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U.S. Not-For-Profit Private Universities Fiscal 2018 Median Ratios: Overall Stability Continues Despite Lingering Issues



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Sector U.S. Public Finance, Higher Education

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Despite continuing issues, S&P Global Ratings' key median indicators for U.S. not-for-profit private universities in fiscal 2018 were relatively stable, reflecting the sector's resilience and ability to withstand medium-term challenges. The higher education sector has been facing a variety of stresses, with increased competition, a shrinking pool of students, and a heightened focus on affordability and value proposition of a four-year college degree. In addition, operating issues continue as declining revenues have combined with growing expenses. However, full-time equivalent (FTE) enrollment for private universities has generally risen over the past year, accompanied by improving retention rates, even if industry enrollments are down overall. Similarly, while operating margins have compressed year-over-year, sectorwide median operating margin remains positive along with growth in median available resource ratios for fiscal 2018.

Ratings Distribution And Characteristics

S&P Global Ratings maintains 282 bond ratings on U.S. private colleges and universities as of May 1, 2018. During the past year, we added eight ratings, all but one of which were investment-grade. The number of ratings in the 'AA', 'A', and 'BBB' rating categories was relatively flat as well, reflecting stable performance of schools across the rating spectrum. The majority of our ratings for private universities remain in the 'A' category.

In our assessment of the medians (see tables 1 and 2), we observed the following:

- While the median net operating margin for the private universities remain positive, the pace of increase in the change in net tuition revenue has seen a considerable decline for the past five years, particularly in fiscal 2018.
- Increased tuition discounting combined with modest increases in net tuition revenue across rating categories.
- Endowment market values rose across all rating categories, largely reflecting positive market conditions, although growth narrowed from fiscal 2017 levels.
- Available resource ratios improved modestly relative to both operations and debt, based mostly on favorable market returns.
- The total amount of debt remained relatively flat for fiscal 2018, both sectorwide and across each rating category except 'AAA'.

While FTEs for private universities have generally increased over the past year, selectivity and graduation rates have weakened, indicating that many universities are relaxing their admission requirements and students are taking longer to graduate. At the same time, universities continue to face growing tuition discounting burdens as they navigate strategies to attract and retain students, including increased financial aid offerings. Endowments, both in nominal terms and per FTE, increased in fiscal 2018, enabling the broader pool of rated institutions to balance earnings and spending. Maximum annual debt service (MADS) burdens were relatively flat or decreased slightly in almost every rating category, which reflects private universities' conservative approach to managing expenses, because net tuition revenue continues to face stress. The average age of plant also rose modestly in fiscal 2018, indicating that schools will likely need to address deferred maintenance needs through their own investment or additional debt.

Ratios help measure credit quality

Demand and financial ratios are pivotal in measuring the credit quality of U.S. higher education institutions. We calculate means and medians to assess the operational and financial health of individual institutions, gauge industrywide trends, and produce meaningful comparisons of rating categories (see table 1). We publish these medians as general benchmarks and means to observe industry trends.

Table 1

Selected Sectorwide Ratios For Private Colleges And Universities

	2018	2017	2016	2015		
Sample size	252	264	267	261		
ENROLLMENT AND DEMAND						
FTE Enrollment						
Median	3275	3144	3309	3239		
Mean	6398	6109	6212	6242		
Undergraduates (%	of total enrollment	t)				
Median	75.2	76.0	74.6	75.7		
Mean	74.1	74.3	73.8	74.3		
Freshman acceptance rate						
Median	62.4	61.6	61.9	62.7		
Mean	56.1	55.6	56.1	56.9		
Average SAT Score for entering freshman						
Median	1206	1155	1153	1174		
Mean	1228	1188	1197	1239		
Retention Rate						
Median	85.0	84.8	84.3	85.0		
Mean	83.9	83.9	83.8	84.0		
Six-year graduation	rate					
Median	71.3	72.0	71.0	73.0		

Mean	70.8	70.5	69.9	70.6				
FINANCIAL PERFORM	MANCE							
Change in Net Tuition	Change in Net Tuition Revenue (%)							
Median	1.1	1.9	2.3	2.8				
Mean	0.9	2.1	1.8	2.8				
Net adjusted operati	ng margin							
Median	0.8	1.3	1.5	1.2				
Mean	1.0	1.5	1.3	1.5				
REVENUE DIVERSITY	,							
Student-generated r	evenue							
Median	84.8	84.8	86.2	85.1				
Mean	77.2	76.8	77.5	76.7				
Grants and contracts	3							
Median	1.2	1.3	1.2	1.8				
Mean	3.6	3.8	3.7	4.8				
Gifts and pledges								
Median	2.0	1.9	1.9	2.1				
Mean	2.5	2.6	2.7	2.6				
FINANCIAL AID/EXPE	ENSE RATIO SECTI	ON						
Financial aid burden								
Median	26.6	25.3	24.8	24.3				
Mean	25.2	24.1	23.5	22.8				
Instruction								
Median	26.9	27.5	27.7	27.9				
Mean	27.9	28.5	28.8	28.8				
Tuition discount rate								
Median	39.2	37.7	36.9	36.0				
Mean	39.2	37.7	36.6	36.0				
ENDOWMENT								

Endowment market value (\$000s)				
Median	206,188	191,278	174,478	185,541
Mean	1,363,269	1,246,642	1,123,394	1,197,131
AVAILABLE RESOUR	CE RATIOS			
Cash and investmen	ts to operations (%	%)		
Median	132.2	126.1	119.1	125.7
Mean	204.1	201.3	190.5	206.9
Cash and investmen	ts to debt (%)			
Median	259.1	246.5	226.5	238.7
Mean	341.6	318.3	310.6	327.6
Expendable resource	es to operations (%	%)		
Median	83.6	81.0	73.7	79.4
Mean	138.2	138.5	129.4	146.2
Expendable resource	es to debt (%)			
Median	164.6	148.1	143.3	149.5
Mean	220.9	207.2	199.7	220.7
DEBT RATIOS				
Total debt outstandi	ng (\$000s)			
Median	96,633	95,209	90,181	91,670
Mean	374,727	354,211	336,649	336,620
Average age of plant	(years)			
Median	14.2	13.9	13.5	13.4
Mean	14.6	14.1	13.8	13.5
Current MADS burde	en			
Median	4.2	4.0	4.4	4.5
Mean	4.8	5.0	5.1	6.7
FTE RATIOS				
Total debt per FTE (\$	3)			
Median	28,471	28,997	28,719	27,831

Mean	49,548	51,492	49,268	48,774	
Endowment market value per FTE (\$)					
Median	55,265	52,570	45,766	53,046	
Mean	188,690	180,515	163,715	176,837	

FTE--Full-time-equivalent. N.A.--Not available.

The analysis for any particular institution involves assessing unquantifiable risks that we did not include in this article. These medians should not be considered thresholds to achieve a particular rating.

