Corporate Valuation
Bed, Bath, and Beyond, Inc. (NSDQ: BBBY)

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Abstract:

Bed, Bath, and Beyond, Inc. ("BBBY") is an omnichannel home décor retailer with 1,552 stores in the US, Canada, and Mexico. Over the last five years, they have been unsuccessful in growing top line revenue (5-year CAGR of 1.8%) while costs have continued to rise (five-year CAGR of 3.3%). While management has adroitly run the operating side of the business as evidenced by healthy financial ratios including higher than industry average ROE (27%), a low debt-equity-ratio (0.4x), and high EBIT interest coverage (18x), BBBY is projected to run out of debt-free cash flows in 2021 due to their evaporating net income. With this information, BBBY is evaluated at a **SELL** recommendation as its equity is valued at $429M on a DCF basis and $528M on a multiples basis; these are well below the $2.2B the company currently holds in market capitalization.

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Overview of the Business

Description

Bed, Bath, and Beyond, Inc. ("BBBY" or "the Company") is a New Jersey-based omnichannel retailer providing home decoration products, solutions, and services to customers across the US, Mexico, and Canada. Founded in 1971, the Company started with two stores selling bed linens to customers in Springfield, New Jersey and has expanded both organically and through acquisition to become a $12.3B dollar retail company with 1,552 store locations as of its last SEC filing on March 3rd, 2018. Within BBBY, the company operates a host of brands all aimed at the value-based, home décor market including retail store locations under the names Bed Bath and Beyond, Cost Plus World Market, buybuy Baby, Christmas Tree Shops, and Harmon as well as online entities such as OfaKind.com, PersonalizationMall.com, and OneKingsLane.com. **Table 1** shows the composition of BBBY by brand and their store locations.

Table 1: BBBY's Brands and Number of Locations

Store Name	Number of Locations
Bed Bath and Beyond	1017
Cost Plus World Market	276
buybuy BABY	119
Christmas Tree Shops	83
Harmon	57
Total	***1552***

The Company feels that they provide the furnishings and products commonly acquired during "heart-felt life events"[1] as evidenced by their solutions and services pertaining to wedding registries, baby registries, product personalization services, and new student collections. BBBY prides itself on serving its customers by whichever channel the customer prefers, whether it be online, through brick-and-mortar locations, or a combination of the two. As with most omnichannel retailers, the merging of their online and offline channels allow customers to buy its merchandise online and pick up in-store, buy online and return in-store, have items shipped to their local store from either another store or one of BBBY's distribution centers, or simply keep the entire interaction based in-store or online. While the omnichannel strategy is seemingly better for BBBY's customers in a vacuum, the advent of online purchases for home décor has introduced competition for BBBY which has significantly eroded their top line revenue while the cost associated with running an omnichannel strategy continue to rise.

Competitors

Competition in the home décor market is intense. High-end retailers like Williams Sonoma, Crate and Barrel, Ethan Allen, and Macy's are pulling customers with a high willingness to pay away from value-based brands like Bed, Bath, and Beyond

[1] BBBY 2017 Annual Report, Page 5

while online channels like Wayfair and Amazon are able to deliver a higher selection of merchandise at less cost and price to the customer given their asset-light, limited brick-and-mortar business models. To combat this, BBBY has invested in the omnichannel retail approach which has provided a more seamless engagement with the customer via a combination of online and physical locations, however the decline in customer traffic in the capital-intensive physical locations without the return on sales from the high-margin online channels has bred a dire financial situation for the Company.

Strategy

At its core, BBBY aims to be "trusted by its customers as the expert for the home and heart-felt life events."[2] To achieve this objective, the Company has made several acquisitions of firms that aim to deliver on a similar promise in order to broaden the array of services and merchandise for the value-priced home décor market under the Bed, Bath, and Beyond umbrella. This strategy of acquiring firms that serve the same or similar market as Bed, Bath, and Beyond has brought an increase in store locations from 34 in 1992 to 1,552 in 2018.

This strategy has had only marginal impact on the firm's total creation of economic value. For example, in 2012, BBBY purchased Linen Holdings, LLC which sold textiles, amenities, and other goods into the cruise line, hospitality, and healthcare

[2] BBBY 2017 Annual Report, Page 7

markets. Given the higher margins and lower competition in the institutional linens market, this gave rise to BBBY's "Institutional Sales" operating segment. However, due to its lack of reportable sales volume under US GAAP standards, it cannot be valued on its own merit as of March 2018.

Aside from expanding its presence in the home décor market via internal growth and strategic acquisitions, the Company believes that investments in technology will smooth out operating inefficiencies while concurrently enabling them to engage their customers more effectively to increase top line revenue. Taken from page 7 of their 2017 Annual Report:

> *"Over the next several years, the Company expects to make heavy investments in people, processes and technology as it continues the evolution of its foundational structure to support its mission to be trusted by its customers as the expert for the home and heart-felt life events."*

The theoretical benefit of this strategy is easy to understand, but the impact of systematic market pressures from online firms like Amazon and Wayfair have forced BBBY to see underwhelming financial returns from these investments.

Financial and Operating Risks

BBBY has a host of operating risks affecting its business. The most prominent is the impact of online retailers like Amazon and Wayfair on its top line revenue. Even with the Company's omnichannel retailing strategy, customers have chosen to purchase their value-based home products on Amazon given the broad selection, low prices, and fast delivery of their merchandise. Customers have decided to purchase their furniture through Wayfair for the same reasons. While BBBY's management has navigated the idiosyncratic operation of their firm decently well, stagnant revenues coupled with the increasing costs of leases, technology investments and maintenance, and marketing from a systematic perspective have had a steady and suppressive effect on their net income over the last five years.

The Company's current financial risk is currently manageable but the diminishing returns from operations without major strategic shifts in the near future will eventually put pressure on their capital structure. Currently, BBBY has $1.5B in senior unsecured notes outstanding with maturities in 2024, 2034, and 2044. On a net cash basis, this only accounts for 28.4% of their enterprise value as of March 2018 (see **Exhibit 2** for a breakdown of debt-to-equity). They have no short-term debt and their days accounts payable has remained steady around 55 days in the last five years ending 2017 (see **Exhibit 1** for financial ratios). BBBY also has a $250M revolver backed by senior unsecured debt maturing in November 2022. As of March 2018, there is no balance on this revolver. While these are healthy ratios, especially when compared to the heavy debt loads of the growth-oriented Amazon and Wayfair, the suppression of revenue is starving BBBY of cash inflows (they don't sell on credit) which will affect their coverage for both capital investments and debt in the future as they use that debt to expand their business.

