

**Detailed Valuation of
25,000 Shares of Common Stock**

as of December 31, 2014

Doubleday Sports, Inc.



Copyright 2016
Drysdale Valuation, PLLC
Gibraltar Business Valuations is a dba of Drysdale Valuation, PLLC

SAMPLE ONLY - Names, Amounts and Circumstances Fictionalized

February 1, 2015

Sandy Koufax, Trustee
DOUBLEDAY SPORTS, INC. EMPLOYEE STOCK OWNERSHIP TRUST
1234 Ball Diamond Lane
Cooperstown, New York

Re: Valuation of Doubleday Sports, Inc.

Dear Mr. Koufax:

Gibraltar Business Valuations has performed a valuation (appraisal) of Twenty-Five Thousand (25,000) shares of voting common stock of Doubleday Sports, Inc. as of December 31, 2014. The following detailed report is intended to provide our estimate (opinion) of the fair market value on a controlling, non-marketable basis.

This valuation was performed solely to comply with regulatory requirements as defined by the U.S. Department of Labor related to the annual valuation of shares held by Doubleday Sports, Inc. Employee Stock Ownership Trust for the Doubleday Sports, Inc. Employee Stock Ownership Plan. The resulting estimate of value should not be used for any other purpose or by any other party.

Based on our analysis, as described in the following detailed valuation report, we have concluded that the fair market value of Twenty-Five Thousand (25,000) shares of voting common stock as of December 31, 2014, on a controlling, non-marketable basis is:

Eighteen Million Four Hundred Seventy-Five Thousand Dollars

\$18,475,000

which equates to

Seven Hundred Thirty-Nine Dollars per Share

\$739/share

This estimate and opinion of value is subject to the Statement of Assumptions and Limited Conditions found in the appendices to the report. This letter, and the following report, are a single document and are not to be considered separately.

Respectfully,
GIBRALTAR BUSINESS VALUATIONS


Don M. Drysdale, CPA/ABV, ASA

This page intentionally left blank to accommodate double sided printing

Table of Contents



Opinion Letter	iii
Table of Exhibits	vii
Introduction	1
Macroenvironmental Risks	9
Industry Risks	14
Internal Risks and Resources	17
Cost of Capital	31
Valuation Approaches	42
Asset Approach	44
Income Approach	48
Market Approach	57
Effects of Control on Value	60
Effect of Marketability on Value	63
Conclusion	73
Appendix A: Representations/Certification	A-1
Appendix B: Financial Information	B-1
Appendix C: Adjustments to Public Guideline Companies	C-1
Appendix D: Sources of Information	D-1
Appendix E: Qualifications	E-1
Appendix F: Statement of Assumptions and Limiting Conditions	F-1

Intentionally Left Blank to Accommodate Double-Sided Printing

Table of Exhibits

Exhibit 1: Locations	2	Exhibit 36: Unsystematic Risk	32
Exhibit 2: Tri-Level Risk Framework	6	Exhibit 37: Returns by Asset Classes	33
Exhibit 3: Industry Life Cycle Curve	6	Exhibit 38: Build-up Method Formula	33
Exhibit 4: Life Cycle Implications	7	Exhibit 39: Size Adjusted Equity Risk Premium	34
Exhibit 5: Macroeconomic Risk	9	Exhibit 40: Discount Rate	35
Exhibit 6: GDP	9	Exhibit 41: Weighted Average Cost of Capital	36
Exhibit 7: Purchasing Managers Index	10	Exhibit 42: Guideline Public Company Summary	37
Exhibit 8: Unemployment	10	Exhibit 43: Size Comparison	38
Exhibit 9: Market Area Population Growth	12	Exhibit 44: Growth Comparison	39
Exhibit 10: Macroeconomic Assessment	13	Exhibit 45: Guideline Adjustment Formula	40
Exhibit 11: Industry Risk Framework	14	Exhibit 46: Adjusted Multiples	40
Exhibit 12: Industry Risk Assessment	16	Exhibit 47: Cash Allocation	45
Exhibit 13: Entity Risk Framework	17	Exhibit 48: Adjusted Balance Sheet	46
Exhibit 14: Revenue Trend	18	Exhibit 49: Non-Operating Real Estate	47
Exhibit 15: Revenue Index	18	Exhibit 50: G&A Expense Adjustment	48
Exhibit 16: Days Receivable (DSO)	19	Exhibit 51: Adjustments to Earnings	49
Exhibit 17: Days Inventory (DIO)	20	Exhibit 52: Cash Flow to Invested Capital	50
Exhibit 18: Days Payable (DPO)	20	Exhibit 53: Depreciation v. Capital Expenditures	50
Exhibit 19: Revenue Per Employee	21	Exhibit 54: Future Earnings	51
Exhibit 20: Gross Profit Margins	21	Exhibit 55: Future Account Balances	52
Exhibit 21: Operating Expenses	23	Exhibit 56: Residual Working Capital Needs	53
Exhibit 22: Pre-Tax Earnings	23	Exhibit 57: Capitalized Cash Flows Formula	53
Exhibit 23: Cash Conversion Cycle	23	Exhibit 58: DCF Formula	54
Exhibit 24: Revenue-to-Assets	24	Exhibit 59: DCF Method	55
Exhibit 25: Pretax Return on Assets	24	Exhibit 60: Implied Valuation Multiple	59
Exhibit 26: Pretax Return on Equity	24	Exhibit 61: Control Spectrum	61
Exhibit 27: DuPont Analysis	25	Exhibit 62: Restricted Stock Studies	65
Exhibit 28: Current Ratio	25	Exhibit 63: TVA Study Benchmark	66
Exhibit 29: Quick Ratio	26	Exhibit 64: Longstaff Study Summary	68
Exhibit 30: Working Capital Percentage	26	Exhibit 65: Adjusted Volatility	69
Exhibit 31: Debt-to-Equity	26	Exhibit 66: Extrapolated Longstaff Results	69
Exhibit 32: Interest Coverage	27	Exhibit 67: IPO Cost Formula	71
Exhibit 33: Book Value	27	Exhibit 68: Summary of Methods for Lack of Marketability	71
Exhibit 34: Altman Z Score	28	Exhibit 69: Conclusion of Value	73
Exhibit 35: Entity Specific Risk Assessment	29		

Intentionally Left Blank to Accommodate Double-Sided Printing

Introduction

Doubleday Sports, Inc. Employee Stock Ownership Trust engaged Gibraltar Business Valuations to value 25,000 shares of common stock of Doubleday Sports, Inc. as of December 31, 2014 in connection with its sponsorship of the Doubleday Sports, Inc. Employee Stock Ownership Plan.

Organization of this Report

Value is a function of economic benefit (i.e., cash flow, net assets, etc.) and the risk associated with that economic benefit. More specifically, it is the future expected economic benefit to be received by an investor. Because the future is unknown, there is risk that expectations will not match reality. When appraising the value of an investment, the risk is represented by the rate of return an investor would expect to receive. This rate of return is also referred to as the cost of capital. The greater the risk, the higher the expected rate of return. This report is organized as follows:

- ◆ provides background into the subject of this valuation and an investment therein;
- ◆ provides an analysis of the risks associated with an investment;
- ◆ develops an appropriate cost of capital based on those risks; and,
- ◆ applies the cost of capital to the associated measure of economic benefit.

What is Being Valued?

Subject Entity and Ownership

Subject Ownership. Doubleday Sports, Inc. Employee Stock Ownership Trust engaged Gibraltar Business Valuations (GBV) to appraise the value of 25,000 shares of voting common stock representing a 100 percent ownership interest of DSI as of December 31, 2014 (Valuation Date).

Subject Entity. Doubleday Sports, Inc. (DSI or Company) is a corporation organized under the laws of the State of New York, and has elected S-corporation status with the Internal Revenue Service (IRS).

Background. Abner Doubleday opened a 1,800 square foot sporting goods store in Cooperstown, New York in 1829. In 1937 he incorporated the business as a New York corporation under the name Doubleday Sports, Inc. Over time the business grew and in 1964, Abraham G. Mills became a shareholder. In 1989 DSI sponsored the Doubleday Sports, Inc. Employee Stock Ownership Plan (ESOP) and the Estate of Abner Doubleday sold its shares to the Doubleday Sports Inc. Employee Stock Ownership Trust (ESOT). This gave the ESOT an 62 percent ownership stake in DSI. Later in that same year, Mr. Mills sold his shares to the ESOT, making it the sole shareholder.

In 1990, DSI elected S corporation status with the Internal Revenue Service (IRS). In 2011, DSI opened additional stores in the region, adding locations in Albany, Buffalo, and Syracuse New York.

Products/Services. DSI sells a full spectrum of sporting goods and outdoor products, that includes, but is not limited to, the following:

- ◆ Ski and snowboard equipment and clothing;
- ◆ Hunting equipment, including, firearms, ammunition, reloading equipment and supplies, clothing as accessories;

EXHIBIT 1: Locations

Location	% of Revenue
Cooperstown, Otsego County, New York	15.0%
Buffalo, Erie County, New York	25.0%
Rochester, Monroe County, New York	20.0%
Syracuse, Onondaga County, New York	20.0%
Albany, Albany County, New York	10.0%
Utica, Oneida County, New York	10.0%
Total	100.0%

- ◆ Fishing equipment, including, rods, reels, tackle, lures, float tubes, clothing and accessories;
- ◆ Camping and backpacking equipment, including, tents, sleeping bags, backpacks, outdoor cooking equipment, and other camping and backpacking supplies and accessories;
- ◆ Outdoor clothing for men, women and children;
- ◆ Footwear for men, women and children, including athletic shoes, work boots and other footwear; and,
- ◆ Sports equipment for golf, racquet sports, basketball, volleyball, baseball, softball, football, soccer, and other sporting activities.

DSI also provides rentals and related services. It rents skis, snowboards, snowshoes, kayaks, canoes, paddleboards, wakeboards, mountain bikes, and paintball guns. These rentals and other services represent a small piece of the overall revenue generated.

Locations. DSI operates from six locations as detailed in the accompanying table (see Exhibit 1), and is headquartered in Cooperstown, New York.

Current Ownership. The ESOT holds 25,000 shares of the common stock of Doubleday Sports, Inc., representing 100 percent of the outstanding shares of stock (Subject Interest).

Historical Transactions. As previously described, the prior owners sold their shares of stock to the ESOT in 1989. Since that time, there have not been any transactions involving equity interests in DSI.

Transfer Restrictions. Shares of DSI are restricted from transfer by Federal and State securities laws and regulations. DSI's organizational documents (i.e. [articles of incorporation and bylaws] also place restrictions on the transferability of the Subject Interest. These restrictions have been presented in more detail later in this report.

Why is it Being Valued?

This valuation engagement is to determine an estimate of value in order to comply with regulatory requirements defined by the U.S. Department of Labor related to the annual valuation of shares held by the Doubleday Sports, Inc. Employee Stock Ownership Trust for the Doubleday Sports, Inc. Employee Stock Ownership Plan. The report and analysis are restricted for this purpose only, and are not to be used for any other purpose or by any other party.

This report is not designed nor intended to be used for selling this business to outside individuals or other entities. It may not contain sufficient descriptive information to satisfy an uninformed prospective buyer of the Subject Interest. It is also not designed to adequately portray desirable qualities of the business, which may be informative to a potential buyer. Such information should be addressed in an offering document designed for a that purpose.

When is the Subject Interest Being Valued?

This valuation was performed as of December 31, 2014 and this report was issued on February 1, 2015. We have neither obligation nor responsibility to update this report for events, circumstances or information that comes to our attention subsequent to the date of this report.

How is the Subject Interest Being Valued?

Standard of Value

How is Value Defined? The standard of value is “fair market value.” The U.S. Department of Labor Proposed Regulation 29 CFR Part 2510 and IRS Revenue Ruling 59-60, 1959-1, C.B. 237 define fair market value as:

the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.

Rev. Rul. 59-60 also states, “in addition that the hypothetical buyer and seller are assumed to be able, as well as willing, to trade and to be well informed about the property and the market for such property.”

Throughout this report we have used the proper noun, “Investor,” to refer to a hypothetical, willing and able, buyer and seller.

What Affect do Income Taxes Have? S corporations do not pay income taxes directly to the IRS. This type of legal business organization is referred to as a “pass-through entity” (PTE). For tax purposes the earnings are attributed to the individual owners, who become individually responsible for paying income taxes on their *pro-rata* share of corporate earnings.

Owners of PTEs may receive cash “distributions” (as opposed to a C corporation’s “dividend”) from entity income. Because C corporation dividends are paid after the tax liability is satisfied, an Investor will recognize that only a PTE’s “excess distributions” (i.e., those in excess of the entity’s tax liability are equivalent to C corporation dividends.

Well managed S corporations pay distributions to shareholders in amounts at least sufficient to cover the income taxes that accrue to the shareholders. As such, there is a cash flow obligation on S corporations for such distributions.

In the case of ESOPs, one or more of the shareholders is the Trust, which does not pay income taxes. In this particular case, the Trust holds 100 percent of the outstanding shares and the actual amount of income taxes paid is zero.

There are two conflicting thoughts on how to treat S corporation ESOPs. In the tax court case, *Gross v Commissioner*, the idea of “tax affecting” S corporations was rejected. However, the Valuation Advisory Committee of the ESOP Association recommends treating S Corporation that sponsor ESOPs as C corporations for valuation purposes, which includes tax affecting. The reasoning behind this is set forth in the following:

Since FMV [fair market value] does not assume a particular buyer, one cannot assume the hypothetical buyer described by the FMV definition... will be an S corporation. Therefore, the FMV of company shares would not include any future benefits accruing to an ESOP shareholder of an S corporation.¹

An Investor would follow the recommendation of the ESOP Association in this particular case, and interpret this statement that S corporations sponsoring ESOPs should be treated as a C corporation for valuation purposes. The subject business entity in *Gross v Commissioner* did not sponsor an ESOP, and therefore the guidance from the ESOP association appears more applicable.

Premise of Value

GBV has assumed that the Company will continue in its current form, operating its current lines of business. GBV has also assumed that there is no planned or contemplated discontinuance of any line of business nor any liquidation of the Company.

Basis of Value

The Subject Interest is a controlling interest. As discussed later in this report, a controlling interest has the ability to direct administration, management and operations of the Company. This may increase the

1. Valuation Advisory Committee of the ESOP Association, *Advanced Issue Brief*, “Valuation Issues for ESOPs in S Corporation, p. 2.

value of the Subject Interest relative to an equivalent ownership interest that lacks control.

The Subject Interest lacks marketability. As discussed later in this report, marketability (also referred to as liquidity) is the ability to sell and liquidate an ownership interest within a short period of time. This lack of marketability may cause the Subject Interest to be less valuable than an equivalent ownership interest that is marketable.

Some valuation analysts argue that a 100 percent controlling ownership interest in a privately held entity is fully marketable and that adjustments for lack of marketability are not applicable to such interests. They hold that even though such interests cannot be sold quickly, the owner can still extract cash from the business while waiting for a liquidity event. While that may be true, a privately held entity is not as marketable as publicly traded stocks, and the value may change while the owner is waiting for a liquidity event. This is a risk that does not fully exist with a publicly traded stock.

What are the Applicable Professional Standards?

American Society of Appraisers

This engagement was conducted in accordance with the Business Valuation Standards (BVS) of the American Society of Appraisers (ASA) and is intended to be an appraisal, which is described by the BVS as follows:

An Appraisal is the act or process of determining the value of a business, business ownership interest, security or intangible asset.

The objective of an appraisal is to express an unambiguous opinion as to the value of a business, business ownership interest, or security, which opinion is supported by all procedures that the appraiser deems to be relevant to the valuation.²

2. American Society of Appraisers, Business Valuation Standards, *BVS-I General Requirements for Developing a Business Valuation*, II(C)(1)(a), (b).
3. American Institute of Certified Public Accountants, SSVS No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*, ¶ 21a.
4. The American Society of Appraisers uses the term “estimate” in connection with a Limited Appraisal, which is lower in scope than an “opinion.” It uses the term, “opinion,” in connection with an Appraisal, its highest scope of work. On the other hand, the AICPA uses the term, “estimate” in connection with its highest scope of work. For this report, the terms opinion and estimate are considered synonymous.
5. *Ibid.*, SSVS 1, ¶51.

This report is intended to be a “comprehensive report.”

American Institute of CPAs

This calculation engagement was conducted in accordance with the Statement on Standards for Valuation Services (SSVS) No. 1 of the American Institute of Certified Public Accountants (AICPA), which describes a calculation engagement as follows:

Valuation engagement—A valuation analyst performs a valuation engagement when (1) the engagement calls for the valuation analyst to estimate the value of a subject interest and (2) the valuation analyst estimates the value (as outlined in paragraphs 23-45) and is free to apply the valuation approaches and methods he or she deems appropriate in the circumstances. The valuation analyst expresses the results of the valuation as a conclusion of value; the conclusion may be either a single amount or a range.³

This report is intended to be a detailed report, estimating⁴ a conclusion of value. SSVS describes a detailed report as follows:

The detailed report is structured to provide sufficient information to permit intended users to understand the data, reasoning, and analysis underlying the valuation analyst’s conclusion of value.⁵

Uniform Standards of Professional Appraisal Practice

This appraisal was conducted in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP).

Differences exist in the terminology of the BVS and the SSVS. We have generally used the terminology of the SSVS in this report.

Valuator Independence

GBV is an independent valuation firm. No owner, officer or employee of GBV has any existing or contemplated financial interest in the Company. GBV is not, nor has it acted as an advocate for the Company. The fee for this analysis was not based on the opinion of value provided.

