Understanding the Effects of State Oversight and Fiscal Policy on University Revenues

Considerations for Financial Planning

by Gabriel Ramón Serna

This article outlines the ways in which increased state oversight and restrictive state fiscal policies have affected public four-year college and university revenue structures, highlights how these policies introduce new considerations for institutional financial planners, and outlines some possible institutional responses.

INTRODUCTION

Public universities are increasingly finding their revenue structures affected by state policies and accountability measures aimed at regulating everything from tuition pricing and state appropriations to debt financing (Heller 2001; Knott and Payne 2004; Moody 2007, 2008; Zumeta 2001). Although direct state funding to higher education has decreased (Archibald and Feldman 2006, 2008, 2011; Cheslock and Gianneschi 2008; McLendon, Hearn, and Mokher 2009; St. John and Priest 2006; Tandberg 2008), state efforts to govern public higher education institutions are on the rise. It is clear that states must deploy their resources among a growing number of state operations. However, it is a distressing reality that during economic downturns, higher education is often less able to compete for state funding than other governmental programs. Often, state expenditures to public colleges and universities are considered discretionary rather than mandatory. This perception is likely due to the fact that public higher education has access to a vital revenue source—tuition and fees—that institutions maintain both in tandem with, and separate from, state appropriations (Cheslock and Gianneschi 2008; Kane, Orszag, and Gunter 2003; Titus 2009; Zumeta 2004). As states continue to face ever-increasing demands on already tight resources, retrenchment strategies have become popular techniques for stabilizing and balancing budgets. In the face of the diminished state support that results, public institutions are continually required to take on larger and larger budget cuts. It is in this same environment that public colleges and universities are being subjected to increasing governance and greater accountability measures and requirements.

Because states must fund multiple programs, it is not surprising that policies aimed at state budgets as a whole could result in implicit fiscal difficulties for public higher education institutions. For example, states employ a diverse set of restrictive fiscal policies including tax revolt provisions (TRPs), balanced budget requirements (BBRs), and debt limits to rein in taxes and spending, balance budgets, and limit debt levels. Recent research shows that TRPs such as tax and expenditure limitations (TELs) and supermajority requirements (SMRs) aimed at limiting state government revenues and/or expenditures negatively impact public higher education funding (Archibald and Feldman 2006, 2008, 2011). More recently, Serna (2012) provides evidence that tuition and fees are also impacted by these types of state-level fiscal policies.

It is not surprising that policies aimed at state budgets as a whole could result in implicit fiscal difficulties for public higher education institutions.

This article outlines the ways in which increased state oversight and restrictive state fiscal policies have affected public four-year college and university revenue structures, with special attention to tuition and state appropriations. It also highlights how these policies introduce new considerations for institutional financial planners. The article concludes by outlining some possible responses to state fiscal policies and accountability measures.

UNIVERSITY REVENUES

Public colleges and universities are not immune to the effects of state economic and political climates. For financial planners in these institutions, a primary task is to develop a comprehensive understanding of internal budgetary processes that incorporates the forces at play within the state's larger economic and political environment. As part of budget development, institutional planners must make resource allocation decisions in a rapidly changing environment. Significant changes in costs and expenditures due to variable environmental factors are typical during the budgeting process. College and university planners are well aware that even small changes to personnel and physical-plant maintenance costs or the prices of required goods and services, variations in support for unfunded mandates, shifts in the demand for higher education, and changes in funding policy can affect institutional budgets significantly and quickly.

REVENUE COMPONENTS

Toutkoushian (2003) and Goldstein (2005) outline the primary revenue-generating activities upon which public universities typically rely. The six major revenue types include student/parent funds (which can also include student financial aid from both state and federal sources), federal appropriations and research contracts or grants, state government allocations, private gifts/fund-raising, endowment income, and auxiliary enterprises. Figure 1 outlines the major revenue-generating activities undertaken by higher education institutions. It is important to note that funds from auxiliary enterprises generally stay within their units (except for charges for institutional services) and therefore have little impact on an institution's general fund. This is also true in the case of research grants and contracts.