In its 2017 Annual Report, the Company also cites risks relating to both macroeconomic and altogether non-business factors such as weather conditions, fluctuations in consumer demand based on abundance of discretionary spending, data breaches, incorrect modeling of seasonality, and supplier reputation concerns. These factors do not affect BBBY's valuation in any significant manner. Even major economic issues like trade wars with China do not materially affect BBBY's valuation since the Company's sources its merchandise from over 11,100 domestic suppliers as of 2018, with 10 of those suppliers comprising the top 16% of inventory purchases. While trade wars could drive up BBBY's cost of goods sold ("COGS"), it would not significantly affect how its management manages its purchasing practices.

Financial Statement Analysis

All things considered, BBBY is a relatively simple yet healthy company when looking at their financial ratios over time. Being a retailer that doesn't manufacturer their merchandise, growth in items like COGS; days accounts payable; inventory; property, plant, and equipment (hereafter "PPE" and tracked for capital lease expenditure); and sales and general expenses (for operating lease expense) are items of interest to determine how well those growth track with their revenue growth. Over the last five years, while BBBY has had steady but marginal growth in its cost and capitalized PPE numbers at around 4%, its revenue has grown at a smaller rate at around 2% (**Exhibit 3** shows BBBY's growth trends over the last five years). This is a disturbing trend which, given its steady nature and pervasiveness over many years of reporting, will adversely affect BBBY's overall equity valuation.

Stated differently, while BBBY has no credit sales, it pays its 11,100 suppliers on time (days accounts payable averaged 55 days from 2013-2017), and its EBIT coverage has a median value of 15x over the last five years, they are not earning top line revenue due to the market squeeze they're feeling from Amazon on the value-end of home décor retailing so their profit margins are shrinking into obscurity. This has deteriorated their "management effectiveness" ratios such as return on equity ("ROE"). Illustrated below in **Table 2** and spoken about in more detail in the Projections section of this analysis, this company-killing situation will eventually cause negative debt-free cash flows and thus a greatly reduced valuation of equity. (**Table 2** depicts the Company's return-on-equity via DuPont decomposition over the last five years).

Table 2: BBBY's Reduction of Profit Margin from 2013-2017

Year Ending	**2013**	**2014**	**2015**	**2016**	**2017**
Profit Margin	8.90%	8.10%	7.00%	5.60%	3.40%
Asset Turnover	1.8	1.8	1.9	1.8	1.8
Equity Multiplier	1.6	2.5	2.5	2.5	2.4
Return on Equity	25.90%	34.90%	32.90%	25.20%	14.70%

Outlook

From a market perspective, the outlook for BBBY is a muddy one. While certain trends in the industry look promising for the Company (online sales for goods for the home rose 29.3% in 2017[3]), most others show declining values. The S&P Retail Select Industry Index, which is comprised of retail firms mostly bound by discretionary spending, has returned 16.7% per year on a CAGR basis over the last 10 years[4] where the S&P 500 itself returned 10.8% on a CAGR basis.[5] While the industry has been able to marginally beat the market over that time period, competitors like Amazon who have centered their strategy on the asset-light nature of selling home décor merchandise online (as well as a host of other products) have experienced much higher returns. Amazon specifically has returned a 10-year CAGR of 141.6%.[6]

From a firm perspective, the outlook for BBBY is dire. If they do not make major strategic changes to the Company in the way of divesting brands, closing stores, or working to capitalize on their software assets to yield a return above investment, their diminishing net income trend will continue into negative values in the next few years. As taken from BBBY's 2017 Annual Report (page 17), **Graph 1** shows how its stock has

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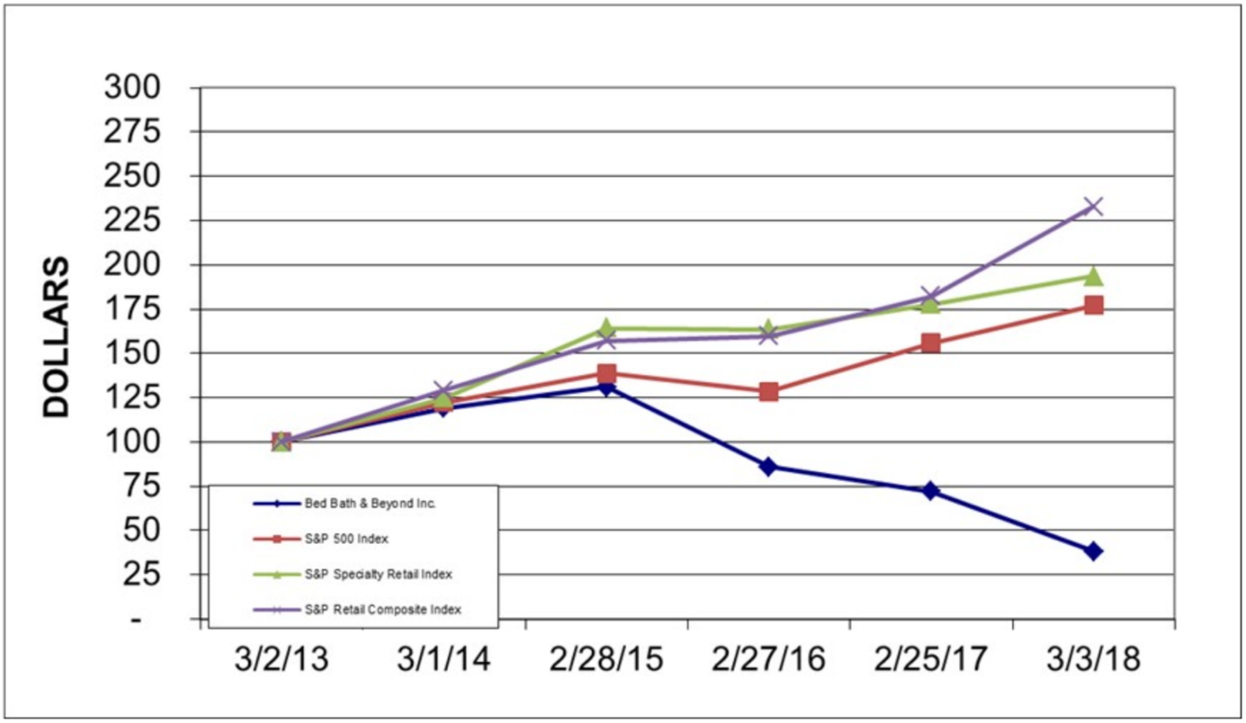
[3] "Online home goods sales soared 29.3% in 2017", https://www.digitalcommerce360.com/article/online-home-goods-sales/. Retrieved April 10th, 2019.
[4] S&P Retail Select Industry Page, https://ca.spindices.com/indices/equity/sp-retail-select-industry-index, Retrieved April 21st, 2018
[5] http://www.moneychimp.com/features/market_cagr.htm
[6] https://finance.yahoo.com/quote/AMZN/history

done compared to the market in general (as shown via the S&P 500 index) and two retail indices over the last five years.