Our ratios fall into two main categories: enterprise and financial. From a broad perspective, the ratios provide a clear picture of the difference in credit fundamentals between rating categories. Both enterprise and financial metrics correlate highly with credit quality, and the differences between metrics become have become more distinct.

Table 2

Selected Fiscal 2018 Ratios For Private Colleges And Universities

Rating	AAA	AA	Α	BBB	SG	Sectorwide		
Sample size	11	47	96	81	17	252		
ENROLLMENT	ENROLLMENT AND DEMAND							
FTE Enrollmer	nt							
Median	11,275	6,429	3,864	2,700	2,728	3,275		
Mean	11,622	10,335	6,701	3,415	4,636	6,398		
Undergraduates (% of total enrollment)								
Median	44.3	67.8	79.1	74.1	74.3	75.2		
Mean	58.5	70.6	78.3	72.7	77.0	74.1		
Freshman acceptance rate								
Median	7.2	22.2	64.8	71.4	72.5	62.4		

Mean	9.9	25.5	62.0	70.3	69.9	56.1
Average SAT S	core for enteri	ng freshman				
Median	1,490	1,393	1,218	1,113	1,082	1,206
Mean	1,478	1,393	1,222	1,118	1,079	1,228
Retention Rat	е					
Median	98.0	95.0	85.9	78.8	76.0	85.0
Mean	98.0	94.4	84.6	77.2	74.3	83.9
Six-year gradu	uation rate					
Median	94.1	90.1	75.5	60.5	54.0	71.3
Mean	93.8	88.4	72.5	59.4	53.4	70.8
FINANCIAL PE	FINANCIAL PERFORMANCE					
Change in Net	Tuition Revenu	ue YOY 2018 ('	%)			
Median	2.0	4.0	1.1	(0.6)	1.1	1.1
Mean	3.1	4.1	1.1	(0.5)	2.3	0.9
Net adjusted o	Net adjusted operating margin					
Median	3.7	2.3	1.5	(0.6)	(2.2)	8.0
Mean	5.5	2.8	1.9	(0.9)	(2.7)	1.0
REVENUE DIV	ERSITY					
Student-gene	rated revenue					
Median	30.9	58.3	87.1	89.4	85.4	84.8
Mean	32.2	54.4	83.7	86.6	82.5	77.2
Grants and contracts						
Median	15.2	3.6	1.0	1.0	1.2	1.2
Mean	15.5	7.0	2.8	1.3	2.5	3.6
Gifts and pled	ges					
Median	4.5	3.0	1.7	1.3	2.2	2.0
Mean	4.1	3.6	2.0	2.0	4.4	2.5

FINANCIAL AID/EXPENSE RATIO SECTION

Financial aid burden

Median	13.2	19.9	27.9	30.3	22.6	26.6			
Mean	13.7	18.1	26.7	29.3	24.4	25.2			
Instruction	Instruction								
Median	29.3	28.5	26.6	26.4	24.9	26.9			
Mean	32.5	29.1	28.1	26.9	25.8	27.9			
Tuition discou	nt rate								
Median	42.7	37.9	37.5	40.8	41.6	39.2			
Mean	45.5	39.3	37.8	40.5	36.7	39.2			
ENDOWMENT									
Endowment m	arket value (\$0)00s)							
Median	10,869,245	1,603,114	240,030	77,239	44,645	206,188			
Mean	15,409,566	2,718,339	384,715	106,063	44,284	1,363,269			
AVAILABLE RESOURCE RATIOS									
Cash and inves	stments to ope	rations (%)							
Median	838.9	333.1	144.9	82.6	60.3	132.2			
Mean	829.7	362.4	168.5	98.0	67.7	204.1			
Cash and inves	stments to deb	ot (%)							
Median	921.1	505.9	267.3	166.5	103.1	259.1			
Mean	868.9	540.9	332.8	210.5	122.6	341.6			
Expendable re	sources to ope	erations (%)							
Median	671.3	228.6	96.3	49.7	35.2	83.6			
Mean	694.5	253.2	109.0	57.6	37.3	138.2			
Expendable resources to debt (%)									
Median	723.5	320.2	175.7	89.4	48.5	164.6			
Mean	711.6	372.7	208.4	118.9	62.8	220.9			
DEBT RATIOS									
Total debt outs	standing (\$000	s)							
Median	2,556,520	386,585	104,964	57,739	53,607	96,633			
Mean	2,243,225	895,569	207,031	83,972	58,067	374,727			

Average age of plant (years)							
12.1	13.9	13.9	15.0	15.6	14.2		
12.6	14.2	14.2	15.0	16.7	14.6		
burden							
5.1	4.1	4.4	4.0	4.4	4.2		
5.8	5.5	4.6	4.5	5.0	4.8		
FTE RATIOS							
FTE (\$)							
146,178	71,226	27,327	21,843	21,462	28,471		
194,869	99,610	33,527	25,248	23,372	49,548		
Endowment market value per FTE (\$)							
1,363,134	343,676	55,527	25,452	15,220	55,265		
1,463,508	406,283	89,583	39,915	30,766	188,690		
	12.1 12.6 burden 5.1 5.8 FTE (\$) 146,178 194,869 arket value pe 1,363,134	12.1 13.9 12.6 14.2 burden 5.1 4.1 5.8 5.5 FTE (\$) 146,178 71,226 194,869 99,610 arket value per FTE (\$) 1,363,134 343,676	12.1 13.9 13.9 12.6 14.2 14.2 burden 5.1 4.1 4.4 5.8 5.5 4.6 FTE (\$) 146,178 71,226 27,327 194,869 99,610 33,527 arket value per FTE (\$) 1,363,134 343,676 55,527	12.1 13.9 13.9 15.0 12.6 14.2 14.2 15.0 burden 5.1 4.1 4.4 4.0 5.8 5.5 4.6 4.5 FTE (\$) 146,178 71,226 27,327 21,843 194,869 99,610 33,527 25,248 arket value per FTE (\$) 1,363,134 343,676 55,527 25,452	12.1 13.9 13.9 15.0 15.6 12.6 14.2 14.2 15.0 16.7 burden 5.1 4.1 4.4 4.0 4.4 5.8 5.5 4.6 4.5 5.0 FTE (\$) 146,178 71,226 27,327 21,843 21,462 194,869 99,610 33,527 25,248 23,372 arket value per FTE (\$) 1,363,134 343,676 55,527 25,452 15,220		

SG--Speculative grade. FTE--Full-time-equivalent. N.A.--Not available.

The sample size for our private college and university median ratios has changed over the past few years. For fiscal 2018, as in prior years, we excluded universities and colleges that we deem as specialty schools from our sample size--these schools maintain a niche focus on specific educational programs (for example, a stand-alone law school, or medical or pharmacy school). We understand that, given the nature of these specialty schools, certain metrics used to help measure credit quality might be skewed, leading to large variances in ratios.