Valuation Process

Procedures

In performing this analysis, we have viewed the Company from the standpoint of an independent, outside Investor. We have considered factors a reasonable and prudent outside Investor would consider, for the purpose of estimating a fair and reasonable rate of return such an Investor would expect to receive.

The value of a business enterprise, at its most basic level, is the function of the following:

- ◆ Expected cash flows to the owner;
- ◆ Expected future growth in those cash flows; and
- ◆ Perceived risks associated with the investment.

Each of these items is addressed in this report.

The procedures employed in valuing the Subject Interest included such steps as an Investor would consider necessary, including but not limited to following:

- ◆ A visit to each of the Company's individual stores and headquarters, January 15 through 16, 2015;
- ◆ Discussions with management regarding the past and future operations of the business;
- ◆ An analysis of the historical and estimated future financial condition of the Company;
- ◆ An analysis of the industry in which the Company operates;
- ◆ An analysis of the macroenvironmental conditions, including economic conditions, as of the valuation date;

- ◆ A comparative analysis where possible of guideline companies; and,
- ◆ An analysis of other pertinent facts and data resulting in the conclusion of value.

An Investor would consider the factors stated in IRS Revenue Ruling 59-60 in developing the risk profile. They include both internal and external influences that can impact the value of the Subject Interest. These factors are as follows:

- ◆ The nature of the business and the history of the enterprise from its inception.
- ◆ The economic outlook in general and the condition and outlook of the specific industry in particular.
- ◆ The book value of the equity ownership and financial condition of the business.
- ◆ The earnings capacity of the business.
- ◆ The dividend-paying capacity.
- ◆ Whether or not the enterprise has goodwill or other intangible value.
- ◆ Sales of the equity ownership and size of the block of equity ownership to be valued.
- ◆ The market price of equity ownerships of corporations (and other forms of business ownership) engaged in the same or similar line of business, having their equity ownership actively traded in a free and open market, either on an exchange or over-the-counter.⁶

Investment Risks

Risk Assessments. One of the tenets of valuation is that investors are risk averse. This means that investors will either avoid risk or expect to earn a higher rate of return on investments that carry higher risk. One of the objectives of this analysis is to develop a risk profile, and use it to develop an appropriate expected rate of return on an investment in the Subject Interest.

To develop the risk profile, an Investor would use something similar to the tri-level risk framework developed by Warren Miller at Beckmill Research. It

6. Rev. Rul. 5-60, §4.01.

EXHIBIT 2: Tri-Level Risk Framework

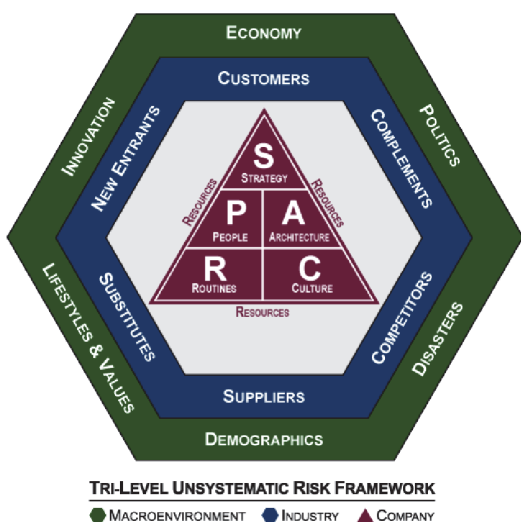
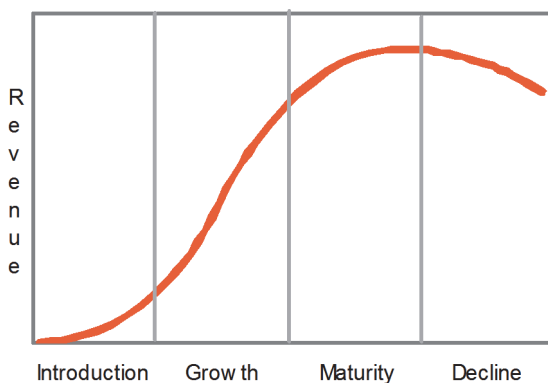


EXHIBIT 3: Industry Life Cycle Curve



breaks unsystematic⁷ risk into three broad categories: macroenvironmental risk, industry risk, and company risk (see Exhibit 2). The first of these categories, macroenvironmental risk, focuses on industry level risks external to the Company, and over which it has no control. The second, industry risk, represent industry level risk items over which the Company may have some control. The last, company risk, are risks specific to the

Subject Entity and includes items within the control of the Company. Each of these categories is addressed in this report, and summarized in the *Risk Profile* Chapter.

Subject Domain. A domain is a subset of an industry and is defined as, “the group of firms in the valuation entity’s competitive arena.”⁸ In order to effectively analyze external risks, an Investor must first define the domain in which the Company operates.

In this case an Investor would define DSI’s domain as the dozens of sporting goods retailers operating in the same market areas as DSI. More specifically, DSI’s market area includes Albany, Erie, Monroe, Oneida, Onondaga, and Oswego Counties in New York.

Industry Life Cycle. An analysis of the industry life cycle can be a helpful tool in assessing external risk associated with an industry/domain. The classic industry life cycle curve, presented in the accompanying chart (see Exhibit 3), consists of different stages, namely the introduction stage, the growth stage, the maturity stage and the decline stage. The shape of the curve and the length of each stage will vary by industry, but more importantly for this analysis is that each stage carries with it different challenges and risks. The challenges and implications of these different stages are summarized in the accompanying table (see Exhibit 4).

IBIS World Industry Report 45111: Sporting Goods Stores in the US, (IBISWorld) indicates that the industry is in a maturity stage. IBISWorld indicates that the key features of a mature industry are as follows:

- ◆ Revenue grows at same pace as economy.
- ◆ Company numbers stabilized.
- ◆ M&A stage.
- ◆ Established technology & processes
- ◆ Total market acceptance of product & brand.
- ◆ Rationalization of low margin products & brands.⁹

7. The term, unsystematic risk will be explained in greater detail later in this report.

8. Miller, Warren D., *Value Maps: Valuation Tools That Unlock Business Wealth*, p. 8.

9. McKenna, Farrell, “Sporting Goods Stores in the US,” IBISWorld Industry Report 45111, Mar. 2015, p. 4,13.

EXHIBIT 4: Life Cycle Implications

	Key Challenge	Market Implications	Competitive Implications	Financial Implications
Introduction	Product design and innovation	Small market, few market segments, high risks	Few competitors	Low margins, high R&D costs
Growth	Management of growth, scaling of operations, market development	Increasing market size and segmentation	New entrants creating increasing competition	Improving margins, investments required for advertising and expansion
Maturity	Controlling costs, increasing efficiency, process improvement	Large market with many segments, slower growth	Intense competition with price pressures	Tightening margins, investment required for process improvements
Decline	Planning and effectuating an exit or transition to a different industry	Declining markets	Declining competition	Low margins, investment required for switch to new industry

Adapted from Gregory G. Dess, G.T. Lumpkin, and Alan B. Eisner, (2010). "Strategic Management: Creating Competitive Advantages," Fifth Edition, McGraw-Hill Irwin, Boston, 2010.

Financial Benchmarking. An Investor would benchmark various DSI financial measures and ratios to data from guideline public companies (GPCs) and privately held peers (Private Peers). The GPCs have been identified and analyzed later in this report. An investor would look to Private Peer data from sources like Bizminer *Industry Financial Reports*. (Bizminer) The Bizminer peers represent 22 firms with revenues between \$50 million and \$100 million operating under NAICS code 451110, Sporting Goods Stores. The benchmarking of this data to DSI is presented in the *Internal Risks and Resources* chapter of this report.

Sources of Information

An Investor will read, study, consider, and rely on various information sources to assist in the analysis. These included both internal and external information sources. A detailed listing of information we relied upon is in the appendices to this report.

The approaches and methodologies used in this valuation did not comprise an examination in accordance with generally accepted auditing standards (GAAS). The objective of a GAAS examination is to express an opinion regarding the fair presentation of historical or prospective financial statements or other financial information in accordance with generally accepted accounting principles (GAAP). Because we did not perform an examination in accordance with GAAS, we express no opinion and accept no responsibility for the accuracy and completeness of the financial information or other data provided to us by others. We do assume that the financial and other information provided to us is accurate and complete, and we have relied upon it in performing this valuation.

Limiting Conditions

We include a *Statement of Assumptions and Limiting Conditions* as an appendix to this report. This *Statement of Assumptions and Limiting Conditions* describes important conditions, restrictions, and assumptions used

in this analysis. We have further referenced additional assumptions and restrictions throughout this report.

Users of this report should read and study the entire report in order to understand the conclusion of value.

Macroenvironmental Risks

An Investor would assess an increased risk to an investment in the domain due to lingering economic headwinds from poor labor market improvements, the slow pace of population growth of the market area, and the potential risks of handling consumers' credit and debit card information.



The tri-level risk framework separates external risks into two broad categories, known as macroenvironmental risks and industry risks. These risks, both macroenvironmental and industry, are common to all participants in a domain.

Researchers have identified macroenvironmental risks are items of risk that are shared among all members of an industry/domain. By definition, macroenvironmental factors are outside the influence or control of the domain they affect. The tri-level risk framework identifies six broad categories of macroenvironmental factors as potential sources of business risk (see Exhibit 5).

An Investor would analyze each of these factors to assess the risks each may represent to an investment in the Company. In this chapter we only discuss those macroenvironmental risk factors that an Investor would believe to have a material impact (either positive or negative) on the risk of investing in the Subject Interest

EXHIBIT 5: Macroenvironmental Risk

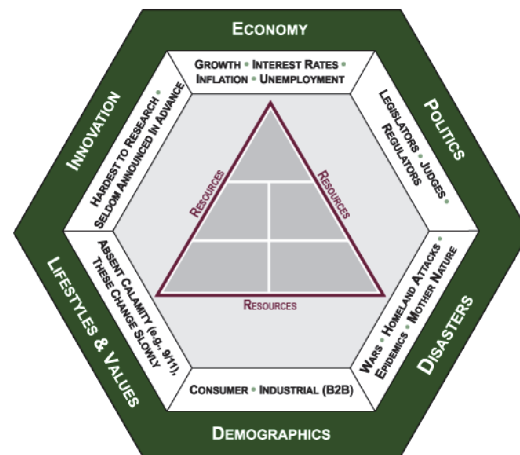
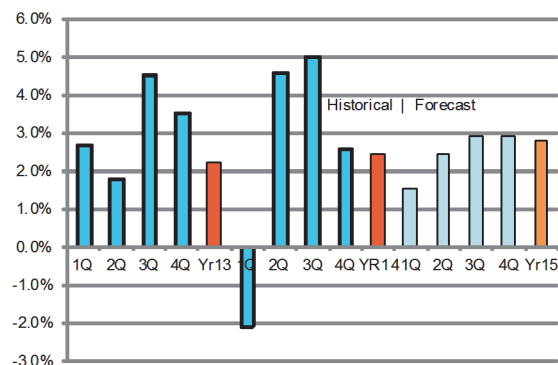


EXHIBIT 6: GDP



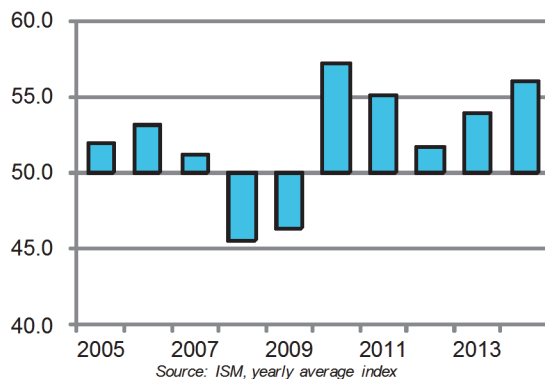
Economy

Economic factors impact most businesses, but the manner in which they are impacted can vary significantly. An Investor will consider various economic measures that have the most significant impact on the domain, as follows:

Real GDP

One measure of overall economic strength is Gross Domestic Product (GDP). The accompanying chart shows the quarterly and annual percentage change in Real GDP since 2013 (see Exhibit 6). GDP in the second and third quarters of 2014 showed strong

EXHIBIT 7: Purchasing Managers Index



leading indicator of economic strength. A PMI above 50 suggests that economic activity is expanding, while readings below 50 suggest economic slowing. The average 2014 PMI was 56.1, representing two years of increases following two straight years of declines (see Exhibit 7).

Unemployment

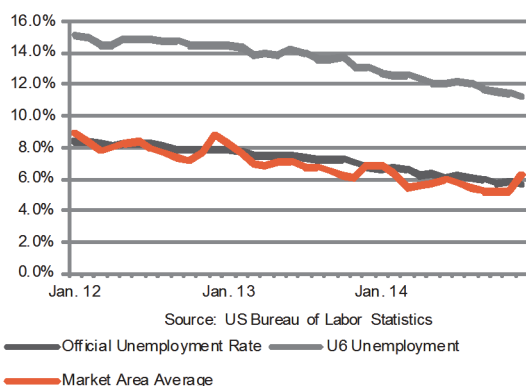
Consistent with the slow growth suggested by GDP and the PMI, the “official” unemployment rate has been slow to improve.

The average annual unemployment rate (U3) during 2014 was 6.2 percent,¹⁰ representing slow improvement from the high that occurred in 2010. During 2014 the unemployment rate dropped from 6.7 percent in December, 2013 to 5.6 percent in December 2014. The local area unemployment rate has mirrored the national rate. The trends of these rates have been presented in Exhibit 8.

However, the broadest measure of unemployment published by the U.S. Bureau of Labor Statistics, known as U6, includes the underemployed and those who have stopped looking for employment. This rate remained above 11 percent at the end of 2014.¹¹ Forecasters with Wells Fargo Bank and the Livingston Survey expect the unemployment rate to continue to decline slowly during 2015.¹²

Another measure of the employment situation is the labor participation rate. This rate is a measure of those participating in the labor force. It has been steadily declining, dropping to 62.7 percent in December 2014¹³, remaining virtually unchanged since the prior year. While the unemployment rate has steadily improved, the labor participation rate has not. This rate is the lowest since 1978. This rate impacts the unemployment rate because once someone drops out of the labor force, they are no longer counted as being unemployed, artificially lowering the unemployment rate.

EXHIBIT 8: Unemployment



growth. That growth moderated in the fourth quarter. On an annual basis, 2014 GDP growth was slightly better than the previous year. Forecasters call for a continuation of GDP gains throughout 2015.

Purchasing Managers Index

The purchasing managers index (PMI) is a monthly survey of purchasing managers and is considered a

10. U.S. Bureau of Labor Statistics, <http://data.bls.gov/timeseries/LNU04000000>, viewed Apr. 2, 2015.

11. Ibid. <http://www.bls.gov/timeseries/LNS133277709>, viewed Apr. 2, 2015.

12. Wells Fargo Securities, LLC, “Global Weakness Presents a Threat to U.S. Growth,” Feb. 11, 2015, and Federal Reserve Bank of Philadelphia, *Livingston Survey*, December 2014,

13. Ibid, Bureau of Labor Statistics, <http://data.bls.gov/timeseries/LNS11300000>, viewed Apr. 2, 2015.

Personal Income

Annual growth in personal income in the market area slowed to 1.2 percent in 2013 (most recent data available). This follows two years of annual growth that exceeded 5 percent.¹⁴

Inflation

Another important economic indicator is the rate of price inflation. An Investor would look to the consumer price index as a measure of inflation. This index has been below 2 percent over the past few years. Economic forecasters contributing to the Wells Fargo Economic Forecast expect the consumer price index to slow below one percent during 2015 and then return to more normalized rates afterwards.¹⁵

Canadian Dollar

Although it is not a major factor, the exchange rate for the Canadian Dollar is influential on retailers in the market areas. When exchange rates are favorable to Canadians, they will come to areas like upstate New York for vacations and long weekend get-aways. This boosts sales for retailers in these areas.

At the beginning of 2013, the exchange rate was about 0.9859 CND for every US dollar, which was historically strong against the US dollar. The rate steadily worsened for the Canadians throughout 2013 and 2014. At the end of 2013 the rate was 1.0637 CND to each US dollar, and at the end of 2014 the exchange rate was 1.1601 CND to every US dollar.¹⁶

Innovation

Industry innovations, technical or otherwise, influence the risks of investing in a business enterprise. Innovations can be a threat by causing an existing product to become obsolete or provide an opportunity to incorporate the innovation to improve products or services. IBISWorld indicates that the level of

technological change in the sporting goods retailing industry is low.¹⁷

Even though the rate of technological change in the industry is low, there are innovations impacting the industry. The ability of customers to scan bar codes with their phones and identify the retailer with the lowest price is an innovation that puts pricing pressure on retailers. Another concern in the industry is online retailers. However, this is of lesser concern for apparel retailers, because customers like to try on clothing to see how it fits before they buy. Some online retailers have even begun opening up physical stores to compliment their online business.¹⁸

Lifestyles and Values

Lifestyles and values can influence risks associated with an investment in a business enterprise through the importance society places on the products and/or services provided by the enterprise.

Sports Participation

Demand for sporting goods is driven by many factors including the sports participation rate. The rate of sports participation has been increasing in the U.S. During 2009 the sports participation rate was 18.2 percent. This rate has grown to 19 percent during 2014 and it is expected to grow to nearly 19.3 percent over the next five years. The increase in the sports participation rate will not only help to drive demand for sporting equipment, but also footwear and sports apparel.¹⁹

Shooting Sports

The re-election of Barak Obama and the attitudes of the current administration on gun control, along with the Sandy Hook tragedy, and the calls for gun control in its aftermath, created a significant demand for guns and ammunition. However, this demand began to slow in 2013²⁰ and declined in 2014. However, the decline appears to have bottomed as Smith and Wesson

14. Bureau of Economic Analysis, Personal Income Summary Personal Income, Population, Per Capital Personal Income, <http://bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=27&isuri=1&7022=20&7023=7&7024=non-industry&7025=4&7026=36029&7001=720&7028=1&7031=36000&7083=levels&7029=20&7090=70>.