Graph 1: BBBY Stock Performance Against S&P 500 and Specialty Retail Indices



Projections

Methodology

Given the Company's stable state and lack of non-recurring major financial events (excluding acquisitions as BBBY seems to make those regularly, last transaction happening in 2017), the general methodology used to project performance in the future was to determine per annum growth values for items in the income and balance sheet and to decide which value to use moving forward in the projections. Elements like effective tax rates, maturity dates of long-term debt, deferred revenues and taxes, and the use of revolvers came from footnotes and sections in BBBY's annual reports.

Dissection of Rates Used

While **Exhibits 4** and **5** detail the 5-year projections of both the income statement and balance sheet for BBBY respectively, the **Table 3** and **Table 4** detail what growth rate was used for each line item and why.

Table 3: Growth Rates Used in Income Statement Projections

Metric	Value	Reason
Revenue	1.8%	Growth has been steady and their strategy hasn't changed in the last five years so the average revenue growth rate from the last five years was chosen
COGS	3.3%	BBBY has an extremely diverse group of suppliers for their merchandise so the average growth rate over last five years of COGS was used
SGA	7.0%	SGA expense has been increasing over the last five years relative to revenue given BBBY's marketing spend and investment in technology so the last year's SGA growth rate was used to reflect that trend
Interest Expense	$(65,661)	BBBY doesn't have any long-term debt maturing until 2024, the last year's interest expense was used through 2023 to reflect their current long-term debt amount
Taxes	36.8%	The Company's effective tax rate remains around this value from the past five years and they didn't use a carryforward in 2017, the average effective tax rate from that period was used

Depreciation Expense	9.4%	The Company will have to capitalize all operating leases due to FASB changes in 2019 so the average depreciation expense (which is the higher than their median) was used

Table 4: Growth Rates Used in Balance Projections

Balance Sheet

Metric	**Value**	**Reason**
Assets		
Cash & cash equivalents	$518,426	Being a retailer, cash comes in from sales and out to COGS which shouldn't go too far up or down in years to come. Given their steady nature, the average cash balance over the last five years was used
Securities	$212,712	Like cash, BBBY holds short term T-bills for use for accounts payable. The average holdings over the last five years was used
Merchandise inventories	4.1%	BBBY made have had a sell down in 2017 to sell "cheaper" LIFO inventory to boost their operating margin for the average growth rate from 2013-2016 was used
Other current assets	$384,698	This line item floats around this value so the average from the last five years was used
Long-term investments	$19,517	BBBY seems to have sold their longer-term US treasuries so the last year's value was used
PPE, net	5.0%	These are broken down in more detail in Exhibit 5 but every line item uses the average growth rate given the steady nature of BBBY's capital investments

Goodwill	$716,283	The last value was used since it's assumed BBBY won't buy any companies in the next five years and they won't impair them either
Other assets	$405,759	This line item floats around this value so the average from the last five years was used
Liabilities		
Accounts payable	$1,147,717	Like cash, this value seems to hover around the five-year average since the level of AP outstanding shouldn't grow with time (and doesn't), the five-year average was used
Accrued expenses	8.1%	The average from 2013-2016 was used since the 2017 value seems like an outlier
Credit & gift cards	5.0%	Uses the average growth rate over the last five years since its connected to sales
Current income taxes payable		Equals the effective growth rate multiplied by last year's net income until there's a loss where it equals $0
Deferred rent	$489,154	Since it's assumed BBBY will actively negotiate their lease agreements per their 2017 annual report, the average from the last five years is used
Income taxes payable	-8.0%	Uses the average growth rate over the last five years since it is connected to their provisions for future taxes
Long term debt	$1,492,078	Used the same value as the last year since BBBY doesn't have any debt maturing until 2024
Equity		
Common stock	$3,381	This value doesn't move too far up or down so the last five-year average was used

Additional paid-in capital	4.5%	Used the average growth rate over the last five years since the company is still selling stock
Retained earnings		Equal beginning balance plus net income (assumes no dividends moving forward)
Treasury stock, at cost		Uses the account as the plug moving forward to make the balance sheet balance, no effect on financial performance
AOCI	-$41,341	This item floats around a mean so the average from the last five years was used
Statement of Cash Flows		
Capex	5.2%	Since the company will need to capitalize leases moving forward and it is assumed they won't make any major capital investments in the next few years, these effects cancel and the average growth rate from the last five years was used

Valuation

Discounted Cash Flows Approach

Based on the projections displayed in **Exhibits 4** and **5**, a time table of debt-free cash flows was arranged to determine the present value of quick in **Exhibit 6**. The calculation used to arrive at a debt-free cash flow for a period was as follows:

1. Start with the net income for the given period.

2. Add back the interest expense after tax to obtain the NOPAT value for the period. The interest expense after tax was calculated using the interest expense for the period multiplied by 1 – Effective Tax Rate.
3. Add back the deprecation expense for the period.
4. Subtract any capital expenditures for the period.
5. Add any changes to net working capital for the period. For this analysis, operating vs financing working capital was not delineated so net working capital represents all current liabilities subtracted from all current assets.

The main issue with this analysis was the negative free cash flows generated after 2020 as depicted in **Exhibit 6**. Since this analysis is one of valuation and not of strategy, the projected values contain the strategy of the firm for the trailing five years, including capital expenditures and management of suppliers. Due to this assumption, net income for BBBY becomes negative in 2021 and even the addition of interest expense, deprecation, and positive changes in net working capital do not yield positive debt-free cash flow for the Company in those periods. To avoid a negative cash flows, periods in which the value was negative were set to zero under the assumption that either 1) the Company would use its revolver to balance the deficit with hopes that it could recover the sum during operations in the year (which doesn't seem likely and is an inadvisable financial strategy) or 2) the company would divest brands or assets under its umbrella to free up cash to fund investments to strengthen their diminishing operating margin.

