

Article Title: ARCHIVE | General Criteria: Methodology: Not-For-Profit Public And Private Colleges And Universities Data: (EDITOR'S NOTE: —This article is no longer current. It has been superseded by "Global Not-For-Profit Education Providers," published April 24, 2023.) 1. This criteria article describes S&P; Global Ratings' methodology for assigning stand-alone credit profiles (SACPs), issuer credit ratings (ICRs), and issue credit ratings to not-for-profit public and private colleges and universities globally. 2. This methodology provides additional transparency to help market participants better understand our approach in assigning ratings to not-for-profit public and private colleges and universities globally, to enhance the forward-looking nature of these ratings, and to enable better comparison between these ratings and ratings in other sectors and asset classes. 3. This methodology is related to our criteria article: "Principles Of Credit Ratings," published on Feb. 16, 2011. 4. All terms followed by an asterisk (*) are defined in the glossary in Appendix 1. I. SCOPE OF THE CRITERIA 5. The methodology for rating not-for-profit public and private universities applies to the assignment of ICRs, SACPs, and issue credit ratings to not-for-profit public and private colleges and universities globally. All entities are hereafter referred to as "universities" or "institutions." 6. These criteria do not apply to for-profit entities that exist to benefit private shareholders, even if they operate in the same market as not-for-profit universities. Such corporations are evaluated using "Corporate Methodology," published Nov. 19, 2013. 7. The ratings on tax- or general fund-supported debt issued by community or junior colleges, which typically offer two-year degree programs and receive property tax support, are evaluated under separate criteria (U.S. Public Finance: "GO Debt," published Oct. 12, 2006). Issue credit ratings on debt secured by pledges that are not a general obligation or an unlimited student fee, such as student housing revenue bonds; continue to be evaluated under the "Higher Education" criteria, specifically the section "Auxiliary Revenue Bonds And Privatized Dormitories." 8. These criteria define a public university as one having the following characteristics: in the U.S: established by governmental action and subject to related government rules and regulations, and receives regular and ongoing funding from a government for operating purposes; or outside the U.S: receives government financial support and operates within a regulatory framework. A nonpublic university is considered to be private. Private not-for-profit universities retain surplus revenue within the organization for the benefit of the university's mission without the consideration of owners or shareholders. Within the U.S., not-for-profit universities have tax-exempt status. II. SUMMARY OF THE CRITERIA 9. We use these criteria to assign a stand-alone credit profile (SACP) and an ICR to public and private not-for-profit universities globally, and issue credit ratings to their debt obligations using a framework that considers the enterprise and financial profile of the university. Evaluation of (1) industry risk, (2) economic fundamentals, (3) market position and demand, and (4) management and governance determines the enterprise profile. Assessment of (1) financial management policies, (2) financial performance, (3) financial resources, and (4) the debt and contingent liability* profile determines the financial profile. 10. The combination of the enterprise and financial profile establishes the indicative SACP (see table 1). We also apply the credit-specific overriding factors and caps (see paragraphs 23-37), when relevant. The indicative SACP can be adjusted up or down by one notch for peer comparisons (see paragraphs 38-40), to arrive at a university's final SACP. When applicable, we then apply our criteria, "General Criteria: Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015, and "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions," published Nov. 19, 2013, to determine the ICR. If these two criteria are not applicable, the ICR will equal the final SACP (see chart). 11. Issue credit ratings will be determined based on our view of the ICR and the legal/covenant package, as more fully described in "Assigning Issue Credit Ratings Of Operating Entities," published May 20, 2015. This applies to both U.S. and non-U.S. universities. Further guidance regarding our view of debt security is in paragraphs 43 and 44. 12. Subordinate debt obligations issued by universities under the scope of these criteria will be rated consistent with "Assigning Issue Credit Ratings Of Operating Entities." 13. This paragraph has been deleted. 14. This paragraph has been deleted. III. METHODOLOGY A. Not-For-Profit Public And Private University Rating Calibrations 15. We calibrate our higher education rating criteria based on our analysis of the history of defaults, the impact of changes in higher education delivery patterns over time, our view of the industry's essentiality, the industry's sensitivity to economic and demographic cycles, and the credit strength of the not-for-profit higher education sector compared with other sectors.

We outline our framework in two articles: "S&P; Global Ratings Definitions," published on Jan. 5, 2021, and "The Time Dimension of Standard & Poor's Credit Ratings," published on Sept. 22, 2010. 16. Higher education sector default rates are low in absolute terms. From 1986 to August 2015, three rated U.S. private universities defaulted. While a small sample, the reasons behind the defaults are common credit considerations within the higher education sector. They include declining enrollment, high financial aid expenses resulting in declines in net tuition revenue, sustained operating deficits, negative operating cash flow, lack of management actions, and debt issuance relying on future enrollment growth for repayment. These risks are captured in this methodology through the focus on market position and demand; management and governance; assessing operating performance; measuring financial resources and operating liquidity; and debt management. 17. The broad higher education sector (which includes not-for-profit institutions in scope of these criteria, but also auxiliary higher education debt and independent schools not in this scope) was only marginally more volatile, as measured by the number of rating changes, than other non-housing U.S. Public Finance sectors as tax-secured debt, appropriation-backed obligations, or mass transit enterprise sector, but was less volatile than the health care and utility sectors. For more information, please see our annual U.S. Public Finance Default Study And Rating Transitions report. 18. The higher education sector is not highly regulated, but does have varying degrees of governmental oversight. In the U.S., no governmental regulatory entity directly controls or approves tuition or fees for private or public universities. However, there can be indirect effects on university policies, tuition decisions, financial or enrollment policies, and scholarship management based on rules and requirements associated with various U.S. government loan, grant, or scholarship programs. Non-U.S. public universities experience more oversight from their sponsoring governments. This can include direct or indirect control of tuition levels or increases; allowable levels of financial reserves; qualification requirements for in-state students; and mandated financial policies and procedures. Most U.S. public universities experience relatively little sponsoring government control of their tuition and fee decisions. Some of the larger U.S. universities (both public and private) operate hospitals or clinical facilities, and as such may have exposure to health care industry risks, and a more highly regulated regulatory framework. If health care represents a significant portion of revenue, then the industry risk score is adjusted to capture that risk. B. Overall Analytic Framework For Universities 19. These criteria assign SACPs and ICRs to universities, and issue credit ratings on revenue-secured debt (such as revenue bonds in the U.S.) using an overall framework that considers the enterprise and financial profiles of an institution. Determining the indicative SACP 20. The enterprise and financial profiles are computed by rounding (to the nearest whole number) the weighted average of the individual factors. To assess most factors, we first consider quantitative elements, and then qualitative factors. Each factor can range from '1' (the strongest) to '6' (the weakest). The enterprise profile is a weighted average of the four assessments: industry risk (weighted 10%), economic fundamentals (10%), market position and demand (70%), and management and governance (10%). The financial profile also comprises four factors: financial management policies (10%), financial performance (20%), financial resources (35%), and debt and contingent liability profile (35%). 21. The indicative SACP results from the combination of the enterprise and financial profiles as shown in table 1. In cases when the matrix presents a range of ratings, the choice between the two ratings is based on our view of the future performance of the factors composing the enterprise and financial profiles. If we view an issuer's financial and/or enterprise profile as unsustainable or if its obligations are currently vulnerable to nonpayment, and if the obligor is dependent upon favorable business, financial, and economic conditions to meet its commitments on its obligations, then we will determine the issuer's SACP using "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012. If the issuer meets the conditions for assigning 'CCC+', 'CCC', 'CCC-', and 'CC' ratings, we will not apply table 1. Table 1 Determining The Indicative SACP

	1	2	3	4	5	6
Extremely strong	aaa	aa+	aa-	a	bbb+/bbb	bb+/bb
Very strong	aa+	aa/aa-	a+	a-	bbb/bbb-	bb/bb-
Strong	aa-	a+	a	bbb+/bbb	bbb-/bb+	bb-
Adequate	a	a/a-	a-/bbb+	bbb/bbb-	bb	b+
Vulnerable	bbb+	bbb/bbb-	bbb-/bb+	bb	bb-	b
Highly vulnerable	bbb-	bb	bb-	b+	b	b-

Overriding factors, caps, and determining the final SACP 22. To determine the final SACP, we evaluate the presence of various caps and overrides. If a university has several overriding factors, we adjust its indicative SACP

by the cumulative effect of those overriding factors and take into account the lowest cap indicated by those adjustments. Overriding Factors And Caps 23. Application of overriding factors and peer analysis result in the final SACP moving a specified number of notches above or below the indicative SACP. Caps limit the final SACP to no higher than a particular rating level, and the SACP assigned could be lower than the cap, depending on the severity of the condition. Rating caps are absolute, meaning that no positive override or adjustment can result in an SACP exceeding the cap. Table 2 is a summary of overriding factors and caps. Table 2 Summary Of Overriding Factors/Caps

