

10-1-2011

Trends in Expenses and Revenues at Not-for-profit and For-profit Postsecondary Institutions: The Nondistribution Constraint and the Future of the Trust Market

Bonnie Fox-Garrity

Roger Fiedler

Mark Garrison

Follow this and additional works at: <https://scholars.fhsu.edu/alj>

 Part of the [Educational Leadership Commons](#), [Higher Education Commons](#), and the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Fox-Garrity, Bonnie; Fiedler, Roger; and Garrison, Mark (2011) "Trends in Expenses and Revenues at Not-for-profit and For-profit Postsecondary Institutions: The Nondistribution Constraint and the Future of the Trust Market," *Academic Leadership: The Online Journal*: Vol. 9 : Iss. 4 , Article 17.

Available at: <https://scholars.fhsu.edu/alj/vol9/iss4/17>

This Article is brought to you for free and open access by FHSU Scholars Repository. It has been accepted for inclusion in Academic Leadership: The Online Journal by an authorized editor of FHSU Scholars Repository.

Academic Leadership Journal

Issues: [Fall 2011 - Volume 9 Issue 4](#)

Posted On 2012-02-27 04:30:24

Author(s): Bonnie Fox Garrity, Roger Fiedler, and Mark Garrison

Authors:

Bonnie Fox Garrity

Roger Fiedler

and Mark Garrison

Within a framework of trust markets, this study compares expenses, instructional expenses, and revenues per FTE of not-for-profit and for-profit postsecondary institutions using IPEDS data. Median expenses per FTE at not-for-profit institutions were double those at the for-profit institutions. Median revenue beyond instructional expenses increased at the 4-year-and-above level institutions while decreasing at other levels. Percent of revenue allocated to instructional expenses, other expenses, and excess revenue is presented. Surprisingly, 4-year-and-above, not-for-profit institutions generate more excess revenue per FTE than 4-year-and-above for-profit institutions. Implications of the nondistribution constraint for trust markets and the policy implications of these findings are discussed.

A review of current peer-reviewed literature shows that there is sparse information regarding trends in expenses and revenues on the national level at for-profit and not-for-profit colleges and universities over the past decade. This study compared financial measures of not-for-profit and for-profit institutions at the less-than-2-year, 2-year, and 4-year and above levels in 2000 and 2004. Framed by a discussion of trust markets (Winston, 1999), comparisons and trends are examined in expenses, instructional expenses, revenues, and differences between revenue and instructional expenses. Revenues are examined by the percentage spent on instructional expenses, the percentage spent on other expenses, and the percentage not spent on expenses.

While there is a wealth of data available from the Integrated Postsecondary Education Data System (IPEDS) over the past decade, the data are provided in such a way as to make their retrieval, processing, and comparisons over time difficult. Comparative studies of the finances of postsecondary institutions have generally focused on 1995-1996 and earlier data (Gumport & Jennings, 1999; Toutkoushian, 1999; Winston, 1999; Laband & Lentz, 2004; Morphew & Baker, 2004; Epple, Romano, & Sieg, 2006) presumably because reporting systems and data collection tools changed after this date, making such studies much more challenging. This has limited the examination of trends over time in important categories of information, including expenses and revenues per FTE at the national level at for-profit and not-for-profit institutions. In addition, since FTE was not calculated and reported in IPEDS until 2003, studies of financial measures per FTE from prior to that date are not available.

Examination of these trends is important since over the past decade, the categories of not-for-profit and for-profit may no longer reflect “traditional” differences assumed to exist between these groups of institutions. Changes have taken place in both types of institutions in a variety of ways, including levels of degrees offered, staffing models, academic scheduling options, and distance education (Kinser, 2005, 2006b, 2007). As not-for-profits have forcefully entered professional education markets (e.g., nursing, teacher education), for-profits have moved beyond vocational training and certificate programs into a domain once dominated by private, not-for-profit and public colleges and universities (see Labaree, 2006).

In an effort to address these issues, this research develops and applies a series of methodological steps to gather data from 2000 and makes comparisons to 2004. The steps taken with these data involve detail with regard to such methodological issues as level (less-than-2-year, 2-year, and 4-year and above) and type of control (for-profit and not-for-profit) of institution, parent-child aggregation, FASB and GASB reporting system differences, and FTE calculations to provide a consistent denominator for expense and revenue comparisons over time.

The results provide new information regarding the changing landscape of education and its financing over time, and identify important trends that may raise alarms or, alternatively, herald the advent of new educational models for the near future. The information provided here is also timely, as the recent worldwide financial market crisis has raised many concerns regarding the financing of education in the U.S, and scrutiny of for-profit education by the federal government has been initiated.

Trust Markets and the Nondistribution Constraint

While research comparing the operational functioning of not-for-profit to that of for-profit institutions dominates the literature, the impact of legal and financial strictures on institutional functioning accompanying not-for-profit and for-profit status has received relatively little attention. The association of for-profit institutions with the generation of revenue that exceeds expense (“profit”) may have caused researchers to ignore comparative trends in the generation of excess revenue at not-for-profit institutions.

From a legal perspective, private institutions register with a state as not-for-profit or for-profit based upon the fulfillment of certain requirements related to purpose, structure, and ownership. In his seminal article, Hansmann (1981) described a not-for-profit organization as one that is prohibited by state law from distributing net earnings to those who control the organization. However, not-for-profit organizations are not prohibited from earning excess revenue beyond expenses (“profit”). Rather the nondistribution constraint requires that earnings be reinvested in the goods or services the not-for-profit was formed to provide. For-profit institutions, on the other hand, may distribute profits generated to owners, shareholders, or others who control the institution. They are not required to reinvest excess revenue into the goods or services the for-profit was formed to provide. Thus while the operational differences between not-for-profit and for-profit postsecondary educational institutions have been studied, the impact of the legal and financial restrictions on not-for-profit institutions, such as the nondistribution constraint, and lack thereof on for-profit institutions, has not been studied at the national level.

