Barnes and Noble's Education (BNED)

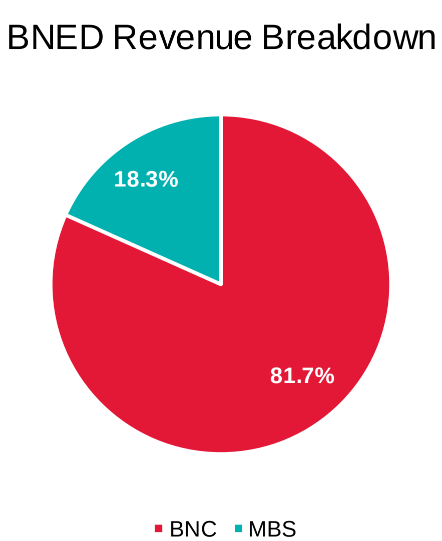
INVESTMENT REVIEW

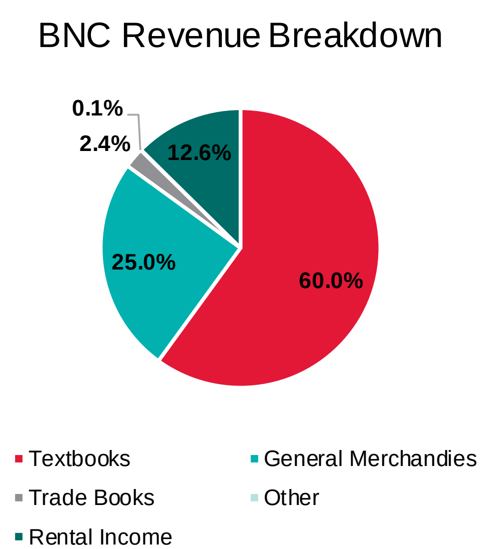
JUNE, 2017

MASSIF CAPITAL, LLC | New York, NY

Investment Thesis: Niche retailer, operating in a fragmented market with favorable industry dynamics. Management is focused on growth via continued industry consolidation of core business and has positioned the company to take advantage of opportunities in the changing education technology landscape.

The Existing Business: Barnes and Nobles Education (BNED) is a contract operator of on-campus bookstores for postsecondary educational institutions. The primary revenue driver for the business is selling and renting textbooks, while a secondary revenue driver is the sale of school-branded swag, school supplies and other miscellaneous small items that students need. The primary growth driver for the brick and mortar retailing business is the addition of new campus stores. Because of the need for a relationship with campus administrators to open new stores, and the monopoly like nature of being the single source of educational resources on a given campus, it is not appropriate to compare BNED to other more traditional brick and mortar retailers. This claim will be examined in great detail within the industry section of this write-up.





*Revenue Breakdown and BNED Revenue Breakdown are based on analysts estimates

At the current time, BNED operates 769 physical campus stores via its Barnes and Nobles College (BNC) segment, 712 virtual stores through its MBS Direct segment and supplies new and used textbooks to 3,700 physical bookstores through the firms MBS Wholesale segment.[1] These three operating segments comprise the core of the existing business model and generate most of the firm's revenue, cash flow, and profit. Based on available information the FY2018[2] Revenue

[1] MBSA Direct and MBS Wholesale are the two-primary operating segment of the recently acquired MBS Textbook Exchange. The acquisition of MBS was completed during BNED FY2017. FY2017 financial results for BNED (reported on July 12th, 2017) included MBS results for the period from February 27th, 2017 to April 29th, 2017.

[2] Note that BNED has an odd Fiscal Year due to the school year and is currently in the midst of the 2018 Fiscal Year.

breakdown will look something like the pie charts above, the revenue breakdown for MBS, between MBS Direct and MBS Wholesale is not available.

BNED's brick and mortar business is highly seasonal and synced with the postsecondary school schedule. BNED stores operate under long-term management agreements with college/university administrations. Agreements are typically five years, with renewal options and require that BNED pay schools a percentage of sales for the right to be the sole campus store. Some agreements mandate a minimum yearly payment but more than half of agreements do not have a minimum guaranteed payment. Over the last four years, BNED has renewed 94% of agreements, and grown the physical store footprint from 647 stores in 2012 to 769 in 2017, a CAGR of 3.52%. In FY2017, BNED opened 38 stores with annual sales of $118 million and grew the overall brick and mortar footprint by 18 stores. In FY 2018 BNED management has signed up an additional 23 physical school stores, with an estimated first-year annual sales of $50 million.