Figure 1 **Typical Major Revenue-Generating Activities of Public Higher Education Institutions**

Fund Source	Revenue Type	Method Received
Students	Tuition and Fees	Student Charge
Government: Federal	Appropriations Grants and Contracts	Subsidy Reimbursement
Government: State and Local	Appropriations Grants and Contracts	Subsidy Reimbursement
Private (Fund-raising, Grants, and Contracts)	Gifts Grants and Contracts Contributed Services	Contribution Reimbursement for Services
Institutional Endowment and Fund Balances	Investment Earnings	Investment of Working Capital and Permanent Funds
Sales and Services	Educational Activities Auxiliary Enterprises Medical Services	Student/Customer Fee or Charge

Sources: Goldstein 2005; Toutkoushian 2003.

Figure 1 shows that public institutions employ a diverse set of revenue-generating techniques. However, two revenue components remain central and significant to institutional budgets: state appropriations and income from tuition and fees.[1]

While state support is generally tied to enrollment numbers in some fashion, it does not necessarily reflect enrollment demands exactly (Hauptman 2001). For example, even when enrollments increase, institutions may not see a commensurate change in state funding (Heller 2001, 2006). In fact, as states face deteriorating economic conditions, they often constrict funding dedicated to higher education institutions, forcing institutions to make do with fewer resources from state coffers even when student numbers rise. Nevertheless, institutions continue to look to the state as a significant source of revenue, even though funding can fluctuate significantly across and even within years, especially in difficult economic times. Regardless of the continued spending cuts made to public higher education institutions (Archibald and Feldman 2006, 2008, 2011; McLendon, Hearn, and Mokher 2009; Tandberg 2008), these expenditures remain a significant part of state budgets (Thelin 2004).

In the face of institutional budgetary shortfalls resulting from the withdrawal of state support, tuition and fees have become an increasingly critical revenue source for public higher education institutions (Barr 2009; Griswold and Marine 1996; Hauptman 2001; Hossler 2004; Hossler et al. 1997; Koshal and Koshal 2000; Zumeta 2004). It is necessary to note that despite their importance, tuition and fees for in-state residents can be constrained by statutory restrictions (Goldstein 2005; McGuiness 2003). Further, institutions often face mounting pressure from state legislatures and their constituencies to limit or cap tuition (Klein 2004; McPherson and Shulenburger 2010). Even when tuition and fees are

[1] Tuition and fees can be referred to interchangeably as tuition, tuition prices, and tuition levels.

allowed to rise significantly, the increases have not necessarily counteracted the negative consequences of diminished state support. Interestingly, the policy course chosen by many states is one that typically leads to tuition and fee increases (Koshal and Koshal 2000; Middaugh 2005; Tandberg 2008). If state policy disallows tuition increases, then it will be incumbent upon financial planners to find alternative revenue sources or budgetary reductions to fill the gap.

In the face of institutional budgetary shortfalls resulting from the withdrawal of state support, tuition and fees have become an increasingly critical revenue source.

TRENDS AND PATTERNS IN HIGHER EDUCATION FINANCE

As mentioned previously, states are facing tumultuous economic and political conditions, and public institutions are being pressured to increase service levels and programs with less state financial support (Archibald and Feldman 2008; Cheslock and Gianneschi 2008; McLendon, Hearn, and Mokher 2009; Tandberg 2008). This trend was forecasted by Hovey (1999), who correctly predicted that the fiscal and economic conditions for both states and higher education institutions would profoundly impact higher education funding. His analysis also correctly foresaw that enrollments would rise as state tax receipts and funding for higher education stagnated.

It is evident that both state appropriations and tuition will continue to play a vital role in institutional budgets. However, difficulties arise when state appropriations are cut and tuition is used as the primary mechanism for making up budgetary shortfalls (Klein 2004; McPherson and Shulenburger 2010; Middaugh 2005). This is especially true if tuition hikes are politically unpopular. Given the aversion state legislatures and voters have to both increased tuition prices and higher taxes, it is unlikely that institutions will find fiscal relief in state public policies (Zumeta 2004), especially when they employ policies aimed at limiting already scarce resources.

