hold their ground and compete with elite private universities. With relatively fixed enrollment capacity and little control over tuition, universities have few operational degrees of freedom. Across the board, infrastructure demands and growing Medicaid commitments have increased demands on the state purse, essentially crowding out state expenditures on higher education.[7]

II. The University of Virginia: New Strategies for Tuition and Aid

The starting point for a reconfiguration of the funding relationship between the state of Virginia and the public universities is a recognition that the unfunded gap in

[6] Quoted in the *Washington Post* (1/12/2004) Travis Reindl of the American Association of State Colleges and Universities notes, "The numbers just dictate it. If you're a university like U-Va and the state has become such a minority stakeholder, you can legitimately ask how much authority should they exercise over my business if they are only kicking in 10 percent of funding." Reindl goes on to note that the logic for such institutions is "we'd rather have less money we can count on than more money we can't count on."

[7] An early note of this trend is found in Breneman and Finney (1997), while Kane and Orszag (2004) have done considerable work to formalize this relationship.

resources is structural, not transitory. A long-held position of state policy makers and higher education leaders was that cutbacks to higher education funding were cyclical, and – eventually -- relatively high levels of state appropriations would return. Yet, policy makers in Virginia and elsewhere have increasingly adopted the view that the cutbacks to higher education are permanent, with dollars taken away "never coming back" (Breneman, 2004).[8]

Add to this clear evidence that "start and stop" funding has long-term costs and the stage was set for considerable negotiation. That the Darden School, the Law School and the University Hospital system already have considerable autonomy from state regulations provides something of a model.[9] The autonomy of the Darden School is described by Kirp (2003) as the "most autonomous – most 'private' -- school in any American public university." While the virtual privatization of the Darden School is identified by some as an example of an institution shedding the constraints of state control, the continued dependence of public universities on state support combined with the substantial political importance of public higher education in the state made a wholesale "privatization" initiative for public universities in the state of Virginia remote at best.

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[8] Breneman (2004) writes, "The severity of the cuts, coming after more than two decades of slow but steady relative decline in state support, has forced many education leaders to conclude that the old, often implicit, compacts between states and their universities – such as ensured access to public colleges and universities for the states high school graduates -- have been abandoned. Hence, it is understandable that we are seeing efforts to establish a new relationship that gives the institutions control over setting tuition and freedom from specific state regulations."

[9] As quoted in Kirp (2003), stirrings of potential greater autonomy for state universities can be found in the mid-1990s. One 1996 General Assembly report concluded: "as higher education changes the way it conducts business, the Commonwealth should consider changing its business relationship with higher education, develop[ing] a plan to grant selected institutions special independent status in state government [to free then from] stifling bureaucratic regulation…."

A. Increased University Autonomy

The (formal) timeline for the "Restructured Higher Education Act" initiative extends from January of 2004 when the presidents of the University of Virginia, the College of William and Mary, and Virginia Tech announced their intention to put forth a plan to redefine the relationship between these universities and the state through a proposal titled "Commonwealth Chartered Universities and Colleges Act." The initial proposal was the subject of considerable public discourse, resulting is some modification. By February of 2005, the idea evolved to legislation the "Restructured Higher Education Financial and Administrative Operations Act" (House Bill 2866 and Senate Bill 1327) passed the General Assembly. Virginia Governor Mark Warner attached some amendments, which largely related to the status of non-faculty employees, to the legislation before returning it to the General Assembly for approval. The final legislation was approved by both houses of the General Assembly on April 6, 2005 and is set to take effect July 1, 2005.[10]

The initiative has evolved appreciably since its proposal by the three large universities at the start of 2004 to include provisions for all 16 public colleges and universities in the state.[11] While the institutional coverage has broadened (to include something for everyone), the scope of the autonomy offered to institutions such as University of Virginia has also been narrowed to a large degree. Rather than permanent

[10] Yet, it is not until July 1, 2006 that the University of Virginia or other state colleges will operate under a new management agreement. The terms of the legislation specify that universities (such as the University of Virginia) pursuing the highest level of autonomy must negotiate agreements with the Secretary or Secretaries designated by the Governor prior to November 15, 2005 and these agreements must be approved by the General Assembly in the their 2006 session.

[11] The legislation offers three levels of autonomy in which all institutions can qualify for freedom to manage salaries, purchasing and leasing, with the level of autonomy depending on each school's financial strength and ability to manage day-to-day operations. At the highest level (that covering the University of Virginia), institutions can negotiate individual autonomy agreements while retaining public status.

autonomy, the University will develop a six-year academic and financial plan outlining tuition and fee projections and enrollment projections (including the mix of in-state and out-of-state students), while specifying benchmarks related to the opportunity for students from different economic circumstances and accountability standards.[12]

The motivating idea behind the initiative is the recognition that state resources sufficient to allow the University of Virginia to be competitive with peer institutions are unlikely to be forthcoming. At the same time, the University has substantial "excess demand" at the undergraduate level.[13] Autonomy to set tuition is the key provision of the proposal on the revenue side. [Overall, there are a number of other important dimensions of the policy including the relaxation of state regulations governing contracting, building and so forth.]