MBS Textbook Exchange, which BNED acquired earlier this year for $174.2 million[3] brings significant FCF to BNED, which will likely be used by management to expand the on-campus brick and mortar network further and support Ed-Tech efforts. The MBS business (wholesale textbooks) has generated an average yearly FCF of $61.7 million over the last three years.[4] The business is seasonal in a similar way to BNC but with a slight shift to account for the fact that stocking of inventory occurs before the school year starts.

The acquisition was completed on favorable terms; the $174.2 million price tag implies that the transaction was completed at a P/E of 3.7x and a P/BV of 1.9x. The cash return ratio over the last three years has averaged 20.8%, and the earnings yield has averaged 17%. It is likely the transaction will add more than $50 million in FCF a year to BNED's results. Assuming revenue at MBS continued to fall for the next three years at an average rate of 5.2% (which it has done for the last two years), a 10% discount rate, no terminal growth, and a share count equal to BNED shares outstanding, MBS had a per share valuation of between $5 and $6.5 at the time of purchase. At the current time, BNED is trading within the MBS valuation range.

Within the on-campus store retail niche, BNED is well positioned to grow the BNC footprint as the industry remains highly fragmented, with roughly 50% of all stores considered independent operators (either run by the school or by a third party independent). The two largest contract operators in the industry are BNED and private operator Follett. Going forward the on-campus bookstore industry appears primed for further consolidation as the stressed financials at most college/university campuses encourage campus administrators to outsource non-core services.

[3] The BNED acquisition of MBS Textbook Exchange was financed through cash on hand and existing credit facilities.
[4] FCF calculated as CFO-CapEx, see 05/08/2017 Form 8-K/A for MBS Financials.

BNC - School Funding Needs Drive Growth in Outsourcing

Although BNED is a retail business, it should not be looked at in the same way as either a big box retail chain or most specialty niche retailers. The reason for this is that BNED stores do not serve one customer, they serve two: students and school administrators. Of the two customers, the more important customer by far is the school administrator. The reason for this is that while student decisions drive incremental revenue, school administrators drive contracting decisions.

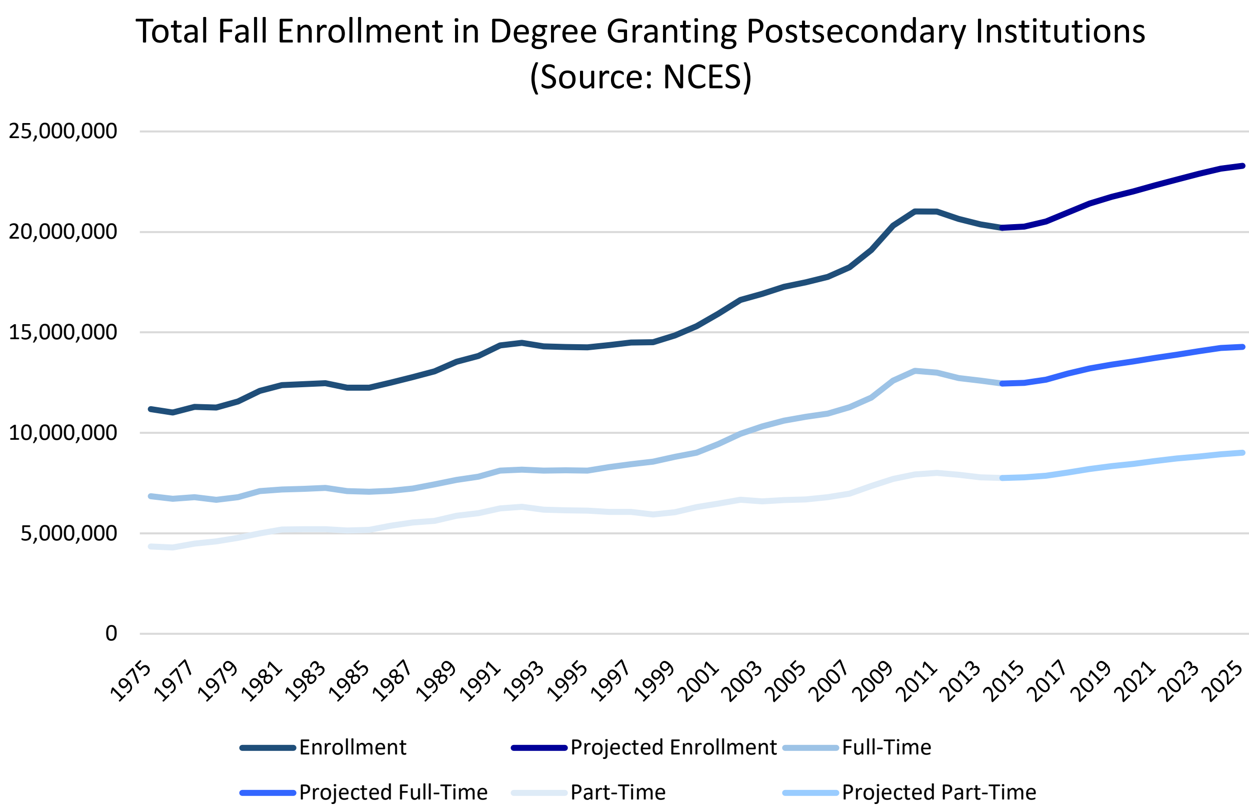
For BNED, new customer acquisition is an addition of a new school store, not a new student buyer; a new store adds an average of $2.5 million in revenue (the average revenue per store for the last five years). Furthermore, unlike a big box retailer that may take several years for a new store to achieve the expected run rate revenue, campus bookstores are likely, regardless of who runs the store, to generate stable levels of revenue relative to a school's enrollment. When viewed through this lens the primary concern for BNED management is a combination of school enrollment and school finances. Of the two variables though school finances are the more important variable as they are the primary driver of customer acquisition. Most analysts are focused on enrollment though; this is one reason the stock is mispriced.

