Duquesne University of the Holy Spirit, PA

Update to credit analysis

Summary
Duquesne University’s (A2 stable) very good credit quality is supported by its niche position as an urban, Catholic university with broad undergraduate and graduate programs. Despite a highly competitive environment and weak regional high school demographics, enrollment will remain generally stable. University operations are consistently favorable, providing for solid debt service coverage and excess cash flow. While financial reserve growth has lagged similarly rated peers in recent years, absolute wealth remains sizeable and provides a good cushion relative to debt. Moving forward, we expect financial reserve growth to accelerate due to retained cash flow and improving fundraising. However, a high reliance on net student revenues, combined with the aforementioned market pressures, underscore the importance of meeting enrollment and net tuition revenue targets.

Credit strengths
» Consistently favorable operations providing for solid debt service coverage
» Niche, Catholic identity with comprehensive program offerings and an urban location in Pittsburgh, Pennsylvania
» Very good strategic positioning supported by multi-year planning, regular capital investment, and overall enrollment stability
» Predictable, entirely fixed rate debt structure with relatively level annual debt service

Credit challenges
» Highly competitive core market and relatively weak regional high school demographic trends
» Limited revenue diversity, with about 88% of total revenues deriving from student charges
» Modest fundraising profile, with average gifts per student of $1,422, which represents about one-third of the A-rated private university median

Rating outlook
The stable outlook reflects our expectations of continued favorable operating performance, with cash flows in the 12-15% range. It also reflects our expectations of generally steady enrollment, stable liquidity, and manageable leverage.
Factors that could lead to an upgrade

» Sizeable growth in financial reserves outpacing peers and providing a stronger cushion relative to debt and operations

Factors that could lead to a downgrade

» Failure to meet enrollment targets, resulting in a deterioration of operating performance
» Sustained reduction in unrestricted monthly liquidity
» Material debt issuance beyond current financing absent commensurate growth in financial reserves

Key indicators

Exhibit 1

DUQUESNE UNIVERSITY OF THE HOLY SPIRIT, PA

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2017 pro forma</th>
</tr>
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<tbody>
<tr>
<td>Total FTE Enrollment</td>
<td>9,330</td>
<td>9,098</td>
<td>8,876</td>
<td>8,895</td>
<td>8,882</td>
<td>8,882</td>
</tr>
<tr>
<td>Operating Revenue ($000)</td>
<td>269,685</td>
<td>280,050</td>
<td>284,954</td>
<td>287,112</td>
<td>284,763</td>
<td>284,763</td>
</tr>
<tr>
<td>Annual Change in Operating Revenue (%)</td>
<td>2.8</td>
<td>3.8</td>
<td>1.8</td>
<td>0.8</td>
<td>-0.8</td>
<td>-0.8</td>
</tr>
<tr>
<td>Total Cash &amp; Investments ($000)</td>
<td>286,462</td>
<td>342,212</td>
<td>324,200</td>
<td>311,414</td>
<td>336,703</td>
<td>336,703</td>
</tr>
<tr>
<td>Total Debt ($000)</td>
<td>196,870</td>
<td>165,212</td>
<td>156,372</td>
<td>149,645</td>
<td>142,170</td>
<td>160,055</td>
</tr>
<tr>
<td>Spendable Cash &amp; Investments to Total Debt (x)</td>
<td>1.0</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Spendable Cash &amp; Investments to Operating Expenses (x)</td>
<td>0.8</td>
<td>1.0</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Monthly Days Cash on Hand</td>
<td>255</td>
<td>301</td>
<td>252</td>
<td>243</td>
<td>238</td>
<td>238</td>
</tr>
<tr>
<td>Operating Cash Flow Margin (%)</td>
<td>14.8</td>
<td>15.9</td>
<td>15.1</td>
<td>15.3</td>
<td>12.4</td>
<td>12.4</td>
</tr>
<tr>
<td>Total Debt to Cash Flow (x)</td>
<td>5.0</td>
<td>3.7</td>
<td>3.6</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Annual Debt Service Coverage (x)</td>
<td>2.9</td>
<td>3.6</td>
<td>2.9</td>
<td>3.0</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

2017 pro forma incorporates anticipated 2018 bonds
Source: Moody's Investors Service

Profile

Duquesne University of the Holy Spirit is a private, urban Catholic university located in Pittsburgh, PA. Originally established in 1878, the university now offers a broad menu of undergraduate and graduate programs. Duquesne serves over 9,000 students and had total operating revenues of approximately $285 million.