Higher education, particularly baccalaureate and above, historically has been provided by not-for-profit private and public institutions in the United States. It was traditionally viewed as a social institution

where an informal compact existed between the institutions and society. The institutions were expected to provide both private goods in the form of education as well as social or public goods, such as the transmission of culture and promotion of civic engagement. In exchange, society allowed favorable financial status in the form of funding or tax-exempt status for the institutions (Gumport, 2000; Friedman, 2002; Couturier, 2005). This arrangement was predicated on a trust that each party would uphold the compact to the fullest extent possible.

Trow (1996) emphasized the role trust has historically played in governing how society relates to higher education, "that is, the provision of support, by either public or private bodies, without the requirement that the institution either provide specific goods and services in return for that support, or account specifically and in detail for the use of those funds." "Trust," he continues, "is the basis of the very large measure of autonomy of colleges and universities anywhere which are able to raise substantial sums of private money, or which are funded by governments which voluntarily delegate much of their power over the institutions, and thus give to the institutions a large measure of autonomy in the use of the funds they provide" (pp. 310-311).

Hansmann (1981) articulates the logic employed to determine when not-for-profit organizations are preferable to for-profit organizations using the term contract failure. The definition is similar to Winston's (1999) concept of a trust market. Both authors describe circumstances where it is difficult for one party in the transaction (the consumer or donor) to compare the quality of performance prior to engaging with the organization. After the engagement it is also difficult to determine whether the good or service was delivered as promised. This situation leads to an asymmetry of information where the organization has information that the other party does not. Trust in the provider becomes an important element in these circumstances. Both Winston (1999) and Hansmann (1981) argue that not-for-profit organizations are preferable in these circumstances for two reasons. One is that the nondistribution constraint requires that excess revenue be reinvested in the goods or services being produced rather than possibly being distributed to shareholders/owners as profits or dividends, allowing for a comfort level for the party to the transaction that their money will eventually be used for the intended purpose. The other is the potential for fraud in a trust market or contract failure environment. The inability of a not-for-profit to generate profits for owners reduces one source of pressure to violate the trust necessary due to the asymmetry of information in the transaction. Not-for-profit organizations are considered to be less likely to take advantage of the trust arrangement.

While trust is central to governing the relationship between society and not-for-profit institutions, market forces are most prominent in governing the relationship between society and for-profit entities (Trow, 1996). For-profit educational institutions have operated in the United States for more than 300 years (Ruch, 2001; Morey, 2004) historically, providing less-than-2-year and 2-year vocational and occupational types of training and education. Vocational and occupational education provides a tangible skill set that potential employers and graduates can demonstrate and measure. This aids in reducing the trust necessary in these transactions. Measures of education at the 4-year and above level are not as easily quantified and this level of education is often designed to provide a long term impact on an individual, therefore, the asymmetry of information inherent in a trust market is increased at the 4-year-and-above levels of education. However, within the past 10 years for-profit institutions have experienced tremendous growth at the master's degree level and above (Turner, 2006; Fox Garrity, Garrison, & Fiedler, 2010) while generating increased respect from the federal government (Outcalt & Schirmer, 2003). There also has been movement toward inclusion of for-profits in the same regulatory

framework as not-for-profit and public institutions (Kinser, 2005). However, recent scrutiny by the federal government related to the amount of federal aid that is received by for-profit institutions may signal a change in the direction of legislative movement related to for-profit institutions.

The recent movement toward public accountability measures and transparency highlight pressure to reduce the asymmetry of information inherent in the trust market of postsecondary education. However, the lack of a strong methodology to “measure” education provides data and information that are less than what would be necessary to truly change the trust market or contract failure arrangement to one of equal information available to both parties. Therefore, 4-year and above education still operates in a trust market environment. Interestingly, however, some of these institutions, particularly at the 4-year and above level, operate with a nondistribution constraint (not-for-profits) and some institutions operate without a nondistribution constraint (for-profits). While measures of violations of the trust market are beyond the scope of this article, the influence of the nondistribution constraint on excess revenue generation serve as a lens through which changes in the educational marketplace over time may be reviewed.

Methodological Issues

IPEDS

This study used IPEDS data from the years 2000 and 2004. All institutions that participate in Title IV student aid are required to complete several IPEDS surveys each year. This data is then released through the National Center for Education Statistics (NCES) website. This system provided data for our analysis from the entire population of Title IV participating institutions.

IPEDS Parent Child Aggregation of Institutions

One of the major methodological issues when using the IPEDS databases over time is that of determining the level (less than 2-year, 2-year, and 4-year and above) and control (public, not-for-profit, and for-profit) of the institution. While there are codes in IPEDS that allow researchers to determine, for any single year, whether the institution offers less than 2-year degrees (certificate programs), 2-year degrees (associate programs), or 4-year and above (bachelors and beyond programs), and a code for determining whether the institution was reported to be under public; private not-for-profit, or private for-profit control, these codes are at the entity level.

There is also a code in IPEDS that determines whether any single institution is an independent entity or a “child” of a “parent” institution. This code allows researchers to collect all entities of a parent institution together under a single institution. In most cases, the child institutions reported most of the enrollment data, while the parent institution reported the aggregated financial data for the whole group of institutions. Examples of institutions using parent-child reporting were the State University of New York and the University of Phoenix. For purposes of analysis, all data points of child institutions were aggregated with their parent institutions and counted as one institution. This allowed for calculation of finance variables that could then be standardized using enrollment data to determine per FTE expenses and revenues for the entire group of related institutions.