Furthermore, although both variables have a high degree of cyclicity student enrollment is much more cyclical then school finances for which government funding is extremely important. At the current time, although there has been a negative short-term enrollment trend, there has been a long-running trend of decreasing funding from both state and federal governments for postsecondary education. The result of this trend is the continued rise of outsourcing of services by school administrators. As Morgan Olsen, the CFO at Arizona State University Olsen admits, the "pressure" on financial teams "to really do better than we're doing" has driven universities to seek savings and has led to a surge in outsourcing at his institution, and many others (Arizona State outsources Bookstore operations to BNED competitor Follett).

Per the Center on Budget and Policy Priorities, state funding for two and four-year colleges is currently more than $10 billion below what it was before the 2008 recession. On average schools are receiving 18% less per student from states, then they were before the recession. Funding cuts are occurring during a period when the overall revenue at public universities has increased on average 2.75%, but costs have increased at a rate of 3.54%. Meanwhile, as of 2016, the long-term 10-year average annual endowment return fell below 5%, well below what is required for universities to maintain the industry standard of a 5% endowment draw and offset the effects of modestly rising inflation.

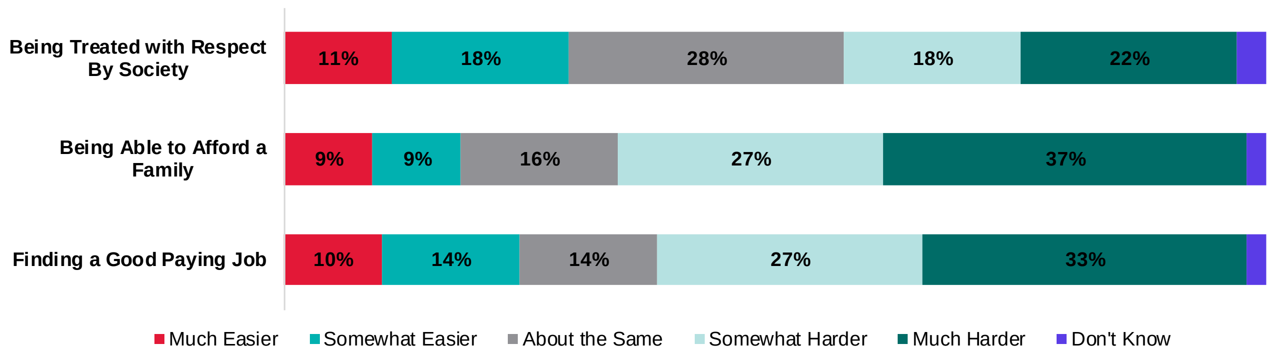
Given this situation, the rationale behind outsourcing makes increasing sense; Colleges may be good at education but are not necessarily good at all the services that go along with running a campus. By hiring companies that specialize in various services, schools not only save money but often retain a portion of the revenue services had generated when running internally. A review of several publicly available BNED contracts shows that schools retain anywhere from 7% to 10% of gross sales after certain minimum revenue levels are met. Also, BNED pays for store renovations and upgrades and often provides some yearly scholarship funding.