15. Ibid., Wells Fargo Securities, LLC, p. 3.

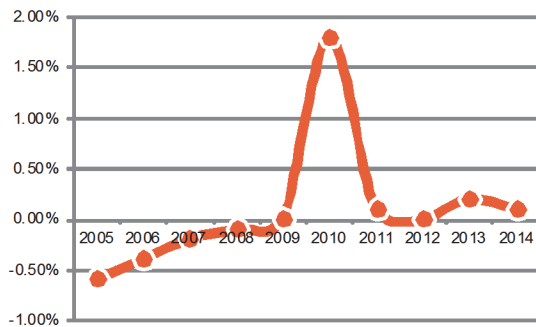
16. Data from the Board of Governors of the Federal Reserve System, H.10, :Foreign Exchange Rates, Country Data.

17. Ibid., IBISWorld, p. 31.

18. Jacobs, Steven, *Street Fight: Inside the Business of Hyperlocal*, "Why Ecommerce Companies are Eyeing Brick-and-Mortar Retail," <http://streetfightmag.com/2014/01/23/why-ecommerce-companies-are-eyeing-brick-and-mortar-retail/>, viewed Mar. 6, 2014.

19. Ibid., IBIS World, p. 16, 33.

EXHIBIT 9: Market Area Population Growth



Source: Federal Reserve Bank of St. Louis

reported stronger than anticipated gun sales during the third quarter 2014 and also reported that orders from retailers has been strong.²¹

Demographics

Demographic conditions and trends, as they relate to a business enterprise, also impact the risks of investing in that enterprise. Population growth of the Market Area has slowed significantly since the economic slowdown in 2008, as illustrated in the accompanying chart (see Exhibit 9). This suggests slow population growth going forward as long as economic growth remains slow. As presented later in this report, Cornell University projects long-term population estimates for the market area at practically zero percent.

Disasters

The potential for disasters, either natural or man-made, and the ability of a business enterprise to prepare for, and mitigate the impact of such disasters can add to the risks of an investment in a business enterprise. An Investor would not identify any potential for natural

disasters in the industry over and above the usual risks that face most businesses.

Data Breaches

Data breaches have become a regular occurrence and involve well know businesses. These include retailers, restaurants, insurance providers, and financial services firms. These data breaches have let to multi-million dollar lawsuits and settlements.²²

Weather

Participants in the domain sell outdoor products that can be dependent on weather. Sales of hunting, fishing, camping, skiing and related products can be enhanced with favorable weather conditions and diminished with unfavorable conditions. Additionally, the unpredictability of weather makes it difficult to plan appropriate types and quantities of inventory for the various seasons.

Politics

Political issues, and the sensitivity of a business' products and/or services to the political environment can influence the risks of investing in that business enterprise. IBISWorld categorizes the level of risk from regulatory and polity factors as light.²³ Despite this, there are political factors that do impact the industry.

Affordable Care Act (ACA)

The ACA has led to increased costs for employers and those employers have responded by passing more of the cost of health insurance to employees such as raising co-pays and boosting costs for dependents. Further, 40 percent of small businesses have delayed hiring, 20 percent have reduced their workforce, and 12 percent plan to reduce workers' hours.²⁴

Data Breach Legislation

Continuing occurrences of data breaches have congress conducting hearing on the subject. There are 47 states that have data breach notification laws.²⁵

20. Bhasin, Kim, *Huff Post Business*, "Buying Guns Has Become a New Post-Thanksgiving Tradition in America:" (Nov.29, 2013), http://www.huffingtonpost.com/2013/11/29/black-friday-gun-sales_n_4351663.html, viewed Mar. 6, 2014.







21. Roberts, Daniel, *Fortune*, "Guns are barreling back, thanks to women," (Mar. 6,2015), <http://fortune.com/2015/03/06/gun-boom-smith-and-wesson/>, viewed Mar. 19, 2015.

22. "In the News: Data Breach," *Chicago Tribune*, <http://articles.chicagotribune.com/keyword/data-breach>, viewed Apr. 2, 2015.

23. *Ibid.*, p. 24.

24. Herrick, Devon M., "The Effects of the Affordable Care Act on Small Business," *Policy Reports | Health*, National Center for Policy Analysis, <http://www.ncpa.org/pub/st356>, Viewed Apr. 2, 2015.

EXHIBIT 10: Macroenvironmental Assessment

Economy	 Increased Risk	Although economic conditions appear to be slowly improving, unemployment remains high especially in light of the labor participation rate. The exchange rate for the Canadian Dollar has become less favorable for Canadians in recent months.
Innovation and Technology	 Neutral Risk	The pace of innovation and technological risk in the industry is low. Ecommerce presents a risk to traditional retailers, but the impact appears to be mitigated for clothing retailers by the desire of customers to try on clothing before purchase.
Lifestyles and Societal Values	 Decreased Risk	Demand for firearms has been very high in the last few years, but demand appears to be slowing. Sports participation levels are increasing.
Demographics	 Increased Risk	Population growth in the Market Area has slowed with the economic downturn and appears to remain low.
Disasters	 Increased Risk	Data breaches involving sensitive customer information have become more commonplace with negative impacts on revenues and expenses of retailers suffering such data breaches. Weather conditions can also impact domain revenues in any particular year.
Politics, Regulations and Legal	 Neutral Risk	Overall, the existence of regulation and legislation impacting the industry is low. However the Affordable Care Act is expected to increase costs for most businesses, and retailers may soon be subject to additional regulations covering data breaches.

Macroenvironmental Summary

An Investor would recognize the most significant macroenvironmental risks facing the domain as presented in the accompanying table (see Exhibit 10).

25. Jones, Erik C., "Step Aside, States?", (Jan. 22, 2015), http://www.slate.com/articles/technology/future_tense/2015/01/obama_data_breach_legislation_federal_laws_shouldn_t_pre_empty_state_laws.html, viewed Apr. 2, 2015.

Industry Risks

An Investor would assess an increased risk to an investment in the domain due to the competitive nature of the business and low barriers to entry.



An Investor would consider the condition and outlook of the industry/domain in which the entity operates. Like macroenvironmental risks, industry/domain risks impact all participants in the domain equally. Economist Michael Porter identified five forces that shape every industry. Other researchers, borrowing from Porter, have expanded this to six factors. The tri-level risk framework identifies these six factors as potential sources of business risk (see Exhibit 11).

An Investor would analyze each of these factors to assess the risks each may represent to an investment in the Company. In this chapter we only discuss those industry/domain risk factors that an Investor would consider as having a material impact (either positive or negative) on the risk of investing in the Subject Interest.

Customers

Customer Base

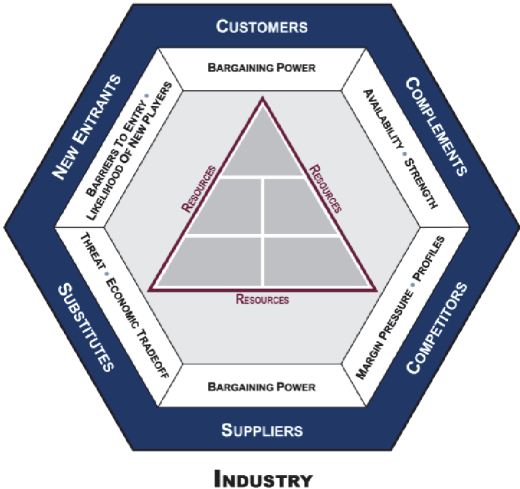
DSI's customer base is the general public in the market area. IBISWorld discusses demand for sporting goods as follows:

Demand for sporting goods is influenced by a number of variables including consumer income, sports participation levels, consumer preferences and population demographics.²⁶

Each of these factors, except consumer preferences, was addressed in the *Macroenvironmental Risks* chapter of this report.

26. Ibid., IBISWorld, p. 15.

EXHIBIT 11: Industry Risk Framework



Bargaining Power of Customers

As a retail operation, customers have little bargaining power without the ability to negotiate pricing. The power of the customer is in the exercise of their preferences to purchase items elsewhere.

Suppliers

Overview

Suppliers include all the manufacturers of sporting goods and clothing, and their representatives. These include large and small suppliers.

Bargaining Power of Suppliers

Independent sporting goods retailers have a number of buying groups that they can join, which offsets some of the power of the large sporting goods suppliers.

Competitors

Competitive Landscape

IBISWorld describes the competitive landscape as follows:

The Sporting Goods Stores industry is highly fragmented and characterized by a large number of small players as well as several companies that each contribute more than 10.0% of total industry revenue.

*As mass merchandisers enter the Sporting Goods Stores industry, the landscape for the industry has changed. For example, larger operators' price-based competition is hampering the viability of smaller operators.*²⁷

Further, IBISWorld indicates that competition in the industry is high and increasing.²⁸

An online search of DexKnows.com for "Sporting Goods" in the Market Area reveals dozens of retailers ranging from specialty shops (i.e. golf, fishing, bicycle) to mass retailers such as Walmart. The overall competitive landscape does not appear to lack participants.

The Market Area became more crowded when a mass retailer of sporting goods opened a new 42,000 square foot store near DSI's Albany store last year. This competitive store is located less than one-half mile away from DSI's Albany store and carries private label products.

DSI CFO, Jackie Robinson, performed an analysis of the potential impact of the entrance of the mass retailer into DSI's market area. Mr. Robinson concluded that about half of DSI's product mix will not directly compete with

the mass retailer's product mix which is heavily weighted on hunting and fishing products. However, he does expect initial decreases in guns and ammunition of about 50 percent, fishing products about 20 percent and camping gear about 10 percent. He expects this to equate to a 10 to 15 percent reduction in sales volume from what it would have been without the mass retailer.²⁹

Further, another mass retailer of sporting goods recently opening a new store in Buffalo, New York, down the street from DSI's store. Unlike the new mass retailer store in Albany, this mass retailer has had a clear negative impact on the Buffalo store.

New Entrants

The threat of new entrants into a business' market or industry relates closely to existing or perceived barriers to entry. These barriers take several forms, and can increase or decrease the risks related to an investment in an enterprise.

IBISWorld indicates that the barriers to entry are low and static. The barriers that do exist include establishing relationships with suppliers, obtaining capital to build a store, or build out a leased location, and the capital needed to purchase inventory.³⁰

Substitutes

Substitutes are other products, usually using different technologies, which perform the same function as the product offered by the domain. The primary substitutes in the industry are big box retail stores and the popularity of purchasing sporting goods online. Other substitutes include used sporting goods retailers that allow for the trade-in of old sports equipment for newer equipment.³¹

Complements

A complementary product or service is one that will create additional demand for the subject's product as demand for the complementary product increases. For the sporting goods retail business, complementary activities include golf instruction, tennis lessons,

27. Ibid., p. 21.







28. Ibid., p. 23.

29. Internal DSI letter dated August 31, 2013.

30. Ibid., IBISWorld, p. 24.

31. Ibid.

EXHIBIT 12: Industry Risk Assessment

<p>Customer Bargaining Power</p>	 <p>Neutral Risk</p> <p>Customers of retailers have little power to bargain or negotiate purchases. They do have the ability to exercise preferences and purchase elsewhere.</p>
<p>Supplier Bargaining Power</p>	 <p>Neutral Risk</p> <p>Independent sporting goods retailers can join a number of different buying groups, diminishing the power of large sporting goods suppliers.</p>
<p>Competitors, Intensity of Rivalry</p>	 <p>Increased Risk</p> <p>Competition is high and increasing. The market area appears to have plenty of competitors and the market area has attracted larger mass retailers of sporting goods.</p>
<p>New Entrants, Barriers to Entry</p>	 <p>Increased Risk</p> <p>Barriers to entry are low.</p>
<p>Availability of Substitutes</p>	 <p>Neutral Risk</p> <p>Big box stores and online retailers appear to be the primary substitute, but that risk appears to be mitigated by the desire of clothing buyers to try on items before they buy.</p>
<p>Existence of Complements</p>	 <p>Neutral Risk</p> <p>Complimentary items would include sports instructors, recreational sports teams and events. These do not appear to pose risks to the industry.</p>

recreational sports teams. Additionally, the location of a store in proximity to other retailers can be a complimentary factor.

Industry Summary

An Investor would recognize the most significant industry risks facing the domain as presented in the accompanying table (see Exhibit 12).

Internal Risks and Resources

An Investor would recognize the existence of risk to an investment related to a slowing of revenue growth, decline in profitability and high levels of debt.



An Investor will consider the resources employed and internal risks associated with the Company. In assessing these risks, an Investor will look to the potential sources of risk as described by SPARC³² analysis in Beckmill Research’s tri-level risk framework (see Exhibit 13). The SPARC factors are interconnected, and therefore an Investor will focus on the resources that feed into the SPARC factors.

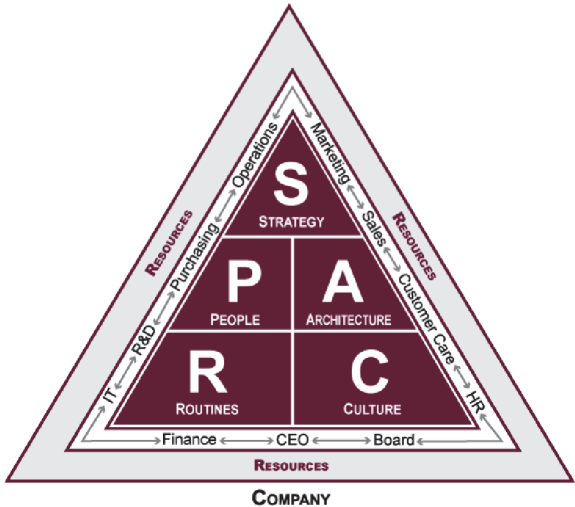
Strategy

Strategy is the bridge between external risks and internal risks and resources. A proper strategy will be aligned to harmonize with business enterprise’s domain structure. DSI’s domain structure is a oligopoly, which is defined a relatively small group of competitors within a market area. To determine DSI’s strategy an Investor must first analyze its strategic emphasis and strategic scope.

Strategic Emphasis. Traditional management theory says that a business enterprise can either emphasis low cost or the uniqueness of its products and/or services. In this case, DSI emphasizes the merchandising and shopping experience that is usually associated with a large national chain, with the customer service and knowledgeable sales professionals found at smaller, local shops.

Strategic Scope. A business enterprise can use a broad target scope (usually industry wide) or a narrow target scope. (usually focused on a small segment of an industry).

EXHIBIT 13: Entity Risk Framework



DSI’s scope is broadly defined, providing a wide range of products at all pricing points from entry level to high end. At the same time, DSI’s CEO, Mr. Joe DiMaggio, indicated that they emphasize high end products because such items are not as available with competitors.

An Investor would recognize the wisdom of DSI not attempting to be the low price leader, noting that a national presence with large sales volumes would be required.

32. SPARC is an acronym for Strategy, People, Architecture, Routines and Culture, which represent potential sources of risks directly from a business enterprise.

EXHIBIT 14: Revenue Trend

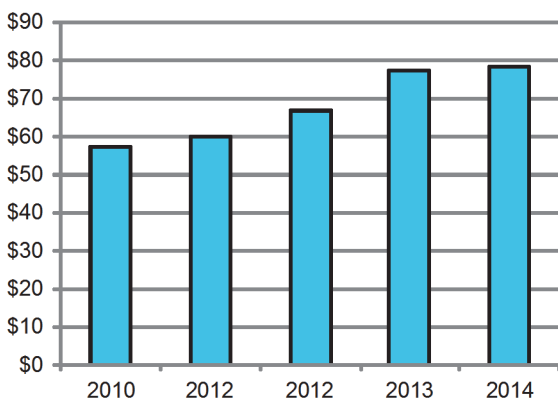
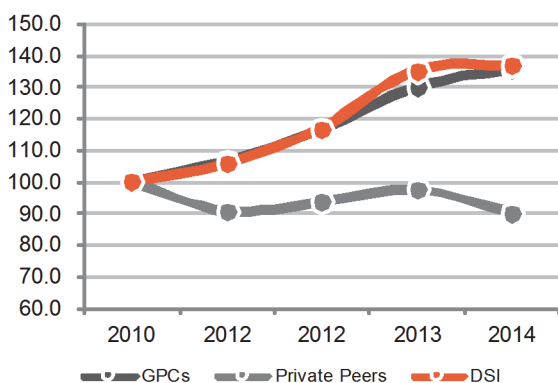


EXHIBIT 15: Revenue Index



Sales and Marketing

Revenues

Revenues are amounts that flow into a commercial enterprise from the sale of goods and services. DSI's revenue comes from the sale of sporting goods and apparel, and to a lesser extent, rental of certain sporting equipment,

DSI's has seen a significant increase in revenues over the past five years. The increases can be tied to the renovations of stores in Buffalo, New York in 2012 and in Rochester, New York in 2013, high demand for firearms in recent years, and favorable exchange rates for Canadian visitors. However, the most recent year

experienced a slowing in revenue growth (see Exhibit 14).

It is difficult to compare actual sales amounts between companies and benchmark data. In order to compare revenues in a meaningful manner, an Investor would compute a revenue index (current period revenue divided by base period revenue multiplied by 100). This index shows that DSI's revenue growth was similar to the GPCs and significantly outpaced the BizMiner peers (see Exhibit 15). DSI's compounded annual growth rate over the past five years has been approximately 8.3 percent.