A second methodological concern for analyses of IPEDS financial data over time is that parent-child

reporting is a choice made each year by the institutions. Therefore, an institution may be part of a parent-child reporting structure one year, but not for any subsequent years. When aggregating IPEDS data for the time period of the present study, we found that the parent/child relationships resulted in 2,238 institutions aggregating into 598 family units. This process is critical since the finance and enrollment numbers in some years were reported by separate members of the family unit and calculation of financial variables per FTE would be misleading without this step.

Table 1 shows the number of institutions in each sector that were part of a parent-child reporting relationship before and after aggregation into related family units. The 190 Administrative units that were not part of a parent-child relationship were removed since they generally reported 0 enrollment.

Determination of Institutional Level

Three important methodological concerns were raised by the determination of institutional level. First, IPEDS reports 4-year and above institutions that offer certificates, Associate's, Baccalaureate, Graduate, and Doctoral Degrees with those offering 4-year Baccalaureate degrees only. A second methodological concern was that child entities aggregated to the parent institutional level might have differing levels of degree offerings. In order to be consistent with the reporting of financial data for these parent institutions, we used the highest-level code of any member of the family unit. A third methodological concern became apparent when examining institutional level over time. Some institutions may have changed their offerings of highest degrees during the time period examined. These institutions were included in their reported level for each year of the study. Therefore, some institutions may be included in one level in 2000 and in a different level in 2004. This methodology allows for an accurate reporting of the total expenditures and revenues in each year.

Institutional Control Issues

Institutional control was the key variable for the study, and was represented in the IPEDS database as a code for "public", "private not-for-profit", and "private for-profit". Interestingly, while institutions have rarely changed from one form of control to another in the past, there are recent examples of for-profit institutions buying not-for-profit institutions (Blumenstyk, 2007b) and even rarer instances of not-for-profit institutions buying for-profit institutions (Blumenstyk, 2007a). According to Fox Garrity and Fiedler (2010), 122 institutions changed control between 2000 and 2004. The same methodological consideration for level was applied to the study of institutional control. Therefore, some institutions may be included in one control in 2000 and in a different control in 2004. This inclusion does not provide a substantial change to the median values reported. However, further study of possible changes in financial measures after conversion from one form of control to another is suggested.

An additional analysis of the institutions that were included in the same level and control in each year of the study found that including all institutions (those that changed and those that did not) did not substantially change the medians reported. The magnitude of difference was largest in the less-than-2-year not-for-profit institutions; however, that difference does not change the conclusions reached in the study. Further study of whether the changes are a result of a different financial structure at institutions that either discontinued operation, began operation, or changed level or control between 2000 and 2004 is suggested.

On limited occasions, “child” institutions reported a different control value than the other institutions in that same system in the same year. In the years included in this study, the authors identified five institutions in 2000 and two institutions in 2004 where this was true. These child institutions were eliminated from this study.

Calculating Full-Time Equivalents (FTE)

For purposes of comparison, it was important for the study of financial data to include a consistent denominator. Large institutions present larger aggregated dollar totals when compared to smaller institutions, and therefore reporting of financial information by full-time equivalent (FTE) student enrollments becomes the clearest way to show differences between institutions of differing sizes. Due to a lack of a consistent, robust variable in the IPEDS database across the years of the study for calculating FTE student enrollment (National Center for Education Statistics, 2004), we began by estimating FTE with two different formulae used by IPEDS. For both 2000 and 2004, IPEDS calculated their estimate of FTE using headcount enrollments. In 2004 IPEDS also calculated a more robust estimate of FTE based mainly on credit and contact hours (National Center for Education Statistics, n.d.).

We used the 2004 IPEDS estimate of FTE first, which is based upon the 12-month total of undergraduate credit hours, undergraduate contact hours, and graduate credit hours and the headcounts of first professional students. Undergraduate credit hours/30 were added to undergraduate contact hours/900 and to graduate credit hours/24. These calculations were adjusted slightly for institutions using a quarterly calendar and credit hour system, where undergraduate credit hours were divided by 45 and graduate credit hours by 36.

First professional FTE was estimated by calculating the fractions of the total of first professional students who were reported as full-time, and then part-time, in the fall semesters. These fractions were then extrapolated to the full year using unduplicated headcounts for first professional students, with the full-time first professional student FTE added to 1/3 of the part-time first professional FTE.

These estimated FTEs for undergraduate, graduate, and first professional students were then added together for all institutions for the 2004 and 2000 data sets. In 2004, if an institution disagreed with the IPEDS calculated FTE estimate, the institution could provide their own estimate of undergraduate or graduate FTE which IPEDS would use in place of their calculated undergraduate or graduate FTE number (National Center for Education Statistics, [2007](#)).

Due to this replacement process in IPEDS, a similar verification process was needed for the 2000 dataset. A second estimate of FTE was calculated using the 2000 IPEDS formula, which was based upon headcounts alone. This second formula estimated FTE using full-time undergraduate, graduate, and first professional headcounts as full FTEs, then added estimates of part-time FTEs using a partial weighting formula (National Center for Education Statistics, [2007](#)).

A comparison between these two FTE estimates was made for the 2000 dataset to determine whether there were large differences between them and when the more robust 2004 formula appeared to either grossly over- (less than 2% of institutions) or underestimate (approximately 23% of institutions) the FTE, the headcount estimate FTE was substituted. Institutions were assumed to place more emphasis

on accurate reporting of headcount than credit and contact hours in 2000, as those were used to calculate their reported FTE in that datayear. Therefore, when there was a large difference between the headcount based FTE and the credit hour based FTE in 2000 or if the variables needed to calculate the credit hour based FTE were not included in the IPEDS dataset, the assumption was made that the headcount FTE would be a more accurate reflection of the FTE enrollment. This affected about 25% of the individual institutions prior to parent child aggregation in the 2000 dataset but it was necessary to achieve a consistent denominator across all institutions for both years.