A key piece of the argument in favor of tuition autonomy (and, implicitly, higher tuition levels) is that students will be the beneficiaries of the increase in resources. Implicitly, students are "off their demand curves" when they are willing to pay more for a higher quality (or at least more resource intensive) offering. Evidence that many current

[12] Significant provisions of the legislation affect the degree of autonomy that colleges and universities are afforded in procurement, personnel, and capital-project regulations. University administrators make the case that many state regulations pose unnecessary costs on higher education institutions, hampering efficiency in production. An example of the inefficiency created by state regulations is the requirement that all building projects (including those funded with private money) must go through a more than 15-month planning process, gain approval from the General Assembly and adhere to all state building regulations. Such a process is not only time-intensive but often opens projects to lobbying efforts and political wrangling. Tebbs (2005) notes two examples of costly delays that might be avoided under more autonomous building regulations. In one case, the University of Virginia spent considerable time and resources on the question of whether a sprinkler system was necessary in the roof over a new pool at the Aquatics and Fitness Center, while at William and Mary administrators were forced to engage in a dispute over whether illuminated exit signs were required in a four-post picnic shelter (with no walls).

[13] For example, the proposal notes: "The key to the proposed legislation is enabling U.Va. to use its untapped 'market share' to produce additional revenues. The potential of the "market share" is demonstrated by the fact that U.Va., like William and Mary and Virginia Tech, annually receives many more applications for admission than it can accept. Yet the tuitions of these universities are substantially lower than those of comparable universities to which many of the same students are applying."

students prefer the prospect of higher tuition to budget constraints of further reliance on state funding is provided by the support of the Student Council for the initiative.[14]

As the formal contract between the University of Virginia and the state has yet to be negotiated, the "terms" of the agreement are not yet settled. Still, the shape of the expected agreement appears to be in place. It is expected that the tuition and fee increases for in-state undergraduate students will be phased in over a five-year period to allow for full-funding of base adequacy (including the 60th percentile of the University's peer group). It is further expected that the state will achieve a goal of funding 67 percent of the cost of education for every in-state student over a five-year period, which implies an increase in general fund appropriations from $10.5 million in 2005-06 to $52.6 million in 2009-10 (Exhibit B, 1/05 Board of Visitors; see Appendix Table 1 for full projections). Explicit in this agreement is the expectation of continued resources from the state general fund and an agreement that the "Commonwealth [agrees to] continue funding the College at the level the College would receive if this Charter Agreement had not been put in place."[15] In effect, the structural funding gap is to be closed through an increase in in-state tuition.

While neither the proposed Charter agreement specific to the University of Virginia nor the legislation in front of Governor Warner make the expected increases in tuition levels explicit, some indication is offered by the review of projections presented to

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[14] U.Va. Student Council passed a resolution recommending "the General Assembly allow the University of Virginia Board of Visitors to be autonomous in its decision making with respect to the University's government and management, including determining tuition levels…"

[15] As proposed, there is also a modest "give back" where the chartered universities agree to accept a somewhat smaller rate of increase in general fund appropriations than universities at large. "Based on this state funding assumption, when an increase in state general funds is provided by the Commonwealth to public institutions of higher education for educational and general purposes, the Academic Division agrees to accept only 90% of the amount of the increase that it otherwise would receive if the University were not a Commonwealth Chartered University."

the Board of Visitors. At the January 2005 Board of Visitors meeting, there was a substantial discussion of the long-term tuition plan, including explicit projections for the tuition levels needed to achieve funding targets over the next five years.[16] What has been proposed are annual tuition and fee increases of just below ten percent for in-state undergraduates, leading to an expected increase in total sticker price (including fees room and board) of about eight percent per year. For out-of-state graduates, annual increases of just over six percent are expected. To put dollar figures on these projections, one finds the following (Exhibit D, Board of Visitors, February 2005):

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
In-state undergraduates						
Tuition + E&G Fees	5,243	5,760	6,327	6,950	7,636	8,389
Non E&G Fees (6% AI)	1,357	1,438	1,525	1,616	1,713	1,816
Board (3.8% AI)	2,990	3,104	3,222	3,344	3,471	3,603
Housing (9% AI)	2,970	3,237	3,529	3,846	4,192	4,570
Projected Total Sticker Price	$12,560	$13,539	$14,603	$15,756	$17,012	$18,378
Out-of-state undergraduates						
Tuition + E&G Fees	$21,343	$22,677	$24,094	$25,599	$27,199	$28,899

Beyond these stated expectations for tuition increases, there is mention of the potential for yet larger increases under the circumstances where the state fails to meet its commitment to general fund appropriations.