STATE OVERSIGHT AND FINANCIAL PLANNING

GOVERNANCE

State policy and governance are typically at the center of debates surrounding state appropriations and tuition pricing decisions. Because states have different policy infrastructures, decision-making structures, and degrees of public higher education governance centralization, this topic has become increasingly complex. Consider, for example, the challenge that arises in the form of oversight bodies. In some states, public institutions must seek approval from oversight bodies before they respond to unanticipated changes in fiscal conditions, especially when tuition pricing and state appropriations are involved (Knott and Payne 2004; Volkwein and Malik 1997). Moody (2008) provides another example of the impact of state oversight bodies. He notes that if the state board is highly centralized, then the ability of institutions to lobby legislators for needed resources or desired policies may be diminished. Although it is arguably the case that state legislators wish to keep tuition prices low so that more of their constituents can attend college, when a decision is taken to impose controls or limits on tuition pricing or to limit the taxing and spending authority of the state, college and university financial planners have no guarantee that the budgetary gaps that arise will be filled with more state monies (Archibald and Feldman 2006, 2008, 2011; Lowry 2001). As McPherson and Shulenburger (2010) state, “It is simply unrealistic to think that tuition and fee charges could be reduced significantly unless those funds are replaced from other sources” (p.

21). This is the context in which financial planners must make pricing decisions, determine the allocation of scarce resources, diversify revenue streams, and balance institutional budgets.

A recent study by Burgess (2011) analyzing the policies surrounding tuition levels at public land-grant universities finds that tuition and fees are higher on average in states with a relatively low degree of governance centralization. He concludes that policy choices related to both the autonomy of institutional decision makers and state-level funding support of public higher education clearly impact tuition and fee levels. Further, a study by Knott and Payne (2004) finds that states do not generally subsidize universities that maintain lower tuition rates. What both studies underline is that governance structures can and often do mediate between taxpayer demands, accountability measures, and politico-economic changes when it comes to college and university management and resource allocation decisions. It may also be true that institutions under a highly centralized decision-making structure must find alternative methods to finance their operations given the considerably greater constraints placed upon them.

ACCOUNTABILITY

Historically, public higher education enjoyed significant public support and funding and was seldom called upon to account for outcomes or to quantify student success. More recently, however, accountability in higher education has come to occupy a central position in policy discussions (Heller 2001). Given the complex relationships that exist among public higher education institutions, legislators, and the public, it is not surprising that there have been calls for measures of accountability (Heller 2001; Zumeta 2001). These efforts have been focused on various areas, such as curricular changes, funding formulas, diversity policies, and performance-based funding (McLendon, Hearn, and Deaton 2006; Shin 2010). They have typically been in response to externally imposed demands, especially from tax payers and policy makers who desire improved "outcomes" given that public institutional funding relies to some extent on tax revenues (Zumeta 2001).

Given their aim to directly influence institutional activities and priorities, the effects of accountability measures and structures are still unclear (Shin 2010; Zumeta 2001). It may be that these structures are better understood in terms of incentive structures. In other words, accountability structures may create constraining, tax-like deterrents with the goal of discouraging or encouraging certain activities. In this way, accountability measures could be understood to incentivize the alignment of university priorities with broader state or legislative priorities. For example, Lane (2007) and Weerts and Ronca (2006) show that when universities broadly align (divert) their missions and priorities with those of a legislator or legislature, the institutions are rewarded (penalized) for their actions. In such instances, it is difficult to understand how universities can maintain smooth revenue streams, accomplish their missions, please policy makers, and keep tuition low. Even given this precarious balancing act, many states have adopted accountability measures (McLendon, Hearn, and Deaton 2006; Shin 2010).

STATE FISCAL POLICY AND FINANCIAL PLANNING

COMPETITION FOR RESOURCES

As responsibility for social programs has shifted away from the federal government and toward the states, competition for already tight budgetary resources has increased (Callan 2002; Kane, Orszag, and Gunter 2003; Schuh 2009; Wellman 2010). As a result, public colleges and universities find themselves in an atmosphere of increased competition for state funding. In an effort to deal with this unprecedented situation and the resulting fiscal disruption, institutions have become adept at coping with a quickly changing financial environment. They have been forced to introduce multiple efficiency-enhancing measures in order to balance their budgets, particularly as states employ retrenchment strategies to balance their own budgets. Wellman (2010) describes the effects of the recent economic downturn and how its impact on state revenues has reverberated throughout institutions. Public colleges and universities have become more dependent on tuition and fee revenues. They have also been forced to employ such cost-cutting measures as reducing staffing, furloughing faculty, and reducing, consolidating, or simply cutting programs.

POLITICS

Political concerns often sit at the core of price determination and appropriation decisions in public higher education. These decisions often occur in an environment in which fiscal needs, market sensitivity, and the costs associated with the actual cost of providing a college education are largely overlooked by policy makers (Hossler et al. 1997; Tandberg 2008). For example, Hossler and his colleagues state that by using the rhetoric of the market model, policy makers justify decreased support for public higher education while simultaneously ignoring policies that could allow universities to become more autonomous in terms of revenue diversification (Hossler et al. 1997). This situation leads to difficult trade-offs that must be made by university administrators (Hossler 2004) in an often contentious environment.