Detailed credit considerations

Market position: urban, Catholic university with broad undergraduate and graduate programs and relatively steady enrollment

Duquesne’s niche Catholic identity, urban location, and comprehensive programs will support generally stable enrollment. In fall 2017, the university enrolled 8,882 full-time equivalent students, which includes the largest incoming freshman class size in its history (1,563 students). However, weak regional high school demographics and heightened competition from both public and private universities continue to add competitive pressures. Favorably, the university regularly evaluates its program offerings and makes market-driven adjustments accordingly. In recent years, underperforming programs have been discontinued. In fall 2018, the university is introducing an international securities studies major along with masters programs in biomedical engineering, higher education administration, and supply chain management.

While competitive pressures persist, the university maintains additional pricing power, with competitive net tuition per student of $23,318 relative to private university peers. This is important to the university’s longer term credit quality because a high 88% of

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revenues derive from student charges. Over the last five years, average annual net tuition per student grew a solid 3%, and discounting rose only modestly. Heading into fall 2018, the university has a freshman enrollment target of 1,517, which it anticipates reaching based on current deposits.

**Operating performance: consistently favorable operating performance indicative of sound financial management**

Despite a constrained revenue environment, a continued focus on expense management will contribute to ongoing operating stability. In fiscal 2017, the university generated a 12% cash flow margin, which provided good debt service coverage of 2.5x. Based on preliminary university data, we expect fiscal 2018 operations to be moderately stronger relative to fiscal 2017.

While revenue growth will remain subdued due to competitive pressures, the university’s relatively flexible expense base will help maintain surplus operations. Furthermore, management demonstrates a willingness to implement measures that generate sustained cost savings, including early retirement incentives, targeted departmental expense reductions, and debt refinancings. Relative to similarly rated peers, operations are lean, with educational expenses per student of $25,876, lower than the A-rated private university median of $32,668.

**Wealth and liquidity: sizeable absolute wealth and good liquidity**

At the A2 rating, Duquesne’s has sizeable absolute wealth with $337 million total cash and investments. However, the cushion of spendable cash and investment relative to operating expenses is a modest 0.8x. Over the last five years, spendable cash and investments grew just 13%, which lags similarly rated peers. During this period, growth was suppressed by investment volatility, and university investments in capital and other strategic priorities. However, in upcoming years, we expect an acceleration of financial reserve growth driven by retained cash flow and an increase in fundraising. The university is investing in bolstering its advancement infrastructure to improve upon its three-year average gifts per student of $1,422, which is modest relative to the A-rated private university median of $4,590.

**Liquidity**

Duquesne will maintain a favorable liquidity position, particularly given its minimal exposure to potential capital calls. In fiscal 2017, unrestricted monthly liquidity of $167 million provided 238 monthly days cash on hand.

**Leverage: manageable debt relative to financial reserves and operations**

Debt will remain manageable relative to financial reserves and operations. Spendable cash and investments provide a solid 1.4x cushion relative to pro forma debt. Favorable operations will continue to provide for strong debt affordability, with pro forma debt to cash flow a solid 4.5x. Beyond the 2018 bonds, future near-term debt plans include approximately $30 million in 2020. With steady pay down of existing debt, regular financial reserve growth, and favorable operations, Duquesne has additional debt capacity at the rating level.

A regular commitment to infrastructure spending helps retain market appeal and limits deferred maintenance. Over the last five years, capital spending averaged 1.2x depreciation. During this period, purchases of capital or property, plant, and equipment totaled approximately $128 million.

**Debt structure**

Duquesne employs a conservative, entirely fixed-rate debt structure with relatively level annual debt service through the 2034 final maturity. This provides for predictable fixed costs to incorporate into university budgets.

**Legal security**

All of the university’s rated debt is a general obligation of the university, secured by student tuition and fees. There is no debt service reserve fund.

**Debt-related derivatives**

There are no debt-related derivatives.

**Pensions and OPEB**

Exposure to post-employment benefits is modest. The university does not offer a defined benefit pension plan. Rather, eligible employees participate in one of two defined contribution plans. For fiscal 2017, the university’s expenses for the defined contribution plans amounted to $8 million, or just 3% of total operating expenses.
Certain university retirees are eligible for postretirement health benefits (OPEB) which are funded on a pay-as-you-go basis. In fiscal 2017, the OPEB related liability was about $8 million and has not increased materially over the last five years.

**Governance and management: planning focused management team enhances the university’s competitive position**

Duquesne’s strong executive leadership team supports its very good strategic position. Operations are regularly favorable, which underscore sound fiscal management and conservative financial plans. To enhance its competitive position, the university regularly evaluates its programs, forges strategic partnerships, and adjusts recruitment and outreach strategies. Capital investment is regular using a diverse source of funding including capital markets, internal resources, and philanthropic support.
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