The final (or most recent) iteration of the "Restructured Higher Education Act" legislation makes clear that, with increased autonomy and higher tuition levels, public universities must actively pursue efforts to enhance "access" and "affordability." The proposed legislation makes explicit the expected commitment to financial aid policies

[16] http://www.virginia.edu/bov/meetings/05feb/%2705%20Feb%20Finance%20Comm%20Book.pdf

sufficient to help families address increased tuition, stating that "Each such institution shall commit to the Governor and the General Assembly to:

> 1. Consistent with its institutional mission, provide access to higher education for all citizens throughout the Commonwealth, including underrepresented populations, and, consistent with subdivision 4 of § 23-9.6:1 and in accordance with anticipated demand analysis, meet enrollment projections and degree estimates as agreed upon with the State Council of Higher Education for Virginia;
>
> 2. Consistent with § 23-9.2:3.02, ensure that higher education remains affordable, regardless of individual or family income, and through a periodic assessment, determine the impact of tuition and fee levels net of financial aid on applications, enrollment, and student indebtedness incurred for the payment of tuition and fees;"[17]

While no numerical targets are specified, there is no mistaking a clear sense that demonstrable shifts in the composition of the student body toward more affluent, full-pay students would be considered a breach of the terms of the contract. Nevertheless, it is plainly unclear how the state or policy authorities will monitor the success of the University in attaining the objective of equality of educational opportunity.

As the authorizing language is operationalized in a "draft" of an agreement between the University of Virginia and the state, considerable emphasis is placed on the recently initiated outreach effort known as AccessUVa. Described in more detail below, AccessUVA is not an outgrowth of the Charter initiative but rather a predecessor, as the first prong of the initiative implemented with the class of 2001 which guarantees that the university will meet 100% of need for a specific group of low-income students. Because the AccessUVA initiative is incorporated directly in the terms of the proposed agreement, aid and tuition policies become "coupled" in the policy process.

B. AccessUVa

[17] http://leg1.state.va.us/cgi-bin/legp504.exe?051+ful+HB2866H1

Concern about the representation of low income students at the University of Virginia predates the initiative for fiscal autonomy, [18] but the cause has received new urgency with the formalization of the "Restructured Higher Education Act." Much of the impetus for AccessUVa was driven by the concern over how the fiscally inevitable tuition increases in 2003 and 2004 would impact students eligible for financial aid. At the October 2003 meeting of the Board of Visitors, President Casteen asked staff to craft a plan that would address the impending financing challenges for low- and middle-income students at the University.

To much fanfare, the AccessUVa plan was announced in February 2004. AccessUVa is not a single financial aid initiative, but rather a portfolio of institutional policies intended to increase the representation of students from low and moderate incomes among University of Virginia undergraduates. The first prongs of the program are relatively easy to define and concern financial aid: first, students with family income below 150% of the poverty line are guaranteed that the loan portion of their aid packages will be replaced with grants; second, the university will address the concerns of moderate income families with financial need by capping the amount of expected debt at no more than the cost of education for one year ($14,520 for in-state students in 2004).[19] But beyond changes in the availability and distribution of financial aid, the AccessUVa program includes an aggressive outreach and public information campaign designed to

[18] Unlike some selective private universities that have been able to meet full financial aid for several decades, it was not until the matriculation of the Class of 2001 that the University was first able to commit to meeting the full-need of all aid-eligible students.

[19] In January 2005, the University of Virginia announced the expansion of AccessUVa to expand opportunities for transfer students from the Virginia Community College System and to increase the cutoff for eligibility for relief from loans and work study those with family incomes less than or equal to 200% of the federal poverty level ($37,700 for a family of four).

"get the word out" that students from all economic circumstances have opportunities to attend the University.

While the financial aid changes are well-documented, what is more difficult to document are the changes in recruitment strategies designed to increase the representation of students from relatively disadvantaged economic circumstances in the undergraduate class. These steps include:

- Increases in the number of visits to high schools from relatively low income areas that have traditionally not sent large numbers of students to the university;
- Public service announcements on radio and in other media touting the openness of the University of Virginia to students with financial need;[20]
- More aggressive assistance from the financial aid office in helping students to complete FAFSA forms and understand financial aid options.

There is much enthusiasm and determination surrounding the objectives of AccessUVa at the University level, as discussions with staff reveal commitment from many offices.