STATE FISCAL POLICY

It could be argued that restrictive state fiscal policies such as tax revolt provisions (including tax and expenditure limitations and supermajority requirements, balanced budget requirements, and debt limits) decrease the amount of resources that states have available for public institutions. This is because these policies are aimed at imposing fiscal restrictions on state governments, which in turn affects state expenditures. In the case of tax revolt provisions, the goal is to limit either the taxing or spending authority of the state by imposing external limits or creating higher voter or legislative threshold requirements for new or increased taxes. Balanced budget requirements, on the other hand, are aimed at reducing the size of state budgets through rules placed upon the state executive, legislature, or both. These rules can range from lenient, such as simply requiring the submission of a balanced budget by the governor, to very stringent, such as disallowing access to deficit financing from year to year. Debt limits also likely play a role in long-term institutional planning. These rules explicitly impose restrictions on either the dollar amount of debt that the state can incur or the overall percentage of debt (Denison, Hackbart, and Moody 2006). Because the goal is to limit overall state debt, including the debt of state agencies, these rules can implicitly impair the ability of institutions to access debt financing and can also possibly negatively affect their credit ratings (Moody 2008).

Although research in this area remains sparse, recent studies explore the relationship between tax revolt provisions (TRPs) and state support to higher education (Archibald and Feldman 2006). Findings indicate that tax and expenditure limitations and supermajority requirements (in other words, efforts to roll back or limit taxes or to alter decision-making rules in the legislature) negatively affect state spending on higher education. A related study by Serna (2012) examines the impact of these same fiscal policies on tuition and fees and finds that in states with supermajority requirements (SMRs), tuition and fees are higher on average by approximately six percent. This could suggest that public colleges and universities in states that have adopted an SMR are more dependent upon tuition and fees as a spillover effect of the policy. Given that as of 2008, 30 states have adopted some form of tax and expenditure limitation (TELs) and 16 states have adopted SMRs (see figures 2 and 3), the effects of growing anti-tax sentiment on state fiscal policy may become even greater.

Figure 2 **State Tax and Expenditure Limitations as of 2008**

State	Year Adopted	Constitution or Statute	Limit	Tuition Included
Alaska	1982	Constitution	Expenditure	N
Arizona	1978	Constitution	Expenditure	Y
California	1979	Constitution	Expenditure	N
Colorado	1991 1992 2005	Statute Constitution Referendum	Expenditure Revenue Both	Y
Connecticut	1991 1992	Statute Constitution	Expenditure Expenditure	N
Delaware	1978	Constitution	Expenditure	N
Florida	1994	Constitution	Revenue	N
Hawaii	1978	Constitution	Expenditure	N
Idaho	1980	Statute	Expenditure	N
Indiana	2002	Statute	Expenditure	N
Iowa	1992	Statute	Expenditure	N
Louisiana	1993	Constitution	Expenditure	N
Maine	2005	Statute	Expenditure	N
Massachusetts	1986	Statute	Revenue	N
Michigan	1978	Constitution	Revenue	N
Mississippi	1982	Statute	Expenditure	N
Missouri	1980 1996	Constitution Constitution	Revenue Revenue (Renewal)	N
Montana	1981	Statute	Expenditure	N
Nevada	1979	Statute	Expenditure	Y
New Jersey	1990	Statute	Expenditure	N
North Carolina	1991	Statute	Expenditure	Y
Ohio	2006	Statute	Expenditure	N
Oklahoma	1985	Constitution	Revenue & Expenditure	N
Oregon	2000 2001	Constitution Statute	Revenue Expenditure	Y
Rhode Island	1992	Constitution	Expenditure	N
South Carolina	1980	Constitution	Expenditure	N
Tennessee	1978	Constitution	Expenditure	N
Texas	1978	Constitution	Expenditure	N
Utah	1989	Statute	Expenditure	N
Washington	1993	Statute	Expenditure	Y
Wisconsin	2001	Statute	Expenditure	N

Sources: Archibald and Feldman 2006; Waisanen 2011.