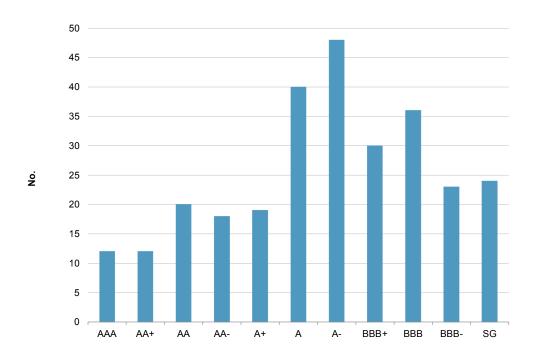
In fiscal 2018, we upgraded four private universities, with one moving up to the 'AA' rating category from the 'A' level. At the same time, we downgraded nine issuers, with one moving to the 'A' category from the 'AA' level and one moving to the 'BBB' category from the 'A' level. Consistent with S&P Global Ratings' expectations as stated in its 2019 outlook (for more information, see "Global Not-For-Profit Higher

Education 2019 Sector Outlook: Credit Pressures Proliferate," published Jan. 24, 2019, on RatingsDirect), negative rating actions outpaced positive ones in the sector at a 3-to-1 rate.

Overall, ratings maintained a normal distribution, with the majority of ratings (69.5%) in the 'A' and 'BBB' categories and approximately 87% of ratings maintaining a stable outlook. Several issuers observed a negative revision in their outlook, leading to an overall 9% increase in the negative outlook category for fiscal 2018 compared with 5% in the same category in fiscal 2017. This indicates an increased percentage of credits facing a potential downward rating movement during their outlook period. Nevertheless, we believe that the rating and outlook distribution metrics indicate overall stability in the sector (see charts 1, 2, and 3).

Chart 1

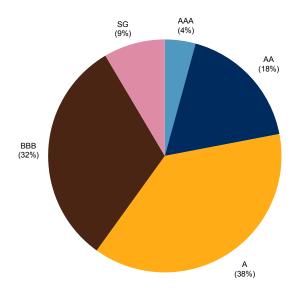
Private Colleges And Universities -- Ratings Distribution
As of May 1, 2019



SG--Speculative grade.

Chart 2

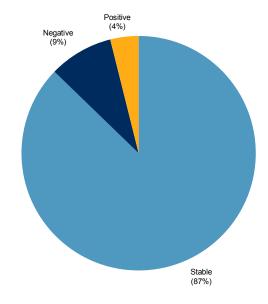
Private Colleges And Universities -- Ratings Distribution By Category
As of May 1, 2019



SG--Speculative grade.

Chart 3

Private Colleges And Universities -- Outlook Distribution
As of May 1, 2019



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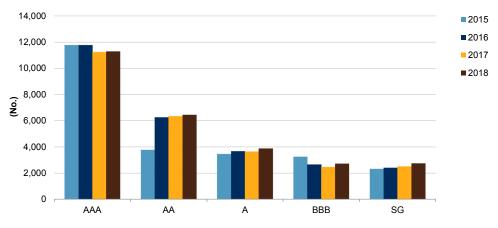
Enrollment And Demand Medians Guide Enterprise Profile

Enrollment trends

Despite increased competition and pressured demographics in some regions, FTE enrollment increased modestly across all rating categories in fiscal 2018 (see chart 4). We believe that some of the modest growth seen in FTE enrollment is due to universities' heightened focus on student recruitment and retention, coupled with their efforts to increase transfer populations or add professional and graduate programs to offset undergraduate enrollment stress. Reflecting this is a very slight decline in undergraduates as a percentage of overall enrollment in the sectorwide ratios. Also, many colleges and universities are investing heavily in increasing their online presence and offering a wide array of flexible programs that are appealing to students, including hybrid programming, through their online platform.

Chart 4

Private Colleges And Universities -- Full-Time-Equivalent Enrollment



SG--Speculative grade.

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We observed that undergraduates as a percentage of total enrollment were flat or decreased moderately across all rating categories, except for the 'A' and the speculative-grade ones. We believe this percentage decrease is due to growth in graduate and professional enrollment outpacing undergraduates for many institutions, rather than an absolute decline in the undergraduate count.

In contrast, the percentage increase in these rating categories is likely because many of these schools have a very small graduate program. Speculative-grade rating category also increased tuition discounting overall, leading to a subsequent increase in FTE enrollment and undergraduates as percentage of enrollment.

Enrollment at higher rated institutions remains more diverse, with undergraduates representing less than half of total FTE enrollment in the 'AAA' category. Many are major research universities with substantial graduate and professional programs. Although the share of undergraduate students declined slightly, most of the institutions in the 'BBB' category are predominantly undergraduate. Given that these institutions have a small base, we do not expect material change in their metrics, at least in the medium term.

Demand and student quality

Sectorwide, selectivity weakened slightly in fiscal 2018, although it improved at the higher end of the rating spectrum. The freshman acceptance rate strengthened slightly for the 'AAA' and 'AA' rating categories, but weakened for the remaining categories. We believe the continued improvement at the higher rating levels follows the increasing competition for admittance to these schools and the strengthening academic profiles of applying students. The number of schools using the common application has grown over time, and we have seen that this

increases the number of applications and artificially drives down the acceptance rate in the first or second year of usage. In our opinion, these figures tend to normalize a few years after a school adds the common application as an option and therefore the trend is more apparent after a few years of usage.

Selectivity correlates significantly with credit quality. The highest-rated institutions in the 'AAA' category have the most competitive acceptance rates (7.2%), with each successive rating category becoming less selective. Student quality, as measured using standardized test scores, freshman retention, and six-year graduation rates, often correlates directly with the rating level as well. We believe that strong student quality can partially insulate a school from weakening demand. As the most selective group, the 'AAA' rated institutions often attract students with the highest standardized test scores (see table 2). In fiscal 2018, the national average SAT score for incoming freshmen was 1068, while median SAT score in the 'AAA' category was 1490, based on the 1600 scale. Also, the median SAT for speculative-grade issuers most closely aligned with the national average, at 1082. Overall, the median SAT score improved for entering freshmen classes across rating categories, which could partially reflect the changes in SAT score reporting, but indicates that the pool of incoming students is becoming more and more competitive.

Overall, student quality, graduation rates, and retention rates were flat or improved slightly across all rating categories in fiscal 2018, reflecting the industry's commitments to produce enhanced student outcome and success to justify the value proposition of education as students and families becoming increasingly cautious of the financial commitment for obtaining a college degree. At the same time, the metrics' stability indicates that, while many institutions have incorporated a heightened

focus on specific measures of student quality in their strategic planning, it is difficult for an institution to change these measures over one year and it often take several years for the efforts to show any kind of fruition.