Once the FTE variable was complete, total expenses per FTE, instructional expenses per FTE, and total revenues per FTE were calculated for each institution in constant 2004 dollars. Due to the variance in the results, medians are used as the measure of central tendency.

Comparisons Between FASB and GASB Institutions

Comparisons of the financial information of postsecondary institutions was complicated by the fact that in 1997, for-profit and not-for-profit institutions were required to begin using a new set of accounting standards issued under the Financial Accounting Standards Board (FASB) (National Center for Education Statistics, n.d.). These standards dictated the methods of accounting for certain types of expenses and revenue. However, the Government Accounting Standards Board (GASB) sets the accounting standards for local and state government entities. Since these standards require different accounting methods, it was not possible to compare the financial data of public institutions to those of for-profit or not-for-profit institutions. Therefore, this study did not include public institutions in any of its calculations of financial results.

Conversion to Constant Dollars Over Time

A significant step in studies of finances over time is the adjustment for inflation. Each total in this study was converted to 2004 dollars to provide a constant for comparison (Sahr, 2008). This process provides the ability to compare dollar amounts from different years using the same scale.

Results

The results of this study provide information on the enrollments and finances of not-for-profit and for-profit Title IV participating postsecondary institutions in the United States for 2000 and 2004. Enrollment data are presented first, followed by total expenses, instructional expenses, revenue, and revenue minus instructional expense. The results section will conclude with a review of the percentages of revenue spent on instruction, other expenses, and excess revenue.

Enrollment

Enrollment data on headcounts and FTE are included in table 2. For-profit FTE enrollments increased much more quickly than the not-for-profits at all levels, although the enrollment at for-profits was still substantially smaller than the not-for-profit and public enrollment at the 4-year-and-above level. At the 2-year level, for-profits had a larger enrollment than not-for-profits, although publics dominated at this level as well. The 2-year not-for-profit category saw a substantial decrease while for-profits gained nearly

200,000 FTEs between 2000 and 2004. At the less-than-2-year level, for-profits have a much more substantial presence than the not-for-profits and publics.

Expenses

As shown on table 3, of the \$109 billion spent by 4-year and above private institutions in 2004, \$104 billion was spent by the not-for-profits. For-profits, nevertheless, reported a majority of the expenses at the 2-year and less-than-2-year levels. However, when expenses for each FTE are compared, not-for-profits spent nearly double the median amount per FTE than the for-profits at all levels. This is consistent with the literature regarding expense minimization strategies incorporated at many for-profits. These strategies include extensive use of adjunct faculty and limited use of tenured faculty; full deployment of faculty time for teaching instead of research and shared governance; the adoption of a centrally-designed curriculum; use of rented space in lieu of large campuses; and little support for athletic programs (Kelly, 2001; Morey, 2004; Kinser, 2006a, 2006b; Turner, 2006). However, Morey (2004) noted that these expense-minimization strategies may influence the behaviors of not-for-profit and public institutions as they compete with the for-profit institutions for students.

A surprising finding is the difference in the percentage change between the 4-year and above level and the other levels in median total expenses per FTE. While the total expenses per FTE rose at the 4-year level, all groups at the 2-year and less-than-2-year level experienced a drop in expenses per FTE in 2004 constant dollars.

Instructional Expenses

Table 4 reveals some interesting changes in instructional expenses between 2000 and 2004. At 2-year not-for-profit institutions, there is a distinctive trend. The total instructional expenses reported by all institutions in this group show a decline of over 19%, which is similar to their decline in FTE enrollments. However, this decline is not evenly spread across all 2-year not-for-profit institutions. This is evidenced by their marked increase in median instructional expenses per FTE. Other than the 2-year not-for-profit group, all other groups follow the same trends in increases and decreases in median instructional expenses as in total expenses.

Revenue

Similarly, in table 5, the revenue patterns show an increase at the 4-year-and-above level and decreases at other levels. Interestingly, the 4-year-and-above for-profits show an 11.58% increase in median total revenue per FTE to \$12,240 while showing an increase in median expenses per FTE of 8.91% to \$10,760. The total revenue of the 4-year-and-above for-profits in 2004 reached \$6 billion while reported total expenses were \$4.7 billion. The not-for-profits had a greater disparity. They reported \$134 billion in revenue and \$104 billion in expenses in 2004. Of note is the trend at the not-for-profit less-than-2-year institutions, which shows a 25% decrease in median revenue per FTE but only a 17% decrease in median expenses per FTE. By 2004, the less-than-2-year not-for-profits reported total revenue of \$235 million and total expenses of \$238 million. This could threaten the sustainability of a number of institutions in this category.

Revenue Minus Instructional Expenses

In table 6, the only groups of institutions showing an increase in median revenue over and above instructional expense are the 4-year-and-above institutions with the largest increase (17.41%) in the 4-year and above, for-profit category. The 2-year and less-than-2-year not-for-profit categories reported a large decrease in revenue beyond instructional expenses. At the 2-year level this is a function of both a decrease in revenue and an increase in instructional expenses per FTE. At the less-than-2-year level there has been a large decrease in revenue and a smaller decrease in instructional expenses.

Percentages of Revenue

When revenue is divided between instructional expenses, other expenses, and revenue beyond expenses (excess revenue), some interesting trends are revealed. In table 7, all not-for-profit groups showed increases (some very large) in percent of revenue spent on instructional expenses. For-profits at the 4-year-and-above and 2-year levels showed a decrease in percent of revenue spent on instruction. Revenue spent on all other expenses includes research, public service, academic support, institutional support, student services, auxiliary enterprises, and all other expenses. Between 2000 and 2004, an increase of more than 15% in the percent of revenue spent on other expenses is shown at the 4-year and above not-for-profits with a very small (<1%) increase recorded at the 4-year for-profits. All 2-year and less-than-2-year categories recorded a decrease in the percent of revenue accounting for all other expenses.