Interviews with Mr. Robinson, reveal that the slower growth was the result of several factors. These factors include the following:

Canadian Exchange Rate. As previously presented, the exchanged rate for the Canadian Dollar became less favorable for Canadian visitors. As a result, revenues were adversely affected.

Weather. The 2013-2014 winter weather persisted into summer in DSI's market areas. This dampened sales of camping, hiking and backpacking products for the summer selling season.

Firearms. As previously presented, demand for firearms, which has been high in the past few years, has slowed recently.

Mr. Robinson expects revenue growth to pick-up now that the renovations are completed, barring any further erosion of the value of the Canadian Dollar and fire arms demand.

Sales Function

DSI uses departmental sales staff with a sales manager over each department. Management has implemented the sales system produced by well known national figure. Under this system, new sales associates receive online training. After being trained, bi-weekly sales goals are established and the sales associate is accountable to the department sales manager for those goals. Management indicated that if a sales associate does not meet the goals, they first look to themselves to make sure they have properly trained and motivated the sales associate. However, if a sales associate consistently

fails to improve, they will either look to place that person elsewhere if they appear to be a valuable employee, or ask them to leave.

Sales are recorded by cashiers at sales registers, that are part of DSI's point-of-sale (POS) system. This system also tracks inventory.

Marketing

DSI's marketing efforts are broad based, including newspaper, television, radio and billboard advertising. Social media promotions are also conducted. In addition to advertising, DSI sponsors various events. It sponsors marathons, half-marathons and "Spartan Runs" where the registration packets are picked up by participants at the stores. It also sponsors other activities and educational events. These are just a few examples of promotional activities DSI conducts throughout the year.

Pricing

Manufacturers establish the pricing of their products and DSI generally uses this pricing. Products will be marked down for promotions and special sales. When various products have not sold, or when new model years are being introduced, remaining products will be marked down for clearance.

Customer Care

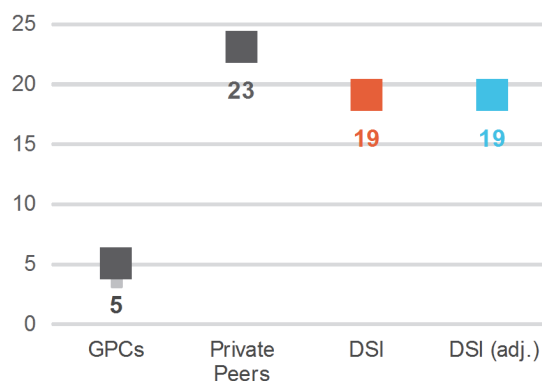
Customer Service

Our interviews indicate that DSI is customer centric. A store manager told me that an employee will never get in trouble for making a customer happy. This was confirmed by DSI's President, Lou Gehrig, who further indicated that they will back up the products, even when the manufacturers will not. Dwight Goodin, the store manager for the Albany store indicated that he has the mandate from executive management to resolve the customer's concerns to the customer's satisfaction.

Accounts Receivable

"Receivables turnover" and quality are factors in evaluating operating efficiency and management. One measure of receivables turnover, days sales outstanding (DSO), is calculated by dividing the average of the beginning and ending receivables balance by total annual sales revenue, with the result multiplied by 365 days. This measures the average number of days that

EXHIBIT 16: Days Receivable (DSO)



accounts receivable are outstanding. A lower DSO is considered preferable.

As a retail business, DSI's receivables are immaterial. The receivables they do have are primarily with governmental agencies. DSI's receivables were outstanding, on average, 19 days while the public guideline peers ranged from a lower quartile of 7 days to an upper quartile of 12 days and the Private Peers had a median of 22 days (see Exhibit 16). This suggests that DSI was less efficient more efficient similarly efficient at collecting receivables than the GPC's.

Purchasing

DSI maintains a team of buyers who arrange for the purchase of inventory, with a buyer for each department. The buyers start each buying season investigating what is available from each vendor, and establishing a monthly buying schedule by store. The buyers take into account how well items sell, how much they want to spend with particular suppliers, expected weather conditions and other factors. DSI belongs to a buyers group, which allows it to take advantage of volume purchasing discounts.

Inventories

DSI's inventory primarily consists of sporting goods and apparel. DSI accounts for inventory using the average costing method. Mr. Robinson indicated that the POS system tracks the costing of inventory.

EXHIBIT 17: Days Inventory (DIO)

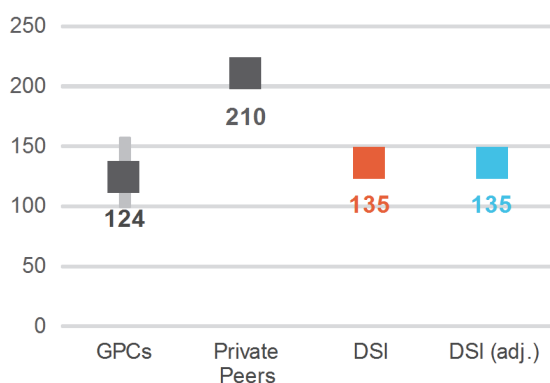
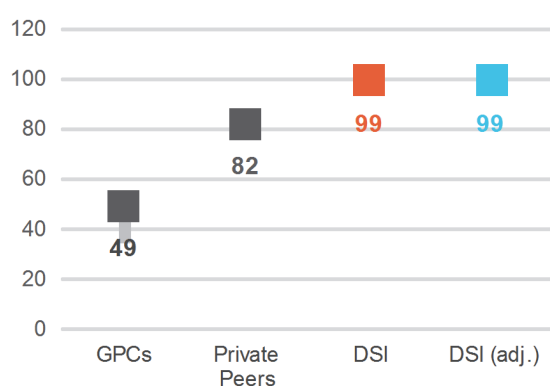


EXHIBIT 18: Days Payable (DPO)



“Inventory turnover” is indicative of management’s ability to efficiently use inventory in meeting the needs of customers. Generally, the faster an entity turns its inventory, the more efficient it is in utilizing its investment in inventory to create sales. Slower turnover can be indicative of less efficient inventory utilization or may be indicative of obsolete inventory. One measure of inventory turnover is days inventory outstanding (DIO). This measure is expressed in terms of days and is computed by dividing the average of the beginning and ending inventory by the daily average cost of sales (goods sold) with the result multiplied by 365 days. A lower DIO is considered preferable.

DSI’s DIO was 135 days compared to the GPC lower quartile, which was also 135 days, and an upper quartile of 155 days. The Private Peers’ median was 160 days (see Exhibit 17). This is an indication that DSI was able to operate with slightly fewer/fewer/more resources tied up in inventory than the GPCs and Private Peers.

Accounts Payable

“Accounts payable turnover” is an indicator of managements efficiency and effectiveness at managing accounts payable. Generally, the slower an entity turns its payable, the better cash flows will be. However, this must be balanced with the need to maintain positive relations and credit standing with suppliers. A measure of accounts payable turnover is days payable outstanding (DPO). This measure is expressed in terms of days and is computed by dividing the average of the beginning and ending payables balance by total annual cost of sales with the result multiplied by 365 days. A higher DPO is generally considered preferable.

DSI’s DPO was 99 days compared to GPCs’ lower quartile of 68 days and an upper quartile of 90 days. The Private Peers’ median was 67 days (see Exhibit 18). This is an indication that DSI pays its suppliers less quickly than the peers, enhancing its cash flows.

Information Technology

In addition to maintaining information technology systems for office purposes, it also maintains a POS system to track inventory and sales. The POS system is maintained by a server at each store, which is backed-up daily on-site, with a mirrored off-site backup.

Credit card and debit card data is encrypted and also protected by a hardware switch. To further protect this data, credit and debit card information is deleted after payments have been processed. Finally, DSI maintains data breach insurance.

Human Resources

At the Valuation Date, DSI employed 375 individuals. Employees are hired under a 90 day probationary period. DSI’s Director of Human Resources indicated that employee turnover was very low. Our interviews with employees indicated that several have been with DSI for more than 20 years. Due to the nature of the business, they hire seasonal employees, and many of them return year-after-year. Management attributes

employee longevity to a pleasant, family-like working environment.

Employee benefits include medical, dental, and vision, with DSI paying about 90 percent of the cost for the employee. The ESOP allows employees to become owners and provides for retirement. No other retirement plans are offered. DSI will also provide educational assistance for educational courses relevant to an employee's position.

Cashiers and receiving employees are on the low end of the pay scale, being paid hourly wages. Sales associate receive a base salary plus a 2 percent commission. This commission is 1 percent for gun department sales people because of the low margins and high volume. Sales managers are paid an hourly wage plus commission. Office clerical employees are paid an hourly wage. Department managers, store managers, buyers, and other executives are paid salaries.

A comprehensive employee manual is maintained and provided to each employee. Sales associates are trained under the sales program, as described previously.

DSI generated less revenue per employee than the public guidelines, (see Exhibit 19) suggesting that it was less efficient at utilizing its employees. However, Mr. DiMaggio and Mr. Gehrig indicated that their desire to provide superior customer service requires more sales associates than other sporting goods stores, lowering the per employee revenue and increasing employee expense.

Operations

Organizational Structure

According to DSI's organizational chart each store has a store manager with an assistant manager and sales staff. The store managers report directly to the President, as do the CFO, Director of IT, Senior Buyer, Advertising Managers and Security Officer. As such, the organizational structure appears relatively flat with no more than five layers.

EXHIBIT 19: Revenue Per Employee

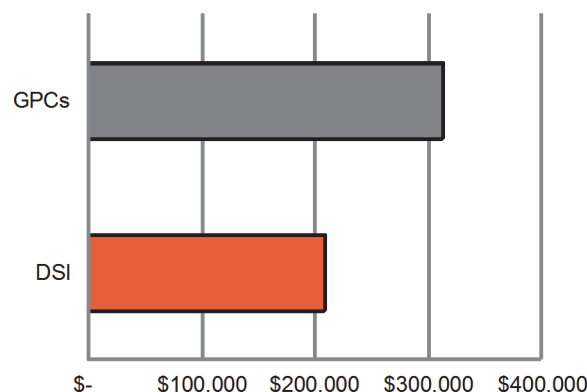
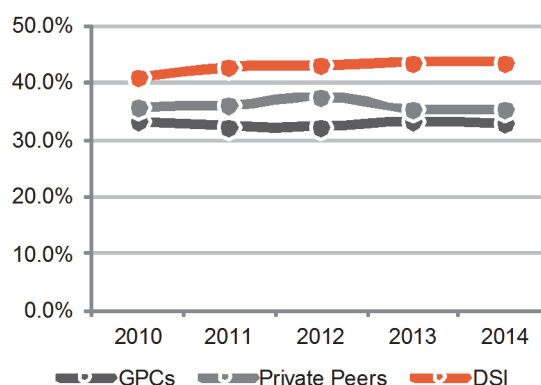


EXHIBIT 20: Gross Profit Margins



Gross Profit Margin

Gross profit is the result of subtracting the cost of sales from sales (revenues minus cost of those revenues). A gross profit margin is the ratio of the gross profits to the revenues. The gross profit margin is computed by dividing gross profit by net sales, with the result expressed as a percentage. A high gross profit margin is preferable.

DSI's gross profit margins have slowly improved over the past five years, and have remained above the GPCs and Private Peers (see Exhibit 20). Mr. Gehrig attributes the improvement to clearing out obsolete inventory and improved inventory management.

Management

ESOP Trustees and Board of Directors

The ESOT has hired an outside trustee, Sandy Koufax to oversee the management and administration of the ESOP.

DSI maintains a three member Board of Directors, with Mr. DiMaggio acting as the Chairman, and DSI's President, Lou Gehrig, and CFO, Jackie Robinson, as the other members of the board.

Key Members of Management

DSI's key members of management / officers are as follows:

Joe DiMaggio, CEO. Mr. DiMaggio was hired by the DSI in 1964 as a manager. He left to attend Cornell University, where he earning an MBA in 1972. After graduating he returned to DSI and was given the position of Director of Store Operations. In 1985 he was promoted to president and in 2002 was promoted to CEO.

Lou Gehrig, President. Mr. Gehrig joined DSI in 1979, after having been employed by large retail store chain as a manager. Mr. Gehrig earned a Masters Degree in Sales and Marketing from New York University in 1974. In 2002 he was promoted to president.

Jackie Robinson, CFO. Prior to joining DSI, Mr. Robinson worked for 15 years as an auditor with the CPA firm Arthur Anderson. After the collapse of Arthur Anderson, he joined a large retail electronics chain as the controller. He joined DSI in 2011 as CFO. Mr. Robinson is a CPA and holds a Masters of Accountancy from Dartmouth University

Yogi Berra, Director of Store Operations. Mr. Berra joined DSI originally in 1989 and left employment with DSI in 1991. He returned in 1996 as a sales associate. He was promoted to assistant store manager in 1998 and most recently promoted to Director of Store Operations after earnings a Bachelors Degree in Sales and Marketing from the University of Phoenix.

Micky Mantle, Director of IT. Mr. Mantle began his career with DSI as a sales associate in 2005. Upon completion of a degree in information technology he was named Director of information technology.

Hank Aaron, Director of Purchasing. Mr. Aaron began working for DSI in 1976 as a sales associate. Three years later he was promoted to assistant sales manager, and to a buyer in 1981. In 2008 he was named Director of Purchasing. Mr. Aaron holds a purchasing credential from the Purchasing Managers Association.

Stan Musial, Director of Marketing. Mr. Musial was originally hired DSI in 1996 and has served as a sales associate, assistant store manager, store manager, and assistant Director of Marketing prior to becoming the Director of Marketing in 2006.

Culture

Culture is a system of shared values (what is important) and beliefs (how things work) that combined to produce behavioral norms.

Management Philosophies. Lou Gehrig, CEO, described the overall management style as being very hands-on and customer centric. He said that executive management is interested in having employees at all levels grow and succeed, and that employees are included in decisions that impact their particular functions. He indicated that involvement in the community is also important.

Employee Ownership. The employees, through the ESOP, own 100 percent of DSI. Management believes this gives the employees a sense of ownership and helps foster greater personal responsibility among employees. Several of the employees expressed that sense of ownership, and the team/family like environment of working for DSI.

Profitability

Operating Expenses. The operating expense margin is the total of operating expenses divided by revenues, with the result expressed as a percentage. Control over operating expenses can mean the difference between profitability and losses. Management's ability to control expenses can be assessed by comparing the operating expense margin to those of industry peers. A low operating expense margin is preferable.

DSI's operating expenses, as a percentage of sales, increased through 2013, with a slight decline in 2014. Both the GPCs and the Private Peers experienced up ticks in operating expenses as well. DSI's operating

expenses remained higher than the GPCs and Private Peers (see Exhibit 21).

Pre-Tax Earnings. Pre-tax profits are the result of revenues less expenses (not including taxes). The pre-tax profit margin is computed by dividing pre-tax profits by revenues with the result expressed as a percentage. An entity must generate profits in order to grow, succeed and survive over the long-term. A high pre-tax earnings percentage is preferable.

Although DSI's had higher gross profit margins, it also had higher operating expenses, resulting in a pre-tax earnings that fell between the level of the GPCs and the Private Peers in all but one of the last five years (see Exhibit 22).

DSI, the GPC's and the Private Peers have all experienced declines in pre-tax earnings over the past year or two. Mr. Gehrig explained that these declines relate to the same reasons for the decline in revenue growth and increasing costs. He also explained that steps are being taken to correct the decline. These steps include better control of merchandising and modified hiring practices to improve the revenue per employee.

Utilization of Assets and Capital

Cash Conversion Cycle. The cash conversion cycle measures the average length of time from purchase of a product for sale, to conversion of that product to cash. It is computed by adding the DSO to the DIO and subtracting DPO. A low cash conversion cycle is considered preferable.

DSI's cash conversion cycle was 55 days, which was as favorable as the best of the GPCs. The cash conversion cycle for the GPCs ranged from a lower quartile of 30 days to an upper quartile of 110 days, and the Private Peers was even longer still at 151 days (see Exhibit 23). This is an indication that DSI was more efficient at generating cash from its operations than the Private Peers and GPCs.