Declining or stagnant enrollment is certainly disappointing for BNED, but it is a transitory issue. By taking advantage of school administrators need to shed cost during a period of poor enrollment BNED has primed its brick and mortar business to take advantage of an eventual rebound in enrollment. While state funding is expected to continue to deteriorate, the long-term trend of enrollment in post-secondary education is expected to pick back up (See chart below):



Underpinning the belief in the return of enrollment growth is the ample evidence that postsecondary and graduate school education is a net economic positive for most people, especially as the economy continues to transition more and more towards complex and/or high-tech jobs. As a recent study by the think tank New America highlights the broader US population understands this, with 75% of Americans believing that it is easier to be successful with a degree than without and 79% of Americans agreeing or strongly agreeing that people who enroll in higher education benefit from it.

Perhaps more important to the forecast that enrollment in postsecondary educational institutions will return is the beliefs of American Adults not just in the absolute value of higher education (the statistics presented above) but of the growing challenges of accomplishing various common life goals without a postsecondary education relative to their parents' generation:



The take away from this chart is that Americans (whether it is true or not) believe that basic, fundamental wants and desires from life are easier to achieve with a postsecondary degree, as such there would seem to be little question that the current short-term downtrend in enrollment will reserve itself.

Valuation

Based on a series of scenarios described below, BNED's core businesses have an intrinsic value range of between $9 to $13 a share. The primary valuation approach for each scenario was a discounted EPS plus TBV analysis with an explicitly forecasted ten year period. In each scenario, a 10% discount rate was applied.

Base Case: Base case scenario assume zero revenue growth relative to 2016 for the next ten years and zero revenue growth in the terminal stage, the existing capital, and cost structure, are assumed. In this case, BNED is worth $10.01 a share.

Scenario A: In Scenario A we assumed that revenue at the MBS subsidiary would shrink for the next three years at the average rate that revenue shrunk over the last two years, -5.2%, and assumed that the BNC segment experiences no revenue growth. Again, the existing capital and cost structure is assumed. In this scenario, BNED is worth $9.75 a share.

Scenario B: In Scenario B we assumed revenue at MBS shrinks for three years at -5.2% and that BNED continues to expand the physical store footprint at the same pace as the last three years, 3.38%, with revenue per store at the five-year average of $2.5 million. Again, the existing capital and cost structure is assumed. In this scenario, BNED is worth $10.10

All three scenarios seem not only highly plausible but highly probable, nor do they seem particularly difficult to accomplish. Two more positive scenarios analyzed are as follows:

Scenario C: Scenario C is the same as Scenario C but with additional revenue growth of 1% in both the terminal phase and years 4 through 10 of our explicitly forecasted period. In this case, the results is only slightly better than Scenario B, $10.55.

Scenario D: Disappointing additional value creation through what we deemed achievable revenue growth in Scenario C prompted a test of the impact of cost savings on valuation. In Scenario D we assumed flat revenue at MBS and three years of 1.5% revenue growth at the BNED and 2% decline in SG&A relative to revenue, which would bring SG&A back into line with 2013 and 2014. In this case, BNED was worth $16.11.

In addition to the scenario analysis conducted, we also did an EBIT-Multiple pricing of the stock. In this case, the 3-year average operating margin was applied to the estimated FY2018 revenue taken from the from the base case (which is equal to BNED FY2016 plus MBS FY2016 Revenue) to come up with an EBIT estimate. Bull and Bear revenue cases are -2% and +2% revenue. A 10x, 15x and 20x EV/EBIT multiple was applied to the EBIT estimate to determine a potential enterprise value (it should be noted that the three-year minimum EV/EBIT multiple is 15.6x, the five-year minimum is 9.1x and the three and five-year averages are 20.5x and 19.0x).