At the for-profit institutions, excess revenue increased by at least 25% and by as much as 118%. All not-for-profit categories showed a decrease in percent of revenue in excess of expenses by as much as 115%. However, the 4-year-and-above institutions in the not-for-profit and for-profit categories reached near parity in the percent of revenue in the excess revenue category by 2004. However when compared on actual dollar amounts, not-for-profit institutions generated larger amounts of excess revenue. By applying the formula percent of excess revenue times total revenue, then dividing by total FTE, the resulting excess revenue per FTE at the not-for-profit 4-year institutions in 2004 was \$9,392 while the excess revenue per FTE at the for-profit 4-year and above institutions was \$2,371.

While for-profit total expenses increased at the 4-year-and-above and 2-year levels, their revenue increased at a faster rate, leaving more excess revenue not restricted by a non-distribution constraint. The not-for-profits also recorded a decrease in revenue at the 2-year and less-than-2-year levels but the decrease in expenses was not as great as the decrease in revenue. This has resulted in a smaller portion of their revenue being in excess of their reported expenses.

Discussion

The growth rate of the enrollments at for-profits is greater than that at the not-for-profit groups at each level. The faster growth in enrollments at 4-year and above for-profits challenges the preference in the literature for not-for-profit provision in a trust market such as 4-year and above education (Winston, 1999). Enrollment trends at for-profit institutions show the fastest growth at the less-than-2-year institutions with a 141% increase in FTE enrollments. However, that group of institutions showed the lowest median revenue per FTE and the lowest percentage of revenue that is in excess of reported expenses. The highest median revenue per FTE of all levels of for-profits is at the 4-year and above

level which also recorded the highest percentage of revenue in excess of reported expenses at 22%. This level of institution is where the greatest excess revenue is generated in both the not-for-profit and for-profit categories. As noted by Tierney and Hentschke (2007) for-profit institutions seek growth to “increase the wealth of their shareholders or owners” (p. 160). Increased enrollment at the 4-year and above level of for-profit education would help to satisfy both goals: growth and increased wealth generation. Further research is suggested on enrollment growth trends.

Instructional expenses are an important indicator of resources allocated directly to the education of students. At the less-than-2 year level, instructional expenses increased while total expenses decreased (see Tables 3 and 4). At the less-than-2-year level instructional expenses have become a much larger portion of the overall expenses of the institution and therefore a greater contributor to the costs of a postsecondary education. At the 4-year and above level the not-for-profits showed a similar shift with instructional expenses becoming a greater portion of the overall expenses with total expenses increasing 17.91% and instructional expenses increasing 19.48%. This is in contrast to trends at the for-profit 4-year and above institutions where total expenses increased by more than 112% but instructional expenses increased by less than 75%. The decrease in the relative percentage of expenses spent on instruction at the 4-year for-profits is consistent with the expense minimization literature related to for-profit institutions. It also indicates an increase in the expenses related to research, public service, academic support, institutional support, student services, auxiliary enterprises, and all other expenses of these institutions. However, when viewed as a percentage of revenue, for-profit 4-year institutions appear to have directed less of their revenue toward meeting instructional expenses and a very small increase in the percent of revenue directed toward non-instructional expenses.

The expense minimization strategies attributed to for-profit institutions (Kelly, 2001; Morey, 2004; Kinser, 2006a, 2006b; Turner, 2006) and differences in operational features has resulted in not-for-profits spending nearly twice as much per FTE in expenses as the for-profits. Both groups of institutions' expenses have risen between 2000 and 2004 at the 4-year and above level with the expenses at for-profits increasing at what appears to be double the rate (8.9%) of not-for-profits (4%). Even so, there remains a large difference between the median expenses per FTE of not-for-profit and for-profit institutions.

Several authors have found that expenditures (particularly instructional expenditures) have a positive effect on graduation rates (Ryan, 2004; Gansemer-Topf & Schuh, 2006; Titus, 2006) however, none of the studies separated for-profit institutions from other institutions, nor did they study less than 4 year institutions. The differences in expense levels suggest the need for further research into the relationship between per FTE expenditures and student outcomes by control of institution. If lower expenditures are related to lower graduation rates, then questions should be raised about effectiveness of existing accountability models and what resources are necessary to support student completion. This question is especially important given the wide disparity in the expenses between not-for-profit and for-profit institutions, and the continued growth of for-profits, especially at the 4-year and above levels.

The literature on the nondistribution constraint of not-for-profit institutions implies that there would be less pressure on not-for-profits to generate excess revenue since that revenue cannot be distributed to those who control the institution (Hansmann, 1981). Surprisingly, however, the data show that the not-for-profit institutions are generating a slightly higher percentage of revenue in excess of reported

expenses and much higher dollar amounts than the for-profits at the 4-year and above level.

One consideration in this comparison is the existence of endowments at many not-for-profit institutions. Total revenue includes permanently restricted, temporarily restricted, and unrestricted funds. Revenues may include returns on endowment funds whose expenditure may be restricted by regulations beyond the non-distribution constraint. These revenues may be influenced by market fluctuations, expenditure level decisions, and other restrictions placed on endowment funds. Market returns on endowment funds on average were higher in 2004 than in 2000 with an average return of 16% in 2004 and 10.8% in 2000 (NACUBO, [2005](#); NACUBO, [2001](#)). Expenditure levels of endowment funds averaged approximately 4.5% in 2000 and increased to 5.0% in 2004 (Lord, 2005).