Yet, the barriers to the enrollment of low-income students at the University of Virginia have been persistent, even in periods of somewhat lower tuition. The research questions that remain open include how these initiatives ultimately affect application behavior, as well as matriculation and persistence at the university. Data from the State Council of Higher Education for Virginia identify just over 6% of students in the entering class of the fall of 2002 (the most recent year for which detailed data are available) with family income less than $30,000. What is more, working-class families are

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[20] Using the slogan "Got the Brains but not the Bucks? The Door is Open," the advertisements feature actor Shawn Patrick Thomas, a University of Virginia alumnus, and encourage general inquiries from potential students.

underrepresented at the University of Virginia, where one report placed nearly 60% if the incoming class with family incomes over $100,000 (Marklein, 2005).

As public discussions of the “Chartered Universities Initiative” and later the “Restructured Higher Education Act” have progressed, the question of how the universities will maintain a commitment to helping low- and middle-income families finance college has been prominent. For example, an editorial in the *Virginia Pilot* (12/26/04) notes “No matter how much Virginia wants revered colleges engaged in cutting edge inquiry, the state cannot neglect its primary duty of making college broadly accessible, both through affordable tuition and an adequate number of slots.” The need for a transparent and public indication of University commitment to financial aid in order to gain broad-based support for the “Restructured Higher Education Act” has, in turn, strengthened support for AccessUVa within the University. In the end, aggressive financial aid strengthens the university’s hand in negotiations for greater autonomy (including setting tuition), while the need to gain public endorsement for greater autonomy increases the visibility and internal support for policies like AccessUVa. Thus, the result is a set of policies coupling higher tuition with higher financial aid in long-term projections.

III. High Tuition, High Aid: Prospects and Perils

The combination of renegotiated institutional status under the “Restructured Higher Education Act” and AccessUVa represents an unambiguous shift to a high-tuition, high-aid policy at the University of Virginia. Some would argue that this is a first-best policy solution which takes full advantage of student demand and the existing national market for higher education.[21] A more reluctant group would come to support of the policy only with the recognition that it is unlikely that increased public support will be forthcoming to allow for a competitive level of funding of the University of Virginia.[22]

The discussion of the tradeoffs between a 'high tuition, high aid' strategy and across-the-board low tuition has surfaced in research and policy discussion for more than three decades. Late in the 1960s, Hansen and Weisbrod (1969) made the case that large state subsidies to support low tuition were both inequitable and inefficient and, instead, tuition should more accurately reflect cost of instruction, with public subsidies targeted to low-income students in the form of higher financial aid. The crux of the Hansen and Weisbrod argument, which derived largely from a study of the case of California, is that students from relatively affluent families are represented disproportionately in flagship universities that receive the largest per student appropriations from the state. To this end, the distribution of subsidies was inequitable, in the sense that they were concentrated among the relatively affluent, and inefficient in that these students would likely continue to enroll at selective public institutions if they were charged appreciably higher prices.

While much debate ensued, no state adopted the "high tuition, high aid" model as explicit policy in the 1970s and many leaders in higher education at the time maintained "that higher education, like elementary and secondary schooling, should be provided by a society at little or no cost to all who want it who are qualified" (Breneman and Finn, 1978). In turn, to the extent that substantial tuition growth occurred at public universities

[21] An important assumption in making such a claim is that institutions award financial aid on the basis of financial need, not merit. The interjection of merit aid would change appreciably the distributional implications and potential costs of the policy in a full general equilibrium sense.

[22] It is surely the case that there may be opponents to the general outline of the plan. To argue in opposition to increased tuition conditional on stagnant public funding is to make the case that the objective of low tuition serves a more significant policy objective than full-funding of universities at the target level. While this position is not invalid, it illustrates an unavoidable choice between low tuition and high resources per student.

during the 1990s, it was far from a conscious shift in financing strategy but often a stop-gap funding response to state fiscal crises. That tuition hikes occurring at state institutions were often a response to local fiscal crisis left the goal of providing opportunities for low income students often pushed to the side. Because tuition increases have not been consciously tied to a structural shift to a "high tuition, high aid" policy in recent years, the opportunities for students from the most economically disadvantaged families may have eroded.

In weighing the tradeoffs between a low-tuition policy and a "high-tuition, high-aid" model, the political philosopher Amy Gutman (1987) notes:

> A morally troublingly risk of a high-tuition, full scholarship policy is that in times of austerity, the two parts of the policy may be decoupled, public or private universities retaining their high tuitions and giving up their full scholarships. The risk cannot be eliminated without doing away with democracy or the autonomy of universities, but it can be minimized by policies that tie levels of tuition to levels of support …. The commitment to economic nondiscrimination is thereby expressed by a single policy, rather than being the coincidence of two policies with independent rationales …

In a world in which relatively high tuition at public universities seems to have arrived as a matter of public policy necessity, the question is whether tuition and aid policy can be effectively "recoupled" in the public interest.