	Bear	Base	Bull
Normalized Revenue Estimate	**2,328.68**	**2,376.21**	**2,423.73**
Operating Margin	1.59%	1.59%	1.59%
EBIT Estimate	**36.98**	**37.73**	**38.49**
Manual Input EBIT Multiple	10.00	15.00	20.00
Estimated Value of Operating Business	**369.77**	**565.97**	**769.72**
Plus Cash & ST Investments	19.00	19.00	19.00
Total Value of Business+Cash	**388.77**	**584.97**	**788.72**
Less Total Debt	(159.60)	(159.60)	(159.60)
Estimate Fair Value of Business	**229.17**	**425.37**	**629.12**
Shares Outstanding	46.52	46.52	46.52
Estimated Value Per Share	**$4.93**	**$9.14**	**$13.52**
Margin of Safety	-27%	31%	54%

In most cases, the potential price for BNED is significantly higher than the current trading price save for the low end of the multiple ranges. At the current time, the global specialty retail sector trades at an average EV/EBIT multiple of 14.7x.

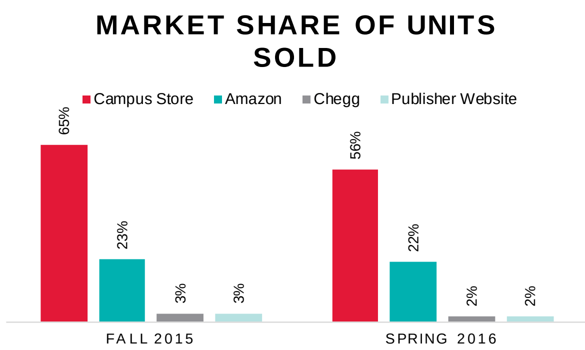
From a valuation perspective, it is also worth highlighting that at the current price BNED is trading at an 11% FCF yield relative last year's FCF. If you include last year's FCF from MBS to that produced by BNED, the stock is currently trading at a 42% FCF yield. In both cases, the FCF used is a simple FCF equal to CFO less CapEx. Although simply adding the FCF from MBS last year to BNED last year likely overstates FY2018 FCF, BNED FY2017 FCF likely significantly overstates FY2018 FCF due to the acquisition of MBS. Finally, the current P/TBV is 1.7x, and the P/S is 0.15.

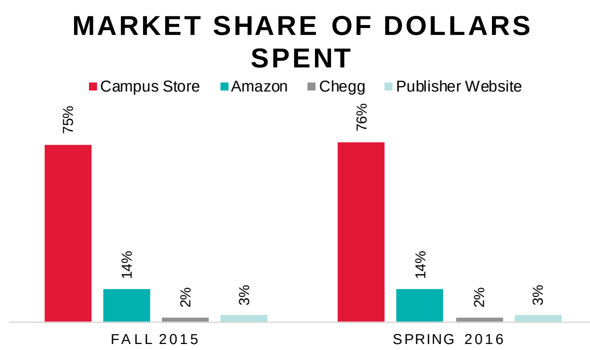
Core Business Has Favorable Industry Structure

The campus bookstore industry, which derives most its revenue from renting and selling textbooks, is comprised of three strategic groups: independent bookstores, contract operators, and online retailers. BNED falls within the contract operator group, which is most closely related to the independent bookstore segment of the industry but also has exposure to online retail. Each group is pursuing a different strategy to address the needs of the industries end customers, students.

One principal difference between independent bookstores/contract operators and online retailers is the need to address the demands of an intermediary customer, the school administration. The need for campus stores to have the support and buy-in of school administrators is important because it is both a license to operate on campus, but also a stamp of trust and approval. The combination of these two factors creates barriers to entry that isolate students for the benefit of the on-campus store (whether it be an independent or contract operator)