Figure 3 **Current State Supermajority Requirements and Year of Adoption**

State	Year Adopted	Supermajority Requirement	Statutory (S) or Constitutional (C)
Arizona	1992	2/3	C
Arkansas	1934	3/4	C
California	1979	2/3	C
Colorado	1992	2/3	C
Delaware	1980	3/5	C
Florida	1971	3/5	C
Kentucky	2000	3/5	C
Louisiana	1966	2/3	C
Michigan	1994	3/4	C
Mississippi	1970	3/5	C
Missouri	1996	2/3	C
Nevada	1996	2/3	C
Oklahoma	1992	3/4	C
Oregon	1996	3/5	C
South Dakota	1996	2/3	C
Washington	1993	2/3	S

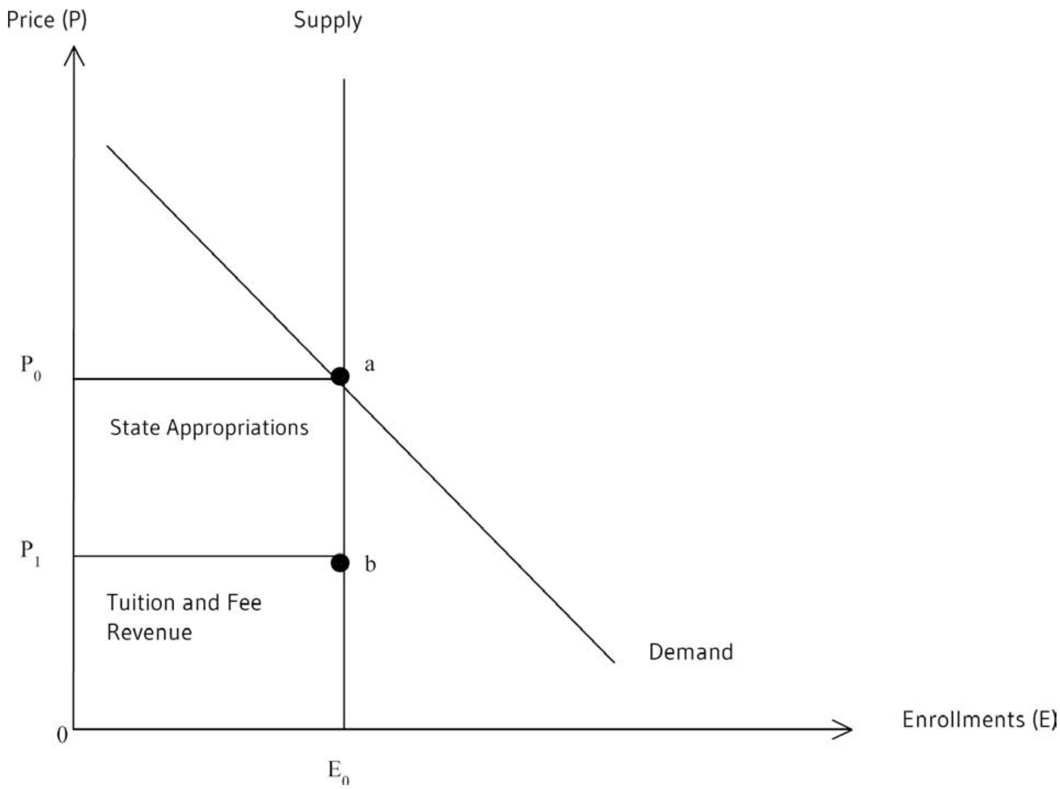
Sources: Archibald and Feldman 2006; Waisanen 2011.

It is likely due to structural pressures resulting from shrinking budgets and diminished tax revenues that competition for state resources has increased while support to higher education has decreased (Wellman 2010). TRPs may have exacerbated these pressures given their goals of limiting state revenue generation and authority. If states continue to implement policies aimed at limiting their own revenue-generating capacity, then financial planners will have to consider how this aversion to taxes will manifest itself in other ways, such as higher tuition and fees. However, because tuition and fee hikes are often politically unpopular, planners are in a particularly difficult position. Similarly, Moody (2007, 2008) provides evidence that debt limits and the centralization of state governance are dampening the ability of institutions to lobby for needed debt financing and other financial resources. Although a relationship has not yet been established, it may be that as states implement more stringent balanced budget rules, they will be forced to cut support to higher education. This would mean that once again institutions are left more reliant upon tuition and fees as well as alternative revenue sources. Two possible scenarios involving tuition and fees and state appropriations are illustrated in the basic microeconomic models that follow.