Financial Medians Convey Fiscal Health

Our analysis of a private institution's financial strength includes an assessment of revenue and expense composition, financial operating performance, available resources, and debt burden.

Financial aid, tuition discounting and change in net tuition revenue

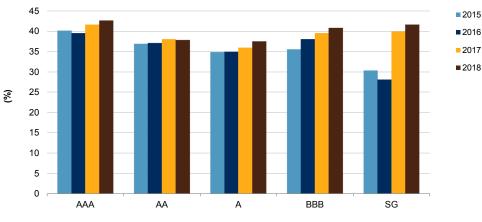
For private universities with relatively high tuition, financial aid strategies are key in motivating students to matriculate; this is especially true now, with significant competition for a shrinking pool of students and increased conversation concerning student debt. We measure financial aid via the tuition discount rate, calculated as financial aid as a percentage of gross tuition and fees. Our analysis also focuses on the annual growth in net tuition revenue (gross tuition less financial aid expense), which we believe is a key indicator of the sustainability of most universities' key revenue source.

Sectorwide, financial aid remains an increasing burden when considering that both the median tuition discount rate (39.2% of gross tuition revenues) and financial aid burden (26.6% of total adjusted operating expenses) have increased in each of the past five years (see table 2). At the same time, the growth in net tuition revenue change, although still positive, has slowed in each of the past five years. In the highest-rated universities, the discount rate is greater, with a median of 42.7% in fiscal 2018 (see chart 6), showing an increasing trend year-over-year within this category. This reflects not only the high tuition rate at these institutions,

but the significant resources they can offer students to achieve enrollment and student profile goals. The tuition discount rate increased across all rating categories in fiscal 2018, except for 'AA', for which there was a 10 basis-point (bp) decline. The speculative-grade categories showed the greatest increase in tuition discounting with a 160 bp increase. At the same time, the 'BBB' category was the only one with a negative 0.6% median change in net tuition revenue for fiscal 2018. This increased in each of the other rating categories, albeit very narrowly and decreasing year-over-year. These trends highlight the particularly difficult competitive environment for lower rated institutions and the lack of additional resources to entice students to matriculate.

Chart 5

Private Colleges And Universities -- Tuition Discount Rate



SG--Speculative grade.

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Operating margins and revenue diversity

Sectorwide, the net adjusted operating margin for private institutions, which includes institutionally funded financial aid, decreased by approximately 50 bps in fiscal 2018, highlighting increased operating pressures. At the 'AAA' level, net operating margin remained relatively flat, whereas it increased slightly in the 'AA' and 'A' rating categories,

indicating the relative strength of institutions at a higher credit quality and their ability to withstand financial pressures amidst challenging environment. At the same time, median net operating margins declined for 'BBB' and speculative-grade issuers. The drop in the latter group was significant, at 184 bps, the largest of any rating category. We also note that 65% of the sample size of the speculative-grade category produced a full-accrual operating deficit, which adds to our view of the increasing pressures faced by organizations at the lower rating. The decrease reflects the vulnerability of speculative-grade institutions to an increasingly competitive environment and their lack of financial flexibility or resources to offset revenue declines.

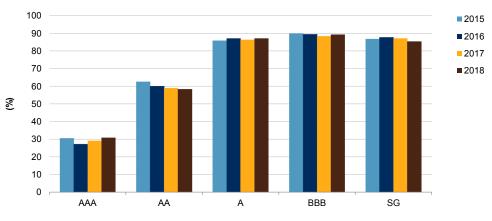
Operating margins correlate less with ratings unless combined with other measures such as revenue diversity and financial resource ratios. Strong revenue diversity can safeguard institutions against fluctuating enrollment trends and volatile market conditions, in our view. However, revenue diversity is difficult to achieve within a short period given nonstudent-generated revenue sources typically include sources such as gifts, grants, contracts, and endowment income, which take time to cultivate. Consequently, revenue diversity remains the strongest for the 'AAA' category and decreases as credit quality weakens.

To further support the strength and stability of revenue diversity at higher rating categories, grant and contract revenue trends in fiscal 2018 saw a modest decline in all rating categories, although the highest level of grants and contracts remained in the 'AAA' category. We believe this reflects the ability of institutions with well-established research programs to more successfully achieve grants and contracts. At the same time, gifts and pledges increased sectorwide as well as at the extreme ends of the rating category, mainly at the 'AAA' and speculative-grade levels, although others remained flat or fell slightly. This reflects an

increased emphasis on fundraising efforts at the lower-rated institutions. Diverse revenue sources reflect an institution's focus on research, a strong and wealthy alumni base, and a significant endowment.

Chart 6

Private Colleges And Universities -- Student-Generated Dependence



SG--Speculative grade.

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Change in net tuition revenue across regions

Most rated private colleges and universities depend greatly on net tuition revenue, as seen in a median ratio of 85% dependence on student-generated revenue sectorwide. While net tuition revenue fell in most regions, it increased 18 bps in the Southeast. Among the regions that were hit the hardest were the Midwest (for a description of regions, see table 3), primarily due to the challenging demographics with declining numbers of high school graduates; and the Southwest, which has favorable demographics with more high school graduates, but faces increased competition from both in-state and out-of-state institutions that are trying to increase recruiting efforts outside their region. This has resulted in these institutions offering competitive financial aid packages and increased tuition discount that has limited their net tuition revenue growth.

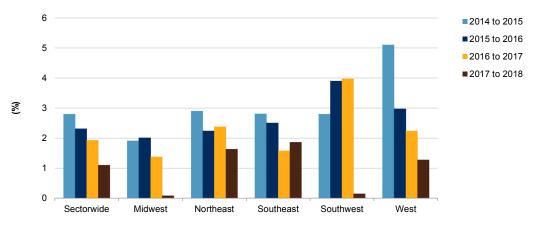
Table 3

Regional Breakdown

Region	States
Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, and Wisconsin
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont
Southeast	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia
Southwest	Arizona, New Mexico, Oklahoma, and Texas
West	Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming

Chart 7

Private Colleges And Universities -- Median Net Tuition Revenue Change, Year-Over-Year



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Credit By Enrollment Size

As private colleges and universities continue to face challenges, we find that small private colleges and universities (those with fewer than 1,400 FTEs) might be hit harder than others we rate while the larger private

colleges and universities (those with greater than 15,000 FTEs) are more adept at handling the industry's challenging landscape.

Per our methodology for not-for-profit public and private colleges and universities, we apply a negative qualifier to those with very small FTE enrollment due to limited program offerings and vulnerabilities to shifts in demand. While these institutions are not precluded from achieving a 'AAA' rating, the rating distribution differs notably from the sector, with the bulk of institutions (47%) rated 'BBB' (see chart 8). In addition to a notably different rating distribution, small private colleges and universities tend to have some distinct demand metrics and ratios compared to private university sector at large (see table 4). FTE enrollment declined at small colleges and universities, which are primarily composed of undergraduate students (the median is 97% of the total), while increasing slightly for the sector overall. At the same time, student quality and retention have weakened for the group. On the financial side, the operating position is materially weaker, with a considerable drop in net tuition revenue and much higher tuition discount rates of above 50%, illustrating how enrollment volatility and increasing expenses can weaken both demand and financial profiles.