Revenue-to-Assets. The revenue-to-total-assets ratio is a measure of how effective assets are being utilized. It is computed by dividing annual revenue by the average of the beginning and ending asset balance. A higher revenue-to-total-asset ratio is generally considered

EXHIBIT 21: Operating Expenses

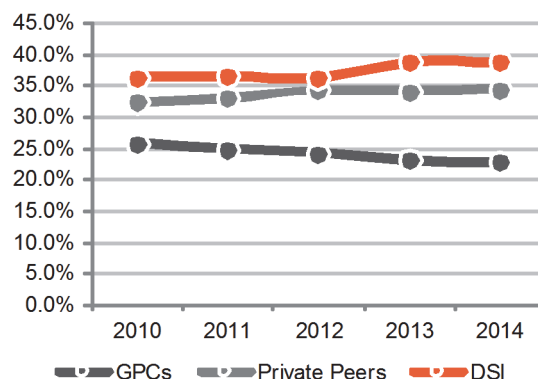


EXHIBIT 22: Pre-Tax Earnings

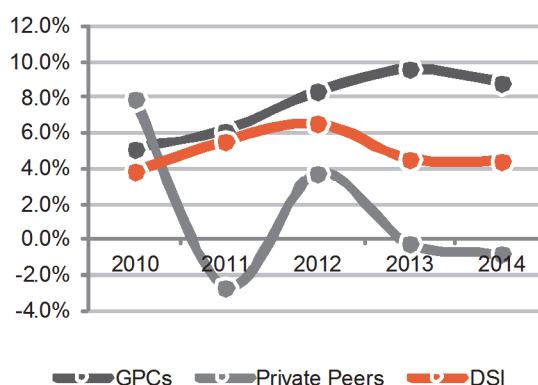
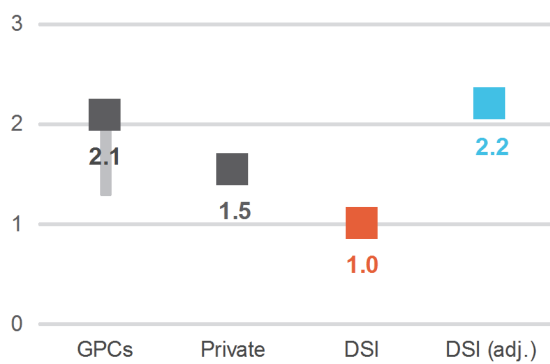


EXHIBIT 23: Cash Conversion Cycle



EXHIBIT 24: Revenue-to-Assets

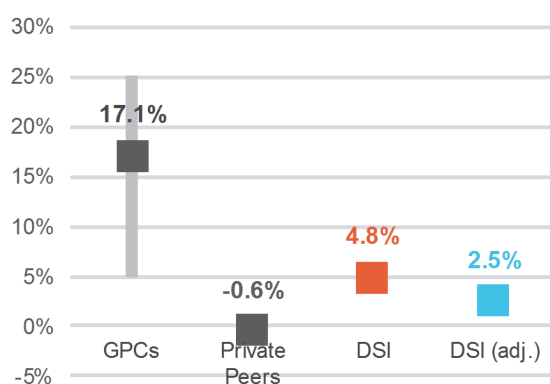


preferred. This ratio can be skewed downward by the presence of non-operating assets.

DSI's revenue-to-total-assets was weaker than the GPCs on an unadjusted basis. This may be the result of DSI holding a significant level of real estate. On an adjusted basis, DSI's ratio was similar to the GPCs (see Exhibit 24). This suggests that, on an adjusted basis, DSI was similarly efficient at utilizing its assets as the GPCs.

Pre-Tax Return on Assets. Asset utilization can be measured by "pre-tax return on assets" (Pre-tax ROA). This ratio is an indicator of a company's effectiveness in using its asset base to generate profits. Pre-tax ROA is calculated by dividing pre-tax earnings by the average of the beginning and ending asset balances. A higher pre-tax ROA is considered preferable.

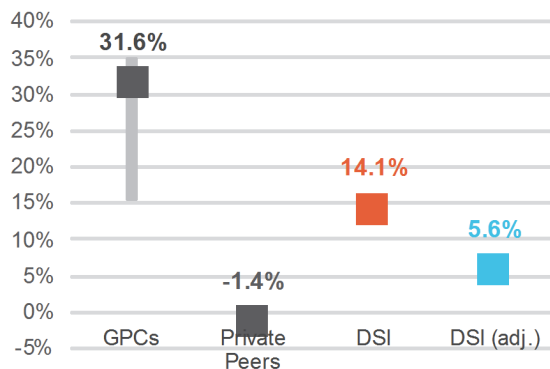
EXHIBIT 25: Pretax Return on Assets



DSI's adjusted and unadjusted pre-tax ROA was inferior to the median of the GPCs but superior to the Private Peers (see Exhibit 26). The adjusted amount, here and with other ratios, was based on adjusted financial information as presented later in this report.

Pre-Tax Return on Equity. Pre-tax income divided by total shareholders' equity, or "return on equity" (Pre-tax ROE) is a measure of an entity's investment performance. A high return is often associated with effective management, although such a return could be the result of under capitalization. Therefore, return on equity must be viewed in conjunction with an entity's leverage and its balance sheet. Pre-tax ROE is calculated by dividing pre-tax earnings by the average of the beginning and ending book equity balances. A higher pre-tax ROE is considered preferable.

EXHIBIT 26: Pretax Return on Equity



DSI's adjusted and unadjusted pre-tax ROE was inferior to the median of the GPCs but superior to the Private Peers (see Exhibit 24).

DuPont Analysis

The return on assets and return on equity can be further analyzed using the DuPont analysis. This analysis looks at the separate components that make up the return on assets and return on equity to gain additional insight.

Based on the DuPont analysis, DSI's Pre-tax ROA has closely followed the change in pre-tax earnings except in

EXHIBIT 27: DuPont Analysis

Year	Pre-Tax Profit Margin ¹	Multiplied by Revenue to Assets Ratio ¹	Equals: Pre-Tax Return on Assets	Multiplied by Assets to Equity Ratio ¹	Equals: Pre-Tax Return on Equity
2014	4.4%	1.0	4.4%	3.0	13.2%
2013	4.5%	1.2	5.4%	2.8	15.1%
2012	6.5%	1.4	9.1%	1.9	17.3%
2011	5.5%	1.5	8.3%	2.0	16.6%
2010	3.8%	1.6	6.1%	2.2	13.4%

¹ From Appendix B.

the most recent year when the revenue-to-asset ratio declined. But an increase in the asset-to-equity ratio as insufficient to overcome the decline in pre-tax ROE (see Exhibit 27).

Finance

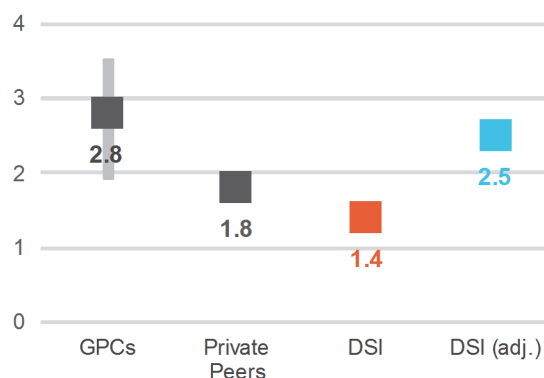
Financial Liquidity

An entity's financial liquidity measures its ability to meet obligations at a specific point in time. The two primary financial liquidity ratios are the current ratio and the quick ratio.

Current Ratio. The current ratio is computed by dividing total current assets by total current liabilities. It is one measure of an entity's ability to meet short-term obligations using its current assets. It is also a measure of an entity's working capital (current assets less current liabilities). A current ratio above one (1) indicates that an entity has more current assets than current liabilities. A current ratio below one (1) indicates that an entity has more current liabilities than current assets. For example, a current ratio of 1.5 would indicate that a company has \$1.50 of current assets for every \$1.00 of current liabilities. A higher current ratio is considered preferable.

DSI's unadjusted current ratio was 1.4, which was lower than the GPC median of 2.8 and the Private Peer's median of 1.8. On an adjusted basis it fell between the current ratios of the GPCs and Private Peers (see Exhibit 28). This suggests that DSI's ability to meet its current obligations, on an unadjusted basis, was inferior to both the Private Peers and similar to the GPCs.

EXHIBIT 28: Current Ratio

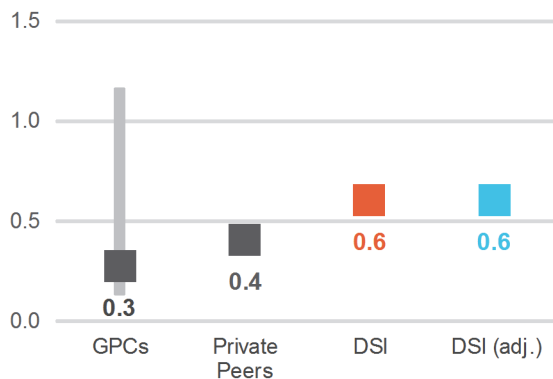


Quick Ratio. Another measure of liquidity is the quick ratio. This ratio is computed by dividing the sum of cash, near cash and trade accounts receivable by total current liabilities. This ratio excludes less liquid assets such as inventory, in order to measure how much of the current liabilities could be quickly eliminated by liquidating current assets. Again, a higher quick ratio is preferable.

DSI's liquidity, as measured by the unadjusted quick ratio (see Exhibit 29), was superior than the GPCs and the median of the Private Peers. This suggests that DSI's ability to meet its current obligations exceeded the GPCs and Private Peers.

While the benchmarking of the current ratio and the quick ratio produced different results, the difference can

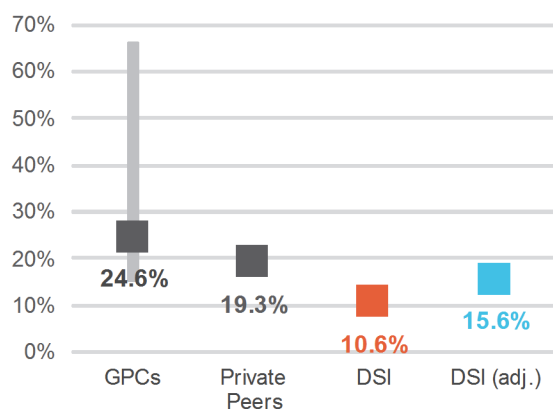
EXHIBIT 29: Quick Ratio



be explained by the large cash balance held by DSI and its significant current portion of long-term debt.

Working Capital Percentage. Working capital percentage (working capital ratio) can measure how efficiently an entity employs its working capital. It is computed by dividing the working capital balance by the average of the beginning and ended revenue. This ratio must be analyzed in conjunction with other liquidity ratios to uncover its true meaning. If working capital is average relative to peers, then the working capital ratio can indicate the efficiency of generating revenue from working capital. A high percentage may indicate an inefficient use of working capital. If working capital is high relative to peers, then the percentage will tend to be higher. If working capital is low, the percentage will tend to be lower. This

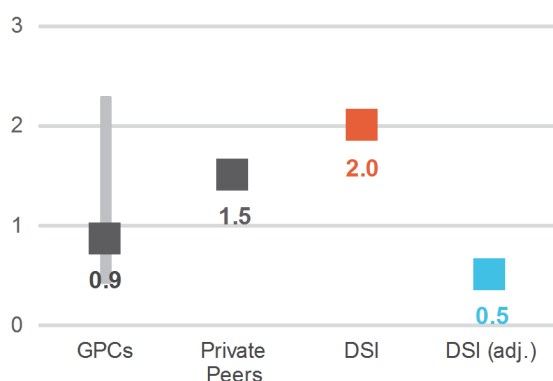
EXHIBIT 30: Working Capital Percentage



In this case, DSI's unadjusted working capital ratio was lower than the GPCs and Private Peers (see Exhibit 30). In light of DSI's unadjusted current ratio, its working capital ratio has been diminished by the low level of working capital. This is evidenced by the adjusted sales-to-working-capital ratio being similar to the GPCs and Private Peers.

On an adjusted basis, both the current ratio and working capital percentage were similar to the GPCs, suggesting that DSI has been as efficient at generating revenue from its working capital as the GPCs.

EXHIBIT 31: Debt-to-Equity



Financial Leverage

Debt to Equity. Leverage, as measured by total liabilities divided by total net worth (shareholders' equity), is a measure of the extent to which an entity is dependent on external borrowing (debt capital) relative to equity capital. A business with a high "debt to worth" is generally considered less able to cope with unexpected cash flow problems, sudden economic changes and similar factors. Generally a lower ratio is preferable.

DSI's unadjusted debt-to-equity ratio was 2.0, significantly higher than the median of both the GPCs and Private Peers. On an adjusted basis this ratio was similar to the GPCs' lower quartile (see Exhibit 31). This suggests that DSI's ability to take on additional debt or endure unexpected financial hardship was inferior to the GPCs and Private Peers, on an unadjusted basis.

Interest Coverage. An entity’s ability to support its financial leverage with cash flows and earnings must also be evaluated. One way to do this is analyzing its “times interest earned” ratio. This ratio is computed by dividing earnings before interest, taxes, depreciation and amortization (EBITDA) by interest expense.

A ratio of 6, for example, indicates that a company has \$6.00 in earnings to cover every \$1.00 in interest charges—the greater the ratio, the greater the buffer. DSI’s coverage of interest expense was superior to the Private Peers but inferior to the GPCs (see Exhibit 32).

Capital Structure

Book Value. Book value is a company’s total assets less its total liabilities (as recorded in its accounting system). DSI’s book value at December 31, 2014 exceeded \$25 million (see Exhibit 33). Net income and additional equity investments are the primary reasons for increases in a company’s book value. Conversely, net losses and equity withdrawals are the primary reasons for decreases in book value. The book value at December 31, 2014 represents an increase from the previous year end as a result of earnings.

Equity Classes. At December 31, 2014 DSI had a single class of voting common stock with 25,000 shares issued and outstanding.

The Company has elected S corporation status with the IRS. As an S corporation, taxable income of the Company “passes-through,” or is attributed to the owner. In this case the sole owner is the ESOT, which is not taxed. As a result, the Company, nor its owner, is required to pay Federal income taxes. However, individual plan participants will be taxed on plan distributions upon retirement or other termination of employment.

Debt Structure. DSI’s long-term debt consists of various notes payable. These notes were used to fund the purchase of the new store locations and renovations. Mr. Robinson indicated that management plans to pay off these loans as soon as feasible.

Ownership Rights and Restrictions. Based on the Articles of Incorporation and Bylaws, an Investor would

EXHIBIT 32: Interest Coverage

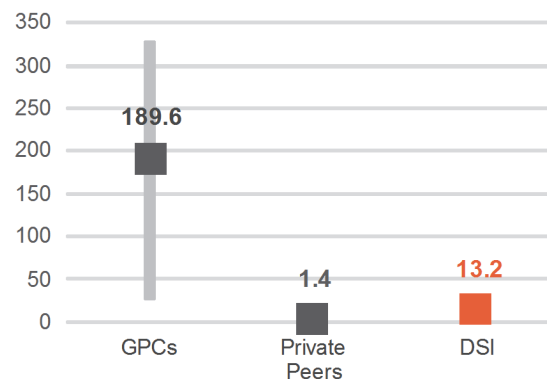


EXHIBIT 33: Book Value

	Unadjusted	Adjusted
Total Assets ^{1,2}	\$ 75,657,854	\$ 35,474,332
Total Liabilities ^{1,2}	(50,567,883)	(12,492,543)
Book Value	\$ 25,089,971	\$ 22,981,789
Divided the number of Shares	25,000	25,000
Book Value per Share	\$ 1,003.60	\$ 919.27

¹ Unadjusted from Appendix B.

² Adjusted from Exhibit 48.

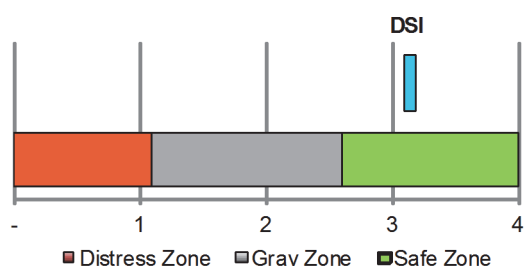
identify the most salient rights and restrictions of ownership. Shareholders have a right of first refusal to purchase shares from another shareholder if the other shareholder attempt to sell his/her shares to an outside party.³³ However, since there is one shareholder the right of first refusal have little to no impact. Further, the Board of Directors have the ability to alter, amend or repeal the By-Laws.³⁴

DSI’s shares of stock are not registered with the Securities and Exchange Commission (SEC) under the Federal Securities Act of 1933. This act generally limits the ability to offer shares of stock for sale to the public.

33. Ibid., Article V, Section 3.

34. Ibid., Article XI.

EXHIBIT 34: Altman Z Score



The details of the rules surrounding unregistered shares are beyond the scope of this report. The salient issue is that shares of DSI's stock can only be sold and purchased through private transactions that qualify for a registration exemption under the Securities Act of 1933 and all applicable state securities laws and rules.

ESOP Participants. DSI employees become eligible to participate in the ESOP after a year of employment.³⁵ Vesting occurs after five years.³⁶ Upon retirement, the Participant may elect to receive all or a portion of his/her vested ESOP balance.³⁷ The Trustee has the ability to pay the benefit out over a ten-year period in equal installments.³⁸ Our interviews with the Trustee indicates that it is his intention to pay participants over this ten-year period only if needed and if the benefit exceeds \$100,000 and as quickly as possible if the benefit is below \$100,000. The trustee indicated that the vast majority of Plan Participants have ESOP account balances below \$100,000.

Financial Health

Altman Z-Score. The Altman Z-Score is a mathematical model that combines different financial ratios to predict the likelihood of bankruptcy. Real world application of the Altman Z-Score successfully predicted more than 70 percent of corporate bankruptcies two year prior. Scores above 2.6 indicate a business is unlikely to enter bankruptcy in the near term. Scores below 1.1 indicate that the chance of bankruptcy is likely.

An Investor would compute DSI's Altman Z-Score at 3.2 (see Exhibit 34). This computation is presented in *Appendix B*.

Dividend Paying Capacity. The dividend paying capacity of an entity is measured by its ability to distribute cash to the owners without having a negative impact on its ability to operate profitably in the future. Dividends are accounted for as a direct reduction of equity (book value) and are not charged against earnings. As a result, an entity's earnings incorporates its dividend paying capacity. However, an entity's cash flows must also be considered.

The Board of Directors have discretion to declare dividends. In this case, DSI has not paid dividend (nor S corporation distributions) in the recent past. Mr. DiMaggio indicated that there are no plans to do so for the foreseeable future.

Asset Holdings

Facilities. DSI operates four stores from leased locations and two stores from owned locations. Each of the leased locations are leased from unrelated third parties. DSI's Albany and Buffalo, New York stores is owned. The Albany real estate is located at 1234 Main Street in Albany and consists of 1.98 acres of land with a building having approximately 50,000 square feet. The Buffalo real estate is located at 9876 Elm Street in Buffalo and consists of 2.25 acres of land with a building of approximately 46,000 square feet. This real estate was appraised by Peter Rose, MAI of Peter Rose Real Estate Appraisal as of November 15, 2014 at \$45 million.