In evaluating the likely consequences of a shift to a 'high tuition, high aid' policy at the University of Virginia, two significant questions of behavior come to the surface. The first is a politics question: Are contracts with the state "enforceable" over the long-term? At issue is whether a change in politics or other circumstances facing the legislature or the governor could lead to a unilateral dismantling of the terms of the "Restructured Higher Education Act," leaving selective public universities not better off (if not worse off) than under the counterfactual without this policy. Secondly, the strength of a high tuition, high aid policy is derived from the assumption of relatively inelastic demand and the capacity of the university to price discriminate to a substantial degree. While available evidence points to little change in demand in the neighborhood of existing prices, it is not known whether this regularity will hold for high achieving students as prices are pushed closer to levels charged by private providers. Moreover, even with the aggressive and well-placed efforts of AccessUVa, the problem of the underrepresentation of low income students at selective institutions is non-trivial and "high aid" may be necessary but not sufficient to increase enrollment demand for these students.

A. Contracting with the State

It is clear that the question of whether an institution like the University of Virginia can enter a non-revocable contract with the state is not specific to higher education.[23] In this case, it is useful to restate the symbolic politics of public tuition policy. When times are good, governors find favor among constituencies when they can step in and "freeze" (or even better, reduce) tuition at public colleges and universities. Even in bad times, state politicians may try to limit tuition increases, essentially forcing a compromise between lower overall university revenues and somewhat higher tuition. Yet, what will be the reaction of a governor when faced with budget problems? When state appropriations fail to meet expectations, the terms of the agreement allow for yet greater tuition increases. Should universities avail themselves of this option, will politicians abandon the political high ground and declare opposition (backed by budgetary or

[23] For example, Moe (1990) underscores how "political uncertainty" is of fundamental importance in distinguishing the behavior of government entities from private institutions and, in turn, distinctly affects the organizational structure of public bureaucracies.

regulatory retribution) to greater than expected increases in tuition during times when families are likely already facing tough financial circumstances?

Eric Patashnik, a political scientist at the University of Virginia studying the political durability of policy reforms, suggests that there are fundamental barriers limiting the capacity of government agents to make long-term policy commitments. Patashnik identifies two potential threats to the durability of the charter contract -- the time consistency problem and political uncertainty. The "time consistency problem" captures the idea that incentives change as circumstances change: policy makers may agree to do X at time t but have an incentive to do Y at time t + 1. The problem is not just that policy makers may change their minds, as the cast of characters in political office may also change dramatically and new governors or legislators may have explicit motivation to distinguish themselves from their predecessors or revoke policies established in the previous administration, particularly when "election" is taken as a mandate for change.

In this sense, there is inevitable concern that without more fundamental structural reform in the relationship of the university to the state, that it will be difficult to guaranty the stability of contracts. For the University of Virginia, the key question is whether there are policy actions that will increase the "cost" to state politicians of reneging on the contract. Consistent and visible demonstrations that the outcomes under the arrangement provide significant general benefits to the state will make it more difficult for politicians to change the terms of trade without generating public objection.

B. Demand Adjustments

The effects of shifting to a high-tuition, high-aid policy at the University of Virginia necessarily depend on the nature of demand. With over 14,000 applications last year for about 2,800 spaces, there is little argument that the university will continue to be able to fill its entering undergraduate class even if the in-state tuition price were to rise as high as that currently charged to out-of-state students. Because the production process in higher education depends on student inputs, however, the key question is how the new pricing strategy will affect the composition of the entering class. In short, achievement of equity and excellence depends not only on financial resources but also the capacity to recruit very able students from a range of socio-economic circumstances. Whether students are likely to face higher or lower college costs will depend on where they are in the income distribution.

Unambiguously, some students will face a higher net price of attendance. How does this change behavior? To answer this question, we need to think about demand -- and the elasticity of demand[24] – and how it varies among students. To be sure, there are some students who are quite inelastic in their demand for attendance at the University of Virginia, as they have established loyalty through family or they simply have a strong affinity for Mr. Jefferson's architecture. Other students weigh the University of Virginia option among a portfolio of other selective public and private universities. For each student, the question will be how does the price and quality of the University of Virginia compare to the student's best alternative. In all likelihood, the University of Virginia will remain less expensive than private options in absolute terms, yet relative prices will shift. Students who once chose the University of Virginia over private options like Duke, the University of Pennsylvania and Georgetown may now change their choice of college.

[24] The elasticity of demand captures the proportional change in enrollment relative to a proportional change in net price. That this parameter may vary with student achievement or income is an important consideration in evaluating the expected adjustments to changes in tuition and financial aid policies.