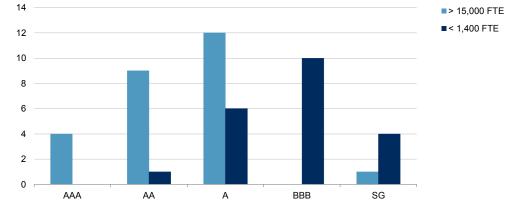
While we do not have a positive qualifier for private colleges and university with a large above 15,000 FTE enrollment, the trends in the smaller sample size relative to the sector and the institutions with small FTEs can provide good insight. Similar to institutions with small FTEs, these private colleges and universities have distinct demand metrics and key ratios (see table 5). Unlike the small FTE institutions, most of the large FTE institutions are typically research institutions, which the large 9% median ratio for the revenues from grants and contracts reflects. Also, they offer a diverse set of academic programs and include a healthy mix of both undergraduates and graduate students, with a median of 45% for undergrads as a share of total enrollment for fiscal 2018. The rating

distribution differs notably from the sector, with the bulk of institutions (46%) rated 'A' (see chart 8), further reflecting their higher credit quality. These institutions experienced large growth in FTE and have very robust selectivity, student quality and retention rates, all of which are stronger relative to the sector (see table 6). On the financial side, these institutions have shown resilience in median operating performance and their ability to withstand demographic changes. Median net adjusted operating margin and net tuition revenue change were solidly positive; tuition discount rates, although high, remain under sectorwide medians. In our view, the more diverse mixture of student composition and revenue diversity helped larger private colleges and universities combat enrollment volatility, helping them sustain both their demand and financial profiles.

Chart 8

Ratings Distribution By Enrollment Size
As of May 1, 2019

Table 4



SG--Speculative grade. FTE--Full-time equivalent.
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2018 Selected Ratios For Private Colleges And Universities, By Enrollment Size

FTE < 1,400 FTE > 15,000 Sectorwide

Sample size	21	26	252			
ENROLLMENT AND DEMAND						
FTE Enrollment						
Median	1046	20223	3275			
Mean	1001	25354	6398			
Undergraduates (9	% of total enrollment)					
Median	96.9	44.8	75.2			
Mean	92.1	51.6	74.1			
Freshman accepta	ance rate					
Median	63.5	27.0	62.4			
Mean	62.3	34.9	56.1			
Average SAT Score	for entering freshman					
Median	1104	1380	1206			
Mean	1153	1348	1228			
Retention Rate						
Median	78.0	92.1	85.0			
Mean	76.5	90.2	83.9			
Six-year graduatio	n rate					
Median	62.2	83.8	71.3			
Mean	61.8	78.4	70.8			
FINANCIAL PERFO	RMANCE					
Change in Net Tuition Revenue YOY 2018 (%)						
Median	-1.3	5.0	1.1			
Mean	-3.1	4.3	0.9			
Net adjusted operating margin						
Median	-2.6	2.2	8.0			
Mean	-2.7	3.5	1.0			
REVENUE DIVERS	REVENUE DIVERSITY					
Otivalant wansusts	Obside at the control of the control					

Student-generated revenue

Median	74.5	67.9	84.8	
Mean	72.8	56.4	77.2	
Grants and contrac	ts			
Median	0.8	9.3	1.2	
Mean	1.3	11.6	3.6	
Gifts and pledges				
Median	2.5	2.2	2.0	
Mean	4.8	2.5	2.5	
FINANCIAL AID/EXF	PENSE RATIO SECTION			
Financial aid burde	n			
Median	30.4	8.6	26.6	
Mean	29.5	14.3	25.2	
Instruction				
Median	23.1	31.0	26.9	
Mean	23.8	32.4	27.9	
Tuition discount				
Median	54.3	32.1	39.2	
Mean	53.4	30.0	39.2	
ENDOWMENT				
Endowment market	value (\$000s)			
Median	123,236	1,784,184	206,188	
Mean	141,993	5,773,645	1,363,269	
AVAILABLE RESOURCE RATIOS				
Cash and investments to operations				
Median	223.1	132.5	132.2	
Mean	220.6	181.1	204.1	
Cash and investme	nts to debt			
Median	409.2	256.9	259.1	
Mean	410.4	365.3	341.6	

Expendable resources to operations					
Median	125.4	83.8	83.6		
Mean	128.2	128.0	138.2		
Expendable resources to debt					
Median	198.3	173.8	164.6		
Mean	235.0	254.8	220.9		
DEBT RATIOS					
Total debt outstand	ding (\$000s)				
Median	35,198	1,281,947	96,633		
Mean	42,728	1,749,867	374,727		
Average age of plant (years)					
Median	17.8	11.7	14.2		
Mean	17.2	11.7	14.6		
Current MADS burd	den				
Median	4.6	3.8	4.2		
Mean	5.1	3.9	4.8		
FTE RATIOS					
Total debt per FTE (\$)					
Median	34,961	55,185	28,471		
Mean	41,819	81,649	49,548		
Endowment marke	t value per FTE (\$)				
Median	144,548	79,651	55,265		
Mean	142,789	287,295	188,690		

FTE--Full-time-equivalent. N.A.--Not available.

Endowment

Positive financial markets enhanced endowment values for a second consecutive year in fiscal 2018 across the sector. Financial returns have been strong in the past two fiscal years, although fiscal 2018 was slightly less robust than 2017. Institutional differences are most apparent here, with the median endowment market value for institutions in the 'AAA' category at \$10.9 billion, compared with \$1.6 billion for those in the 'AA' level, and less in each subsequent category (see table 2). The median endowment market value for institutions in the 'AAA' category increased 8.7% from fiscal 2017. Endowment market values increased in all rating categories, with median increases ranging from 2% to 10%. Endowment per FTE also increased for a second consecutive year across the board in fiscal 2018, except for the 'BBB' level, which was flat. This mirrors historical year-over-year increases (see table 5). In addition to positive market returns, most universities are participating in large campaigns that focus on endowment growth. The median gift levels rose to \$3.7 million in fiscal 2018 from \$3.2 million in fiscal 2017. However, the median gift value of public institutions outpaced that of private institutions, at \$5.0 million and \$3.1 million, respectively, according to the National Association of College and University Business Officers (NACUBO). In our view, the increased fundraising efforts, especially toward endowment growth, could support additional financial aid offering and assist in operations, particularly because affordability remains a major concern among prospective students and families.