After finding the debt-free cash flows for BBBY, those values were then discounted back on a mid-year convention basis with the Company's weight average cost of capital ("WACC") which was calculated in **Exhibit 2**. The rationale for using this discount rate was the solidarity of the business operations at BBBY: regardless of the subsidiary, each entity served the value-based home décor market and thus should have very similar risk profiles. Due to this fact, the firm's overall WACC was used to discount the consolidated firm's debt-free cash flows. While BBBY technical has two operating segments - the "North American Retail" segment which makes up the vast majority of its business and the "Institutional Sales" segment which does not provide enough revenue to be recorded separately under US GAAP standards – the latter does not require a separate WACC for firm-level discounting and risk-adjustment given its lack of volume and reporting.

As there were no cash flows in the fifth year of projections, the terminal value in the DCF approach equates to zero. The rationale for using five years in the projections comes from the steady and persistent nature of the Company's financial trends: anything shorter would produce a terminal value equal to the last year of positive debt-free cash flow divided by the WACC minus the industry growth rate of 0.4% which seems optimistic given BBBY's steady, linear downward trend in operating margin over the last five years. Anything more than five years would be superfluous. A terminal value of zero implies that BBBY should file for bankruptcy in 2021 or consider becoming a target for acquisition.

After the present values of cash flows were added up, they equaled an equity valuation of $429,381,000 for BBBY. Dividing this number by the total number of outstanding shares as of March 2018, 140,498,000, this yields a per share valuation of $3.06. This is well under the current market value per share of $18 so a sell recommendation is given here based on the DCF approach. If BBBY could maintain a steady net income for the next five years as shown in the sensitivity valuation in **Exhibit 7**, there share price would jump to $39.26. While most of this equity value comes from the present value of the terminal value in the DCF analysis (74.1%), it shows that just maintaining their profitability in the near term would have an enormous effect on their share price and thus ability to raise equity financing for capital investment.

Multiples Approach

The multiples approach of valuation entails finding comparable companies to BBBY on the basis of market, size, debt structure, and status of growth to determine, based on their valuation ratios, at what price BBBY should be valued. The difficulty in this analysis, as was the case with BBBY, was finding a decent-sized list of companies with which to compare to BBBY. As not all retailers are the same, the list that was used to compare to BBBY for valuation purposes attempted to have a similar debt structure (around 0.5 – 1.5 debt-to-equity ratio), be somewhere around $10B in business enterprise value ("BEV", calculated on a net cash basis), has some sort of omnichannel strategy, and be US-based with public financial information. **Exhibit 8** shows that companies that were chosen for this analysis and their relevant BEV ratios: Pier 1 Imports, Williams Sonoma, Wayfair, Amazon, Overstock.com, and Macy's.

Four different ratios were used in the comparison analysis: BEV to EBTIDA, EBIT, revenue, and total assets. While no company was a perfect match to BBBY for any one ratio, the blend of ratios has an attempt to see if one fit better than the others. To determine this, the sample-size standard deviation was taken for each ratio and BEV-to-Revenue came in at the smallest deviation from the mean at 0.2x (the ratios and their standard deviations are displays in **Exhibit 9**). BEV-to-revenue also canceled out size as a factor and made sense for valuing low-margin, revenue-hungry retailers. BBBY's position in the BEV-to-Revenue distribution was also measured to determine fit in the comparable set; in this case, BBBY fell in the 83rd percentile. Since most comparable companies had BEV-to-Revenue ratios around 0.2x, the mean value of 0.2x was used in the valuation.

With the comparable ratio chosen, BBBY's 2017 revenue of $12.3B was multiplied by the BEV-to-Revenue ratio of 0.2 to give a BEV value of $2B (**Exhibit 9** shows the valuation calculations). Since our interest in only in equity, the long-term debt of the BEV was subtracted. This left an equity valuation of $528M. Finally, the aggregate of equity was divided by the number of shares, 140M, to yield a per share value of $3.76. Since this is well below the market price per share of $18, the recommendation is to sell BBBY in the market.

Conclusion

While no valuation is "correct" necessarily, evaluating BBBY with both the discounted cash flow method and the comparable company method shows that, given the Company's current trajectory and barring any substantial strategic shifts in the firm's operations, BBBY is overvalued in the market and should be either sold or shorted. Competitors like Amazon have the diversity in merchandise to satisfy customers' demands for products while keeping their PPE and leases to a minimum which is causing the revenue from market participants like BBBY to evaporate. Firm-level investments in technology for their omnichannel strategy only exacerbate the issue as these improvements are not returning top line revenue to the firm. With over five years of steady yet marginal revenue growth (1.8% per year) coupled with a similarly-behaving yet steeper growth in COGS (3.3% per year), BBBY's net income will become negative in two years. From this position, BBBY's debt-free cash flows will also become negative causing the firm to have trouble servicing its long-term debt ($300M of its senior unsecured notes will become due in 2024) and cash for capex investments to improve its operating margin will become very difficult to finance.

Exhibits

Exhibit 1: Financial Ratios and Adjustments

BBBY Ratios and Adjustments					
Reporting Year	**03/03/2018**	**02/25/2017**	**02/27/2016**	**02/28/2015**	**03/01/2014**
Balance Sheet Adjustments					
Average Inventory	$ 2,818,267	$ 2,876,890	$ 2,790,000	$ 2,655,419	$ 2,522,585
Average Assets	$ 6,943,418	$ 6,672,485	$ 6,628,967	$ 6,557,513	$ 6,317,993
Average Net AR	$ -	$ -	$ -	$ -	$ -
Average AP	$ 1,188,296	$ 1,140,023	$ 1,128,663	$ 1,130,518	$ 1,009,017
Asset Management					
Return on Assets	6.0%	10.0%	12.9%	14.2%	16.1%
Inventory Turnover	4.4	4.2	4.3	4.5	4.6
AR Turnover					
AP Turnover	6.7	6.7	6.6	6.4	6.9
Days Inventory	83.3	86.0	84.1	81.6	80.0
Days AR	0	0	0	0	0
Days AP	54.9	54.5	55.0	56.8	53.1
Operating Cycle	83.3	86.0	84.1	81.6	80.0
Cash Cycle	28.4	31.5	29.1	24.8	27.0
Liquidity and Solvency					
EBIT Coverage	10.6x	15.3x	15.2x	29.8x	1415.3x
Net Debt	$ 767,899	$ 1,003,274	$ 898,230	$ 514,434	$ (855,847)

Exhibit 2: Cost of Equity and Debt

Cost of Debt

Issue	Amount (000s)	Yield	Weight	Weighted Value
2024 Notes*	$ 300,000	3.75%	20%	0.7%
2034 Notes*	$ 300,000	4.92%	20%	1.0%
2044 Notes*	$ 900,000	5.17%	60%	3.1%
	$ 1,500,000			
		Weighted Average Cost of Debt[7]		**4.8%**

Cost of Equity

Risk Free Rate[8]	3.0%
Average Market Return[9]	7.1%
BBBY Beta[10]	1.13
Cost of Equity	**7.7%**

Debt / Equity Values from 2018

Debt[11]	$ 1,145,938
Equity	$ 2,888,628
Tax Rate	36.8%
Debt Ratio	28.4%
Equity Ratio	71.6%

WACC 6.85%

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* Taken from Page 49 of BBBY's 2017 Annual Report

7 Calculated on a book basis as market prices for BBBY's debt is not available.

8 04/18/19 30-year US Treasury bond quote from www.treasury.gov, retrieved on April 21, 2019.