Of the \$140.4 billion in revenue received at the 4-year and above private (for-profit and not-for-profit) reporting institutions in 2004, \$31.6 billion was in excess of expenses reported by those same institutions. Not-for-profits generated more than \$30 billion of the excess revenue while the for-profits generated \$1.3 billion. In fact, at all levels there was an increase in excess revenue at the for-profits and a decrease at the not-for-profits between 2000 and 2004. However, surprisingly, when considered as a percentage of revenue, the 4-year not-for-profit and for-profit institutions reached near parity in 2004 at approximately 22% of revenue in excess of reported expenses. When placed in the context of the higher revenue per FTE at not-for-profit institutions, the not-for-profits at the 4-year and above level generated nearly four times greater excess revenue per FTE than the for-profits. The lack of a profit motive and the nondistribution constraint do not seem to have harmed the ability of not-for-profits to generate excess revenue, although the trends observed in this study indicate the need for further research to determine if parity of percentages has been maintained between not-for-profit and for-profit institutions.

The decrease in percentage of excess revenue at not-for-profit 4-year and above institutions was split almost evenly into increases in the instructional expenses and non-instructional expenses at the institutions. However, the for-profit 4-year and above institutions reported a 23% decline in instructional expenses as a percent of revenue, while showing almost no change (<1%) in non-instructional expenses as a percent of revenue. This suggests an effective strategy of expense minimization, frugal management, etc., leading to higher percentages of excess revenue.

The trends observed in this study indicate an important change in postsecondary education finance in the United States. The new models of education demonstrated by for-profit institutions with lower overall expenses and a different ratio of expenses to revenue may herald the advent of new models of education. Perhaps these models should be carefully studied and adopted as appropriate by not-for-profit providers. The current "cost-cutting" strategies at many not-for-profits are a minor adjustment compared to the sweeping changes that would be necessary to more closely mirror the financial measures of for-profit institutions. On the other hand, if lower instructional expenses negatively impact student outcomes, then alarms must be raised about the finances and rapid enrollment growth of for-profit institutions. The current policy of allowing for-profit and not-for-profit institutions, with their differing financial structures, to coexist and compete is illogical in light of this argument. Either not-for-profits must make extreme changes to their expense and revenue structures or for-profit educational models must be questioned.

Conclusion

Postsecondary education, particularly at the 4-year and above levels, operates in a trust market or contract failure environment with asymmetry of information between providers and consumers. Not-for-profit organizations have been preferred in these environments. However, the greatest recent growth in headcount and FTE enrollments has been at for-profit institutions. The trends in expenses show lower expenses at the for-profits consistent with the reported cost minimization strategies of these institutions. The revenue patterns show that not-for-profit institutions generally have higher revenue, so much higher that the excess revenue generated beyond expenses at the 4-year and above not-for-profit institutions is substantially higher on average than that at the for-profit institutions. This raises questions for future research related to the nondistribution constraint and the generation and use of excess revenue at both not-for-profit and for-profit institutions.

This study has provided a base of information about not-for-profit and for-profit institutions, their enrollments, and finances upon which future study can be built. The current expansion of for-profit provision of postsecondary education coupled with the increased pressure for accountability and transparency raise important questions about education, trust markets, contract failure, and finances, which must be addressed through systematic study.

The results of this study raise many other questions for future research as well. Has the increased use of accountability and outcomes measures decreased the necessity of not-for-profit provision of education by altering the trust market or contract failure environment? How do lower levels of instructional expenditures at for-profits affect student outcomes? How is excess revenue used at for-profit and not-for-profit institutions, and how might differences be used to craft more effective accountability policies? How much excess revenue is reinvested and how rapidly in each type of institution? Does the amount of excess revenue generated influence the decisions of which levels of education to provide since generation of profit is, by definition, one function of a for-profit institution?

As higher education faces external pressure to expand offerings to larger sections of the population, while simultaneously reducing costs, public demands for accountability will be better informed with empirical information regarding the use of excess revenue by control of institution as a new avenue for establishing trust in the education marketplace.

References

- Blumenstyk, G. 2007a. National U. buys for-profit college. *The Chronicle of Higher Education*, Feb 23, A26.
- Blumenstyk, G. 2007b. Private-equity juggernaut rolls through higher education. *The Chronicle of Higher Education*, Aug 3, A23.
- Couturier, L. 2005. The unspoken is being undone: The market's impact on higher education's public purposes. *New Directions for Higher Education* 129:85-100.
- Epple, D., R Romano, and H. Sieg. 2006. Admission, tuition, and financial aid policies in the market for higher education. *Econometrica* 74 (4):885-928.
- Fox Garrity, B. and Fiedler, R. 2010. Cross-sectoral competition and conversions in the mixed-form market of postsecondary education. *The BRC Journal of Advances in Business*. (1)2. 19-36.