Now, consider which students are likely to be lured by these selective, private options or selective public options outside the state of Virginia. Students for whom the best private alternative is an institution less highly ranked than the University of Virginia may be relatively unlikely to change behavior (assuming the University of Virginia still dominates alternative in-state institutions). However, it is students who have outside options at more highly ranked institutions that may be more likely to change behavior.[25] Students with outside options that are more highly ranked than the University of Virginia are also likely to be the most able. Thus, a well-placed concern is that tuition increases may have an adverse effect on the quality of the undergraduate student body.[26] Because peer effects are an important part of the "production process" at residential undergraduate institutions like the University of Virginia, any decline in the achievement of students caused by an increase in tuition would have deleterious effects on the quality of undergraduate education and, in turn, the ranking of the institution (Winston, 1999).

Estimating the magnitude of this potential effect is a non-trivial empirical challenge and one should not be content with "turn down" surveys as an indicator of the potential effect.[27] Commonly available empirical evidence (in the form of "turn down"

[25] The intuition comes from a model in which students make a choice between college quality and an outside good, conditional on the set of colleges to which a student is admitted. A student for whom the University of Virginia is the most highly ranked institution is, essentially, at a corner, while a student with more highly ranked options is not.

[26] One institutional response may be to engage in "merit aid" in order to continue to recruit high achieving students able to pay the full tuition. Such a policy would likely be expensive and potentially detrimental to educational objectives (see McPherson and Schapiro, 1998, for a full discussion of merit aid programs).

[27] To illustrate, the meeting of the Finance Committee of the Board of Visitors of the University of Virginia looked to evidence on the schools chosen by those admitted but not attending the University of Virginia in setting projections for tuition (Board of Visitors, February, 2005). The report notes: "In-state applicants accepted by the University turned down our offer of admission to attend these institutions: William & Mary (126), Virginia Tech (64), Duke (32), UNC – Chapel Hill(24), Cornell (23), Virginia Commonwealth (20), Richmond (15), Yale (14), Pennsylvania (12), MIT (12), Princeton (11), Harvard (10), Rice (10), and Georgetown (10). Out-of-state applicants accepted by the University turned down our offer of admission to attend these institutions: Duke (95), UNC – Chapel Hill (59), Pennsylvania (47),

surveys) often fails to distinguish students by achievement or income. Moreover, the key question concerns the outside options available to students who enroll under existing policies as those who currently turn down the University of Virginia would most likely continue to do so with appreciably higher relative tuition levels.

A further challenge to forecasting the effects of the change in aid and tuition policies is that application behavior will likely adjust. Students who at present only apply to the University of Virginia or to the University of Virginia under "Early Decision" are likely to consider a wider range of options. Of course, one intended outcome of AccessUVa is to increase applications among students from relatively low income families. The extent to which this group of students responds to the greater availability of aid remains to be seen.

The increase in price necessarily forces the University of Virginia into more active competition in the national higher education market. The result need not be a net loss of the most able students if the University is able to use additional resources to raise the quality of undergraduate offerings.

III. Conclusion

The success of the proposed "high tuition, high aid" model at the University of Virginia under the combined "charter" and "AccessUVa" initiatives will depend on the extent to which the institution is able to raise both overall quality and participation of low-income students under the new terms. Even with additional tuition revenues, neither outcome is certain. Concerns are twofold: first, it remains to be seen whether contracts or

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Georgetown (45), Cornell (41), Harvard (35), Yale (30), Dartmouth (28), Vanderbilt (28), Maryland (24), Notre Dame (23), Brown (22), Stanford (21), and Princeton (20)."

agreements with the state are truly enforceable as circumstance change; secondly, how potential students from different achievement groups and economic circumstances respond to changes in net price will determine the extent to which a “high tuition, high aid” strategy successfully increases opportunity and excellence at the University of Virginia.

Yet, there is good reason for policy analysts to be (cautiously) enthusiastic about the direction of tuition and aid financing at the University of Virginia. In the past, “higher tuition” has not been explicitly coupled with financial aid, leaving opportunities for low-income students often threatened by efforts to raise university resources. That the restructured universities initiative explicitly couples financial aid through AccessUVa with proposals to increase tuition may yield an outcome fostering both excellence and opportunity at the University of Virginia. It may thereby serve as a model for other selective state university systems.