It may be that as states implement more stringent balanced budget rules, they will be forced to cut support to higher education.

In the model shown in figure 4, assuming higher education supply is fixed in the short run,[2] P_0 is the average level of tuition and fees that in-state undergraduate students would face if the state did not appropriate any funds to institutions. State appropriations (area P_0, a, b, P_1) lower the average price students face to P_1, and student tuition and fees make up the rest (area P_1, b, E_0, 0).

Figure 4 **Economic Model of the Effect of State Appropriations on Higher Education Pricing**



Note: Adapted from Toutkoushian and Shafiq 2010.

Thus, in this simple model the full price of attendance (also total university revenue for ease of analysis) is equal to state appropriations plus tuition and fee revenues (area P_0, a, E_0, 0). However, the state subsidy effectively lowers the price students face to P_1. This means that the institution is less reliant upon tuition and fee revenues. While a generalization, the analysis is applicable to the majority of public four-year institutions and illustrates the impact of diminished state support on institutional revenues.[3]

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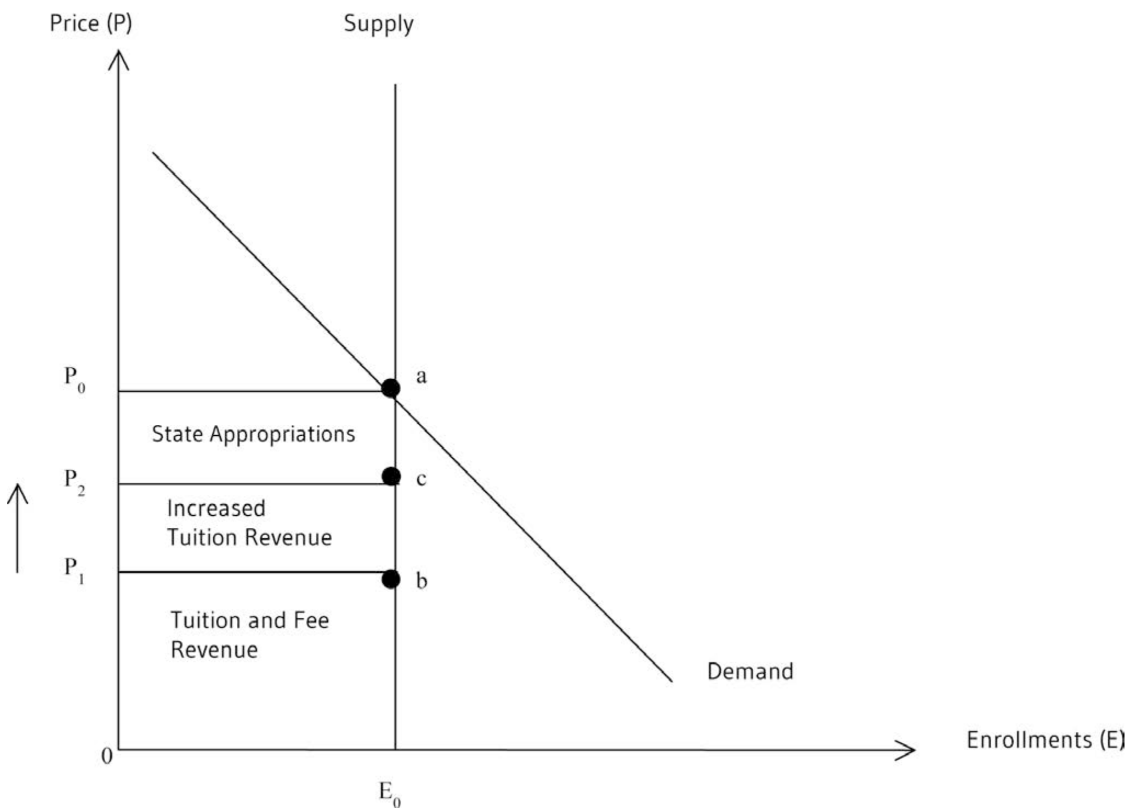
[2] The reason for assuming that the supply of higher education is fixed in the short run is that unless capacity is increased, spaces for enrollment are effectively limited to current levels.

[3] In this model, enrollment demand is also assumed to be rather inelastic, hence the immobility of the demand curve (see, for example, Bowen, Chingos, and McPherson 2009).