9 Average annual return from S&P 500 from 1926-2018.

10 Calculated using 5-year monthly returns of BBBY and S&P 500 from Yahoo Finance.

11 Calculated on a "net-debt" basis by subtracting cash from the total amount of long and current term debt.

Exhibit 3: Growth Trends from fiscal years ending 2014-2017

Growth Rates

	02/28/2015	02/27/2016	02/25/2017	03/03/2018
Net sales	3.3%	1.9%	0.9%	1.1%
Cost of sales	4.7%	3.1%	2.1%	3.5%
Gross profit	1.2%	0.0%	-1.0%	-2.9%
SGA	3.9%	4.6%	7.4%	7.0%
Operating profit	-3.7%	-9.0%	-19.8%	-32.9%
EBIT	-6.8%	-11.7%	-19.7%	-34.7%
Depreciation Expense	9.3%	14.5%	6.2%	7.6%
EBITDA	-4.9%	-8.1%	-15.3%	-25.6%
Net earnings	-6.3%	-12.1%	-18.6%	-38.0%

Growth Averages

	Min	Max	Median	Mean	Latest
Revenue	0.9%	3.3%	1.5%	1.8%	1.1%
COGS	2.1%	4.7%	3.3%	3.3%	3.5%
Gross Profit	-2.9%	1.2%	-0.5%	-0.7%	-2.9%
SGA	3.9%	7.4%	5.8%	5.7%	7.0%
Operating Profit	-32.9%	-3.7%	-14.4%	-16.4%	-32.9%
EBITDA	-34.7%	-6.8%	-11.7%	-13.5%	-34.7%
Depreciation Expense	6.2%	14.5%	8.5%	9.4%	7.6%
EBIT	-25.6%	-4.9%	-15.7%	-18.2%	-25.6%
Net Income	-38.0%	-6.3%	-11.7%	-13.5%	-38.0%

Exhibit 4: Projected Income Statement

Forecasts in Income

Report Date	03/01/2014	02/28/2015	02/27/2016	02/25/2017	03/03/2018	3/1/19	3/1/20	3/1/21	3/1/22	3/1/23
Net sales	$ 11,503,963	$ 11,881,176	$ 12,103,887	$ 12,215,757	$ 12,349,301	$ 12,570,691	$ 12,796,050	$ 13,025,449	$ 13,258,960	$ 13,496,658
Cost of sales	$ 6,938,381	$ 7,261,397	$ 7,483,577	$ 7,639,407	$ 7,906,286	$ 8,168,992	$ 8,440,427	$ 8,720,880	$ 9,010,653	$ 9,310,054
Gross profit	**$ 4,565,582**	**$ 4,619,779**	**$ 4,620,310**	**$ 4,576,350**	**$ 4,443,015**	**$ 4,401,699**	**$ 4,355,623**	**$ 4,304,568**	**$ 4,248,307**	**$ 4,186,603**
Selling, general & administrative expenses	$ 2,950,995	$ 3,065,486	$ 3,205,407	$ 3,441,140	$ 3,681,694	$ 3,939,064	$ 4,214,426	$ 4,509,036	$ 4,824,242	$ 5,161,482
Operating profit	**$ 1,614,587**	**$ 1,554,293**	**$ 1,414,903**	**$ 1,135,210**	**$ 761,321**	**$ 462,635**	**$ 141,198**	**$ (204,468)**	**$ (575,935)**	**$ (974,879)**
Interest income (expense), net	$ (1,140)	$ (50,458)	$ (87,458)	$ (69,555)	$ (65,661)	$ (65,661)	$ (65,661)	$ (65,661)	$ (65,661)	$ (65,661)
EBIT	**$ 1,613,447**	**$ 1,503,835**	**$ 1,327,445**	**$ 1,065,655**	**$ 695,660**	**$ 396,974**	**$ 75,537**	**$ (270,129)**	**$ (641,596)**	**$ (1,040,540)**
Depreciation Expense	$ 218,809	$ 239,193	$ 273,947	$ 290,914	$ 313,107	$ 342,592	$ 374,854	$ 410,154	$ 448,778	$ 491,039
EBITDA	**$ 1,832,256**	**$ 1,743,028**	**$ 1,601,392**	**$ 1,356,569**	**$ 1,008,767**	**$ 739,566**	**$ 450,391**	**$ 140,025**	**$ (192,818)**	**$ (549,501)**
Provision for income taxes	$ 591,157	$ 546,361	$ 485,956	$ 380,547	$ 270,802	$ 146,258	$ 27,830	$ (99,524)	$ (236,385)	$ (383,369)
Net earnings	**$ 1,022,290**	**$ 957,474**	**$ 841,489**	**$ 685,108**	**$ 424,858**	**$ 250,716**	**$ 47,706**	**$ (170,605)**	**$ (405,211)**	**$ (657,171)**