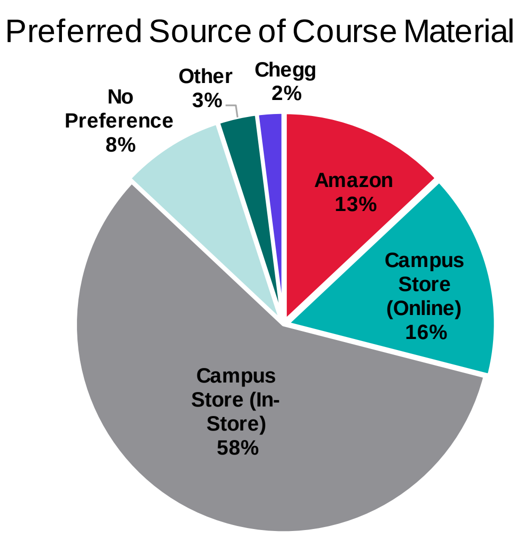
The exclusive on-campus access to students benefits on-campus stores in several ways not enjoyed by online retailers, including more interaction, the opportunity to sell on a basis other than price and a level of convenience that is greater even then online services with next day delivery. The value of exclusive access to students is clear in various industry statistics presented below that also demonstrate the durability of student preference for the campus store vs. other outlets for school supplies. As the two market share charts presented indicate, campus stores are the market leaders in both dollars spent by students and units sold to students during the 2015/2016 academic year by a significant margin:





Capturing student spending dollars is not just a function of having an isolated consumer base though, it is also a student preference. Assuming equal costs, 74% of students said they would prefer to purchase or rent course materials from campus stores, whether they are brick and mortar or online. Given the price match guarantee that BNED offers, it will be the rare situation that a student cannot receive the lowest price available for a book at a BNED store.

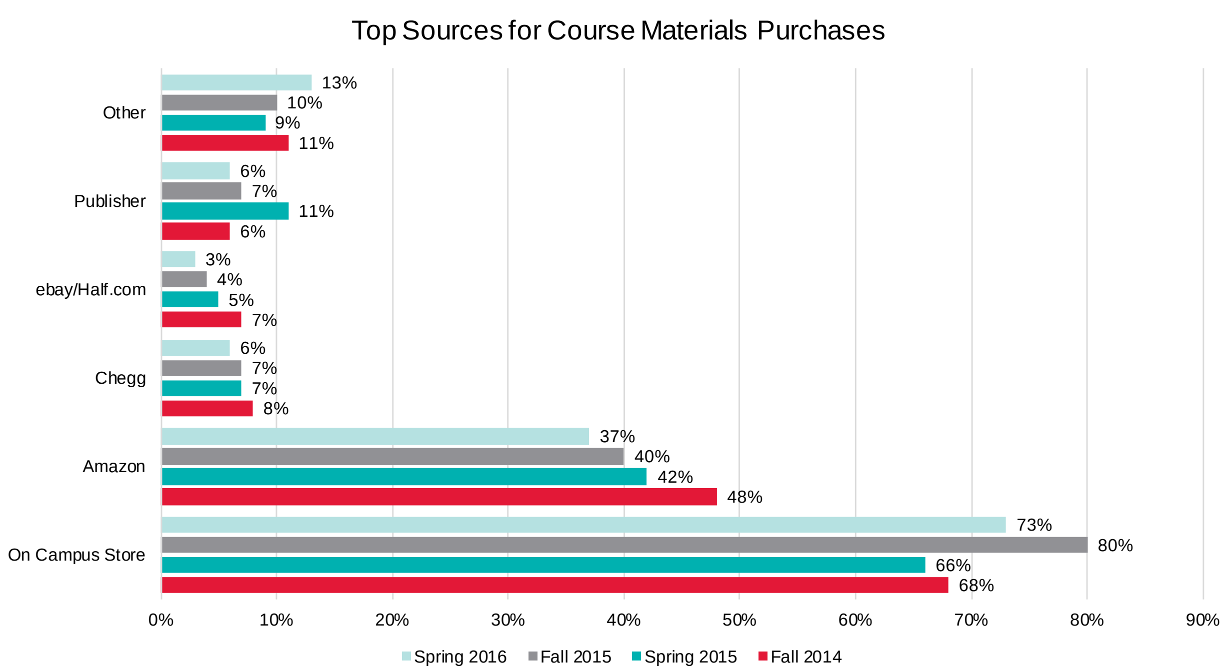
Furthermore, according to research that was done by the National Association of College Stores, the preference for campus stores vs. Amazon is increasing, the preference for Amazon having previously been 19% in the fall of 2014 and in the fall of 2016 only 13%. The reason for the campus store preference includes the convenience and ability to obtain all course materials at one time, but also confidence that the course materials being purchased were the right course materials. The reason for the enhanced confidence in the on-campus sources for course materials is multifaceted, but the combination of the relationship between store and school and the fact that 82% of faculty suggest students purchase course material from the campus store are the primary drivers.