Location. Generally, DSI's stores are located in areas that offer outdoor recreational opportunities. DSI's Albany store is located in the primary retail shopping area of the city. A big box store is located next door. A Warehouse store is directly across the street. Nearby is another big box store, home improvement store, and bed linen store, with many other smaller shops and restaurants. Another complimentary feature is the nearby City maintained sports fields and baseball diamonds.

35. Doubleday Sports, Inc. Employee Stock Ownership Plan 3.1.

36. *Ibid.*, 7.4(c)(1)

37. *Ibid.*, 7.10(a)(1).

38. *Ibid.*, 7.5(b).

EXHIBIT 35: Entity Specific Risk Assessment

Strategy	 Increased Risk	WesTech's business strategy appears suited for its competitive environment.
People	 Neutral Risk	WesTech's employee base and management team appears adequate for its operations. The chairman of the Board of Directors has announced that he intends to retire after his current term on the Board.
Architecture	 Decreased Risk	WesTech's operating and management structure appears suited for its operations and culture. Its financial structure is noted by high levels of long-term debt and low levels of financial liquidity. This is partially mitigated by WesTech's low inventory needs and
Routines	 Decreased Risk	WesTech is ISO 2001 certified indicating that its routines are appropriate for its operations.
Culture	 Increased Risk	WesTech's culture appears to be a positive factor influenced by employee ownership through its ESOP and well defined corporate vision and mission
Financial Analysis	 Increased Risk	WesTech's financial results was marked by decreasing revenues low level of earnings and low Altman Z-Score.

The Cooperstown store is located in Cooperstown, New York which also is the location of the baseball hall of fame. This store is located in a shopping center with a new big box retail store opening next door in 2015. The Syracuse, New York store is the second largest of DSI's stores. It is located across the street from the Syracuse University. The Utica, New York store is the smallest of all the stores and is located on a major street in Utica. It lacks space to expand, which is needed at this location. The Rochester, New York store location has degraded in recent years as major retailers have moved out of the immediate area, and significant competitors have moved into the market. The Buffalo, New York store is located in an area that lacks competition in its immediate area and could benefit from a larger facility.

Fixed Assets. DSI's fixed assets appear typical for its size and type of operation and include product display racks, cases, and fixtures, computers, office furniture and equipment.

Goodwill and Other Intangible Assets

Intangible assets are defined as:

*non-physical assets such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities and contracts (as distinguished from physical assets) that grant rights and privileges, and have value for the owner.*³⁹

Goodwill. By the above definition, goodwill is a subset of intangible assets. Goodwill is defined as:

39. International Glossary of Business Valuation Terms.

*that intangible asset arising as a result of name, reputation, customer loyalty, location, products, and similar factors not separately identified.*⁴⁰

According to GAAP, goodwill is not recorded on an entity's books unless it is purchased in an acquisition of another entity. The fact that goodwill is not recorded does not mean it does not exist. This is also true of other types of intangible assets that may not be recorded on the books.

Internal Risks and Resources Summary

An Investor would recognize the internal risks associated with the Subject Interest. These were presented in light of the various functions and resources employed in DSI's operations. To relate these back to the SPARC factors, these risks have been summarized among the related SPARC factors as presented in the accompanying table (see Exhibit 35).

40. Ibid.

Cost of Capital

*The cost of capital is the price charged by investors for bearing the risk that the company's future cash flows may differ from what they anticipated when they made the investment.*⁴¹

Recalling the discussion in the *Introduction* chapter, value is a function of expected future economic benefits and the risk associated with those cash flows. The cost of capital represents the quantification of those risks.

Risk Profile

Types of Risk

Whenever money is invested, an investor risks losing his or her money. As the risk of loss increases, an investor is willing to pay less for the investment. When the price an investor is willing to pay decreases, the potential return on the investment increases. Thus, the value of an investment relates inversely to the risks associated with it. Financial theory identifies three broad categories of risk: maturity risk, systematic risk, and unsystematic risk.

Maturity risk. Maturity risk is the risk that the value of an investment will change over time as a result of overall changes in interest rates. This risk increases as the expected holding period of an investment increases.

Systematic Risk. Systematic risk is the risk inherent to an entire market or market segment. It is also called market risk or un-diversifiable risk and includes such things as recessions, wars, political instability and other factors that affect a broad range of investments. Systematic risk cannot be mitigated by diversification.

Unsystematic Risk. Unsystematic risk is the risk inherent in and unique to a specific entity, and is also known as "company specific risk." Investors can mitigate this risk by investing in diversified portfolio of

investments. When valuing a privately held entity, the company specific risk cannot be diversified away. There are four primary sources of unsystematic risk:

- ◆ the size of the subject entity;
- ◆ the macroenvironment;
- ◆ the industry, and
- ◆ company specific risks.

These factors, except for size, have been discussed at length previously in this report. The impact of size is addressed below.

Identified Risk of the Subject Entity

The maturity risk and systematic risk associated with an investment in DSI are inherent in the data used to develop an appropriate cost of capital (discount rate and/or valuation multiple), as described later in this chapter. The impact of company specific risk is summarized in the accompanying table (see Exhibit 36). These risks are summarized as follows:

Size

Investments in small companies are typically considered more risky and carry a greater expected rate of return. This has been demonstrated by several studies. DSI is a small entity relative to even micro-cap publicly traded companies. An investment in DSI is therefore considered a more risky alternative than investments in publicly traded corporations.

41. Tim Koller, Marc Goedhart, and David Wessels, *Valuation: Measuring the Managing the Value of Companies*, 5th ed. (Hoboken, NJ; John Wiley & Sons, 2010), 33.

EXHIBIT 36: Unsystematic Risk

Factor	Risk Impact
Macroenvironment	
Economy	▲
Innovation	▶
Lifestyles and Values	▼
Demographics	▲
Disasters	▲
Politics	▶
Industry	
Customers	▶
Suppliers	▶
Competitors	▲
New Entrants	▲
Substitutes	▶
Compliments	▶
Internal Risks	
Size (relative to publicly traded stocks)	▲
Strategy	▲
People	▶
Architecture	▼
Routines	▼
Culture	▲
Financial Analysis	▲

▲ indicates the factor poses an increased level of risk to an investment in the entity.
 ▶ indicates the factor poses a neutral level of risk to an investment in the entity.
 ▼ indicates the factor poses a decreased level of risk to an investment in the entity.

Macroenvironment

As discussed previously in the *Macroenvironmental Risks* chapter, an Investor would identify an increased risk associated with macroenvironmental factors. These risks include a sluggish economy with concerns for a weakening Canadian Dollar, stagnant population growth in the market area, and recent concerns of data breaches involving retail outlets and the potential for legislation related thereto.

Industry

As discussed previously in the *Industry Risks* chapter, an Investor would identify increased risks associated with

industry factors. This primarily includes competition from large publicly traded entities and the lack of barriers to entry into the industry.

Company Specific Risk

As discussed previously in the *Internal Risks and Resources* chapter, an Investor would identify an increased risk associated with entity specific factors, more specifically slowing growth and high levels of debt.

Summary of Identified Risks

The impact of these risks have been summarized in the accompanying table (see Exhibit 36).

Quantification of Risk

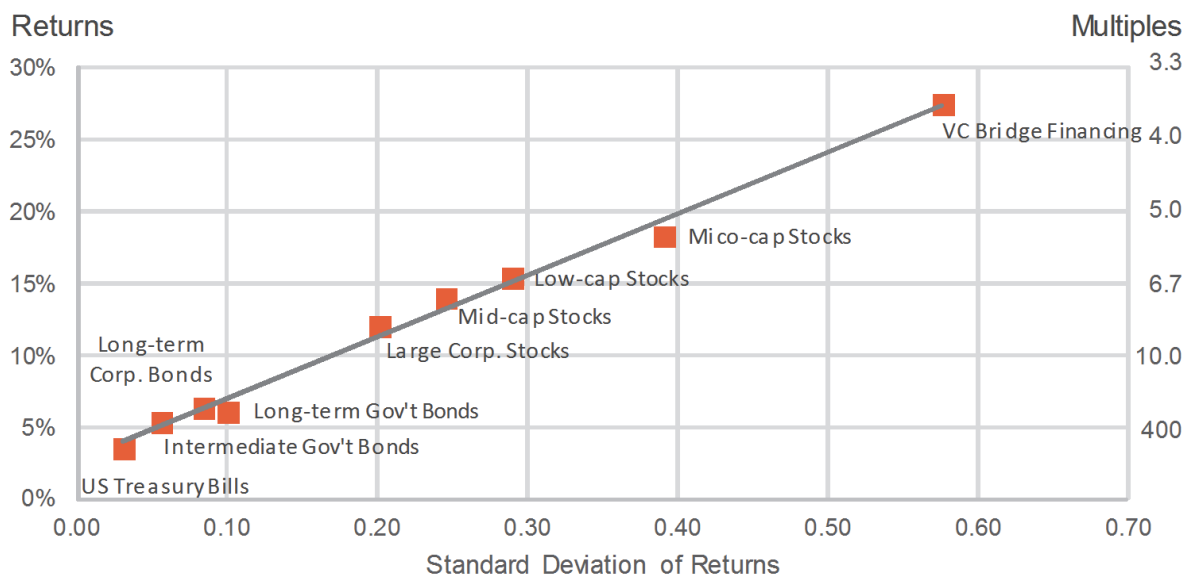
The risk associated with an investment can be expressed as a percentage (e.g., a rate of return) or as a valuation multiple. It is helpful to consider the rates of return achieved historically by different asset classes. The accompany chart presents historical rate of return from 1926 to 2014 for different asset classes (see Exhibit 37). This chart clearly shown that as risk (i.e., standard deviation) increases, the returns on the various assets also increases.

In this case, DSI is smaller than the publicly traded micro-cap stocks presented in the chart. That being the case DSI would generally be considered more risky, and therefore, an appropriate rate of return for an investment in DSI would be higher that those that can be earned on micro-cap stocks.

Another important consideration is the cost of capital must match the measure of economic benefit it is applied to. For example, an equity discount rate is used with cash flow to equity, while a weighted average cost of capital (WACC) is used with cash flows to invested capital. The rates of return (left vertical axis of the chart) and the multiples (right vertical axis of the chart) presented in Exhibit 37 represent returns and multiples for equity investments.

As presented later in the *Income Approach* chapter, an Investor would measure the expected economic benefits based on forecasted future cash flows to invested capital. As such, the cost of capital would be quantified as a weighted average cost of capital.

EXHIBIT 37: Returns by Asset Classes



Source: *Valuation Handbook, Harvard Business School Teaching Notes*

As presented later in the *Market Approach* chapter, an Investor would measure the expected economic benefits based on various measures of earnings reported by GPCs. As such, the cost of capital would be quantified as a valuation multiple from GPCs for that valuation method.

Cost of Capital Development

Discount Rate

The first step in developing a cost of capital is to estimate a discount rate representing an investor's expected rate of return on the Subject Interest. It is applied to projected cash flows over discrete future periods. The most common method for developing a discount rate is the build-up method.

The build-up method is a derivation of the capital asset pricing model (CAPM). It starts with a risk-free rate of return and adds to it additional "premiums" representing the risks associated with an investment. The formula for the build-up method is presented in Exhibit 38.

EXHIBIT 38: Build-up Method Formula

$$k_e = R_f + RP_m + RP_s + RP_u$$

Where:

- k_e = Cost of equity capital
- R_f = Risk-free rate
- RP_m = Equity risk premium
- RP_s = Risk premium for smaller size
- RP_u = Risk premium attributable to industry and entity specific items (also referred to as unsystematic risk or entity specific risk).

Discount Rate Variables

Risk-free Rate. Rates for U.S. Treasury bills, notes, and bonds are often considered free of risk of default. According to the *Federal Reserve Statistical Release* dated January 5, 2015, the yield on actively traded long-term (20-year) U.S. Government Treasury Securities on December 31, 2014 was 2.47 percent.

EXHIBIT 39: Size Adjusted Equity Risk Premium

Measure of Size	DSI	Logarithm ¹	Slope	Constant	Indicated Premium ²
Book Value of Equity	\$ 29,267,293	1.466383	(0.02540)	0.17084	13.36%
5-Year Average Net Income	\$ 3,353,918	0.525552	(0.02644)	0.14953	13.56%
Total Assets	\$ 41,759,836	1.620759	(0.02699)	0.18743	14.37%
5-Year Average EBITDA	\$ 5,552,006	0.744450	(0.02685)	0.16366	14.37%
Sales	\$ 78,163,929	1.893006	(0.02103)	0.16769	12.79%
Number of Employees	375	2.574031	(0.02010)	0.17329	12.16%
				Average	13.44%
				Median	13.46%
				Selected	13.50%

¹ The Company's amounts were expressed in millions (1,000,000 = 1.0) for computation of the logarithm, with the exception of the number of employees. This was done in order to be consistent with the formulae provided by the *Valuation Handbook*.

² Computed by multiplying the logarithm by the slope and subtracting the result from the constant. The result is

As presented below, an Investor would look to the 2015 *Valuation Handbook - Guide to Cost of Capital* (*Valuation Handbook*) published by Duff & Phelps, LLC to help develop a cost of capital. The authors of the *Valuation Handbook* explain that the current risk-free rates are artificially low due to a "flight to quality" and significant intervention by the Federal Reserve brought on by the financial crisis of 2008 and the subsequent slow pace of the economic recovery. As such, the *Valuation Handbook* recommends using a risk-free rate of 4 percent.

Size Adjusted Equity Risk Premium. An Investor would look to the *Valuation Handbook* to quantify the equity risk premium (ERP) and the size premium. When using the build-up method, the *Valuation Handbook* combines the ERP and size premium into a single amount called the Risk Premia Over the Risk-free Rate. We will refer to this as the "Size Adjusted ERP."

The *Valuation Handbook* provides investment return data beginning in 1963 on publicly traded companies ranked by size and includes those companies that appear in both the Center for Research in Security Prices database and the Standard and Poor's *Compustat* database. The *Valuation Handbook* ranks the companies into 25 groups based on several different

measures of size. The *Valuation Handbook* also provides statistical formulae necessary to extrapolate a Size Adjusted ERP for the subject entity, based on the same measures of size. Investors expect an additional return on investment in smaller companies. Based on the *Valuation Handbook* data, over the 1963-2014 time frame investors in a company with similar size characteristics as DSI could expect returns above U.S. Treasury Coupon Bonds similar to those computed in the accompanying table (see Exhibit 39).

Equity Risk Premium Adjustment. The authors of the *Valuation Handbook* indicate that when using the *Valuation Handbook* data in the build-up method, an adjustment is needed. This adjustment is the difference between the current estimated equity risk premium and the historical average equity risk premium, and is called the Equity Risk Premium Adjustment.

Entity Specific Risk Premium. It may be appropriate to include an additional risk premium, or subtract a risk discount, for risks specific to the entity being valued. An Investor's perception of these risks have been analyzed throughout the previous chapters of this report and were summarized in Exhibit 36. Based on these risks, an Investor would conclude that an additional entity specific risk premium was appropriate.

Equity Discount Rate. The risk-less rate and various premiums are summed to develop a discount rate applicable to an equity investment in DSI (see Exhibit 40)

Weighted Average Cost of Capital

When cash flow to invested capital (debt free cash flow) is used, the estimate of future earnings is capitalized using a weighted average cost of capital (WACC). The WACC is a rate of return that incorporates both the costs of debt and equity. It is computed by weighting the equity discount rate by the portion of equity held in the entity, and by weighting a company's borrowing costs by the portion of debt held by the entity. The weighted cost of equity is added to the weighted cost of debt to arrive at a weighted cost of capital.

Cost of Equity Capital. The cost of equity capital was determined previously in Exhibit 40.

Cost of Debt Capital. The cost of debt is the current prevailing borrowing rate that the Company can expect when incurring long-term debt. An Investor would determine this by looking to the rate charged DSI by third party lenders.

The cost of debt must be tax effected. The formula to do so is:

$$\text{Tax Effected Cost of Debt} = \text{Pre-tax Cost of Debt} \times (1 - \text{income tax rate})$$

The income tax rate is the combined state and federal effective income tax rate. This is determined by the following formula:

$$\text{Combined Effective Tax Rate} = [(1 - \text{State Rate}) \times \text{Federal Rate}] + \text{State Rate}$$

The applicable income tax rate for corporations in the State of New York was 7.1 percent. Federal income tax rates are graduated for different levels of earnings. As taxable earnings increase, the tax rates general increase. The federal income tax rate used, namely 34 percent, represents the effective federal income tax rate for corporations have taxable earnings similar to the Company. From this the combined effective income tax rate was 39 percent.

EXHIBIT 40: Discount Rate

Risk-free rate		4.00%
Size Adjusted Equity Risk Premium ¹	13.50%	
Equity Risk Premium Adjustment ²	-0.10%	
Total Adjusted Equity Risk Premium		13.40%
Add Company Specific Risk Premium		1.00%
Equals the Cost of Equity Discount Rate		18.40%
Rounded		18.50%

¹ From Exhibit 39.

² The current estimated equity risk premium of 5% less the long-term historical equity risk premium of 5.1%.

By applying the effective income tax rate to the pre-tax cost of debt, the tax effected cost of debt was determined.

Weighting. When the Subject Interest lack control prerogatives an Investor will weight the cost of debt and the cost of equity based on the actual values of debt and equity. This is because a non-controlling owner does not have the ability to change the capital structure. When valuing a controlling interest, the Investor has the ability to optimize the capital structure, and will uses weightings reflective of such, rather than actual weightings. A frequent measure of an optimal capital structure is to look to the capital structure prevalent in the industry.

One benefit of using an optimal capital structure is the capture of the value of excess debt capacity when the subject's financial leverage is below optimal. In this case, the optimal capital structure was based on the average of the GPCs.

Concluded WACC. Based on each of these variables, an Investor would computed the WACC as presented in the accompanying table (see Exhibit 41).

Residual Period Capitalization Rate

When the discounted cash flows method is used, cash flows are projected into the future to the point where cash flows are expected to continue at a stabilized rate. At that point, the cash flow for a single period, referred to

EXHIBIT 41: Weighted Average Cost of Capital

Cost of Debt - Tax Effected	4.27%	¹ Multiply by Weight	15%	² Equals	0.64%
Cost of Equity	18.50%	³ Multiply by Weight	85%	Equals	15.73%
Weighted Average Cost of Capital Discount Rate			100%		16.37%
Rounded					16.25%
Less Expected Long-Term Sustainable Growth					<u>-2.25%</u>
Residual Period Capitalization Rate					14.00%

¹ Based on a 0.07 effective borrowing rate and a 0.39 tax rate.

² Weightings based on industry average capital structure as determined by the guideline public companies presented later in this report.

³ From Exhibit 40.

as the residual period, is used to determine the residual period value.

When a cash flow estimate for a single period is being used as an estimate of future cash flows, the equity discount rate must be modified by the expected growth rate. The long-term growth rate of most industries can be closely tied to the overall macro-economic growth rate of the economy.

Because the capitalization rate differs from the discount rate by growth (i.e., capitalization rate = discount rate - growth rate), an Investor will consider expectations for future growth by relying on the following model:

*[O]ver a prolonged period of time it is difficult to sustain growth that exceeds the rate of inflation plus the real rate of growth in terms of the population.*⁴²

An Investor would look to sources like *The Livingston Survey* to estimate future inflation. Economists contributing to *The Livingston Survey* predict that inflation (as measured by the consumer price index) will increase by an annual rate of 2.25 percent over the next 10 years.⁴³ Turning to the second component of the

growth model, the discussion of demographics in the *Macroenvironmental Risks* chapter indicated that the population of DSI's market area is expected to remain relatively constant (zero growth) over the next 10 years.⁴⁴

By adding the estimated long-term inflation rate to the long-term population growth, an Investor would estimate the long-term growth at 2.25 percent (2.25 percent inflation + 0.0 percent population growth). The computation of the residual period capitalization rate can be found in the accompanying table (see Exhibit 41).

Valuation Multiples

Another source of the cost of capital are guideline publicly traded companies (GPC). Publicly traded companies can serve as guidelines to develop an appropriate rate of return that an investor in the subject entity would expect to receive. To develop an applicable cost of capital using GPCs an Investor would search for public companies that would have similar valuation factors. These factors include, but are not limited to the following:

- ◆ the same or similar line of business;
- ◆ similar product lines;

42. *ASA Principles of Valuation: BV202* (American Society of Appraisers, 2010), 75.

43. *The Livingston Survey*, (Philadelphia: Federal Reserve Bank of Philadelphia, December 12, 2014), p. 3.

44. Computed as the compounded annual growth rate of the total population in the six county market area as estimated by Cornell University Program on Applied Demographics, <https://pad.human.cornell.edu/counties/projections.cfm>.

EXHIBIT 42: Guideline Public Company Summary

Company (amounts in thousands except per share)	Ticker	Shares Outstanding	Price per Share	Market Value of Equity	Market Value of Invested Capital (MVIC)	Debt to MVIC	Total Assets	Inventory Method
Big 5 Sporting Goods Corp	BGFV	22,133	\$14.63	\$ 323,806	\$ 380,967	18.0%	\$ 455,576	FIFO
Cabelas Inc.	CAB	71,878	52.71	3,788,682	7,590,815	53.1%	7,675,317	FIFO
Dicks Sporting Goods Inc.	DKS	121,238	49.65	6,019,467	5,804,238	0.1%	3,436,198	FIFO
Foot Locker Inc.	FL	146,000	56.18	8,202,280	7,369,280	1.8%	3,577,000	FIFO
Hibbett Sports Inc.	HIBB	25,620	48.43	1,240,777	1,155,845	0.3%	452,397	FIFO

- ◆ similar procurement and distributions channels;
- ◆ similar competitive positions within the industry;
- ◆ similar expected rates of growth;
- ◆ similar historical and potential profitability;
- ◆ similar capital structures; and
- ◆ similar size, relative to sales volume and total assets.

Such factors are not universal and can vary based on products, industry and other factors.

To find appropriately comparable GPCs an Investor would search various databases for entities operating in the same industry. These databases include the SEC's Electronic Data Gathering Analysis and Retrieval (EDGAR) database and other online data providers such as Yahoo! Finance and Tagnifi.

These preliminary search criteria resulted in a number of companies. An Investor would more closely analyze these companies by obtaining the most recent Forms 10Q and 10K as filed with the SEC. From these filings, an Investor would perform a financial analysis and read excerpts of their SEC filings to determine the applicability of the companies as guidelines. An Investor would narrow the selection to several GPCs as being comparable for valuation purposes (see Exhibit 42). The GPCs are all involved in a similar line of business and affected by many of the same market forces.

Selected GPCs

Each of the selected GPCs are retailers of sporting goods having their shares publicly traded on a national

stock exchanges. An Investor would specifically exclude public companies less comparable to DSI because of unprofitability that prevents the computation of a meaningful valuation multiple, the inclusion of preferred shares, or that lacked sufficient information needed to make adjustments to their valuation multiples (as described later in this chapter).

Comparisons of GPCs With Subject Entity— Overview

An Investor would compare each of the GPCs to the subject entity on a variety of criteria for the purpose of drawing conclusions as to appropriate valuation multiples. Comparison criteria included profitability, financial position, size, growth, business opportunities and diversification. An Investor would use adjusted amounts in these comparisons. An Investor would adjust the GPCs for non-recurring items. The adjustments to DSI were discussed previously. The following section highlights some of the key issues identified.

Specific Comparisons

Financial Liquidity. Recalling Exhibit 28, Exhibit 29, and Exhibit 30 from the *Internal Risks and Resources* Chapter, DSI's current ratio was weaker than the GPCs, its quick ratio was stronger than the GPCs and its working capital percentage was similar to the GPCs on an adjusted basis. Based on these mixed comparisons, an Investor would consider DSI to have financial liquidity position that was relatively similar to the GPCs. This comparison suggests that the valuation multiple of DSI should be similar to those found with the GPCs.

Financial Leverage. Recalling Exhibit 31 and Exhibit 32 in the *Internal Risks and Resources* chapter, DSI's debt-

EXHIBIT 43: Size Comparison

Name	Annual Revenues (000)	Times Larger Than Subject
BGFV	\$ 977,860	12.5
CAB	3,647,650	46.7
DKS	6,814,479	87.2
FL	7,151,000	91.5
HIBB	913,486	11.7
DSI	78,164	

to-equity and coverage ratios were weaker than the GPCs, and indicated a higher level of financial leverage (debt). This comparison suggests that the valuation multiple of DSI should be lower than those found with the GPCs.

Operational Activity. Recalling Exhibit 16 of the *Internal Risks and Resources* chapter, DSI appeared less efficient at collecting its accounts receivable than the GPCs. Exhibit 17 suggests that it had a similar level of resources tied up in inventory as the GPCs, and, Exhibit 18 indicated that DSI took longer to pay its vendors than the GPCs. All of this equated to DSI having a shorter (superior) cash conversion cycle than the GPCs, as shown in Exhibit 23. An investor would look favorably on DSI's cash conversion cycle, suggesting that the valuation multiple of DSI should be higher than those found with the GPCs.

Asset Utilization. Recalling Exhibit 19 and Exhibit 24 in the *Internal Risks and Resources* chapter, DSI generated less revenue per employee, and on an unadjusted basis, less revenue per assets than the GPCs. On an adjusted basis, the revenues per assets were similar to the GPCs. An investor would view this overall as being inferior to the GPCs. This comparison suggests that the valuation multiple of DSI should be lower than those found with the GPCs.

Profitability. Recalling Exhibit 20 from the *Internal Risks and Resources* chapter, DSI's gross profit margins have been superior to the GPCs. At the same time, its operating expenses have been higher, as a percentage of revenues, than the GPCs as shown in Exhibit 21.

Exhibit 22 shows that this resulted in DSI's profitability being weaker than the GPCs.

DSI's inferior profitability resulted in its pretax ROA, as shown in Exhibit 24, and pretax ROE, as shown in Exhibit 24, being weaker than the GPCs. An investor would consider DSI's inferior profitability as unfavorable, suggesting that the valuation multiple of DSI should be lower than those found with the GPCs.

Size (see Exhibit 43). The size comparison of DSI to the public guidelines shows that the public guidelines are much larger than DSI based on revenues. Studies and empirical data show that larger public companies (on average) have higher price to earnings multiples than smaller companies. Since DSI is smaller than the guideline companies, an investor would generally expect a lower rate of return, other things being equal. In "Adjusting Price/Earnings Ratios For Differences In Company Size-An Update," *Business Valuation Review* (September, 1995) by Jerry O. Peters, AM, the price/earnings multiple of public companies with market values of \$25 million or less traded at an average 25.8 percent discount to those with market values of \$50.1 million to \$99.9 million. Similar findings can be found in annual data published by Ibbotson Associates.

Investors perceive the risks associated with investments in smaller companies to be greater than larger companies. This perception may be attributable to factors such as market share, name recognition, management depth, and other factors.

Although the size of the entity is an important factor, certain procedures can measure and adjust for the differences in size. In the article "Adjusting Valuation Multiples for Size," published in *Valuation Strategies* (September/October 2001), the authors, Michael Mattson, Don Shannon and Don M. Drysdale, outline a procedure for adjusting for size differences. The procedure uses empirical data from stock markets to determine the effect of size on valuation multiples and then adjusts guideline company multiples for those effects. The procedure results in market derived valuation multiples that are appropriate for the subject company.

The applicability of such adjustments depends on the nature of the products offered, the operational structure, and other industry factors. In this case, we adjusted the

EXHIBIT 44: Growth Comparison

	Historical Annual			Historical 5-Year CAGR			Analysts' Estimates		
	Revenue	EBITDA	Net Income	Revenue	EBITDA	Net Income	Next Year's Revenue	Next Year's Net Income	5-Year Net Income
BGFV	-1.56%	-30.97%	-46.77%	2.19%	-3.06%	-7.77%	8.80%	9.00%	15.00%
CAB	1.34%	-2.50%	-10.11%	8.18%	14.40%	15.80%	8.10%	-0.30%	10.84%
DKS	9.68%	6.04%	1.95%	8.75%	14.98%	17.26%	6.30%	1.40%	11.34%
FL	9.93%	18.65%	21.21%	9.09%	25.84%	32.44%	4.60%	19.00%	13.15%
HIBB	7.22%	5.01%	3.82%	8.26%	11.38%	12.22%	3.90%	0.70%	8.64%
DSI	1.34%	-42.68%	-76.38%	457.82%	-24.95%	-28.44%	2.50%	-3.35%	6.20%

GPC valuation multiples for differences in size presented later in this chapter. The computation of this has been presented in the Appendices to this report.

Growth Rates (see Exhibit 44). An entity with a higher expected rate of growth will be more valuable than those with lower expected growth, all other things being equal. Greater growth provides the potential for greater future benefits to the shareholder. Expected growth can be based on many factors including historical growth, new products, price inflation, market conditions, and others.

DSI's historical revenue and earnings growth compared unfavorably with the public guidelines, except for the five-year revenue growth. Expected future growth also compared unfavorably to the GPCs.

The difference in the long-term growth rates of the GPCs and DSI relate to differences in estimated population growth. As previously presented, long-term growth is a function of inflation and population growth. Because the GPCs operate nationwide, an Investor would look to total U.S. population growth estimates to determine long-term growth rates for the GPCs.

Although the estimated future growth of the entity is an important factor, certain procedures can measure and adjust for the differences in growth. In the article, "Adjusting Pricing Multiples for Expected Growth," published in *Business Appraisal Practice* (Spring 2000),

the authors, Stephen J. Bravo and Michael Mattson, outline a procedure for adjusting for growth differences between guideline companies and subject entities. The procedure uses established financial analysis to determine the effect of growth on valuation multiples and then adjusts guideline company multiples for those effects. The procedure results in market derived valuation multiples that are more applicable to the subject entity. When appropriate, an Investor would adjust the valuation multiples for differences in expected growth.

Business Opportunities, Diversification & Other Factors. The GPCs have greater geographic and industry diversification. They also have access to public capital markets. These factors increase the business opportunities for the public guideline companies.

Adjustments to Guideline Multiples

As presented, there can be differences between the GPCs and the valuation subject. Mathematical techniques exist that can help to mitigate the impact of these differences. The premise of these mathematical techniques is to substitute a cost of capital variable of a public guideline company for the valuation subject's variable. In other words, in the case of expected growth, the guideline company's expected growth is replaced with the subject company's expected growth when computing a valuation multiple. The same can be done for factors related to size and unsystematic risk.

EXHIBIT 45: Guideline Adjustment Formula

$$M_a = \frac{1}{\frac{1}{M_g} + \alpha\varepsilon(\theta+\mu)+\lambda}$$

Where:

M_a = Adjusted valuation multiple

M_g = Unadjusted valuation multiple of the public guideline company

α = The ratio of revenue to after-tax EBITDA. This variable is set to one (1) if the valuation multiple is not a revenue multiple.

ε = The ratio of the public guideline company's market value of equity to market value of invested capital. This variable is set to one (1) if the valuation multiple is based on equity.

θ = The size premium of the valuation subject less the size premium of the public guideline

μ = The unsystematic risk premium of the valuation subject less the unsystematic risk premium of the public guideline

λ = The expected long-term growth of the public guideline less the expected long-term growth of the valuation subject

The steps to perform these adjustments are as follows:

- ◆ Compute a valuation multiple for the guideline company.
- ◆ Convert the valuation multiple to a capitalization rate by taking the reciprocal.
- ◆ Convert the capitalization rate to a discount rate by adding the guideline company's expected long-term growth.
- ◆ Break the discount rate into its individual components as described by the Capital Asset Pricing Model.
- ◆ Substitute different variables as they relate to the valuation subject for the same variable that relate to the guideline companies.
- ◆ Convert the adjusted discount rate back into a capitalization rate by subtracting the expected long-term growth of the valuation subject.
- ◆ Convert the adjusted capitalization rate back into a valuation multiple by taking the mathematical inverse.

This procedure is expressed by the accompanying mathematical formula (see Exhibit 45). An Investor would apply this to the GPCs in order to arrive at valuation multiples that are more applicable to the valuation subject. The presentation of the variable used and the computations of the adjusted valuation multiples in *Appendix D* to this report.

Summary of the Valuation Multiples

Valuation multiples from GPCs can include price-to-earnings, market value of invested capital (MVIC) to earnings before interest and taxes (EBIT), MVIC to earnings before interest, taxes, depreciation and amortization (EBITDA), as well as others. An Investor would focus on the MVIC multiples because they are applied to EBIT and EBITDA, which more closely approximates cash flows than earnings.

The computation of the adjusted multiples can be found in *Appendix C*, and are summarized in the accompanying table (see Exhibit 46). As previously mentioned, the impact of size and growth have been

EXHIBIT 46: Adjusted Multiples

Name	Price-to-Future-Earnings	MVIC-to-EBIT	MVIC-to-EBITDA
BGFV	7.20	6.80	4.90
CAB	7.70	10.30	8.90
DKS	7.80	6.00	5.00
FL	6.40	5.10	4.70
HIBB	7.70	5.70	5.30
25th Percentile	6.80	5.40	4.80
Mean	7.36	6.78	5.76
Median	7.70	6.00	5.00
75th Percentile	7.75	8.55	7.10
Standard Deviation	0.52	1.84	1.58
Coefficient of Variation	0.07	0.27	0.27

Source: *Appendix C*.

factored into the adjustments. An Investor would also recognize that the impact of other factors presented in

this chapter have been accounted for in the adjustment to the valuation multiples for unsystematic risk

Valuation Approaches

An Investor will consider using each of the valuation approaches and will consider making certain adjustments to managements' financial information.

Valuation Approach Overview

The various approaches to valuing an ownership interest in a business or intangible asset are based in the economic principles of “future benefits” and “substitution.”

The principle of future benefits specifies that an investor will not pay more than today’s value of economic benefits to be received in the future. The principle of substitution specifies that an investor will not pay more for an asset than the cost of another asset that performs the same function. These principles are applied in the various approaches to value, namely the income approach, the market approach and the asset approach. Each of these approaches have corresponding methods that can be used to develop a value.

Asset Approach

The asset approach (or cost approach) is based on the economic principle of substitution. In terms of an investment, the principle of substitution is that an investor will not pay more for an investment than the cost to purchase or create the same investment.

The underlying concept of the asset approach is simple. The value of the investment is the sum of its assets less its liabilities. When properly applied, asset approach methods can be highly complex. This approach not only considers physical assets, but also intangible assets such as trademarks, patents, customer relationships, and reputation, to name a few. This approach also considers actual liabilities as well as contingent liabilities that may exist. The asset approach recognizes that all

economic value can be associated with the productive assets of the business, tangible and intangible.

Income Approach

The income approach is based on the economic principle of future benefits. It uses the concept of the “time value of money” to determine value. The time value of money concept is that an amount of money available now is worth more than the same amount in the future. The reason has to do with uncertainty and investment potential.