Exhibit 5: Projected Balance Sheet

Forecasts in Balance Sheet Items

Report Date	03/01/2014	02/28/2015	02/27/2016	02/25/2017	03/03/2018	3/1/19	3/1/20	3/1/2021	3/1/2022	3/1/2023
Cash & cash equivalents	$ 366,516	$ 875,574	$ 515,573	$ 488,329	$ 346,140	$ 518,426	$ 518,426	$ 518,426	$ 518,426	$ 518,426
Short term investment securities	$ 489,331	$ 109,992	$ 86,197	$ -	$ 378,039	$ 212,712	$ 212,712	$ 212,712	$ 212,712	$ 212,712
Merchandise inventories	$ 2,578,956	$ 2,731,881	$ 2,848,119	$ 2,905,660	$ 2,730,874	$ 2,841,974	$ 2,957,594	$ 3,077,918	$ 3,203,137	$ 3,333,451
Other current assets	$ 379,807	$ 366,156	$ 376,073	$ 416,755	-	$ 384,698	$ 384,698	$ 384,698	$ 384,698	$ 384,698
Prepaid expenses & other current assets	-	-	-	-	$ 516,025	$ -	$ -	$ -	$ -	$ -
Total current assets	**$ 3,814,610**	**$ 4,083,603**	**$ 3,825,962**	**$ 3,810,744**	**$ 3,971,078**	**$ 3,957,810**	**$ 4,073,430**	**$ 4,193,754**	**$ 4,318,973**	**$ 4,449,287**
Long term investment securities	$ 87,393	$ 97,160	$ 71,289	$ 89,592	$ 19,517	$ 19,517	$ 19,517	$ 19,517	$ 19,517	$ 19,517
Land & buildings	$ 538,422	$ 557,538	$ 567,602	$ 579,514	$ 588,115	$ 598,199	$ 608,456	$ 618,888	$ 629,500	$ 640,293
Furniture, fixtures & equipment	$ 1,120,330	$ 1,179,073	$ 1,240,181	$ 1,332,038	$ 1,409,157	$ 1,497,149	$ 1,590,635	$ 1,689,959	$ 1,795,485	$ 1,907,600
Leasehold improvements	$ 1,187,793	$ 1,258,916	$ 1,341,596	$ 1,454,749	$ 1,543,452	$ 1,650,665	$ 1,765,326	$ 1,887,952	$ 2,019,095	$ 2,159,349
Computer equipment & software	$ 755,867	$ 940,754	$ 1,106,812	$ 1,290,690	$ 1,500,199	$ 1,749,754	$ 2,040,821	$ 2,380,307	$ 2,776,265	$ 3,238,090
Property & equipment, gross	$ 3,602,412	$ 3,936,281	$ 4,256,191	$ 4,656,991	$ 5,040,923	$ 5,495,767	$ 6,005,238	$ 6,577,106	$ 7,220,345	$ 7,945,332
Less: accumulated depreciation	$ 2,022,608	$ 2,259,581	$ 2,531,148	$ 2,819,862	$ 3,131,634	$ 3,486,780	$ 3,882,202	$ 4,322,467	$ 4,812,661	$ 5,358,445
Property & equipment, net	$ 1,579,804	$ 1,676,700	$ 1,725,043	$ 1,837,129	$ 1,909,289	$ 2,008,987	$ 2,123,036	$ 2,254,639	$ 2,407,684	$ 2,586,886
Goodwill	$ 486,279	$ 486,279	$ 487,169	$ 697,085	$ 716,283	$ 716,283	$ 716,283	$ 716,283	$ 716,283	$ 716,283
Other assets	$ 387,947	$ 415,251	$ 389,477	$ 411,479	$ 424,639	$ 405,759	$ 405,759	$ 405,759	$ 405,759	$ 405,759
Total assets	**$ 6,356,033**	**$ 6,758,993**	**$ 6,498,940**	**$ 6,846,029**	**$ 7,040,806**	**$ 7,108,355**	**$ 7,338,025**	**$ 7,589,951**	**$ 7,868,216**	**$ 8,177,732**
Accounts payable	$ 1,104,668	$ 1,156,368	$ 1,100,958	$ 1,179,088	$ 1,197,504	$ 1,147,717	$ 1,147,717	$ 1,147,717	$ 1,147,717	$ 1,147,717
Accrued expenses & other current liabilities	$ 385,954	$ 403,547	$ 409,445	$ 484,114	$ 633,100	$ 523,257	$ 565,565	$ 611,294	$ 660,720	$ 714,142
Merchandise credit & gift card liabilities	$ 284,216	$ 306,160	$ 297,930	$ 309,478	$ 335,081	$ 351,778	$ 369,308	$ 387,711	$ 407,031	$ 427,313
Current income taxes payable	$ 65,121	$ 76,606	$ 58,892	$ 59,821	-	$ 92,372	$ 17,577	$ -	$ -	$ -
Total current liabilities	**$ 1,839,959**	**$ 1,942,681**	**$ 1,867,225**	**$ 2,032,501**	**$ 2,165,685**	**$ 2,115,125**	**$ 2,100,167**	**$ 2,146,722**	**$ 2,215,468**	**$ 2,289,173**
Deferred rent & other liabilties	$ 486,996	$ 493,137	$ 499,368	$ 534,677	$ 431,592	$ 489,154	$ 489,154	$ 489,154	$ 489,154	$ 489,154
Income taxes payable	$ 87,791	$ 79,985	$ 72,807	$ 67,971	$ 62,823	$ 58,064	$ 53,666	$ 49,601	$ 45,844	$ 42,372
Long term debt	$ -	$ 1,500,000	$ 1,500,000	$ 1,491,603	$ 1,492,078	$ 1,492,078	$ 1,492,078	$ 1,492,078	$ 1,492,078	$ 1,492,078
Total liabilities	**$ 2,414,746**	**$ 4,015,803**	**$ 3,939,400**	**$ 4,126,752**	**$ 4,152,178**	**$ 4,154,421**	**$ 4,135,065**	**$ 4,177,555**	**$ 4,242,544**	**$ 4,312,776**
Common stock	$ 3,350	$ 3,367	$ 3,377	$ 3,395	$ 3,418	$ 3,381	$ 3,381	$ 3,381	$ 3,381	$ 3,381
Additional paid-in capital	$ 1,673,217	$ 1,796,692	$ 1,884,813	$ 1,974,781	$ 2,057,975	$ 2,149,675	$ 2,245,461	$ 2,345,515	$ 2,450,027	$ 2,559,196
Retained earnings	$ 8,595,902	$ 9,553,376	$ 10,394,865	$ 11,003,890	$ 11,343,503	$ 11,594,219	$ 11,641,925	$ 11,471,321	$ 11,066,110	$ 10,408,939
Treasury stock, at cost	$ 6,317,335	$ 8,567,932	$ 9,668,517	$ 10,215,539	$ 10,467,972	$ 10,752,000	$ 10,646,467	$ 10,366,479	$ 9,852,505	$ 9,065,221
Accumulated other comprehensive income (loss)	$ (13,847)	$ (42,313)	$ (54,998)	$ (47,250)	$ (48,296)	$ (41,341)	$ (41,341)	$ (41,341)	$ (41,341)	$ (41,341)
Total shareholders' equity	**$ 3,941,287**	**$ 2,743,190**	**$ 2,559,540**	**$ 2,719,277**	**$ 2,888,628**	**$ 2,953,934**	**$ 3,202,960**	**$ 3,412,397**	**$ 3,625,672**	**$ 3,864,955**