In a study, NACUBO reported average market returns of 8.2% in fiscal 2018. Among rated issuers for fiscal 2018, endowment market value medians increased 7.8% sectorwide, reflecting that, for most of the sector, fundraising and investment returns for the year were adequate to

offset the schools' annual endowment draw needs. The NACUBO study covered 802 U.S. college and university endowments, while our review included 252.

Table 5

Private Colleges And Universities -- Median Endowment Value Market

(\$000)

	2018	% Change	2017	% change	2016	% change	2015
AAA	10,869,245	8.7	9,996,596	21.0	8,259,597	(4.1)	8,613,547
AA	1,603,114	9.7	1,461,237	29.0	1,132,510	(2.9)	1,166,109
Α	240,030	7.2	223,898	11.4	200,977	(8.3)	219,203
BBB	77,239	2.6	75,273	19.3	63,098	(13.9)	73,284
SG	44,645	5.3	42,411	38.5	30,612	10.2	27,776
SG	Speculative of	grade					

SG--Speculative grade.

Available resources

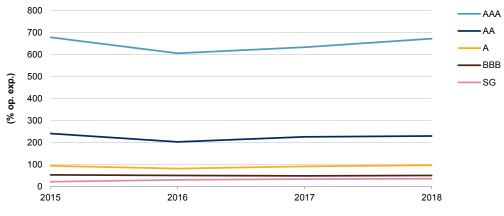
Available resources, as measured by expendable resource ratios, increased very modestly relative to operations and debt levels sectorwide and across almost all rating categories in fiscal 2018. The 'AAA' rating category was the exception, with an increase of 6% in the median expendable resources to operation ration and 9.5% rise in the expendable resources-to-debt median ratio (the largest of any category). This reflects the ability of higher-rated institutions to continue to demonstrate operating flexibility amid a challenging financial environment and the relative strength of their balance sheet allowing them sufficient cushion to absorb additional debt. Sectorwide positive endowment market returns, cost containment, and relatively flat new-money debt issuance

(the change in the median total debt outstanding was 1.5% for fiscal 2018) resulted in stronger expendable resource ratios (see charts 9 and 10).

Eight rated private institutions (among the 252 we used to calculate medians) implemented the FASB reporting change in net assets classifications early. While most of them provided a link to the current method of reporting net assets (that is, unrestricted, temporarily restricted, and permanently restricted), two institutions did not. We excluded the two institutions from the median calculation of available resources to avoid any distortion of data. These are Yale University and University of St. Thomas, in the 'AAA' and 'BBB+' rating categories, respectively. We anticipate the majority of our rated institutions will provide this information. We also look at cash and investments as a metric to gauge liquidity, recognizing that a good amount of cash and investments are often restricted. Median ratios for cash and investments relative to operations and debt have increased moderately for the past two fiscal years after declining in fiscal 2016. The decline followed market fluctuations and negative investment returns for fiscal 2016. With market recovery and favorable returns, cash and investments have risen. For fiscal 2018, the median ratio for cash and investment relative to operations increased 6.0% to 132.2% and relative to debt by a stronger 12.6% to 259.1%. Furthermore, and similar to expendable resources, 'AAA' rated issuers have the strongest cash and investment ratios relative to both operations and debt, indicating the strength and the size of their investment portfolios and their access to a larger resource pool with less robust ratios for each successive rating category. While we understand that a solid portion of the investments could be restricted in the near term, universities typically have access to the funds over a longer period, which could help alleviate credit risks regarding liquidity and balancesheet strength over the next few years.

Chart 9

Private Colleges And Universities -- Expendable Resources As A Percentage Of Operating Expenses



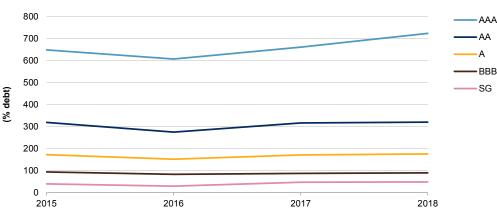
SG--Speculative grade.

Debt

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Chart 10

Private Colleges And Universities -- Expendable Resources As A Percentage Of



SG--Speculative grade.

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Debt

The nominal amount of debt was largely unchanged, increasing 1.5% across rated universities for fiscal 2018. Debt rose most significantly in the 'AAA' category, at 36%. While many of the universities in the rating category issued debt, this significant increase is attributable to a couple

of large new-money issuance by 'AAA' rated schools in fiscal 2018. Given low interest rates, this is not surprising. While there was moderate increase in the 'AA' and 'A' categories, 'BBB' and speculative-grade categories saw declines of 2.3%-3.6% in their respective ratios. This reflects the relatively smaller sample size of issuers, given that we excluded some that could disproportionately affect the median data.

At the same time, debt per FTE declined for 'AAA' and 'AA' categories and was relatively flat for the 'A', 'BBB', and speculative-grade ones in fiscal 2018 (see table X), reflecting that while debt issuances might have been flat, certain institutions were able to grow their total FTE enrollment.

S&P Global Ratings measures a university's debt burden primarily by comparing MADS to adjusted annual operating expenses. The average MADS burden decreased in almost all rating categories for fiscal 2018, expect for 'AA' and 'BB', where it was essentially flat. Given the still-low interest-rate environment at the time, refunding debt issuance for economic savings continued across all categories in the year. Private colleges and universities also reported continued cost-containment and expense-based management, which reduced the total adjusted expenses, preventing a significant decrease in the MADS burden. Most notably, sectorwide MADS burden rose about 23 bps, which we attribute to the smaller sample size of data for fiscal 2018 rather than a systematic increase in the debt issuances and MADS burden for the industry.

Another debt measure is the average age of an institution's physical plant, or facilities. We view deferred maintenance as a future liability, and increases in average age of plant suggest a need to invest more heavily in the area. As age of plant rises, we believe it is critical that colleges and universities make the necessary investments to update and renovate facilities with internal funds, such as gifts, or external funds, such as debt. The average age of plant sector wide increased minimally for fiscal

2018, at 20-50 bps across all categories in fiscal 2018. We believe colleges and universities might be beginning to address delayed capital improvements, with many continuing to strive for balance between capital improvements and operating margins.

Looking Ahead

We believe these fiscal 2018 financial medians support our negative outlook for the rated sector in 2019. As stresses continue throughout the industry, more regional private institutions, and in particular smaller schools, will likely continue to face enrollment and operational issues. We also believe in order to survive the competitive landscape and demographic challenges, colleges and universities will have to generate new ideas and strategies that support revenue growth beyond the tuition dollars. At the same time, expense management will remain crucial to maintaining financial equilibrium. We expect the number of schools in our rated portfolio to remain relatively stable; thus we anticipate the financial medians in fiscal 2019 will be similar to those in fiscal 2018, with variances between the highest- and lowest-rated entities continuing to widen. We will continue to monitor evolving risks and opportunities across the sector.