Moving on from figure 4, where state appropriations (or state subsidies) are higher, figure 5 shows what happens when the subsidies are lowered. The price students used to face is P_1; however, as state appropriations are cut, the price students face rises to P_2 and tuition and fees must make up the difference (area P_2, c, b, P_1). In essence, tuition and fees now make up a larger portion of total revenues (area P_2, c, E_0, 0) due to decreased state appropriations and, as a result, institutions are more reliant upon this revenue stream.

Figure 5 **Economic Model of the Effects of Lowered State Appropriations on Higher Education Pricing**



Note: Adapted from Toutkoushian and Shafiq 2010.

CONSIDERATIONS FOR FINANCIAL PLANNING

A primary concern for financial planners is that state fiscal policies that may not be aimed directly at public higher education could, nevertheless, create implicit policy consequences in the form of spillover effects on institutional budgets. It will become increasingly more important for planners to understand the impact of restrictive state fiscal policies on two of the most important revenue streams upon which public colleges and universities depend: tuition and fees and state support. In the case of TELs, at least six states include tuition in their limits (Archibald and Feldman 2006).

In a study on the importance of financial planning, Brinkman and Morgan (2010) highlight the often pivotal influence of five external trends on higher education. These trends include (1) shifting demographics, (2) reliance on output measures, (3) changes in the perception of higher education from a public good to a private good, (4) dependence on various revenue streams, and (5) the reliance of state governments on the tenets of human capital theory for increased participation in higher education and economic development. However, this list does not include one important and often overlooked external environmental factor: state fiscal policy.

Because so much of the annual budget for most public institutions is made up of state support and tuition and fees, financial planners must take into account state fiscal policies, especially those policies aimed at restricting the state's budget behaviors. As Brinkman and Morgan (2010) note, "The financial planner is specifically obligated to assess the impact of environmental developments on the institution's overall financial prospects and to offer specific guidance regarding resource acquisition and allocation and the accumulation of strategic resources" (p. 8). Clearly, it is incumbent upon financial planners to include in their assessment of the external environment even those policies not necessarily aimed at public higher education that nonetheless impact institutional revenue structure and streams.

CONCLUSION

This article has underscored a few of the central fiscal and economic issues facing public higher education. States differ on a number of important aspects related to higher education finance policy, thus making the task complex. However, at least two things are clear. First, the two revenue sources discussed here, state appropriations and tuition, generally make up the bulk (or at least a major portion) of institutional budgets. Second, a public university's reliance on specific revenue types differs from institution to institution, and therefore context is important. Nonetheless, most public universities will likely be forced to rethink their typical financing mechanisms as state support for higher education declines and opportunities for tuition increases become more limited. This is a task that decidedly falls to institutional financial planners.

It is also clear that policy makers and tax payers are demanding increased efficiency. These two groups have come to value market-oriented outcomes while simultaneously enacting policies and maintaining oversight structures that may hinder the ability of institutions to meet their stated missions and goals. Additionally, these same policies affect resource allocation decisions, if only implicitly. While it is unlikely that state funding and appropriations will increase relative to university budgets, it is almost certainly the case that resources are already scarce and the competition for them intense. Because both states and institutions are seeking strategies to enhance efficiency, it may be sensible for states and their oversight bodies to rethink the use of complex accountability structures. It may also be wise to revisit questions of autonomy and the resultant constraints or flexibility introduced by these choices for those charged with budgeting and planning. This is especially true as institutions face decreased state support and increased reliance upon other revenue sources.

Finally, as financial planners consider the external forces affecting revenue generation, it would be prudent to consider state fiscal policies, especially those policies aimed at restricting the budget behaviors of the state. These external factors have only recently begun to receive attention from policy and finance researchers; however, for financial planners they will likely be an implicit, yet highly important, consideration.

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AUTHOR BIOGRAPHY

Gabriel Ramón Serna, Ph.D., is currently an assistant professor of higher education and student affairs leadership at the University of Northern Colorado. His research focuses on higher education finance and economics, specifically on the intersection of state fiscal policy and higher education funding. His most recent professional experience was as the assistant director of admissions at the University of Kentucky. He holds a B.B.A. in economics from New Mexico State University, an M.P.P. in public budgeting and finance from the Martin School of Public Policy and Administration at the University of Kentucky, and a Ph.D. in education policy from Indiana University Bloomington.