In addition to the privileged position of being on campus vs. online retailers, on-campus stores are usually the only shopping outlet for spending dollars tied to financial aid provided by the school or that accept a school's payment system tied to student accounts. Despite the widespread erosion of brick and mortar throughout the retail segment the dynamics at play within the campus store niche appear very different, driven first and foremost by the interesting monopolistic like position that on-campus stores have within their operating ecosystem.

The competition dynamics faced by different strategic groups within the campus store retail niche are also different. Online retailers face greater competition and operate in a segment of the industry with much lower barriers to entry. From the perspective of the campus bookstore competition is primarily online retailers, campus stores face little or no competition from other brick and mortar booksellers or the campus bookstores at other universities. Online retailers face competition from both on-campus stores and other online retailers. Online retailers must not only price course material at a sufficient discount to overcome the convenience and trust barriers that on-campus stores benefit from, but they must also price competitively vs. all the other online retail outlets.

As such, online retailers suffer from the need to operate a strategy focused on achieving the lowest cost position in the industry. This means that on-campus alternatives have more opportunity to differentiate themselves to intermediate and final customers, which on-campus stores appear to be having success at, as demonstrated in the chart below:



Positioning for the Future

As with almost all businesses these days' investors must be concerned with disruption, in the case of BNED, there are two areas of potential disruption to be concerned with. The first is disruption of the retail model they employ by either a pure online retailer (chegg.com) or some combination of online and brick and mortar (Amazon). The significance of this disruptive risk was dealt with in the industry section above, it exists but appears to be waning and never appeared to gain sufficient traction with students. The second area of potential disruption is in the actual business of education, in the medium, methods, and delivery of education as a product to students. A disruption in this area might result, for example, in need for physical textbooks disappearing.

In both cases, the future is uncertain but seems likely to favor, at least in the near term, survival of BNED and its business at its current operating levels. Furthermore, the second source of potential disruption, which might be characterized as Ed-Tech, is a potential source of growth for BNED. BNED has taken note of the continued trend towards increased use of technology in schools and has positioned itself to take advantage of the increase. What separates BNED's efforts from those of other firms is the fact that BNED's Ed-Tech efforts are backed by an existing business that is FCF positive and already has deep ties with school administrations.

BNED's Ed-Tech efforts are focused on four areas: Learning analytics, competency-based education, learning management and learning materials. At this point, all efforts are still in their infancy and the value difficult to quantify with confidence, which is why this analysis focused on valuation of the operating businesses. Most of the technological development occurs via BNED's LoudCloud subsidiary, which the firm purchased in 2016 for $17 million. LoudCloud is primarily focused on learning analytics and learning management and provides schools with the software infrastructure necessary to combine information from multiple sources across campus to better help teachers and advisors understand and meet student learning needs. In short, LoudCloud provides BNED a foothold in educational data analytics.[5]

Another avenue of Ed-Tech that risks disrupting the BNED business model is the rise of digital textbooks, but it seems that reality is far less than the promise. Even though e-textbooks have been around for more than a decade, and articles going back as far as the late 1990s suggest that the death of the textbook was just around the corner, the threat from e-textbooks appears overstated. The primary reason for this is customer preference, although students are concerned about price, and digital textbooks tend to be cheaper, roughly 66% of students prefer some form of printed textbooks to all other formats. Digital is only preferred by 7% of students.

Besides a long established and hard to break preference for paper, the principal barrier to further widespread adoption of e-textbooks appears to be the publishers, who have taken very

[5] LoudCloud's primary software, LoudSight, captures and analyzes over 200 data points spanning, student demographics, academic performance and campus participation, allowing schools to better monitor and support at-risk students and improve performance for all students.

strict digital rights management positions. Limitations placed on e-textbooks such as platform restrictions or time access restrictions (students may only be allowed to access the textbook for a certain period) in some ways makes e-textbooks more expensive relative to what the student gets from a hardcopy textbook purchase.