Table 6

Ratings On Private Colleges And Universities By Rating Category

As of May 1, 2019

	State	Outlook
AAA		
Columbia University	NY	Stable
Grinnell College	IA	Stable
Harvard University	MA	Stable

Northwestern University Pomona College Princeton Theological Seminary	MA IL CA NJ NJ TX CA PA	Stable Negative Stable Stable Stable Stable Stable Stable
Pomona College Princeton Theological Seminary	CA NJ NJ TX CA	Stable Stable Stable Stable
Princeton Theological Seminary	NJ NJ TX CA	Stable Stable Stable
,	NJ TX CA	Stable Stable
Princeton University	TX CA	Stable
	CA	
Rice University		Stable
Stanford University	DΛ	
Swarthmore College	PA	Stable
Yale University	СТ	Stable
AA+		
Amherst College	MA	Stable
Brown University	RI	Stable
Dartmouth College	NH	Stable
Davidson College	NC	Stable
Duke University	NC	Stable
Smith College	MA	Stable
University of Pennsylvania	PA	Stable
University of Richmond	VA	Stable
Vanderbilt University	TN	Stable
Washington University	МО	Stable
Wellesley College	MA	Stable
Williams College	MA	Stable
AA		
Bryn Mawr College	PA	Positive
Carnegie Mellon University	PA	Stable
Colby College	ME	Stable
Colgate University	NY	Stable
Colorado College	СО	Stable
Cornell University	NY	Stable

Denison University	ОН	Stable
Emory University	GA	Stable
Johns Hopkins University	MD	Stable
Liberty University	VA	Stable
MCPHS University	MA	Stable
Middlebury College	VT	Stable
Oberlin College	ОН	Negative
Pepperdine University	CA	Stable
The Juilliard School	NY	Stable
Trinity University	TX	Stable
University of Southern California	CA	Stable
Wake Forest University	NC	Stable
Washington & Lee University	VA	Stable
Wesleyan University	CT	Stable
AA-		
Boston College	MA	Stable
California Institute of Technology	CA	Stable
Case Western Reserve University	ОН	Stable
College of the Holy Cross	MA	Stable
Franklin & Marshall College	PA	Stable
Haverford College	PA	Stable
Lehigh University	PA	Stable
Medical College of Wisconsin	WI	Stable
Mount Holyoke College	MA	Stable
New York University	NY	Stable
Reed College	OR	Stable
Southern Methodist University	TX	Stable
St. Louis University	МО	Negative
Syracuse University	NY	Stable

Tufts University	MA	Stable
University of Chicago	IL	Stable
University of Rochester	NY	Stable
Villanova University	PA	Stable
A+		
American University	DC	Stable
Bates College	ME	Stable
Baylor University	TX	Stable
Boston University	MA	Positive
Brandeis University	MA	Stable
Clark University	MA	Stable
Dickinson College	PA	Stable
Gallaudet University	DC	Stable
George Washington University	DC	Stable
Lafayette College	PA	Stable
Olin Coll of Engineering	MA	Stable
Rhodes College	TN	Stable
Teachers College at Columbia University	NY	Stable
Trinity College	CT	Stable
University of Dayton	ОН	Stable
University of Denver	CO	Stable
University of Puget Sound	WA	Stable
University of the South (Sewanee)	TN	Stable
Vassar College	NY	Stable
A		
Agnes Scott College	GA	Negative
Babson College	MA	Positive
Baylor College of Medicine	TX	Stable
Belmont University	TN	Stable

Berklee College of Music	MA	Stable
Bryant University	RI	Stable
Buena Vista University	IA	Stable
Catholic University of America	DC	Stable
Centre College of Kentucky	KY	Stable
DePaul University	IL	Stable
Doane University	NE	Stable
Drexel University	PA	Stable
Duquesne University	PA	Stable
Earlham College	IN	Negative
Fordham University	NY	Negative
Franciscan University of Steubenville	ОН	Stable
Gettysburg College	PA	Stable
Hampden-Sydney College	VA	Stable
Hampton University	VA	Stable
Hobart and William Smith Colleges (Colleges of the Seneca)	NY	Negative
Hofstra University	NY	Stable
Hope College	МІ	Stable
Kenyon College	ОН	Stable
Loma Linda University	CA	Stable
Loyola University	MD	Stable
Loyola University of Chicago	IL	Positive
Lycoming College	PA	Negative
Mercy College	NY	Stable
Midwestern University	IL	Positive
Mount St. Mary's University	CA	Stable
Providence College	RI	Stable
Randolph-Macon College	VA	Stable
Sacred Heart University	СТ	Stable

Seattle University	WA	Stable
Southern New Hampshire University	NH	Stable
St. Lawrence University	NY	Stable
Tulane University	LA	Stable
University of Portland	OR	Stable
Willamette University	OR	Stable
Worcester Polytechnic Institute	MA	Stable
A-		
A.T. Still University	МО	Stable
Adelphi University	NY	Stable
Allegheny College	PA	Negative
Assumption College	MA	Negative
Baldwin-Wallace College	ОН	Stable
Bradley University	IL	Stable
Butler University	IN	Stable
Drake University	IA	Negative
Fairfield University	CT	Stable
Flagler College	FL	Stable
Florida Southern College	FL	Stable
Georgetown University	DC	Stable
Goucher College	MD	Stable
High Point University	NC	Stable
Icahn School of Medicine at Mount Sinai	NY	Stable
Illinois Wesleyan University	IL	Stable
Inter American University of Puerto Rico, Inc.	PR	Stable
Johnson & Wales Univ	RI	Stable
Kansas City Art Inst	МО	Stable
Lesley University	MA	Stable
Lewis & Clark College	OR	Stable

Manchester University	IN	Stable
Manhattan College	NY	Stable
Messiah College	PA	Stable
Morehouse College	GA	Stable
Mount Aloysius College	PA	Negative
Nebraska Wesleyan University	NE	Stable
New England Institute of Technology	RI	Stable
Nova Southeastern University	FL	Stable
Quinnipiac University	CT	Stable
Ranken Technical College	МО	Stable
Saint Joseph's University	PA	Stable
Saint Mary's College	IN	Stable
Seton Hall University	NJ	Stable
St John Fisher College	NY	Stable
St. Ambrose University	IA	Stable
St. John's University	NY	Positive
Stetson University	FL	Stable
Stevens Institute Of Technology	NJ	Stable
The New School	NY	Stable
Transylvania University	KY	Stable
University of Miami	FL	Stable
University of Scranton	PA	Stable
University of Tampa	FL	Stable
Washington & Jefferson College	PA	Stable
Wayland Baptist University	TX	Stable
Wofford College	SC	Stable
York College of Pennsylvania	PA	Stable
BBB+		
Albany College of Pharmacy and Health Sciences	NY	Stable