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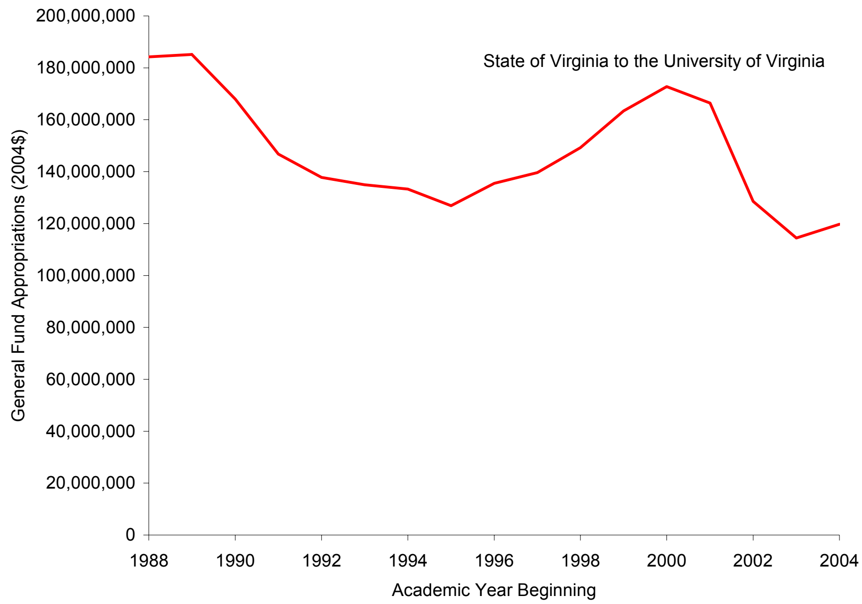
Figure 1: State appropriations from general fund to the University of Virginia



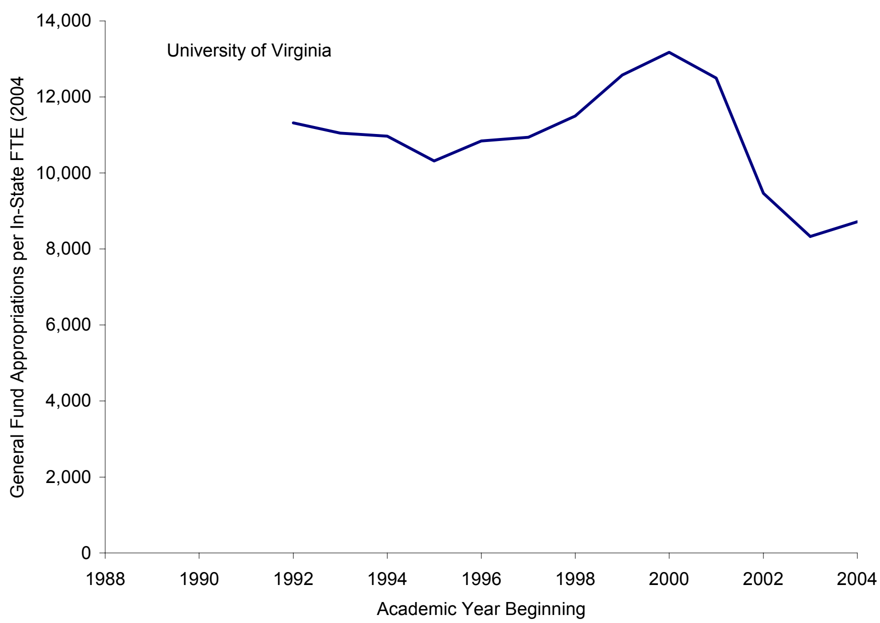


Figure 2: General fund state appropriations relative to education-general expenditures

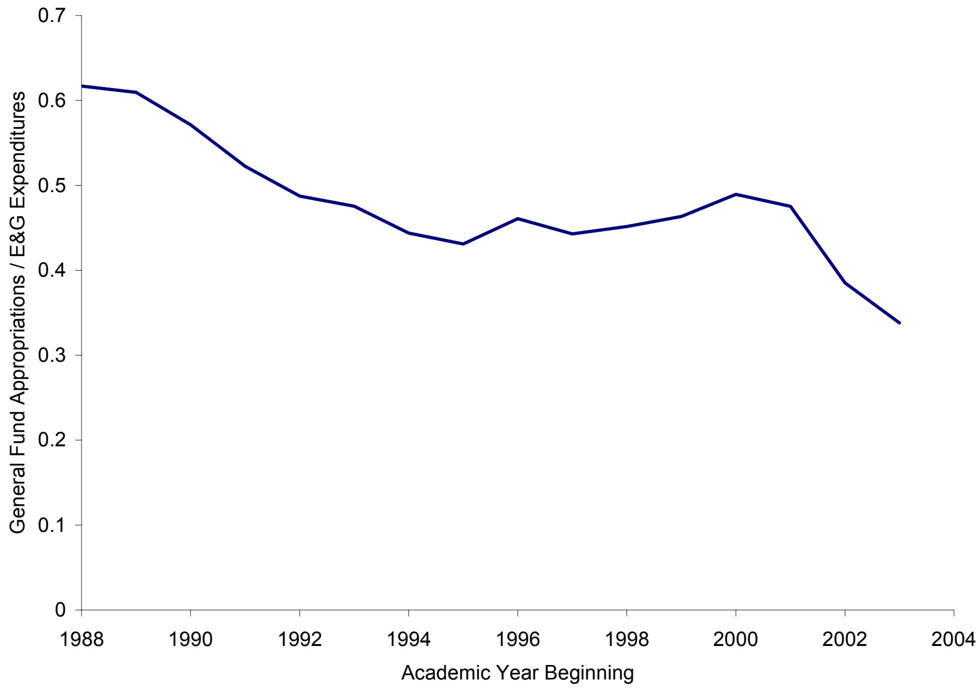
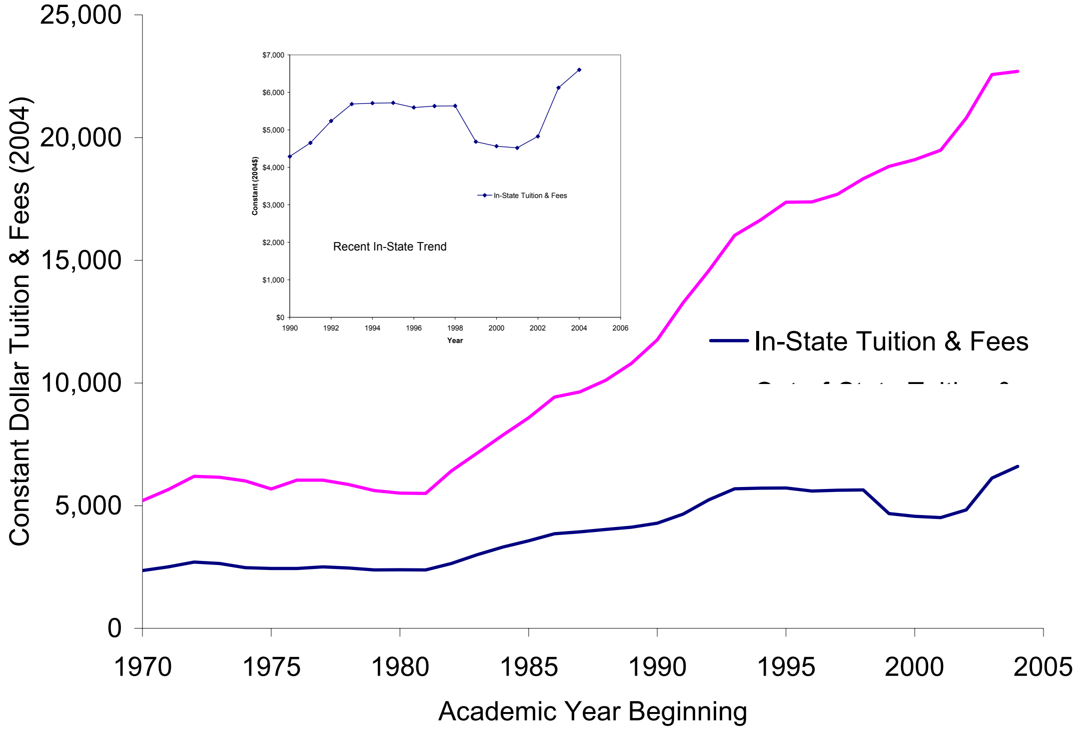


Figure 3: Tuition and fees, constant dollar



Appendix Table 1: Revenue and expenditure projections for the University of Virginia

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
Base State E&G	362,325,000	362,325,000	362,325,000	362,325,000	362,325,000
Incremental Funding Requirements					
Salary commitments	10,587,000	20,686,000	31,052,000	41,699,000	52,642,000
Base budget adequacy	-1,059,000	-2,069,000	-3,105,000	-4,170,000	-5,264,000
Net new general fund support	9,528,000	18,617,000	27,947,000	37,529,000	47,378,000
Interest earning on NNGF	250,000	500,000	750,000	1,000,000	1,250,000
Other E&G Increases	92,000	187,000	285,000	385,000	488,000
Subtotal	372,195,000	381,629,000	391,307,000	401,239,000	411,441,000
Incremental funding requirements					
Salary commitments	12,689,000	26,248,000	40,453,000	55,337,000	70,935,000
Base budget adequacy	10,871,000	21,743,000	32,614,000	43,485,000	54,357,000
Subtotal incremental funding	23,560,000	47,991,000	73,067,000	98,822,000	125,292,000
Needs	385,885,000	410,316,000	435,392,000	461,147,000	487,617,000
Expected	372,195,000	381,629,000	391,307,000	401,239,000	411,441,000
Needed from tuition	13,690,000	28,687,000	44,085,000	59,908,000	76,176,000
Gross New Tuition Revenue	20,006,000	36,591,000	53,315,000	70,984,000	88,889,000
Increases in graduate financial aid	-1,232,000	-1,496,000	-1,774,000	-1,875,000	-2,192,000
Increases in undergraduate financial aid (AccessUVa)	-1,349,000	-3,525,000	-5,437,000	-7,723,000	-9,710,000
Net New Tuition Revenues	17,425,000	31,570,000	46,104,000	61,386,000	76,987,000

http://www.virginia.edu/chartereduniversities/appendixG.html