Exhibit 6: Discounted Cash Flow Analysis

Debt Free Cash Flows

Report Date	**3/1/19**	**3/1/20**	**3/1/21**	**3/1/22**	**3/1/23**	
Net Income	$ 250,716	$ 47,706	$ (170,605)	$ (405,211)	$ (657,171)	
Interest Expense	$ 65,661	$ 65,661	$ 65,661	$ 65,661	$ 65,661	
Tax Rate	36.8%	36.8%	36.8%	36.8%	36.8%	
Interest Expense After Tax	$ 41,469	$ 41,469	$ 41,469	$ 41,469	$ 41,469	
NOPAT	**$ 292,185**	**$ 89,176**	**$ (129,135)**	**$ (363,742)**	**$ (615,701)**	
+ Depreciation	**$ 342,592**	**$ 374,854**	**$ 410,154**	**$ 448,778**	**$ 491,039**	
- CAPEX	**$ 395,380**	**$ 415,989**	**$ 437,671**	**$ 460,484**	**$ 484,486**	
Net Working Capital Beginning	$ 1,805,393	$ 1,842,686	$ 1,973,264	$ 2,047,033	$ 2,103,506	
Net Working Capital End	$ 1,842,686	$ 1,973,264	$ 2,047,033	$ 2,103,506	$ 2,160,114	
+ Change in NWC	**$ 37,293**	**$ 130,578**	**$ 73,769**	**$ 56,473**	**$ 56,608**	
Debt Free Cash Flows	$ 276,690	$ 178,619	$ (82,884)	$ (318,975)	$ (552,540)	
Cash Flows for Valuation	**$ 276,690**	**$ 178,619**	**$ -**	**$ -**	**$ -**	
Terminal Growth Rate	0.4%					
WACC	6.9%					
Terminal Value	**$ -**					
WACC	6.85%	6.85%	6.85%	6.85%	6.85%	Conversion Period
Period	0.5	1.5	2.5	3.5	4.5	0.5
Discount Factor	0.97	0.91	0.85	0.79	0.74	
Present Value of Cash Flows	**$ 267,668.71**	**$ 161,712.00**	**$ -**	**$ -**	**$ -**	
		Mix of TV and CFs				
Sum of PV Cash Flows	$ 429,381	100.0%				
PV of Terminal Value	$ -	0.0%				
Present Valuation (in thousands)	**$ 429,381**					
Shares Outstanding (2018, in thousands)	140,498					
Per Share Price	**$ 3.06**					

Exhibit 7: Sensitivity Analysis of the DCF Approach

Debt Free Cash Flows (Sensitivity Case)

Report Date	**3/1/19**	**3/1/20**	**3/1/21**	**3/1/22**	**3/1/23**	
Net Income	$ 250,716	$ 250,716	$ 250,716	$ 250,716	$ 250,716	
Interest Expense	$ 65,661	$ 65,661	$ 65,661	$ 65,661	$ 65,661	
Tax Rate	36.8%	36.8%	36.8%	36.8%	36.8%	
Interest Expense After Tax	$ 41,469	$ 41,469	$ 41,469	$ 41,469	$ 41,469	
NOPAT	**$ 292,185**	**$ 292,185**	**$ 292,185**	**$ 292,185**	**$ 292,185**	
+ Depreciation	**$ 342,592**	**$ 374,854**	**$ 410,154**	**$ 448,778**	**$ 491,039**	
- CAPEX	**$ 395,380**	**$ 415,989**	**$ 437,671**	**$ 460,484**	**$ 484,486**	
Net Working Capital Beginning	$ 1,805,393	$ 1,842,686	$ 1,973,264	$ 2,047,033	$ 2,103,506	
Net Working Capital End	$ 1,842,686	$ 1,973,264	$ 2,047,033	$ 2,103,506	$ 2,160,114	
+ Change in NWC	**$ 37,293**	**$ 130,578**	**$ 73,769**	**$ 56,473**	**$ 56,608**	
Debt Free Cash Flows	$ 276,690	$ 381,628	$ 338,436	$ 336,952	$ 355,346	
Cash Flows for Valuation	**$ 276,690**	**$ 381,628**	**$ 338,436**	**$ 336,952**	**$ 355,346**	
Terminal Growth Rate	0.4%					
WACC	6.9%					
Terminal Value	**$ 5,505,941**					
WACC	6.85%	6.85%	6.85%	6.85%	6.85%	Conversion Period
Period	0.5	1.5	2.5	3.5	4.5	0.5
Discount Factor	0.97	0.91	0.85	0.79	0.74	
Present Value of Cash Flows	**$ 267,668.71**	**$ 345,505.73**	**$ 286,748.66**	**$ 267,178.68**	**$ 263,691.25**	
		Mix of TV and CFs				
Sum of PV Cash Flows	$ 1,430,793	25.9%				
PV of Terminal Value	$ 4,085,784	74.1%				
Present Valuation (in thousands)	**$ 5,516,577**					
Shares Outstanding (2018, in thousands)	140,498					
Per Share Price	**$ 39.26**					

Exhibit 8: Business Enterprise Value and Multiple from Comparable Companies

Fiscal Year Ending	2017	2016	2015
Pier 1 Imports			
Total Equity	$ 277,570	$ 292,028	$ 284,757
Non-Current Debt	$ 197,906	$ 199,077	$ 200,255
Current Debt	$ 2,000	$ 2,000	$ 2,000
Less Cash	$ 135,379	$ 154,460	$ 115,221
Business Enterprise Value	$ 342,097	$ 338,645	$ 371,791
EBIT	$ 27,669	$ 54,862	$ 75,208
Plus Depreciation	$ 53,603	$ 54,603	$ 50,944
EBITDA	$ 81,272	$ 109,465	$ 126,152
Revenue	$ 1,798,522	$ 1,828,446	$ 1,892,230
Total Assets	$ 772,319	$ 843,082	$ 819,191
BEV / EBITDA	4.2x	3.1x	2.9x
BEV / EBIT	12.4x	6.2x	4.9x
BEV / Revenue	0.2x	0.2x	0.2x
BEV / Assets	0.4x	0.4x	0.5x
Williams Sonoma			
Total Equity	$ 1,203,566	$ 1,248,220	$ 1,198,226
Non-Current Debt	$ 299,422	$ -	$ -
Current Debt	$ -	$ -	$ -
Less Cash	$ 390,136	$ 213,713	$ 193,647
Business Enterprise Value	$ 1,112,852	$ 1,034,507	$ 1,004,579
EBIT	$ 453,811	$ 472,599	$ 488,634
Plus Depreciation	$ 183,077	$ 173,195	$ 167,760
EBITDA	$ 636,888	$ 645,794	$ 656,394
Revenue	$ 5,292,359	$ 5,083,812	$ 4,976,090
Total Assets	$ 2,785,749	$ 2,476,879	$ 2,417,427
BEV / EBITDA	1.7x	1.6x	1.5x

BEV / EBIT	2.5x	2.2x	2.1x
BEV / Revenue	0.2x	0.2x	0.2x
BEV / Assets	0.4x	0.4x	0.4x

Wayfair

Total Equity	$ (48,329)	$ 79,384	$ 242,545
Non-Current Debt	$ -	$ -	$ -
Current Debt	$ 332,905	$ -	$ -
Less Cash	$ 558,960	$ 279,840	$ 334,176
Business Enterprise Value	$ (274,384)	$ (200,456)	$ (91,631)
EBIT	$ (235,453)	$ (196,217)	$ (81,350)
Plus Depreciation	$ 87,020	$ 55,572	$ 32,446
EBITDA	$ (148,433)	$ (140,645)	$ (48,904)
Revenue	$ 4,720,895	$ 3,380,360	$ 2,249,885
Total Assets	$ 1,213,403	$ 761,683	$ 694,581
BEV / EBITDA	1.8x	1.4x	1.9x
BEV / EBIT	1.2x	1.0x	1.1x
BEV / Revenue	-0.1x	-0.1x	0.0x
BEV / Assets	-0.2x	-0.3x	-0.1x

Amazon

Total Equity	$ 27,709,000	$ 19,285,000	$ 13,384,000
Non-Current Debt	$ 24,743,000	$ 7,694,000	$ 8,235,000
Current Debt	$ -	$ -	$ -
Less Cash	$ 20,522,000	$ 19,334,000	$ 15,890,000
Business Enterprise Value	$ 31,930,000	$ 7,645,000	$ 5,729,000
EBIT	$ 4,106,000	$ 4,186,000	$ 2,233,000
Plus Depreciation	$ 11,478,000	$ 8,116,000	$ 6,281,000
EBITDA	$ 15,584,000	$ 12,302,000	$ 8,514,000
Revenue	$ 177,866,000	$ 135,987,000	$ 107,006,000
Total Assets	$ 131,310,000	$ 83,402,000	$ 65,444,000
BEV / EBITDA	2.0x	0.6x	0.7x
BEV / EBIT	0.4x	0.5x	0.4x
BEV / Revenue	0.1x	0.1x	0.1x

BEV / Assets	0.1x	0.1x	0.1x

Overstock

Total Equity	$ 172,123	$ 172,960	$ 149,361
Non-Current Debt	$ 39,909	$ 44,179	$ 9,488
Current Debt	$ -	$ 3,256	$ -
Less Cash	$ 203,215	$ 183,098	$ 170,262
Business Enterprise Value	$ 8,817	$ 37,297	$ (11,413)
EBIT	$ (46,634)	$ 6,915	$ (534)
Plus Depreciation	$ 28,848	$ 27,283	$ 23,516
EBITDA	$ (17,786)	$ 34,198	$ 22,982
Revenue	$ 1,744,756	$ 1,799,963	$ 1,657,838
Total Assets	$ 433,815	$ 485,076	$ 429,129
BEV / EBITDA	-0.5x	1.1x	-0.5x
BEV / EBIT	-0.2x	5.4x	21.4x
BEV / Revenue	0.0x	0.0x	0.0x
BEV / Assets	0.0x	0.1x	0.0x

Macy's

Total Equity	$ 5,661,000	$ 4,322,000	$ 4,253,000
Non-Current Debt	$ 5,861,000	$ 6,562,000	$ 6,995,000
Current Debt	$ 22,000	$ 309,000	$ 642,000
Less Cash	$ 1,455,000	$ 1,297,000	$ 1,109,000
Business Enterprise Value	$ 10,089,000	$ 9,896,000	$ 10,781,000
EBIT	$ 1,807,000	$ 1,315,000	$ 2,039,000
Plus Depreciation	$ 991,000	$ 1,058,000	$ 1,061,000
EBITDA	$ 2,798,000	$ 2,373,000	$ 3,100,000
Revenue	$ 24,837,000	$ 25,778,000	$ 27,079,000
Total Assets	$ 19,381,000	$ 19,851,000	$ 20,576,000
BEV / EBITDA	3.6x	4.2x	3.5x
BEV / EBIT	5.6x	7.5x	5.3x
BEV / Revenue	0.4x	0.4x	0.4x
BEV / Assets	0.5x	0.5x	0.5x

Bed Bath and Beyond

Total Equity	$ 2,888,628	$ 2,719,277	$ 2,559,540
Non-Current Debt	$ -	$ -	$ -
Current Debt	$ 1,492,078	$ 1,491,603	$ 1,500,000
Less Cash	$ 346,140	$ 488,329	$ 515,573
BEV	$ 4,034,566	$ 3,722,551	$ 3,543,967
EBIT	$ 761,321	$ 1,135,210	$ 1,414,903
Plus Depreciation	$ 313,107	$ 290,914	$ 273,947
EBITDA	$ 1,074,428	$ 1,426,124	$ 1,688,850
Revenue	$ 12,349,301	$ 12,215,757	$ 12,103,887
Total Assets	$ 7,040,806	$ 6,846,029	$ 6,498,940
BEV / EBITDA	3.8x	2.6x	2.1x
BEV / EBIT	5.3x	3.3x	2.5x
BEV / Revenue	0.3x	0.3x	0.3x
BEV / Assets	0.6x	0.5x	0.5x

Exhibit 9: Multiples Valuation

Ratio	2017 Average	2017 Median	2017 BBBY	SD	BBBY Position in Distribution
BEV / EBITDA	2.4x	2.0x	3.8x	1.6x	80.0%
BEV / EBIT	3.9x	2.5x	5.3x	4.4x	62.9%
BEV / Revenue	0.2x	0.2x	0.3x	0.2x	83.2%
BEV / Assets	0.3x	0.4x	0.6x	0.3x	85.0%

Ratio Chosen			
BEV / Revenue		0.2x	
x BBBY 2017 Revenue	$	12,349,301	
BBBY BEV	$	2,019,749	
- Long Term Debt	$	1,492,078	<-- Pay the debt holders; cash and securities stay because the company is an "ongoing concern"
Total Equity	$	527,671	
÷ Shares Outstanding		140,498	
Per Share Price	**$**	**3.76**	