OVERRIDING FACTOR/CAP RESULT

Management demonstrates a lack of willingness to support the debt or we believe the organization may be considering a bankruptcy or receivership filing The final SACP is capped at 'b'. A university that has emerged from bankruptcy or receivership or from a period of consultant or governmental oversight Final SACP is capped at 'bb+' until the university achieves resolution of all covenant violations and has established a two- or three-year record of sustainable financial performance. Business disruption/event risk Depending on the disruption's expected magnitude and effect on the university's credit characteristics, the SACP could differ from the indicative SACP. If there are unsustainable business practices the indicative SACP will be lowered depending on the disruption's magnitude. Severe business disruption If unsustainable business practices lead to severe business disruption or closure of the institution, the final SACP is capped at b+. Supporting government rating cap If a university has 30% or more of revenues derived from a supporting government, it can be rated no more than three notches above the supporting government if it demonstrates governance independence and financial resiliency. Management score equals a '5' or '6' or financial policy score is a '6' The indicative SACP may be up to three notches lower than suggested by table 1 Cash and investments are greater than three times the outstanding debt for public universities or four times outstanding debt for private universities The indicative SACP may be one notch higher than suggested by table 1. The financial performance assessment is a '6' (see table 9) and the financial resources assessment (see table 10) is also a '6' The final SACP is capped at 'bb+'. If we view liquidity as a weakness that cannot be rectified by other available resources (see paragraph 107). The final SACP is capped at b+. Financial resources assessment and debt and contingent liabilities assessment are both a '6' The final SACP is capped at 'bb+'. Specialty school--such as Law/pharmacy/medical school The indicative SACP may be one notch lower than suggested by table 1.

a) Payment culture 24. The payment culture override applies when an entity's willingness to make full and timely payments on its financial obligations is questioned. If concerns about the payment culture exist (e.g., if we believe there is a high likelihood that an entity would not prioritize the timely payment of debt service* in a stress scenario), we will cap the final SACP at 'b' and the rating would likely be lower. This analysis is usually evidence-based. Examples may include the absence of material policy change since the last default. In extreme cases, the weak or uncertain willingness to pay will result in the application of "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012. Such a condition might be evidenced by way of conversations with management or governance, verifiable reports in the media, public disclosure, or other informational sources we judge to be relevant. The university's issuer credit ratings would fall to 'D' or 'SD' following a default on an actual debt obligation. 25. We will cap the final SACP at 'bb+' for universities that just emerged from bankruptcy or receivership or from a period of consultant or governmental oversight until all covenant violations have been cured and the organization has established a two- or three-year record of sustainable financial performance. b) Business disruption/event risk 26. In cases of business disruption (for instance, failure to attain accreditation or loss of accreditation for a major academic program) or rapidly rising acute event risk (for instance, a war, escalating domestic conflict, natural disaster, legal risks far above insurance coverage levels), the final SACP will be lowered, depending on the disruption's expected magnitude and effect on the university's credit characteristics. This overriding factor aims to address risks beyond those already captured in the contingent liability assessment. 27. If there are unsustainable business practices (for instance, a trend of unsustainable, large endowment spending draws* or dramatic changes in market position and student demand leading to sustained weak operating performance) the final SACP will be lowered depending on the disruption's expected magnitude and effect on the university's credit characteristics. Furthermore, if we believe these unsustainable business practices could lead to severe business disruption or closure of the institution,

the final SACP will be no higher than the 'b' category. c) Supporting government cap 28. For many public universities, operating appropriations are an important component of their revenues base. As such, the rating of a supporting government (e.g., state, province, municipality etc.), which provides a snapshot of its economic and financial condition, management quality, and offers an evaluation of the strength of higher education support, can have an important impact on the assessment of the public university's creditworthiness. 29. The SACP for public universities with a significant portion of revenue (30% or more) derived from the related government will be capped at the supporting government rating unless it can demonstrate governance independence and financial resiliency. Specifically, the university's final SACP could be up to three notches above the supporting government if the university has both: Governance independence: autonomy on tuition, strong credit culture, sound and predictable management policies, no history and no expectation of negative intervention from the supporting government, and Financial resiliency: independent treasury management; ability to sustain a stress scenario in which its state/government support* is cut by 50% and the university can still demonstrate the ability to manage its expenses and meet its debt service obligations. 30. The supporting government rating cap does not apply to public universities with less than 30% of revenues derived from the supporting government or to private universities, given their inherent autonomous financial profiles. 31. In some cases, S&P; Global Ratings may not have a public rating on the supporting government. If we have sufficient information to determine a confidential rating on the government, we will use such rating to determine the university's cap. Where we do not have sufficient information to determine a confidential rating on the government, we will develop an approximate view of the creditworthiness of the government. An opinion on the government's credit quality (even if it is a confidential credit estimate) is needed to assess the likelihood of negative government intervention for purposes of potentially constraining the university's rating at the government rating; or, if such risk is mitigated via governance independence and financial resiliency, for applying up to a three-notch cap provision in paragraph 29. 32. The supporting government cap affects the public university's final SACP. If the university is a government-related entity (GRE), its ICR can be further constrained or lifted through the application of our GRE criteria (General Criteria: "Rating Government-Related Entities: Methodology And Assumptions", March 25, 2015. 33. We reflect country risk considerations through various assessments in the enterprise risk profile. As such, the SACP already incorporates many risks related to operating in a particular country. In the event the university's SACP is above that of the related sovereign, we will apply the criteria, "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions," published Nov. 19, 2013, to derive the issuer credit rating (see paragraph 41). d) Very weak management 34. A demonstrably weak management team, as measured by a management and governance assessment of '5' or '6', or very weak financial management policy assessment of '6' likely indicate that the financial, strategic, or operating decisions could jeopardize the market demand for this institution or put its financial profile at great risk. In those cases, we will lower the indicative SACP by up to three notches below the indicative SACP suggested by table 1. e) Extraordinary strong or weak financial characteristics 35. The level of available resources to debt is incorporated into the financial resources assessment. However, because its importance as a rating factor increases when available resources are unusually high or low, the indicative SACP may be adjusted up or down as such: In cases where cash and investments are greater than three times the outstanding debt for public universities or four times outstanding debt for private universities, the indicative SACP will be raised one notch from that SACP suggested by table 1. Where cash and investments exceed 3x debt for public universities and 4x debt for private universities only because the amount of debt is extraordinarily low, the usefulness of the ratio is limited and the adjustment may not be applied. In the case where both the financial resources assessment and debt and contingent liabilities assessment are '6', the final SACP will be capped at 'bb+'. 36. We analyze liquidity as a combination of financial performance and financial resources. This is because if a university cannot meet its expense obligations and does not have the financial resources to support these obligations, this is a sign of weak operating liquidity. In cases where the financial performance assessment is a '6' (see table 9) and the financial resources assessment (see table 10) is also a '6', the final SACP will be capped at 'bb+'. If we view liquidity as a weakness that cannot be rectified by other available resources, then the final SACP will likely be no higher than the "b" category (see paragraph 107). f) Specialty

schools: law, pharmacy, medical 37. Because of the narrow focus of the demand profile, greater exposure to changes in market demand and concentration of revenues, the indicative SACP of specialty universities will be lowered one notch from that suggested in table 1. A specialty university is, for example, a stand-alone law, or medical, or pharmacy school. This does not include single-sex universities, where though the demand profile is limited to a single gender, a variety of programs exist. Peer Analysis 38. After incorporating overrides (if applicable), the resulting SACP can be further adjusted one notch up or down based on our holistic view of creditworthiness, and recognizes sustained, predictable operating and financial underperformance or outperformance, as informed by peer analysis. This holistic analysis could also include rare or strongly positive or negative characteristics which the criteria do not separately identify. 39. These criteria define peers as other public or private universities. Peers may include other institutions with similar ratings, size, market position, programs, geographic location, or financial profile characteristics. Based on our assessment, location may be defined as geographically contiguous or an area in another part of the country with similar economic and market fundamentals. Peer comparisons could also be made based on comparisons with sector-wide data including ratio analyses. Peer groups may change through time as operating conditions or organization-specific features evolve. 40. The indicative SACP, adjusted for any overriding factors and peer analysis, if applicable, establishes a final SACP. Determining the ICR 41. If the university is considered a GRE, we will use the university's final SACP in applying the GRE criteria to determine the university's ICR. If the final SACP is above the sovereign rating, we will apply "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions" to determine the final ICR. When pertinent, the final SACP will be based on the application of "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, or "S&P; Global Ratings Definitions," published Jan. 5, 2021. 42. Without the aforementioned adjustments, the university's ICR will be equal to the final SACP. Determining the issue credit rating 43. Most private, and some public, universities that issue debt secure the bonds with a full faith and credit pledge. We may also consider a broad pledge of multiple revenue sources, frequently including revenue from multiple campuses, to be 'equivalent' to a full faith and credit pledge for the purpose of assigning an issue credit rating. 44. We will typically assign ratings on bonds backed by unlimited student fees, tuition pledges, available funds pledges, and other broad pledges on par with the ICR, particularly if the unlimited student fee pledge includes the following conditions: The fee is charged to all students and is pledged to pay debt service, The university has the authority to raise the fee, There is no limit on the fee, and Student fees will be sufficient to cover debt service. C. Enterprise Profile 45. The enterprise profile assessment is the rounded average of the four assessments weighted as follows. Assessments for each factor ranges from '1' (the strongest) to '6' (the weakest). When assessing components of the enterprise profile, if the assessment falls at or near a cut-off or midpoint, we may give the better assessment if trends are improving or believe that future performance is likely to improve. Conversely, we may give a weaker assessment if trends are deteriorating or we believe future performance will be weaker. Industry risk (10%), Economic fundamentals (10%), Market position and demand (70%), and Management and governance (10%). 46. Industry risk assessment reflects our opinion of the risk of the higher education industry when compared to other industries, including its cyclicity, competitive risk, and regulatory policies. 47. Economic fundamentals analysis focuses on how the economic and wider sociopolitical conditions at the country or local level influence the credit profile of the university, including the government's ability to provide services, such as higher education. 48. Market position and demand assessment reflects the university's competitive strength within the higher education market. 49. Management and governance includes our assessment of strategic planning, risk management and operational effectiveness, management expertise, depth and breadth, and internal controls. 1. Industry risk 50. We view industry risk as the impact of an industry's characteristics on a specific entity within that industry. An assessment of the industry risk results from a combination of assessments of: Industry cyclicity, and Industry competitive risk and growth environment, which is based on the degree of the effectiveness of barriers to entry, levels and trends of profitability, substitution risk, and growth trends observed in the industry. Table 3 Industry Risk Assessments

ASSESSMENT	DESCRIPTION
1	Very low risk
2	Low risk
3	Intermediate risk
4	High risk
5	Very high risk
6	Extremely high risk

51. We assess the industry risk for the higher education sector globally at '2' (low risk) (see

table 3) for both public and private universities. This assessment is based on the application of the criteria, "Methodology: Industry Risk," published Nov. 19, 2013. The higher education sector demonstrates counter cyclicity - as the economy declines, more people turn to education rather than the workforce. As such, higher education operating revenues often increase during recession. The higher education sector is also somewhat sensitive to demographic cycles when the number of traditional high school graduates (still the majority of students) in a country or region fluctuates. That said, government sponsor support provides some sector stability directly (public university operating or capital appropriations) or indirectly (research grants, student-directed scholarships, or loan assistance) to higher education providers, both public and private. We do not measure the profitability ratio per the industry risk criteria. Instead, we use enrollment as a more appropriate measure because not-for-profit universities are not driven by a profit margin. They are driven by their mission to educate students, which is in large part measured by enrollment. Enrollment generally grows during a recession given the counter-cyclicity. The combination of a sub-assessment of 1 for industry revenues and a sub assessment of 1 for enrollment results in a cyclicity assessment of 1. 52. When measuring the second component of industry risk, we assess the competitive risk and growth environment. There are two factors which are low risk: Effective barriers to entry from start-ups (due to facility, technology, and capital requirements, although there is abundant competition for students among universities) and established accreditation or regulation processes in different countries; and Risk in growth trends as government, legal, and regulatory conditions tend to change gradually and modestly. 53. There are two factors that are medium risk: Trends in industry profit margins, which are overall stable, but slim, and influenced by gains and losses in investment income; The product substitution from outside the industry, such as for profit universities and massive open online courses. 54. The combination of a competitive risk and growth assessment of '2' (low) and a cyclicity assessment of '1' (very low) results in an industry risk assessment of '2' or low. We do not presently differentiate the industry risk assessments ('2' or low risk) for the private and public education sectors. We view the risks related to barriers to entry, profit margin, and competition in the diverse, mature, and interconnected higher education industry as similar for both public and private universities. 55. We do differentiate the industry risk assessment between universities that have a revenue dependency on another industry. Specifically: If higher education accounts for more than two-thirds of the university's operating revenues, then the university is considered to be primarily exposed to the higher education sector and receives an industry risk assessment of '2'. If higher education accounts for between one-third and two-thirds of the university's operating revenues, then we assign a 'blended' industry risk score based on an (unweighted) average of the industry risk assessments of the higher education industry and other industry (industries), if its operating revenues are at least one-third of the total. Otherwise, we assign the industry risk score based on the higher education industry. If higher education accounts for less than one-third of the university's operating revenues, then the industry risk assessment will be that of a single non-higher-education sector (if it accounts for more than two-thirds of total operating revenues), or an average of two non-higher-education industries (as long as each accounts for at least one-third of total operating revenues). In assessing the share of higher education in the university's operating revenues, in addition to tuition, we include other revenues sources if we consider them relevant to the higher education mission, such as research and endowment, auxiliary revenues, and state appropriations. 56. Although paragraph 55 allows for the possibility that a university's annual revenues may come primarily from nonacademic sources (such as health care), such revenue dependence alone will not qualify an institution for rating under different criteria. Universities with this breadth of operations must be driven by an academic mission and governed as such, with the preponderance of its operating margin*, fundraising ability, endowment, and financial resource management tied to academic pursuits. We will rate an institution under higher education criteria as long as the management and governance of the institution and majority of enterprise and financial factors are still tied to or dependent on academic goals and operations as described in this criteria. 2. Economic fundamentals 57. Economic fundamentals assessment accounts for 10% of the enterprise profile for public and private universities. 58. The anchor assessment is measured by GDP per capita. S&P; Global Ratings believes that income levels and economic activity, as measured by GDP per capita, are indications of the strength of a country's economy, its need for social services in general, and its demand for higher education in

particular. Higher income levels provide families with sufficient incomes to support higher education attendance and may reflect more knowledge-based economies that require a college-educated workforce. Likewise, population trends and age characteristics may further improve or dampen demand if good, or poor, college participation rates* exist. 59. To derive the anchor in table 4, we use either local or national GDP per capita data. The selection is made based on which set of data most adequately reflects the university's demand. Specifically, this analytical decision is based on where the majority of the student body comes from as this determines the tuition revenue. 60. For instance, if a university has a majority of its students coming from a single U.S. state, then the local or state GDP per capita is a more appropriate starting point. Where the demand for students is national, international, or regional (multistate, e.g., U.S. Northeast region), the national GDP per capita of the country in which the university resides is more appropriate. 61. S&P; Global Ratings will generally use the GDP per capita data in U.S. dollars at market prices. "Guidance: Sovereign Rating Methodology" provides the most updated GDP per capita ranges that we use to derive the initial economic assessments in table 4. 62. Depending on the reporting norms in a given country, we might use other nationally recognized proxy for GDP per capita indicators (such as gross state product per capita). In other situations (for instance, when a significant portion of income accrues to nonresidents and is not taxable by the jurisdiction), we will focus on the gross national product per capita measure. If the municipal or provincial/state data are not available, we generally use the data for a higher level of government with appropriate adjustments. 63. In some cases, an anchor (whether based on national or local GDP per capita data) might not fully capture differences in socioeconomic and political conditions and demographic profiles between the areas where universities operate. These differences may have an impact on the university's revenue generation capacity. To incorporate these differences, we apply an adjustment to the GDP per capita anchor if socioeconomic, demographic, and political conditions are above or below the average of the other universities with the same anchor. Specifically, we will apply a positive adjustment (generally of one point) if a university has stronger socioeconomic indicators, predictable and stable institutional environment, and favorable demographic profile. Conversely, we will apply a negative adjustment generally of one point, or two points in exceptional cases, if the university faces weaker socioeconomic indicators. Examples of such socioeconomic indicators requiring a negative adjustment could be a concentrated and volatile economy, subpar economic growth, an unpredictable institutional framework (negatively affecting the consistency of the government support), and a demographic profile that might have a material negative impact on revenue growth, such as a projected decline in the college-age population or low college participation rates. 64. The relevant credit risks for universities are also influenced by country-specific risks (see "Country Risk Assessment Methodology And Assumptions," published Nov. 19, 2013). Country risk is the risk an entity faces by having some of its operations or assets exposed to one or more countries. Country-specific risks consist of economic risk, institutional and governance effectiveness risk, financial system risk, and payment culture/rule-of-law risk. The country risk assessment is determined on a scale from '1' (very low risk) to '6' (very high risk). 65. As long as the country risk assessment is '3' or lower, there is generally no positive or negative impact on the final rating. However, if the country risk assessment was '4' or above, this could affect the overall enterprise risk profile. For example, if the country in which a university is domiciled has a country risk assessment of '4', '5', or '6', the criteria generally assign an enterprise risk profile of no better than '4', '5', or '6', respectively. 66. In the event that there is an exposure to one or more countries, such as a university with a large full-time equivalent (FTE) enrollment base in various countries, then a weighted average of the country risk assessment for all relevant countries where the university has campuses will be assessed. Table 4

The Economic Fundamentals Assessment MEASURE GDP PER CAPITA QUALITATIVE FACTORS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT Economy exhibits more favorable socio-economic, political, and demographic trends compared to peers with the same anchor assessment

QUALITATIVE FACTORS NEGATIVELY AFFECTING THE ANCHOR ASSESSMENT Economy exhibits less favorable socio-economic, political, and demographic trends compared to peers with the same anchor assessment

Refer to "Guidance: Sovereign Rating Methodology" for the most updated GDP per capita ranges. 3. Market position and demand 67. Market position and demand assessment has the highest weighting of 70% in the enterprise profile. 68. The metrics for market position and demand in public and

private universities are mostly the same, with the anchors for all universities being selectivity, retention rates, and other demand factors; the matriculation rate* is an additional anchor for private universities. In addition to these anchors, we view FTE as an important distinguishing factor for public universities because a larger FTE can create both economies of scale and enrollment diversity, which may limit the degree of enrollment fluctuation. Conversely, private universities typically rely more on their ability to successfully meet the needs of their target markets or demand niches (hence, our focus on matriculation data) to secure enrollment stability. Matriculation rate is not included as a sub-factor for public universities as we have not observed a strong correlation between matriculation rates and an institution's financial strength, governmental willingness to support the university, or overall credit quality. 69. Our assessment of market position and demand is based on data provided by the university. The calculations are based on the three most recent periods of information as defined by three academic years, which will be used and weighted 45%, 35%, and 20%, respectively from most to least current. If we believe future performance will deviate from historic results, we will use pro forma or projected data. Pro forma or projected data will be used based on our analytical assessment of the higher education environment and may include a review of the university's internal projections or pro forma expectations. 70. Full-time equivalent enrollment, selectivity, retention, and matriculation sub-factors illustrate an institution's ability over time to attract and retain students, which speaks to the mission of the university and the ability to generate the largest revenue sources, including tuition, auxiliary, fees, etc. 71. Other demand factors are the same for both public and private universities. The assessment is based on a review of the following attributes. The presence of each attribute counts for one point. As a result, the university can have from zero to 10 points for 'other demand factors'. The assessments in tables 5 and 6 depend on the accumulated number of points. For instance, seven points correspond to a sub-score of '2' (5-7 points range) in table 5. Exceptional faculty quality, with a high percentage (85% or more) of faculty with terminal or advanced degrees. This typically indicates a prestigious faculty base which helps student retention and demand; Multiple campuses or academic sites providing locational diversity and adding value to their geographical penetration. This does not include partnerships with other institutions, small commuter campuses or satellite leased spaces. Examples in the U.S. include large public university systems, some of which have multiple academic campuses, and separate academic medical centers; Full institutional accreditation by a nationally or regionally recognized accrediting body and specialized accreditation where applicable. Lack of accreditation may limit student eligibility for government or student loans, and provisional accreditation could indicate weak management oversight leading to enrollment declines; Independent rankings and assessments that we believe enhance a strong external reputation and/or perceived prestige; Strong student quality, as measured by standardized test scores that are typically 20% above national averages. This is indicative of flexibility as the university can relax admissions standards during periods of difficulty. Metrics used to measure student quality may vary from one country to another but must be nationally recognized and publicly available; Graduation rates: Graduation rates measure institutional accountability in educating students on time. Standards vary by program and internationally, but graduation rates are typically 20 percentage points above the national level. For example, if the national six-year graduation rate is 50%, a university must be above 70% to qualify for this demand factor; Tuition discounting: Stable or declining compared to peers and historical performance as measured by total financial aid costs divided by gross tuition and fees. This measures the ability of an institution to address pricing and affordability concerns while recognizing the effect of varied tuition strategies; Low level of deferred maintenance (with an average age of plant* of 10 years or less). Limited deferred maintenance indicates that facilities are more likely to attract and retain high-quality students; Strong fundraising capacity relative to peers illustrates an institution's ability to raise significant financial support as needed and provide flexibility as it lessens the reliance on tuition. High level of sponsored research, ranking nationally in institutions receiving sponsored research. 72. Table 5 details the market position and demand assessment for private universities and table 6 details the assessment for public universities. The final assessment for market position and demand is an equally weighted average of the four sub-factors in each table. To the extent that related demand data is not available for some universities because it is not feasible to calculate due to type of institution or country specificities, then we will equally weigh the remaining sub-factors to arrive at the final market position and demand

assessment. However, only one sub-factor may be excluded from either table 5 or 6. If the sub-assessment information is missing because the school chose not to provide it, we assume an assessment of '6' for that sub-factor.

73. The anchor assessments in tables 5 and 6 can be adjusted up or down based on the following positive and negative qualifiers. Each qualifier counts for half a point, with a cumulative net effect of all qualifiers on the anchor limited to two points.

74. Positive qualifiers used in tables 5 and 6 are: University is a very large, monopolistic provider with a key market position on a national or regional basis. An example could include a university which is essentially the only institution in its country, state, or region such as the only provider of medicine, law, or other professional programs; Full-time equivalent enrollment trends are positive, characterized by growth of greater than 15% cumulatively over the past five years and expectations are that growth will continue. This does not include institutions where growth is dependent on cyclical, nontraditional programs. Geographically diversified student body. The institution attracts a significant portion of students from outside its country, state, or province; and Large full-time equivalent enrollment (applies to private universities [table 5] only). Full-time enrollment has been greater than 25,000 or more than 30% are graduate students for each of the last three years.

75. Negative qualifiers used in tables 5 and 6 are: Full-time equivalent enrollment trends are negative, characterized by declines of greater than 3% per year for two or more consecutive years, and projections of the trend continuing; Trend of declining (for the past three years) or volatile (greater than 10% swings in three of the past five years) number of applications for admissions, or admissions data are incomplete in any of the last three years; Very small full-time equivalent enrollment of less than 1400, indicating limited program offerings and vulnerability to shifts in demand (applies to private universities only); and Limited (less than five years) demand and enrollment information available.

Table 5 Assessing Market Position And Demand For Private Universities

ANCHOR ASSESSMENT MEASURE	1	2	3	4	5	6
Selectivity Rate*	<20%	20%-40%	40%-65%	65%-80%	80%-95%	>95%
Matriculation*	>45%	30%-45%	20%-30%	15%-20%	10%-15%	<10%
First Year Retention Rate*	>97%	92%-97%	80%-92%	70%-80%	60%-70%	<60%
Other Demand Factors (paragraph 71)	>7	5-7	3-4	2	1	0

QUALITATIVE FACTORS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT

The university is a very large, monopolistic provider with a key market position on a national or regional basis. Positive full-time equivalent enrollment trends. Geographically diversified student body. The institution attracts 50% or more of its students from outside its country, state, and province. Large full-time equivalent enrollment. Decreasing or volatile number of applicants or incomplete admission data. Negative full-time equivalent enrollment trends. Limited full-time equivalent enrollment. Limited enrollment and demand information. If data is uniformly unavailable within a country to assess one anchor sub-assessment, that sub-assessment will not be included in the final market position and demand assessment. However, at least three of the four measures in table 5 must be assessed and one must be "Other Demand Factors".

Table 6 Assessing Market Position And Demand For Public Universities

MEASURE	1	2	3	4	5	6
Selectivity Rate*	<50%	50%-75%	75%-85%	85%-95%	>95%	100%
Enrollment (FTE)*	>50,000	20,000–50,000	10,000–20,000	5,000–10,000	1,000-5,000	<1,000
First-year Retention Rate*	>80%	70%-80%	60%-70%	55%-60%	45-55%	<45%
Other Demand Factors (see paragraph 71)	>7	5-7	3-4	2	1	0

QUALITATIVE FACTORS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT

The university is a very large, monopolistic provider with a key market position on a national or regional basis. Positive full-time equivalent enrollment trends. Geographically diversified student body: The institution attracts 30% or more of its students from outside its country, state, province. Decreasing or volatile number of applicants or incomplete admission data. Negative full-time equivalent enrollment trends. Limited enrollment and demand information. *If data is uniformly unavailable within a country to assess one anchor sub-factor, that sub-assessment will not be included in the final market position and demand assessment. However, at least three of the four measures in table 6 must be assessed, and one must be "Other Demand Factors".

4. Management and governance

76. Management and governance assessment is weighed 10% of the overall enterprise profile assessment. Besides assessment in this sub-factor, the effectiveness of management is reflected through our analysis of the financial profile and impact on the university's market position and demand.

77. We use our criteria "Management And Governance Credit Factors For Corporate Entities,"

published Nov. 13, 2012, to assess the university's management and governance risk. In addition, when referring to that criteria, the words "university" or "college" should be substituted for the word "company." 78. The term "management and governance" encompasses the broad range of oversight and direction conducted by a university's board representatives, executives, and functional managers. Their strategic competence, operational effectiveness, and ability to manage risks shape a university's competitiveness in the marketplace and credit profile. If a university has the ability to manage important strategic and operating risks, then its management plays a positive role in determining its operational success. Alternatively, a weak management with a flawed operating strategy or an inability to execute its business plan effectively is likely to substantially weaken a university's credit profile. The assessment of management and governance considers several elements, including (1) strategic positioning, (2) risk and financial management, (3) organizational effectiveness, and (4) governance. 79. Table 7 describes the assessment methodology for higher education institutions. Table 7

Assessment Of Management And Governance ASSESSMENT RELATED FACTORS

Strong (1) At least five of the eight strategic positioning, risk management and organizational effectiveness factor assessments are positive, and none are negative--and no negative assessments for governance.

Satisfactory (2) At least three of the eight strategic positioning, risk management and organizational effectiveness factor assessments are positive, and none are negative--and no negative assessments for governance.

Fair (3) Combinations not covered by other descriptors--or any negative assessment for a governance factor.

Weak (4) Five or more of the eight strategic positioning, risk management and organizational effectiveness factor assessments are negative--or--key aspects of management are potentially harmful to the university's risk profile--or any governance deficiencies are considered severe.

80. As depicted in table 7, management and governance will be assessed no higher than "fair" if we have assessed one or more governance factors as negative, and "weak" if there are deficiencies in governance that we consider severe.

81. Because there are unique governance issues for public and private not-for-profit universities, a neutral governance assessment assumes that the parent board holds all key reserve powers over its subsidiaries, including the ability to remove management, and approve all meaningful financial transactions, consistent with government laws, rules, and regulations.

82. An assessment of negative for any factor indicates that there is a material deficiency in the management or governance of a university. If we view a specific factor or group of factors as potentially harmful to the university's risk profile, we will assess management and governance as "weak." For example, management and governance will be "weak" if a university's management has a history of experiencing unusual items that regularly affect its financial performance to the point of being harmful to its risk profile. Or if we believe the board is not acting in the best interests of the university and is influenced by outside entities including governments and/or religious sponsors.

83. Given the 1 to 4 scale for management and governance per the "Management And Governance Credit Factors For Corporate Entities" criteria, we employ the matrix in table 7 to convert the assessment to a 1 to 6 scale, to be consistent with the design of the higher education criteria. A management and governance assessment of '1' converts to an assessment of '1', a management and governance assessment of '2' converts to an assessment of '2' or '3', a management and governance assessment of '3' converts to an assessment '4' or '5', and a management and governance assessment of '4' converts to an assessment of '6'. In cases where the converted assessment presents two choices, the choice between the two assessments is based on our view of future performance of the factors composing management and governance.

84. We will cap the management and governance assessment at '6', due to the lack of transparency as reflected in: Information is often quite basic and may be communicated with material delays, or Financial reporting is not detailed, and the accounting standards* are consistently unclear. Key information is missing on some government activities.

85. As stated in paragraph 34, a demonstrably weak management team, as measured by a management and governance assessment of '5' or '6', generally lowers the indicative SACP by up to three notches based on the severity of the deficiencies.

D. Financial Profile

86. The financial profile assessment includes four factors: financial management policies, financial performance, financial resources, and debt and contingent liabilities profile. Assessment for each factor ranges from '1' (the strongest) to '6' (the weakest). These criteria calculate the final financial profile assessment through the rounded weighted average of the four factors. The weights, which are the same for public and private universities, are: Financial management

policies, 10% Financial performance, 20% Financial resources, 35%, and Debt and contingent liabilities, 35%. 87. While the weights are the same for both public and private universities, the levels to achieve a particular assessment vary between public and private universities. For instance, as explained in paragraph 102, the anchor assessment for a public university's financial resources assessment is based on a lower level of financial resources than for a private university (see table 10).

88. Our assessment of a university's financial metrics is based on data derived from audited, budgeted, and when available, interim financial statements. In jurisdictions where audited financial statements are not the norm for this sector, we may accept certified or other forms of financial data if we deem the information quality of such statements meet our requirements for analysis, meaning we believe we have a sufficient quantity of information received on a timely basis from a source we consider reliable. In most cases, the ratio calculations are based on the three most recent periods of financial information as defined by three audits or two audits and interim data as long as at least one quarter of interim data (in a format comparable to the audit) is available. If interim-period data are included, the interim data will be weighted at 20%, the previous year's audit at 45%, and the audited period before that at 35%. When interim-period data are not available, or cover less than three months of the fiscal year, three audited periods will typically be used and weighted 45%, 35%, and 20%, respectively from most to least current. Finally, if we believe the future performance will deviate from historic results, we will use pro forma or projected data. 89. Pro forma numbers will be used for those ratios affected by additional debt issuance, or if we believe that historic performance is not be representative of expected future performance. In calculating the ratios, we typically use audited and interim results if we believe they are reflective of future results. If we believe future performance will deviate from historic results, we will use pro forma or projected data. Pro forma or projected data will be used based on our analytical assessment of the higher education environment and may include a review of the university's internal projections or pro forma expectations. Examples of such instances are when a university has a potentially large debt issuance, pending liability, likely decline in state appropriations or plans to draw down internal reserves. 90. Financial reporting, practices, and results can vary from year to year, and across states or countries. S&P; Global Ratings often makes analytic adjustments to data in order to better align the data with our view of the ongoing operational reality of a particular university, and to improve the comparability of the financial results across institutions. Our analysts may also employ adjustments to portray what we view as a more accurate depiction of recurring activity. Certain data adjustments are fairly standard, such as the smoothing of nonrecurring major capital projects that distort a particular year's operating result or adjusting for other nonrecurring revenue and expenditures, where we would typically subtract large one-time revenue receipts or expenditures from revenues and expenditures. 91. When assessing components of the financial profile, if the assessment falls at or near a cut-off or midpoint, we may give the better assessment if trends are improving or believe that future performance is likely to improve. Conversely, we may give a weaker assessment if trends are deteriorating or we believe future performance will be weaker. 1. Financial management policies 92. The financial management policies assessment measures how the quality of a public or private university's financial management policies and practices may affect its financial profile, including its willingness and ability to service its debt over time. The analysis of financial policies includes five main areas: Transparency and disclosure policies; Reserve and liquidity policies; Investment management policies; Long-term planning policies; and Debt management policies. 93. Table 8 details the attributes of each component associated with financial policies assessments of '1', '3', and '5'. A university does not need to display all of the attributes associated with a given assessment, but should display a preponderance. An assessment of '2' results from a roughly equal mix of attributes in the '1' and '3' categories, while an assessment of '4' results from a roughly equal mix of attributes in the '3' and '5' categories. The final financial policies assessment results from the average of the five factors, with each factor receiving equal weight. An assessment of '6' results from extremely weak financial policies or a lack of transparency or credit culture such that all or most of the above descriptors are weaker than an assessment of '5'. Table 8

Assessment Of Financial Policies ASSESSMENT DEFINITIONS

Elements	1	2	3	4	5
Transparency and disclosure policies					
Timely and detailed financial reports, possibly regulated by law, on all operating segments exist and are published several times a year. Reports use accrual-based accounting concepts and include both consolidated and segment-level reporting if					

applicable. No material audit findings or qualifications exist. The effective and integrated use of accounting and reporting software provides data as needed on short notice for information and control purposes. Roughly an equal mix of attributes in categories 1 and 3. Published reports are produced once a year. Both accrual and cash-based elements may exist. The report is independently audited, and only minor qualifications exist. Data for reporting and control analysis exists periodically, but requires significant resources to generate. Roughly an equal mix of attributes in categories 3 and 5. Financial reporting is basic and incomplete. It may be communicated with material delays. Accounting standards are limited or unclear. An audit does not exist or has significant findings. Reserve and liquidity policies A well-defined, formal operating reserve and liquidity policy exists. The policy links reserve levels to cash flow needs. Management has historically adhered to the policy and is expected to continue to do so. Cash and debt management functions are centralized and integrated. Roughly an equal mix of attributes in categories 1 and 3. A reserve policy exists, but it may be less formal or the level has less connection to the university's unique characteristics. The university has historically adhered to the policy. Cash management is less centralized and may not be integrated with debt management. Roughly an equal mix of attributes in categories 3 and 5. No reserve or liquidity policies exist, or if they do, they are not followed. Cash management is highly decentralized. Investment management policies There is a well-defined long-term investment policy with asset allocation targets that are appropriate to the university's liabilities, investment office sophistication, and potential capital needs. Actual accomplishments against declared investment policies are followed up consistently. Roughly an equal mix of attributes in categories 1 and 3. There is a formal investment policy; however, the asset allocation targets are aggressive or concentrated such that there is increased risk, or there is an informal investment policy. Roughly an equal mix of attributes in categories 3 and 5. There is no investment policy. If there is one, the policy is more aggressive than that of peer universities, and there is some significant concentration in the asset allocation. Long-term planning policies Multiyear financial and capital plans exist where future issues are identified along with possible solutions. Well-documented and realistic assumptions support the plans, and the plans are used for drawing up budgets to support a strong commitment to financial discipline. Targets are included in the budget and adhered to consistently. Roughly an equal mix of attributes in categories 1 and 3. Multiyear projections are done only informally that lack detail on assumptions and implications. Some assumptions may be optimistic but are recognized as such. Roughly an equal mix of attributes in categories 3 and 5. There is an absence of medium-term financial planning, reflecting a short-term approach. The financial strategy is aggressive and based on unrealistic assumptions without clear financial benchmarks. Debt management policies A debt management policy with well-prescribed debt limits exists. The policy dictates that long-term debt is used only for capital expenditures. The policy is detailed, actively monitored, and risk-averse. If derivatives are allowed, detailed policies prudently limit their uses. Roughly an equal mix of attributes in categories 1 and 3. A basic policy exists and includes provisions that long-term debt be used for capital expenditures and refinancing of long-term borrowings. Derivatives are only used for hedging purposes. Roughly an equal mix of attributes in categories 3 and 5. No effective policies exist. The university uses long-term debt to cover liquidity needs and regularly breaches debt limits. Debt management is aggressive, or derivatives are used for speculative purposes. An assessment of '6' results from extremely weak financial policies or a lack of transparency or credit culture such that all or most of the above descriptors are weaker than an assessment of '5' 2. Financial performance 94. The financial performance assessment measures how a university's current and future operating earnings could affect its debt servicing capabilities. The initial financial performance assessment is based on the operating margin*. 95. The operating margin measures to what extent the enterprise produces enough income, or surplus revenue, to cover its operating expenses and long-term needs, including debt service, depreciation expense, and plant renewal. The universities in the scope of these criteria exist to fill a public purpose, or social mission, rather than to maximize profit. Hence, the financial performance levels in table 9 were calibrated with an expectation of only modest returns, yet with a view that some level of profitability over time is critical to the university's ability to meet its obligations. 96. There are two different thresholds for the financial performance assessment for public and private universities listed in table 9. This reflects the independent operations of private universities without limitations of a supporting government. This is

contrasted with public universities where their operations could be limited by a regulatory and/or political environment that could limit a public university's ability to grow revenues and therefore affect operating margins. This is mitigated by the government operating subsidy that helps operating cash flow and provides a generally stable source of revenue to the public universities. 97. The calculation of operating margin may differ among countries. For example: U.S. public university accounting standards typically show consolidated operating results; U.S. private university accounting standards typically show both unrestricted and restricted operating results (unrestricted results are adjusted to calculate net operating income*); see the glossary for calculation of financial performance. 98. The anchor can be adjusted up or down by up to two points, based on the net effect of the qualitative factors detailed in paragraphs 99-100 and in table 9. Each qualitative factor counts for one point of adjustment. 99. Positive qualifiers to the anchor are: Significant financial flexibility (on revenue or expenditure side, or both). Examples are: the university has the ability to raise revenues such as tuition without undermining demand or has an endowment spending rate that is less than 3%; or the university has the demonstrated ability and willingness to reduce expenses without affecting demand; or it has a flexible cost structure such as a low tenure rate or a large percentage of part-time faculty. A diversified revenue base: Multiple revenue sources (such that no single source is greater than 30% of total for public universities and 40% for privates) tend to mitigate fluctuations and shortfalls in an individual revenue stream. Government support: This positive adjustment is applied only to public universities which have a stable source and material (over 30% of operating revenues) ongoing support in form of state appropriations or other government transfers, which helps to limit cash flow volatility. If the final SACP results in being rated above the supporting government, then the adjustment is not made. 100. Negative qualifiers to the anchor are: Limited operating flexibility: An inability to raise operating revenues without undermining demand; or exceeding government limits; or endowment spending draw exceeds 6% or is, in our view, unsustainable. For example, the university does not have tuition flexibility and cannot raise it. On the expense side, it has a very tenured faculty, making expenses difficult to adjust. Concentration of revenues: One source of nonstudent-derived revenue comprises more than 40% of revenues. For purposes of this calculation, tuition, fees, and auxiliaries, are the most common student-derived revenue. If 80% or more of private university revenues or 70% of public university revenues are student-derived, that also indicates a concentration. Table 9 Assessing The Financial Performance For Public And Private Universities ANCHOR ASSESSMENT Measure 1 2 3 4 5 6

Measure	1	2	3	4	5	6
Operating margin for public universities	>5%	1% to 5%	-2% to 1%	-5% to -2%	-6% to -5%	<-6%
Operating margin for private universities	>5%	3% to 5%	0% to 3%	-3% to 0%	-5% to -3%	<-5%

QUALITATIVE FACTORS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT (SEE PARAGRAPH 99) QUALITATIVE FACTORS NEGATIVELY AFFECTING THE ANCHOR ASSESSMENT (SEE PARAGRAPH 100) Significant financial flexibility Revenue diversity For public universities: stable and material government support that represents more than 30% of revenue. If the final SACP results in being rated above the supporting government, then the adjustment is not made. Limited financial flexibility Concentration of revenue The final financial performance assessment equals the anchor assessment adjusted up or down based on the net effect of the existence of qualitative factors detailed above. Each qualitative adjustment counts for one point and can raise or lower the assessment by no more than two points. 3. Financial resources 101. The third factor comprising the financial profile assessment is financial resources. Financial resource metrics measure overall leverage and the institution's available resources to assist it in times of financial stress. 102. While the metrics (ratios) for assessing the financial resources are the same for both public and private universities, the terms for financial resources are different due to different accounting systems for public and private universities and the levels required to achieve a certain anchor assessment are different. For example, to achieve the initial financial resources assessment of '3', the private university should have the ratio of available resources to operating expenses in the range of 100%-300%, while the public university should have available resources to operating expenses between 15% and 25% to achieve to the same assessment. The anchor assessment metrics are lower for public universities than for a private university (see table 10) because public universities typically receive a government operating subsidy that helps to improve operating cash flow, provide revenue diversity, and potentially reduce cash flow volatility if the government disburses the subsidy throughout the year. At the same time, the

comparatively higher thresholds required to achieve the same anchor assessment for private universities reflect their independent operations with no or limited government support to cushion the changes in economic and demand cycles. 103. The anchor assessment(s) being measured in table 10 reflect the ability to fund obligations from unrestricted funds on hand. This is measured by the available resources* of a university relative to its expenses. The specific measure used to determine the anchor assessment depends on the common accounting practices in the country the university is domiciled. Universities are subject to a highly variable cash flow cycle as the bulk of their revenue (tuition) is typically only collected twice a year. The assessment is performed at the lowest point of the year, which is typically, June 30, the traditional fiscal year-end for colleges and universities. 104. The financial resources initial assessment can be adjusted up or down based on the net effect of the existence of qualitative factors detailed in paragraphs 105-106) and table 10 . Each qualitative adjustment counts for one point and can raise or lower the assessment by up to two points. 105. The financial resources initial assessment may be positively adjusted in cases where total cash and investments equal at least 2x the total amount of financial resources. Cash and investments is an asset calculation while financial resources measures equity. A cash and investment assessment double the amount of financial resources suggests the universities' available resources may not be as restricted as the more-conservative financial resources measure indicate. 106. Conversely, the financial resources assessment may be negatively adjusted in instances where cash and investments is less than the financial resources measure. Though rare, this typically indicates a significant amount of outstanding receivables, very low working capital, or a large amount of uncollected pledges that mean available resources are less than is indicated by the financial resources calculation. 107. If available resources divided by debt service is less than 1x, and we view this as a liquidity weakness that cannot be rectified, then the SACP would likely be no higher than the "b" category. This ratio is used as a measure of liquidity in that it combines all the financial resources in the current year available to pay one year of debt service and any other contingent liabilities detailed in paragraph 115 due in the next 12 months.

Table 10 Assessing Financial Resources For Public And Private Universities

	1	2	3	4	5	6
Available resources to annual operating expenses for public universities	>35%	25%-35%	15%-25%	10%-15%	3%-10%	<3%
Available resources to annual operating expenses* for private universities	>450%	300%-450%	100%-300%	40%-100%	30%-40%	<30%

QUALITATIVE FACTORS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT Total cash and investments are 2x or more available resources. Total cash and investments are less than available resources. Debt and contingent liabilities 108. The debt and contingent liabilities assessment measures the extent to which current, proposed, contingent, and off-balance-sheet liabilities may affect a university's debt servicing capability. The initial debt and contingent liabilities assessment for private and public universities combines two assessments (both equally weighted) in tables 11 and 12: Maximum annual debt service (MADS)* as a percentage of operating expenses; and Available resources relative to total debt. 109. MADS as a percent of operating expenses uses the same thresholds for both public and private universities. MADS is used as a more conservative and more forward-looking measure than annual debt service. The ratio indicates the university's flexibility to service its future debt in times of diminished financial performance. 110. Some issuers commonly use debt structures that include large maturities (bullets). In this case, we smooth debt service by dividing the debt service related to those issuances over the life of the debt by no more than 30 years (which we consider to be the average length of long-term debt) and include the smoothed annual amount in the calculation of total debt service to determine MADS. However, the bullet maturity, and related need to refinance or pay off at maturity, will be factored into contingent liabilities* in accordance with our definition in the glossary. 111. The second ratio, available resources* relative to debt, measures all of the available resources a university has in order to pay all of its debt. This ratio is used to determine how heavily leveraged the university is. Thresholds for public and private universities are different. The thresholds are higher for private universities to reflect their more-volatile balance sheets, as they operate independent without government support to cushion economic and/or demand cycles. Conversely, the lower thresholds for public universities reflect the presence of government-sponsored capital grants, which have the effect of reducing potential debt. 112. The debt and contingent liabilities initial assessment can be adjusted up or down based on the net effect of the

existence of qualitative factors detailed in paragraphs 113-114 and tables 11 and 12. Each qualitative adjustment counts for one point. The cumulative effect of adjustments will generally be limited to two points. 113. The positive qualifiers are: A third party has a long track record of providing support, and has provided a reliable commitment to making debt service payments, and that debt service repayment represents a significant proportion of total debt (20% or more). Some examples of third parties are supporting government(s), donors, and/or foundations. Overall rapid amortization, with more than 65% of debt coming due in 10 years or less. 114. The negative qualifiers are: An aggressive debt structure, with 50% total debt or more exposure to currency, interest-rate, acceleration, remarketing risks, or bullet maturities without a credible refinancing plan. Unfunded or unaddressed contingent liabilities. Contingent liabilities represent exposures that are not yet an actual obligation, but could be so upon the occurrence of other events. These are either triggers within a loan document or the occurrence of events that are not expected to be addressed adequately or in a timely manner. 115. Some examples of contingent liabilities or actual liabilities that may accelerate are: Accelerations and tenders: A variety of debt instruments have features, such as mandatory tenders or acceleration, that allow an investor or creditor to demand payment from the obligor in advance of the standard payment dates set out in debt documents. The demand feature may be at the sole discretion of the investor, or it may be triggered by certain events. The time frame afforded the university to respond to these events can vary significantly. We evaluate the acceleration, tender, and liquidity risk under the criteria "Contingent Liquidity Risks," published March 5, 2012. Some institutions provide their own liquidity for this type of debt (see our criteria, "Commercial Paper, VRDO, And Self-Liquidity," published July 3, 2007). Off-balance-sheet debt: Off-balance-sheet debt is a financing option used by many universities, typically public universities in the U.S. These criteria focus on two elements in determining whether to include such obligations in tables 11 or 12--economic interest and control. Economic interest could be demonstrated by a university receiving cash flow from a particular project (such as from a ground lease or net project income); or conversely providing cash to support a project; or a project that is critical to the institution's mission (such as housing, athletic facilities, a wellness center, etc.) and located on the university's campus. Control is a measure of the project's linkage to a university, and the greater the control the more likely we will view the related project debt as university debt. Examples could include direct university management of a project, a university's ability to direct project rates and charges, compel management actions, or govern a project or facility, university ownership of the project at the end of any related debt or contract obligation, or the strategic location of the project. S&P; Global Ratings also incorporates other financial liabilities in its anchor assessments for financial resources relative to debt (see tables 11 and 12). We typically include short-term debt outstanding at year-end; capital leases; and debt obligations of affiliates and wholly owned subsidiaries that is not already on the institution's balance sheet. Operating leases are typically not counted as debt. Pensions and other postemployment benefits (OPEB): The anchor score is negatively adjusted for those universities that have significant exposure to unfunded pension or OPEB liabilities that pressure the budget. If there is not a specific and credible plan to address this burden, the score worsens by two points. 116. When assessing the pension and OPEB burden for a potential negative adjustment, the primary areas of focus will be: The funded status* of the pension plan(s) a university participates in or sponsors. If the ratio(s) are less than 60%, they will receive further review. We also consider the magnitude of the unfunded obligation in tandem with the funded ratio(s) when assessing the potential for stress. The determination of required contributions and the contributions made to the plans a university participates in or sponsors. The type of funding policy and whether contributions are actuarially based reflect funding discipline. In addition, the degree to which a university's contribution is actuarially determined versus a statutorily required or other alternate method of determining annual contributions, but have not been funded at the required level for more than three years is an indication of either short-term cash flow issues or management's willingness to defer difficult decisions. The OPEB and pension costs exceed 10% of the university's operating expense base and the university has limited flexibility to change or amend these benefits. The responsibility for employer pension and OPEB contributions are assumed by the related government for many public universities. In these cases, the public university does not have control over the level of funding or the annual contributions made on its behalf. In these cases, we consider the health of the related government, the funding levels of the respective pension and OPEB programs,

and our view of the likelihood that the related government will continue to retain the responsibility for these obligations. Given that the university has little control over these factors, we will apply a negative adjustment of one point if we believe there is a high likelihood that these obligations will shift to the university's balance sheet, or result in increased expenses, or a become cash drain due to higher contributions. The consequence of such a shift is an unaddressed exposure that could lead to an acceleration of payment in the medium term that pressures the budget significantly.

Table 11 Debt And Contingent Liabilities Assessment For Private Universities

ANCHOR ASSESSMENT	1	2	3	4	5	6	MADS
burden*	<2%	2% to 4%	4% to 6%	6% to 8%	8 % to 10%	>10%	Available resources to total debt
	> 4x	2x	– 4x	1x	– 2x	0.4x	– 1x
	0.2x	– 0.4x	<0.2x	QUALITATIVE FACTORS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT			
	QUALITATIVE FACTORS NEGATIVELY AFFECTING THE ANCHOR ASSESSMENT						
	Sizable and reliable commitment from a third party to making debt service payments						
	Overall rapid annual debt amortization, with more than 65% coming due within 10 years. Aggressive debt structure. Unfunded/unaddressed contingent liability (see paragraph 115).						

Table 12 Debt And Contingent Liabilities Assessment For Public Universities

ANCHOR ASSESSMENT	1	2	3	4	5	6	MADS
burden	<2%	2% to 4%	4% to 6%	6% to 8%	8% to 10%	>10%	Available resources to debt
	>2x	1x-2x	0.7x-1.0x	0.5x-0.7x	0.2x-0.5x	<0.2x	QUALITATIVE ADJUSTMENTS POSITIVELY AFFECTING THE ANCHOR ASSESSMENT
	QUALITATIVE ADJUSTMENTS NEGATIVE AFFECTING THE ANCHOR ASSESSMENT						
	Sizable and reliable commitment from a third party to making debt service payments						
	Overall rapid annual debt amortization, with more than 65% coming due within 10 years. Aggressive debt structure. Unfunded/unaddressed contingent liability (see paragraph 115).						

IV. APPENDIX 1: GLOSSARY

*Available resources: The ratio is used to measure balance sheet resources. Though the calculation of available resources varies by country and accounting standards and could include different line items, we believe it produces reasonable outcomes. In the U.S., unrestricted net assets (UNA) is used to measure available resources for public universities while expendable resources (ER) is used for privates. For non-U.S. universities, free cash is used. For example: U.S. private universities use ER. ER = Unrestricted net assets + temporarily restricted net assets – (net plant and equipment – outstanding debt on the balance sheet). U.S. public universities use UNA. Available resources = Unrestricted net assets + debt service reserves + UNA of any affiliated university foundation + any restricted but available expendable net assets that are available for debt service or operations. Pension or OPEB liabilities, if recorded at the university level, are added to UNA to allow comparability. Universities in Mexico, Canada, Australia, and the U.K. typically use a free cash calculation: Available resources = Unrestricted cash + unrestricted financial investments+ board-designated reserves + debt service reserves + dedicated sinking funds. This may include endowment or outside trusts that are demonstrated to be available to pay debt service or operating expenses for a significant portion of university operations. Free cash excludes funds designated for pensions or OPEBs, any other funds that are legally restricted.

*Accounting standards: In general, public universities follow standards promulgated by the Governmental Accounting Standards Board and private universities follow the Financial Accounting Standards Board. In addition, universities in other countries may follow International Standards, or adopt cash-based accounting presentations. Accounting standards differ by country and some institutions do not prepare financial statements on a full accrual basis. The criteria allow for an adjustment of financial statements to be near generally accepted accounting principles (GAAP) if GAAP basis statements are not available. Table 9 is prepared assuming full accrual accounting, and if depreciation expense is not included in operating expenses, it will be added as an operating expense to enable a consistent evaluation.

*Adjusted net operating income: As accounting treatments can vary greatly in their presentation of an institution's statement of activities and may obscure a university's true annual operating performance, we may include or exclude various items from our calculation of net operating income, resulting in adjusted net operating income. The calculation of adjusted net operating income begins with the line usually labeled "excess (deficiency) of operating revenue over expenses," "change in net assets from operating activities," or "operating Income/(loss)" and is then adjusted to include or exclude the following items, which are sometimes classified as nonoperating items in financial statements: Items typically included in calculation of adjusted net operating income: Annual endowment spending for operations State operating appropriations Investment earnings on working cash funds Gift income Other items determined to be a

regular, consistent, and ongoing part of a university's annual financial performance. Items typically excluded from calculation of adjusted net operating income: Net assets released from restriction for capital Noncash defined-benefit or OPEB accruals Unrealized gains/losses on investments Changes in swap valuation Nonrecurring revenue/expenses Extraordinary items Gains/losses from debt refinancing Asset impairment or other one-time financial events

*Average age of plant: Accumulated depreciation/depreciation expense

*Comprehensive institution: A university that offers a range of undergraduate, graduate, and doctoral degrees, including at least one professional program such as law, business, medicine, pharmacy, veterinary medicine, dentistry, theology, or others.

*Endowment spending draw: A formula that determines a sustainable amount of investment and endowment income that can be budgeted and spent in one year, irrespective of fluctuations in realized and unrealized gains or losses in investments. The formula can vary, but is frequently 5% or less of the market value of investments/endowment, measured over a three- to –five-year average.

*College participation rate: Percentage of all 18- to 24-year-olds enrolled in two-year and four-year colleges or universities.

*Contingent liabilities: These include actual liabilities that could be accelerated such as variable-rate demand bonds, commercial paper, bullet payments, and bonds with mandatory tender dates in five years or less, direct bank debt with acceleration clauses, debt guaranteed for parties outside the university, swap or other termination payments if the current rating is two notches or less from the termination trigger, and other identifiable contingencies.

*Debt burden (%): $(\text{debt service} / \text{total operating revenue}) \times 100$

*Debt service: Principal and interest payments on all direct debt, including long term bonds, capital leases, mortgages, and bank debt. For variable-rate debt, assume a 3.5% interest rate. For draws on lines of credit and commercial paper, assume the actual fixed rate or a 3.5% variable interest rate with principal payments spread over 30 years. Guaranteed debt is included at 100% if the guarantor has made any payments over the past five years. Variable-rate debt swapped to fixed rate should be run at the swap rate. Contingent debt (guarantees, off-balance sheet debt transactions, etc.) may be included per the criteria. These interest rates and assumptions may be evaluated periodically depending on policy rate environment, and rates by country.

*Maximum annual debt service (MADS): The greatest annual debt service. For bullet maturities, payments are smoothed out by dividing the total debt service of that issuance by no more than 30 years (which we consider to be the average length of long-term borrowing) and including the smoothed annual amount in the calculation of total annual debt service to obtain the MADS.

*MADS burden (%): $\text{MADS} / \text{total operating expense} \times 100$

*Funded status of defined-benefit plan (%): $\text{Fair value of pension plan assets} / \text{projected benefit obligation} \times 100$

*Debt service coverage: $\text{Net available for debt service} / \text{debt service}$

*Government support: (Also described as state appropriations). Government support is typically considered to be recurring operating appropriations available for general operations. Operating support is generally considered a subsidy, but not funding for research, student loans, or grants for other services. There are many private universities that regularly provide contracted services, such as sponsored research, to governments. The criteria do not typically consider this type of operating activity to be a subsidy. Internationally, government support systems vary, and in some countries, such as the U.K. and Mexico, some forms of research funding may be considered operating appropriations.

*Matriculation rate: The percentage of students who actually attend classes relative to the number of applications that were formally accepted. This rate typically relates to freshman students, but can also apply to graduate or transfer students. The higher the percentage, the more indication that the university has a strong demand niche and is highly attractive to students. A lower percentage typically indicates strong competition for students and a weaker demand position. Matriculation rates for transfer students are typically stronger than for new freshman as due to some self-selection, and may not be comparable to that for first-time students.

*Net available for debt service: $\text{Net operating income} + \text{depreciation and amortization expenses} + \text{interest expense}$

*Operating income: $\text{Total operating revenue} - \text{total operating expenses}$

*Operating margin (%): $(\text{Adjusted net operating income} / \text{total operating expense}) \times 100$

*Retention rates: Typically defined as the number of new freshman students who return to the university after one academic year. A high percentage, such as 90% or greater, indicates a high-quality student base that can perform academically, as well as an institution that has programs and processes in place to retain students.

*Selectivity rates: The total number of accepted student applications relative to the total number of completed student applications. Selectivity rates typically relate to first-time

freshman students, but can apply to graduate students and transfer students as well. The lower the percentage, typically the more the selective the student demand profile, and the more cushion the institution has to maintain its enrollment. An institution with very high selectivity rates, such as in excess of 80%, typically has much less enrollment flexibility and is vulnerable to declines in applications. However, a consistently weak selectivity rate in conjunction with strong student quality and a unique academic niche (usually related to a university with a religious affiliation) can, in some cases, indicate self-selection in the applicant pool. Some public universities have high selectivity rates because of government rules that require them to accept all or most resident students.

V. REVISIONS AND UPDATES This article was originally published on Jan. 6, 2016. These criteria became effective on Jan. 6, 2016. Changes introduced after original publication: Following our periodic review completed on Jan. 6, 2017, we updated the contact information, updated criteria references, and deleted paragraphs 13 and 14, which were related to the initial publication of our criteria and no longer relevant. We also made some clarifications in the text, most notably in paragraph 55. Following our periodic review completed on Dec. 29, 2017, we more clearly identified throughout the criteria all the terms defined in the glossary. On Feb. 15, 2019, we republished this criteria article to make nonmaterial changes to the contact information. On Feb. 14, 2020, we republished this criteria article to make nonmaterial changes to update criteria references. On Feb. 1, 2021, we republished this criteria article to make nonmaterial changes to update criteria references. On Sept. 24, 2021, we republished this criteria article to make nonmaterial changes to update the contact information.

VI. RELATED PUBLICATIONS Partly Superseded Criteria Higher Education, June 19, 2007 (all sections except "Rating Community College Debt" and "Auxiliary Revenue Bonds And Privatized Dormitories") Related Criteria Sovereign Rating Methodology, Dec. 18, 2017 Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015 General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015 Methodology: Industry Risk, Nov. 19, 2013 Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions, Nov. 19, 2013 Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012 Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012 Contingent Liquidity Risks, March 5, 2012 Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011 Principles Of Credit Ratings, Feb. 16, 2011 Related Guidance Guidance: Sovereign Rating Methodology, Jan. 22, 2019 Related Research 2019 Annual U.S. Public Finance Default And Rating Transition Study, June 11, 2020 2017 Annual U.S. Public Finance Higher Education And Nonprofit Organization Default Study And Rating Transitions, June 26, 2018 Standard & Poor's Assigns Industry Risk Assessments To 38 Nonfinancial Corporate Industries, Nov. 20, 2013 The Time Dimension Of Standard & Poor's Credit Ratings, Sept. 22, 2010