Cabrini University	PA	Negative
College For Creative Studies	MI	Stable
Columbia College	IL	Stable
Emerson College	MA	Stable
Fisher College	MA	Stable
Gannon University	PA	Stable
Illinois College	IL	Stable
Juniata College	PA	Negative
Kings College	PA	Stable
Lewis Univ	IL	Stable
Long Island University	NY	Stable
Lynchburg College	VA	Stable
Meredith College	NC	Stable
Moravian College	PA	Stable
Nazareth College of Rochester	NY	Stable
New York Institute of Technolgy	NY	Stable
Niagara University	NY	Stable
Randolph College	VA	Stable
Rensselaer Polytechnic Institute	NY	Stable
Ringling College of Art and Design	FL	Stable
Roanoke College	VA	Stable
Rosalind Franklin University of Medicine & Science	IL	Stable
Simmons College	MA	Stable
Southern California Institute of Architecture	CA	Stable
St. Edwards University	TX	Stable
St. Francis College	NY	Stable
University of Indianapolis	IN	Stable
University of St. Thomas	TX	Negative
Xavier University	ОН	Positive

BBB

Albany Law School	NY	Stable
Arcadia University	PA	Stable
Barry University	FL	Negative
Benedictine University	IL	Negative
Brooklyn Law School	NY	Stable
California College of the Arts	CA	Stable
Carlow University	PA	Stable
Champlain College	VT	Stable
Guilford College	NC	Stable
Gwynedd Mercy University	PA	Stable
Hendrix College	AR	Stable
Iona College	NY	Stable
Lipscomb University	TN	Stable
Loyola University	LA	Negative
Lubbock Christian University	TX	Negative
Marian University	IN	Stable
McDaniel College	MD	Stable
Molloy College	NY	Positive
Neumann University	PA	Stable
Notre Dame of Maryland University, Inc	MD	Negative
Pacific University	OR	Stable
Saint Francis University	PA	Stable
Sarah Lawrence College	NY	Stable
Springfield College	MA	Stable
St. Bonaventure University	NY	Stable
St. John's College	MD	Stable
St. Louis College of Pharmacy	МО	Stable
St. Michael's College	VT	Stable

University of Dubuque	IA	Stable
University of New Haven	CT	Stable
Ursinus College	PA	Stable
Western New England University	MA	Stable
Westminster College	UT	Stable
Westminster College	PA	Stable
Widener University	PA	Positive
Wilkes University	PA	Stable
BBB-		
Ave Maria University, Inc.	FL	Stable
Barton College	NC	Stable
Bethel University	MN	Stable
Chatham University	PA	Stable
Georgian Court University	NJ	Stable
Hartwick College	NY	Negative
Hodges University, Inc.	FL	Negative
Houston Baptist University	TX	Stable
Howard University	DC	Stable
La Salle University	PA	Stable
Lake Forest College	IL	Stable
Lasell College	MA	Negative
Lindsey Wilson College	KY	Stable
Merrimack College	MA	Stable
Methodist University	NC	Stable
New York Law School	NY	Stable
Pace University	NY	Stable
Polytechnic University of Puerto Rico	PR	Stable
Rider University	NJ	Stable
Saint Leo University	FL	Stable

Southwest Baptist University	МО	Stable
University of Findlay	ОН	Stable
Yeshiva University	NY	Stable
SG		
Bethany College	WV	Stable
Chaminade University	НІ	Stable
Cleveland Institute of Art	ОН	Stable
College of Saint Elizabeth	NJ	Stable
Eastern University	PA	Negative
Harrisburg University of Science and Technology	PA	Stable
Hawaii Pacific University	ні	Stable
Hiram College	ОН	Stable
Judson College	AL	Stable
Lawrence Technological University	MI	Stable
Marymount University	VA	Positive
Marywood University	PA	Stable
Medaille College	NY	Stable
Mercyhurst University	PA	Stable
Mount Saint Mary's University	MD	Stable
Pacific Lutheran University	WA	Stable
Regent University	VA	Negative
Rockhurst University	МО	Stable
Roseman University	NV	Stable
Sistema Universitario Ana G. Mendez, Inc.	PR	Stable
Sweet Briar College	VA	Stable
Thomas M Cooley Law School	MI	Positive
University of the Sacred Heart	PR	Stable
Vaughn College of Aeronautics & Technology	NY	Stable

Glossary Of Ratios And Terms

Metric or ratio	Definition	
Enrollment and demand ratios		
FTE enrollment	Total students enrolled on a full-time equivalent basis	
Percent undergraduate (%)	Total number of undergraduate students/total students	
Freshman acceptance rate (%)	Number of freshman accepted/total number of freshman applications	
Average SAT scores	Average combined math and reading SAT scores for entering freshman	
Average ACT scores	Average ACT scores for entering freshman	
Retention rate (%)	Freshmen students who matriculated for sophomore year/total freshman who completed their first year	
Six-year graduation rate (%)	Students who graduate from the university within six years/total students in the freshman cohort	
Percent in-state students (%)	Students enrolled who come from within the state/total students enrolled	
Financial Performance		
Net adjusted operating margin(%)	Total adjusted operating income/total adjusted operating expenses	
Revenue diversity		
Student-generated revenue (%)	Gross tuition and fees + auxiliary revenues /total operating revenues	
Grants and contracts (%)	Government grants and contracts/total operating revenues	
Gifts and pledges (%)	Gifts and pledges/total operating revenues	
Financial aid and expense ratios		
Financial aid burden (%)	Total financial aid expense/ total adjusted operating expenses	
Instruction (%)	Instructional expense/ total adjusted operating expenses	
Tuition discount rate (%)	Total financial aid expense/gross tuition revenue	
Endowment		

University endowment Market value of endowment as of fiscal year-end market value (\$000s) Financial resource ratios Cash and investments to Total cash and investments/total adjusted operating operations (%) expenses Expendable resources ER/total adjusted operating expenses (ER) to operations (%) Cash and investments to Total cash and investments/total debt debt (%) Expendable resources to ER/debt debt (%) Debt ratios Total debt outstanding Outstanding debt as shown on face of balance sheet (\$000s) Maximum annual debt service (MADS) burden MADS/total adjusted operating expenses (%) Accumulated depreciation/depreciation expenses (years) Average age of plant Full-time equivalent (FTE) ratios Total debt per FTE Total debt/FTE students (\$) Market value endowment/FTE students (\$) Endowment per FTE Definitions Total operating revenues (from the audit) + institutionally Total adjusted operating

revenues*

funded financial aid + endowment spending - realized and

unrealized gains.

Total adjusted operating

expenses

Total operating expenses (from the audit) + institutionally

funded financial aid + interest expense

Unrestricted net assets + temporarily restricted net assets -Expendable resources

(Net PPE - outstanding long-term debt)

Cash and investments Total cash, short-term, and long-term investments

This report does not constitute a rating action.

^{*}Adjustments vary based on audit presentation.

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