Despite the many limitations, BNED had made efforts to address the disruptive potential of e-textbooks by first developing an in-house platform, Yuzu, and then pivoting the strategy when in-house development proved cost prohibitive. BNED is now partnered with the industry-leading e-Textbook platform/provider VitalSource. The partnership with VitalSource, the leading digital platform for electronic textbooks with 6 million active users across 7,000 education institutions, means that BNED can offer schools access to a catalog of 90%+ of the core textbooks used at colleges and universities in the US in digital format on a single platform. Additionally, the combination of the VitalSource partnership, with the MBS distribution and inventory infrastructure, virtual stores and the brick and mortar stores, means that BNED is the only one-stop shop, capable of offering schools strategic solutions that meet the needs of all students, whether they be for new, used, rented or digital textbooks, purchased online or in person, with financial aid or without.

The newest addition to BNED's growing digital footprint is Student Brands. Student Brands operates multiple direct-to-student businesses focused on study tools and writing help. The multiple websites operated by Student Brands receive over 20 million unique monthly users. The acquisition is expected to contribute over $10 million in EBITDA to BNED's consolidated operations over the next twelve months at a cost of $58.5 million in cash. Very little public information is available about Student Brands, but according to a recent Fortune article, the company made $20 million in revenue last year.

Risks

There are a handful of risks that may weigh on the stock price though as changes in the industry sort themselves out. Chief among these risks is digitalization of educational course material and growth in rental textbooks; both are potent sources of potential growth at BNED if management has the agility to take advantage of them. Should management fail to artfully navigate the transitions, both may dramatically limit upside potential.

Digitization of Course Material: Within the digital textbook space three trends are underway that may impact the future of BNED. The first, and most advanced is the general growth in the use of digital textbooks. Even though e-textbooks have been around for more than a decade, and articles going back as far as the late 1990s suggest that the death of the textbook was just around the corner, the threat from e-textbooks appears overstated. The primary reason for this is customer preference, although students are concerned about price, and digital textbooks tend to be cheaper, roughly 66% of students prefer some form of printed textbooks to all other formats. Digital is only preferred by 7%.

Besides a long established and hard to break preference for paper, the principal barrier to further widespread adoption of e-textbooks appears to be the publishers, who have taken very strict digital rights management positions. Limitations placed on e-textbooks such as platform restrictions or time access restrictions (students may only be allowed to access the textbook for a certain period), strict DRM in some ways makes e-textbooks more expensive relative to what the student gets then hardcopy.

A second evolution disrupting the growth of e-textbooks is the growth in mixed textbooks, hardcopy books with a digital element. This trend is popular and does impact the bottom line for contract operators like BNED. As publishers (such as Pearson) have attempted to reposition themselves in recent years as learning companies, they have started to roll out textbooks that come bundled with additional learning material delivered via a publisher's internet-enabled platform or via a 3rd party platform, like those provided by MBS.

In the case of campus stores, this trend is less damaging to the top line then a pure shift to digital but, due to the high cost of access codes to digital learning materials, is often an inducement to students to rent textbooks. Typically, the electronic material that accompanies a mixed textbook can be purchased solo, allowing students to rent a textbook from someone like BNED, and then buy, on a publisher's website, access to electronic resources. A recent study by Student Public Interest Research Groups, an independent student advocacy group, found that the average access code cost $100 vs. the average bundled hardcopy textbook and access code which cost $144. At $100 for access to online material students are encouraged to rent textbooks to save money and buy the access codes from the publisher. In the case of BNED rented textbooks do have better margins then newly purchased textbooks, but the absolute revenue derived from a rented textbook is less.

A final trend in the digital textbook space that has the most potential to disrupt the BNED business model is the spread and growth of open access material via organizations such as OpenStax. The future of this trend is still far from clear.

The Rise of Rental: The long-term impact of textbook rental on BNED financials is an open question. Although the absolute revenue derived from rentals is lower than a comparable textbook purchased outright by a student, the margins on textbook rentals are often higher, especially if the rental is a previously used textbook sold at full cost, repurchased at a discount and rented for several school terms. At the current time, rental income only makes up 12% of BNED total revenue, but it has grown at a CAGR of 15.6% since 2013 with margins roughly 2x that of traditional product sales. Over the last five years' margins on rental textbooks has been 39.8% vs. 22.4% for all other products.

It is not clear what impact the merger with MBS will have on the rental business, but with more than 330,000 textbook titles in stock and a logistics and distribution system that can process more than 13 million textbooks annually, there is potential to expand rental as a share of the overall revenue pie. At the same time, there is some evidence that the percentage of students renting textbooks may have peaked and found a plateau, suggesting that there may be little room for growth: