Villanova University, PA
New Issue - Moody's Assigns A1 to Villanova University's (PA) Revenue Bonds; Outlook Stable

Summary Rating Rationale
Moody's Investors Service has assigned an A1 rating to Villanova University’s (PA) proposed Villanova University Revenue Bonds, Series 2016 issued by Delaware County Authority. The bonds have an expected final maturity of 2032. The outlook is stable.

The A1 rating reflects Villanova's established market position as a large, comprehensive university with diverse programs, strong fundraising, and predictable debt structure. It also reflects the university's consistently favorable operations and significantly growing financial reserves. Offsetting credit factors include a heavy dependence on student charges in a highly competitive market, and a recent large increase in debt.

Credit Strengths
» Established market position as a large Catholic comprehensive university with a national reputation and noted intercollegiate athletics
» Strong financial oversight, yielding consistent cash flow generation in the 15% range and three-year (FY 2012-15) average debt service coverage of 3.9 times
» Strong fundraising bolstered by a $600 million comprehensive campaign
» Substantial and growing unrestricted liquidity, with 405 days cash on hand, affording good financial flexibility

Credit Challenges
» Heavy reliance on student charges, representing 81% of total operating revenue, could contribute to operating pressures in the event of softening student demand
» Highly competitive student market, evidenced by constrained net tuition per student growth
» Narrowing of financial reserve cushion relative to debt and operations from recent large debt issuance and expected spending of $100 million

Rating Outlook
The stable outlook reflects expectations that the university will maintain cash flow in the 13-15% range, providing continuously solid debt service coverage. The outlook also incorporates expectations financial leverage will remain stable over the near term, and diminish over time.
Factors that Could Lead to an Upgrade

» Substantial increase in financial resources on an absolute basis and relative to debt and operations

» Greater revenue diversity while maintaining positive operating performance

Factors that Could Lead to a Downgrade

» Deterioration of operating cash flow margins

» Softening student demand or multi-year period of declining net tuition revenue

» Additional debt without compensating increase in revenue and financial resources

Key Indicators

Exhibit 1

VILLANOVA UNIVERSITY, PA

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<tbody>
<tr>
<td>Total FTE Enrollment</td>
<td>9,477</td>
<td>9,381</td>
<td>9,563</td>
<td>9,677</td>
<td>9,827</td>
<td>9,677</td>
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<tr>
<td>Operating Revenue ($000)</td>
<td>391,041</td>
<td>393,096</td>
<td>401,186</td>
<td>411,622</td>
<td>415,985</td>
<td>415,985</td>
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<tr>
<td>Annual Change in Operating Revenue (%)</td>
<td>3.1</td>
<td>0.5</td>
<td>2.1</td>
<td>2.6</td>
<td>1.1</td>
<td>1.1</td>
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<tr>
<td>Total Cash &amp; Investments ($000)</td>
<td>524,532</td>
<td>512,452</td>
<td>576,843</td>
<td>665,976</td>
<td>757,239</td>
<td>757,239</td>
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<tr>
<td>Total Debt ($000)</td>
<td>263,543</td>
<td>189,337</td>
<td>183,033</td>
<td>172,968</td>
<td>164,914</td>
<td>303,914</td>
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<tr>
<td>Spendable Cash &amp; Investments to Total Debt (%)</td>
<td>1.9</td>
<td>1.9</td>
<td>2.2</td>
<td>2.8</td>
<td>3.2</td>
<td>1.7</td>
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<tr>
<td>Spendable Cash &amp; Investments to Operating Expenses (%)</td>
<td>1.1</td>
<td>1.0</td>
<td>1.1</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
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<tr>
<td>Monthly Days Cash on Hand (#)</td>
<td>346</td>
<td>329</td>
<td>352</td>
<td>384</td>
<td>405</td>
<td>405</td>
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<tr>
<td>Operating Cash Flow Margin (%)</td>
<td>17.3</td>
<td>14.8</td>
<td>14.6</td>
<td>15.5</td>
<td>15.2</td>
<td>15.2</td>
</tr>
<tr>
<td>Total Debt to Cash Flow (%)</td>
<td>3.0</td>
<td>3.3</td>
<td>3.1</td>
<td>2.7</td>
<td>2.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Annual Debt Service Coverage (%)</td>
<td>4.0</td>
<td>3.5</td>
<td>3.7</td>
<td>3.9</td>
<td>4.1</td>
<td>4.1</td>
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</table>

Source: Moody's Investors Service

Recent Developments

Villanova's academic profile is further bolstered by the recent change of its “Carnegie Classification” classification to the Doctoral Universities category from the Master’s Colleges and Universities category. The university currently offers three doctoral programs, and is adding a fourth in Theology beginning in fall 2016. Overall, this recognition is favorable and underscores the continued strengthening of the university’s reputation and research profile.

In April 2016, Villanova men’s basketball team won the NCAA national championship. The team’s success is credit positive, enhancing the university’s overall brand recognition and elevating its national profile. The widespread media coverage contributes to increased student demand and greater fundraising. The university reports that the team’s success will likely translate into added student demand for the fall 2017 incoming class.

Detailed Rating Considerations

Market Profile: Solid Reputation as a Catholic University Drives Stability in a Highly Competitive Market

Villanova’s established national reputation, comprehensive program offerings, and Catholic affiliation will support stable student demand. Despite operating in the highly competitive northeast market, enrollment has increased incrementally in recent years, up

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5% from fall 2012 to 9,827 full-time equivalent (FTE) students in fall 2015. While undergraduate demand is stable, the university continues to offset its softening law school demand by leveraging its strong brand to grow enrollment in other graduate programs such as business, nursing, and engineering. Given the relatively low discounting within these graduate programs, maintaining this demand is essential to supporting tuition revenue growth.

Pricing power will be suppressed by the intensely competitive landscape and weak northeastern high school demographics, along with Villanova’s strategy to gradually increase financial aid. Net tuition per student of $27,965 is solid but has remained stagnant over the last five years. While the university seeks to improve the geographic diversity of its student body, the northeastern states will remain the primary source of students over the near to medium term. With overall weak high school demographic trends within the region, growing net tuition per student materially will prove challenging. Favorably, Villanova’s extremely high 98% retention rate reflects its strong ability to attract students of high academic quality.

Operating Performance: Consistently Favorable Operations Supports Very Good Cash Flow and Debt Service Coverage
A culture of fiscal discipline will contribute to ongoing favorable operating margins. Over the last four years, cash flow has remained steady at around 15%, providing ample debt service coverage, resources for capital investment, and financial reserve growth. We expect FY 2016 operating performance to be comparable to FY 2015 as Villanova continues to align revenue and expense growth. Moving forward, expense containment is critical to maintaining strong operating margins given expectations of relatively weak revenue growth. Positively, over the last three years annual expense growth has averaged just 1.5%, demonstrating careful spending oversight.

The university has limited revenue diversity, deriving 81% of FY 2015 operating revenue from student charges. However, with over 30% of enrollment graduate and professional students, Villanova benefits from diversity within tuition revenue. Regardless, this high revenue reliance underscores the importance of sound pricing and financial aid policy to maintaining surplus operations.

Wealth and Liquidity: Growing Wealth and Liquidity Affords Solid Financial Flexibility
Villanova University’s demonstrated history of generating solid financial reserve growth underscores its strong fundraising capabilities and prudent financial management. FY 2015 spendable cash and investments of $527 million increased an exceptional 71% from FY 2010. Future near-term growth will likely be less robust given the university’s plans to use about $100 million of reserves over the next five years for capital projects.

The university’s fundraising prowess is reflected by its success to date in $600 million comprehensive campaign, raising $540 million at FYE 2016, with nearly 60% in cash. The university reports $106 million raised in FY 2016, the third consecutive year of over $100 million in gifts and pledges. With the campaign scheduled to conclude in FY 2018, the university is expected to exceed its goal.

The market value of the university’s endowment portfolio totaled $552 million, with a -5.1% annual return and an annualized five year return of a modest 4.6%, at May 31, 2016, its fiscal year end. The investment allocation is commensurate with similarly sized endowments. Villanova’s investment advisor is Cambridge Associates.

LIQUIDITY
Villanova’s very good unrestricted liquidity provides significant financial flexibility. For FY 2015, the university reported $398 million of unrestricted monthly liquidity, which translates into 405 days cash on hand. With all fixed-rate debt and healthy operations, capital calls are limited to a $37 million unfunded private equity commitment. Additional liquidity support is provided by a $5 million line of credit, which has not been drawn upon.

Leverage: Sufficient Cushion of Financial Reserves to Debt and Operations Despite Recent Large Borrowing
Incorporating the large $139 million debt issuance in 2015, spendable cash and investments cover debt a modest 1.7 times, which affords limited additional debt capacity at the A1 rating. The university’s plans to spend down $100 million in reserves over the next five years will be mitigated by its strong fundraising, investment oversight, and healthy operations. Further, we expect the 2015 student housing project will be at least revenue neutral once open, with cash flow offsetting the additional debt service burden.

The college continues to address its relatively high age of plant (16 years) through capital spending, which has consistently exceeded depreciation. This commitment to capital investment is expected to continue, and is critical to maintaining market appeal. While management reports that there are no additional near-term borrowing plans, future capital plans include a new performing arts center and renovations to the basketball arena, both expected to be funded by donor support.
DEBT STRUCTURE
All debt is fixed-rate, which provides budget predictability. Annual debt service payments peak at $25 million before stepping down following FY 2024.

DEBT-RELATED DERIVATIVES
There are no debt-related derivatives.

PENSIONS AND OPEB
The university has a relatively large $26 million pension and other postretirement benefit (OPEB) liability depressing net assets. However, it has taken recent steps to reduce exposure to post-employment benefits. The defined benefit (DB) pension plan was closed to new employees at the end of FY 1996, and the university recently froze all benefit accruals for active employees. The university offers a defined contribution plan to employees hired since FY 1997 or those that elected to transfer from the DB plan.

Villanova's FY 2015 contributions to the retirement plans and postretirement healthcare plan represent a manageable 4% of total expenses.

Governance and Management: Strong Oversight and Planning a Credit Strength
Villanova's sound financial standing is attributable to management's disciplined fiscal oversight and multi-year planning. Prudent fiscal oversight is demonstrated by the university's consistent operating margins in excess of its 5% target while continuing to invest in programs, salaries, and capital renewal. Overall, management is stable, which will help the university maintain continuity as it embarks on strategic initiatives.

Legal Security
All bonds, including the proposed Series 2016 bonds, are on parity and secured by a lien and security interest in the university's unrestricted revenues. The university also covenants to generate net revenue at least equal to 100% of annual debt service requirements. There are no debt service reserve funds.

Use of Proceeds
Proceeds of the Series 2016 bonds will be used to advance refund the Series 2010 bonds for economic savings, and pay issuance costs.

Obligor Profile
Villanova University was founded in 1842 by the Augustinian Order of the Roman Catholic Church and is located 14 miles west of downtown Philadelphia in the affluent suburb of Radnor Township. A comprehensive university, the university has headcount enrollment of more than 10,700 students across a diverse array of undergraduate and graduate programs.

Methodology
The principal methodology used in this rating was Global Higher Education published in November 2015. Please see the Ratings Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 2

<table>
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<th>Rating</th>
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<tr>
<td>Villanova University Revenue Bonds, Series 2016</td>
<td>A1</td>
</tr>
<tr>
<td>Rating Type</td>
<td>Underlying LT</td>
</tr>
<tr>
<td>Sale Amount</td>
<td>$45,205,000</td>
</tr>
<tr>
<td>Expected Sale Date</td>
<td>08/16/2016</td>
</tr>
<tr>
<td>Rating Description</td>
<td>Revenue: 501c3 Secured General Obligation</td>
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Source: Moody's Investors Service
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Contacts
Christopher Collins 212-553-7124
Associate Analyst christopher.collins2@moodys.com

CLIENT SERVICES
Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454