- Fox Garrity, B., Garrison, M., & Fiedler, R. 2010. Access for whom, access to what? The role of the “disadvantaged student” market in the rise of for-profit higher education. *Journal of Critical Education Policy Studies*. 8 (1) 203-244. <http://www.jceps.com/index.php?pageID=article&articleID=182> (accessed May 24, 2011).
- Friedman, M. 2002. *Capitalism and freedom: Fortieth anniversary edition*. Chicago, IL: University of Chicago Press.
- Gansemer-Topf, A., and J. Schuh. 2006. Institutional selectivity and institutional expenditures: Examining organizational factors that contribute to retention and graduation. *Research in Higher Education* 47 (6):613-642.
- Gumport, P. 2000. Academic restructuring: Organizational change and institutional imperatives. *Higher Education* 39 (1):67-91.
- Gumport, P., and J. Jennings. 1999. Are we privatizing public education? *Change* 31 (6):61-65.
- Hansmann, H. 1981. The rationale for exempting nonprofit organizations from corporate income taxation. *The Yale Law Journal* 91 (1):54-100.
- Kelly, K. 2001. Meeting needs and making profits: The rise of for-profit degree-granting institutions. In *ECS Issue Paper*. Denver, CO: Educational Commission of the States.
- Kinser, K. 2005. A profile of regionally accredited for-profit institutions of higher education. *New Directions for Higher Education* 129:69-83.
- Kinser, K. 2006a. From Main Street to Wall Street. *ASHE Higher Education Report* 31 (5):1-146.
- Kinser, K. 2006b. What Phoenix doesn't teach us about for-profit higher education. *Change* 38 (4):24-29.
- Kinser, K. 2007. Dimensions of corporate ownership in for-profit higher education. *Review of Higher Education* 30 (3):217-245.
- Laband, D., and B. Lentz. 2004. Do costs differ between for-profit and not-for-profit producers of higher education? *Research in Higher Education* 45 (4):429-441.
- Labaree, D. 2006. Mutual subversion: A short history of the liberal and the professional in American higher education. *History of Education Quarterly* 46 (1):1-15.
- Lord, M. 2005. *Trends and issues: Highlights of 2004 NACUBO endowment study*. TIAA-CREF Institute. April 2005.
- Morey, A. 2004. Globalization and the emergence of for-profit higher education. *Higher Education* 48 (1):131-150.
- Morphew, C., and B. Baker. 2004. The cost of prestige: Do new research I universities incur higher administrative costs? *Review of Higher Education* 27 (3):365-384.

National Center for Education Statistics. 2004. Report and suggestions from IPEDS technical review panel #6 derived and calculated variables. Washington, D.C.: National Center for Education Statistics.

National Center for Education Statistics. 2007. *IPEDS glossary*. National Center for Education Statistics. <http://nces.ed.gov/ipeds/glossary/> (accessed on February 20, 2007).

National Center for Education Statistics. n.d. IPEDS finance data FASB and GASB-What's the difference? Washington, D.C.: National Center for Education Statistics.

NACUBO. 2001. Investment pool average compounded nominal rates of return for fiscal year ending June 30.

<http://www.nacubo.org/documents/2000%20Average%20Compounded%20Nominal%20Rates%20of%20Return.pdf> (accessed December 22, 2010).

NACUBO. 2005. Average investment pool compound rates of return.

<http://www.nacubo.org/documents/research/FY04NESReturnRatesforPress.pdf>. (accessed December 22, 2010).

Outcalt, C., and J. Schirmer. 2003. Understanding the relationships between proprietary schools and community colleges: Findings from recent literature. *Community College Review* 31 (1):56-73.

Ruch, R. 2001. *Higher ed, inc.: The rise of the for-profit university*. Baltimore, MD: Johns Hopkins University Press.

Ryan, J. 2004. The relationship between institutional expenditures and degree attainment at baccalaureate colleges. *Research in Higher Education* 45 (2):97-114.

Sahr, R. 2008. *Consumer price index (CPI) conversion factors 1774 to estimated 2018 to convert dollars of 2004*. Oregon State University 2008 [cited June 6 2008]. Available from <http://oregonstate.edu/cl/polisci/faculty-research/sahr/sahr.htm>.

Tierney, W., and G. Hentschke. 2007. *Newplayers, different game: Understanding the rise of for-profit colleges and universities*. Baltimore, MD: The Johns Hopkins University Press.

Titus, M. 2006. Understanding college degree completion of students with low socioeconomic status: The influence of the institutional financial context. *Research in Higher Education* 47 (4):371-398.

Toutkoushian, R. 1999. The value of cost functions for policymaking and institutional research. *Research in Higher Education* 40 (1):1-15.

Trow, M. 1996. Trust, markets and accountability in higher education: A Comparative Perspective. *Higher Education Policy* 9 (4):309-324.

Turner, S. 2006. For-profit colleges in the context of the market for higher education. In *Earnings from learning: The rise of for-profit universities*, edited by D. Breneman, B. Pusser and S. Turner. Albany: State University of New York.

Winston, G. 1999. Subsidies, hierarchy and peers: The awkward economics of higher education. *Journal of Economic Perspectives* 13 (1):13-36.

Table 1

Title IV Participating, postsecondary institutions with a parent-child relationship by sector before and after aggregation of parent-child relationships

Sector	2000		2004	
	Before aggregation	After aggregation	Before aggregation	After aggregation
Administrative Unit	36	0	38	0
Public, 4-yr and above	121	27	92	31
Not-for-profit, 4-yr and above	161	53	126	40
For-profit, 4-yr and above	87	26	111	22
Public, 2-yr	210	50	206	41
Not-for-profit, 2-yr	31	4	16	5
For-profit, 2-yr	134	49	228	73
Public, less-than-2-yr	20	6	15	5
Not-for-profit, less-than-2 yr	9	3	35	5
For-profit, less than 2-yr	183	57	379	101
Totals	992	275	1246	323

Table 2

Student headcount and fulltime equivalent (FTE) enrollment at 4-year and above institutions

Institutions	Headcount	FTE
--------------	-----------	-----

Level	Control	2000	2004	Percentchange	2000	2004
4- year +	Public	6,231,681	6,856,911	10.03%	5,315,364	5,897,087
	Not- for- profit	3,150,069	3,488,513	10.74%	2,824,956	3,197,498
	For- profit	262,771	634,836	141.59%	263,271	562,665
	Total	9,644,521	10,980,260	13.85%	8,403,591	9,657,250
2- year	Public	5,668,234	6,247,602	10.22%	3,509,357	4,157,910
	Not- for- profit	73,916	60,810	-17.73%	72,871	58,392
	For- profit	241,136	334,449	38.70%	314,282	506,641
	Total	5,983,286	6,642,861	11.02%	3,896,510	4,722,943
< 2- year	Public	76,602	60,676	-20.79%	57,589	97,500
	Not- for- profit	13,937	15,028	7.83%	13,921	25,016
	For- profit	204,997	265,570	29.55%	245,880	593,692
	Total	295,536	341,274	15.48%	317,390	716,208

Table 3

Expenses in 2004 constant dollars

Level	Control	Total expenses reported in IPEDS (in 000s)			Median total expense per I		
		2000	2004	Percent change	2000	2004	Pe cf
4- year +	Not- for- profit	\$88,487,116	\$104,334,723	17.91%	\$17,920	\$18,640	4
	For- profit	\$2,218,824	\$4,713,843	112.45%	\$9,880	\$10,760	8
	Total	\$90,705,940	\$109,048,566	20.22%	\$17,010	\$17,230	1
2- year	Not- for- profit	\$9,775,484	\$890,841	-90.89%	\$14,930	\$12,620	15
	For- profit	\$2,424,863	\$3,132,233	29.17%	\$7,780	\$6,900	11
	Total	\$12,200,347	\$4,023,074	-67.02%	\$8,840	\$7,840	11
< 2- year	Not- for- profit	\$837,052	\$238,034	-71.56%	\$10,380	\$8,590	17
	For- profit	\$2,499,740	\$1,965,531	-21.37%	\$6,280	\$5,300	15
	Total	\$3,336,792	\$2,203,566	-33.96%	\$6,390	\$5,430	15

Table 4

Instructional expenses in 2004 constant dollars

Level	Control	Total instructional expenses reported in IPEDS (in 000s)			Median total instructional expense per FTE		
		2000	2004	% Change	2000	2004	% Change
4- year +	Not- for- profit	\$28,445,581	\$33,988,012	19.48%	\$6,040	\$6,440	6.62
	For- profit	\$661,666	\$1,153,059	74.27%	\$2,720	\$2,880	5.88
	Total	\$29,107,248	\$35,141,071	20.73%	\$5,640	\$5,850	3.72
2- year	Not- for- profit	\$371,884	\$298,899	-19.63%	\$4,940	\$6,150	24.49
	For- profit	\$773,683	\$944,442	22.07%	\$2,490	\$2,180	12.45
	Total	\$1,145,567	\$1,243,341	8.53%	\$2,920	\$2,630	-9.93
< 2- year	Not- for- profit	\$61,321	\$126,915	106.97%	\$3,970	\$3,820	-3.78
	For- profit	\$641,285	\$689,620	7.54%	\$1,980	\$1,920	-3.03
	Total	\$702,606	\$816,535	16.22%	\$2,030	\$2,000	-1.48

Table 5

Revenue in 2004 constant dollars

	Total revenue reported in IPEDS (in 000s)	Median total revenue per
--	---	--------------------------

Level	Control	2000	2004	% Change	2000	2004	% Change
4-year +	Not-for-profit	\$132,413,138	\$134,367,173	1.48%	\$19,980	\$21,040	5.30%
	For-profit	\$2,647,778	\$6,047,830	128.41%	\$10,970	\$12,240	11.62%
	Total	\$135,060,916	\$140,415,003	3.96%	\$18,600	\$18,880	1.51%
2-year	Not-for-profit	\$10,624,153	\$952,130	-91.04%	\$11,800	\$10,560	-10.51%
	For-profit	\$2,728,881	\$3,639,876	33.38%	\$8,610	\$7,820	-9.07%
	Total	\$13,353,034	\$4,592,006	-65.61%	\$9,210	\$8,180	-11.08%
< 2-year	Not-for-profit	\$899,222	\$235,476	-73.81%	\$10,570	\$7,840	-25.82%
	For-profit	\$2,662,407	\$2,268,645	-14.79%	\$6,930	\$6,140	-11.40%
	Total	\$3,561,629	\$2,504,121	-29.69%	\$7,080	\$6,260	-11.58%

Table 6

Revenue minus instructional expense median per FTE

Level	Control	2000	2004	Percent change
4-year +	Not-for-profit	\$13,670	\$14,350	4.97%
	For-profit	\$7,870	\$9,240	17.41%

	Total	\$12,910	\$13,060	1.16%
2-year	Not-for-profit	\$7,160	\$5,440	-24.02%
	For-profit	\$5,840	\$5,510	-5.65%
	Total	\$6,020	\$5,500	-8.64%
< 2-year	Not-for-profit	\$6,570	\$3,690	-43.84%
	For-profit	\$4,460	\$3,930	-11.88%
	Total	\$4,470	\$3,920	-12.30%

Table 7

Percentages of total revenue reported for instructional expenses, other expenses, and excess revenue

Level	Control	Instructional exp. as a % of rev.			Non-instructional exp. as a % of rev.			1
		2000	2004	Percent change	2000	2004	Percent change	
4-year +	Not-for-profit	21.48%	25.29%	17.75%	45.34%	52.35%	15.46%	33
	For-profit	24.99%	19.07%	-23.71%	58.81%	58.88%	0.11%	16
	Total	21.55%	25.03%	16.13%	45.61%	52.64%	15.41%	32
2-year	Not-for-profit	3.50%	31.39%	796.84%	88.51%	62.17%	-29.76%	7
	For-profit	28.35%	25.95%	-8.48%	60.51%	60.11%	-0.66%	11

	Total	8.58%	27.08%	215.61%	82.79%	60.53%	- 26.88%	€
< 2- year	Not- for- profit	6.82%	53.90%	690.36%	86.27%	47.19%	- 45.30%	€
	For- profit	24.09%	30.40%	26.20%	69.80%	56.24%	- 19.43%	€
	Total	19.73%	32.61%	65.29%	73.96%	55.39%	- 25.11%	€

VN:R_U [1.9.11_1134]