The receipt of an amount of money in the future is not completely certain. Events and circumstances may prevent the amount from being paid. Investors seek to be compensated for such risks. An amount available today can be invested and earn interest. The investor will have a greater amount of money in the future because of the interest earned. The sooner the money is available for investing, the more interest it can earn. Therefore, an amount of money is more valuable now than the same amount received in the future.

Under the income approach, value is computed as today’s value (present value) of expected future economic benefits to be received. The computation of the present value considers the risks associated with the investment. The risks are expressed in the rate of return that the investors seeks to achieve. This rate of return is often called the “cost of capital.”

The methods used in the income approach primarily include the discounted future cash flows (DCF) method and the capitalized earnings method.

Market Approach

The market approach is based on the economic principle of substitution, but can also incorporate some elements of the principle of future benefits. It uses the concept of “efficient markets.” The efficient market hypothesis is that the market price of an investment will reflect and incorporate all relevant information related to the assets. It means that the trading price will always be equivalent to the fair market value of the investment.

This approach compares the subject entity to transactions involving reasonably similar companies whose values are known. The comparisons are used to develop a cost of capital based on the known values of the comparable companies. The cost of capital is usually expressed as a valuation multiple. The multiple is then applied to an appropriate measure of economic benefit to arrive at a value.

The methods used in the market approach include actual transactions involving the subject investment, the private company transaction method and the publicly traded guideline company method.

Method Selection

An Investor’s selection of an appropriate approach and underlying method of valuation depends on the facts and circumstances of the case. The items that will impact the selection of the most appropriate method of valuation may include, but are not limited to, the following:

- ◆ The purpose of the valuation;
- ◆ The premise of value (i.e., liquidation versus going concern);
- ◆ The availability of adequate information on publicly traded comparable companies or transactions involving comparable private companies;
- ◆ The relative stability or irregularity of historical earnings; and,
- ◆ Growth expectations for the future.

An Investor will consider using valuation methods that relate to the income, asset, and market approaches as detailed in the following chapters of this report.

Asset Approach

An Investor would not use the asset approach to develop an estimate of the fair market value of the Subject Interest. But would use the adjusted net assets as a basis for the financial forecast used in the income approach.



The asset approach is defined as:

a general way of determining a value indication of a business, business ownership interest, or security using one or more methods based on the value of the assets net of liabilities.⁴⁵

Because GAAP recognizes assets at their historical costs, and generally will not recognize intangible assets unless they are purchased, the asset approach involves adjusting a company's individual assets and liabilities up or down from historical cost to reflect their current values. This includes tangible and intangible assets, as well as contingent liabilities.

Usually tangible assets can be easily identified and an appraisal can be performed to determine their values. The subject entity's balance sheet can be adjusted to reflect these values. Identifying and valuing intangible assets can be much more difficult. Such assets include trade names, trademarks, patents, reputation, trained workforce, and others. Valuation techniques used to value intangible assets typically rely on the earnings or cash flows generated by such assets. As such, the income and market approaches inherently capture the value of these assets. For this reason, the asset approach is generally less preferred when valuing a profitable operating entity.

IRS Revenue Ruling 59-60 expresses this as follows:

Earnings may be the most important criterion of value in some cases whereas asset value will receive primary consideration in others. In general, the appraiser will accord primary consideration to earnings when valuing stocks of companies which sell products or services to the public; conversely, in the investment or holding type of company, the appraiser may accord the greatest weight to the assets underlying the security to be valued.⁴⁶

In addition to holding companies, the asset approach is frequently used for non-operating assets held by entities.

Methods Considered

Book Value

Book value is an accountant's measure of recorded assets less recorded liabilities. Because accountants measure most items based on historical cost, book value is typically does not reflect, nor is intended to measure the current market value of assets or liabilities.

DSI's book value was presented in Exhibit 33 and in *Appendix B*. For the reasons mentioned above, an Investor would not use the book value to determine the value of the Subject Interest.

45. International Glossary of Business Valuation Terms.

46. Internal Revenue Service, Revenue Ruling 59-60, 5(a).

EXHIBIT 47: Cash Allocation

	<u>Totals</u>	<u>Allocation Percentages</u>	<u>Cash Allocation</u>
Total assets	\$ 75,657,854		
Less cash balance	<u>(10,233,643)</u>		\$ 10,233,643
Total pre-cash assets	65,424,211		
Pre-cash non-operating assets (cost)	40,183,522	61.42%	6,285,504
Pre-cash operating assets (cost)	25,240,689	38.58%	3,948,139

Source: Exhibit 48.

Adjusted Net Assets

The adjusted net assets method estimates value as the sum of the subject entity's assets (including intangible assets) less its liabilities (including contingent liabilities).

The value of the assets and liabilities is determined as if the entity will continue as an ongoing concern. As stated in Rev. Rul. 59-60, this method is most appropriate for investment companies and holding companies. This method may also be appropriate for operating companies that are marginally profitable or when a significant portion of a company's assets are composed of liquid assets or other investments (such as real estate or marketable securities).

The first step in applying the Adjusted Net Assets method is to adjust the recorded assets and liabilities to their current market values and to add the market values of unrecorded asset and liabilities. It may also be appropriate to exclude non-operating assets and liabilities. These adjustments are as follows:

Cash. An Investor would allocate the cash balance between the operations and the real estate investment segment. This would be done based on the percentage of operating assets to non-operating assets, as presented in the accompanying table (see Exhibit 47).

Land and Buildings. As part of the treatment of the real estate as non-operating assets, an Investor would eliminate these items from the balance sheet.

Accumulated Depreciation. Also as part of the treatment of the real estate as non-operating assets, an Investor would eliminate the portion of accumulated depreciation that relates to the building, from off the balance sheet.

Notes Payable and Current Portion. An Investor would eliminate from off the balance sheet the notes payable related to the real estate. This included the notes payable and the current portion of long-term debt.

Retained Earnings. The sum of the above adjustments was accounted for in the retained earnings in order to balance the adjustments.

The impact of these adjustments are presented in the accompanying table (see Exhibit 48).

In this case, an Investor would consider earnings to be a better measure of economic benefit and, therefore, would not use the asset approach to develop a value of operations. An Investor would, however, adjust the balance sheet to use as a basis for the financial forecast presented later in this report.

Liquidation Value

The liquidation value method is similar to the adjusted net assets method. Value is estimated as the sum of the subject entity's assets less its liabilities.

EXHIBIT 48: Adjusted Balance Sheet

As of: 12/31/2014	Unadjusted ¹	Nonoperating Adjustments	Adjusted	Pct.
Current assets				
Cash and equivalents	\$ 10,233,643	\$ (6,285,504)	\$ 3,948,139	6.0%
Accounts receivable	3,957,750	-	3,957,750	6.0%
Total Inventory	16,291,993	-	16,291,993	24.7%
Total other current assets	352,443	-	352,443	0.5%
Total current assets	30,835,829	(6,285,504)	24,550,325	37.2%
Fixed assets				
Land	8,724,030	(8,724,030)	-	0.0%
Buildings	29,029,988	(29,029,988)	-	0.0%
Fixtures and equipment	17,297,429	-	17,297,429	26.2%
Capital leases	280,736	-	280,736	0.4%
Fixed assets	55,332,183	(37,754,018)	17,578,165	26.7%
Accumulated depreciation	(13,759,779)	3,856,000	(9,903,779)	-15.0%
Net fixed assets	41,572,404	(33,898,018)	7,674,386	11.6%
Other noncurrent assets				
Goodwill	2,233,521	-	2,233,521	3.4%
Other assets	1,016,100	-	1,016,100	1.5%
Other noncurrent assets	3,249,621	-	3,249,621	4.9%
Total Assets	\$ 75,657,854	\$ (40,183,522)	\$ 35,474,332	53.8%
Current liabilities				
Accounts payable	\$ 11,833,779	\$ -	\$ 11,833,779	18.4%
Current portion of long-term debt	10,198,586	(10,198,586)	-	0.0%
Accrued liabilities	518,493	-	518,493	0.8%
Total current liabilities	22,550,858	(10,198,586)	12,352,272	19.2%
Long-term liabilities				
Notes payable	27,876,754	(27,876,754)	-	0.0%
Other long-term liabilities	140,271	-	140,271	0.2%
Total long-term liabilities	28,017,025	(27,876,754)	140,271	0.2%
Total liabilities	50,567,883	(38,075,340)	12,492,543	19.4%
Equity				
Common shares	25,000	-	25,000	0.0%
Additional paid in capital	225,000	-	225,000	0.3%
Retained earnings	31,339,971	(2,108,182)	29,231,789	45.4%
Treasury stock	(6,500,000)	-	(6,500,000)	-10.1%
Total equity	25,089,971	(2,108,182)	22,981,789	35.7%
Total Liabilities and Equity	\$ 75,657,854	\$ (40,183,522)	\$ 35,474,332	55.1%
Working Capital	\$ 8,284,971		\$ 12,198,053	

¹ From Appendix B.

The difference is the assets and liabilities are valued as if being liquidated as opposed to in place with a going concern.

As such, the liquidation value differs from the net asset value by the costs associated with disposition of the assets (e.g., sales commissions, taxes, legal, accounting, and other administrative costs associated with keeping the entity alive long enough to liquidate it). According to USPAP Standards Rule 9-3, this method should be considered. This rule states:

In developing an appraisal of an equity interest in a business enterprise with the ability to cause liquidation, an appraiser must investigate the possibility that the business enterprise may have a higher value by liquidation of all or part of the enterprise than by continued operation as is. If liquidation of all or part of the enterprise is the indicated premise of value, an appraisal of any real property or personal property to be liquidated may be appropriate.

Comment: This Standards Rule requires the appraiser to recognize that continued operation of a business is not always the best premise of value because liquidation of all or part of the enterprise may result in a higher value. However, this typically applies only when the business equity being appraised is in a position to cause liquidation. If liquidation of all or part of the enterprise is the appropriate premise of value, the scope of work may include an appraisal of real property or tangible personal property. If so, competency in real property appraisal (STANDARD 1) or tangible personal property appraisal (STANDARD 7) is required.⁴⁷

Management did not indicate that there was any intention on pursuing a course of liquidation. As a result, an Investor would not use the liquidation value method.

EXHIBIT 49: Non-Operating Real Estate

Appraised value of real estate ¹	\$ 40,000,000
Allocated cash	6,285,504
Less mortgages ²	<u>(38,075,340)</u>
Estimated Equity Value of Real Estate	<u>\$ 8,210,164</u>
Rounded	<u>\$ 8,210,000</u>

¹ From real estate appraisals.

² Sum of the current portion of long-term debt and notes payable from Exhibit 48.

Non-Operating Items.

Occasionally, business entities hold assets or liabilities that are unrelated to the business operations. These can include items that are personal in nature, items that are obsolete, or items that are unneeded for the prudent operation of the business.

In this instance, an Investor would consider the following as non-operating items:

Real Estate

An Investor will treat DSI's real estate as a non-operating asset because it could operate from leased facilities rather than owning the real estate. To determine the current market value of the real estate, an Investor would rely on the real estate appraisal performed by Rose Real Estate Appraisers. An Investor would compute the estimated market value and equity value of the real estate as presented in the accompanying table (see Exhibit 49).

47. The Appraisal Foundation, *Uniform Standards of Professional Appraisal Practice and Advisory Opinions: 2014-2015 Edition*, Standards Rule 9-3.

Income Approach

An Investor would use the income approach to develop an indication of value. Specifically, an Investor would use the discounted future cash flows method to estimate the fair market value of the Subject Interest.



To apply the income approach, an Investor would:

- ◆ make any necessary adjustments to DSI's earnings;
- ◆ determine the best way to measure the economic benefits;
- ◆ compute the amount of the economic benefits; and,
- ◆ apply the previously determined cost of capital to the economic benefits by applying the method that relates to the measure of economic benefit.

is chapter details the above items as well as the principal methods of the income approach. These methods including, but not limited to, the capitalized cash flows method, the discounted cash flows method, the adjusted present value method, and the excess earnings method. considered and methods used.

Adjustments to Earnings

Before estimating economic benefits an Investor would adjust DSI's earnings to remove non-recurring items, to account for non-operating items, and to normalize items related to the Subject Interest's ability to exercise control.

When developing an opinion of value for a controlling interest in a company, an Investor will optimize discretionary expenses, capital structure, and similar items. The controlling interest holder has the ability to change each of these financial items in order to maximize value. On the other hand, when performing a valuation for a non-controlling interest in a company, an

EXHIBIT 50: G&A Expense Adjustment

Replacement rent	\$ 3,500,000
Replacement retirement expenses	312,000
ESOP contribution expense	<u>(975,000)</u>
Total adjustment to general and administrative expense	<u>\$ 2,837,000</u>

Investor will make these additional adjustments, because the non-controlling interest holder is unable to change any of these financial items. With ESOPs an Investor will add back contributions made by the Company to the ESOP, and subtract costs that would be incurred if the ESOP did not exist. These adjustments are made in order to achieve an estimate of fair market value.

An Investor will treat the real estate held by DSI as a non-operating assets. Non-operating assets are removed from the financial information so that the value of operations can be determined separately, and then the value of the non-operating assets are added to the value of the operations to arrive at the overall value. In the case of real estate, it is treated as if it were being leased. An Investor will also treat the ESOP as a non-operating item. To do so, expenses related to the ESOP are removed and replaced them with expenses that would be associated with a more common type of retirement plan such as a 401K plan.

EXHIBIT 51: Adjustments to Earnings

For the year ended: 12/31/2014	Unadjusted ¹	Nonoperating Adjustments ²	Adjusted	Pct.
Revenue	\$ 78,163,929	\$ -	\$ 78,163,929	101.3%
Cost of sales	44,149,050	-	44,149,050	57.2%
Gross profit	34,014,879	-	34,014,879	44.1%
General and administrative expenses	27,814,107	2,837,000	30,651,107	39.7%
Expenses before depreciation'	27,814,107	2,837,000	30,651,107	39.7%
EBITDA	6,200,772	(2,837,000)	3,363,772	4.4%
Depreciation and amortization	2,423,507	(212,586)	2,210,921	2.9%
Income from operations	3,777,265	(2,624,414)	1,152,851	1.5%
Other income (expenses)				
Interest expense	(468,043)	468,043	-	0.0%
Gain (loss) on disposal of assets	105,514	-	105,514	0.1%
Other income (expenses)	(362,529)	468,043	105,514	0.1%
Income before taxes	3,414,736	(2,156,371)	1,258,365	1.6%
Income taxes	-	435,394	435,394	0.6%
Net Income e	\$ 3,414,736	\$ (2,591,765)	\$ 822,971	1.1%

¹ From Appendix B.

² The adjustment to General and Administrative expenses are from Exhibit 50.

Details of these adjustments are as follows:

General and Administrative Expenses. The adjustment to general and administrative expenses represents three separate items. The first adjustment to general and administrative expenses was the inclusion of a market rate of rent on real estate held by DSI. The real estate appraisal performed identified this amount as \$3.5 million annually.

The second adjustment was the replacement retirement benefits. DSI's president, Lou Gehrig, indicated that internal analysis indicates that if DSI had a 401K plan in place participation in the 401K plan would be approximately 50 percent, and that DSI would match employee contributions up to 4 percent of wages. Based on this information, an Investor would compute an estimated replacement retirement plan cost at \$312,000 (\$15,600,000 payroll x 0.5 participation x 0.04 contribution match).

The third item is the add back of contributions to the ESOP totaling \$975,000 for the year 2014. The sum of these expenses is presented in Exhibit 50.

The sum of these three items represents the total adjustment to general and administrative expenses. These same items were considered in management's forecasted income statements.

Depreciation Expense. The depreciation on the Albany and Buffalo stores was eliminated as part of the treatment of real estate as a non-operating asset. The amount for these adjustments were provided by DSI's CFO, Jackie Robinson, and include loan fee amortization.

Interest Expense. Interest expense was eliminated as all interest bearing debt was mortgages on real estate held.

Income Taxes. An Investor would adjust the earnings of the Company for income taxes. This adjustment normalizes the income tax expense as part of the

EXHIBIT 52: Cash Flow to Invested Capital

Adjusted pretax earnings
+ Interest expense
<hr/>
= Earnings before interest and taxes
- Normalized income taxes
+ Noncash charges, i.e., depreciation and amortization
<hr/>
= Gross cash flow
- Incremental working capital to support growth
- Anticipated capital expenditure needs
- Required distributions to cover owners' taxes ¹
<hr/>
= Net Cash Flow to Equity

¹ Only for businesses taxed as pass-through entities.

EXHIBIT 53: Depreciation v. Capital Expenditures

Long-Term Growth	Depreciable Life					
	3	5	7	10	15	20
2%	97.1%	95.2%	93.4%	90.7%	86.5%	82.6%
3%	95.7%	93.0%	90.3%	86.6%	80.8%	75.5%
4%	94.4%	90.8%	87.5%	82.7%	73.6%	69.3%
5%	93.0%	88.8%	84.7%	79.1%	70.9%	63.9%
6%	91.8%	86.8%	82.1%	75.8%	66.7%	59.1%
7%	90.5%	84.9%	79.7%	72.7%	62.8%	54.8%

Source: Brant H. Armentrout, "A Sanity Test When Estimating Capital Expenditures in Excess of Depreciation," *Business Valuation Review* (Sept. 2003), pp. 136-141.

valuation purposes, and presents it in a manner consistent with benchmark information.

The impact of these adjustments on DSI's pretax earnings is shown in the accompanying table (see Exhibit 51).

Measure of Economic Benefit

An Investor would estimate the economic benefits to the Subject Interest holder by looking to cash flows expected to be generated. This is because cash flow is, in most

cases, a better measure of economic benefit than earnings.

Estimated Ongoing Cash Flows to Invested Capital

Cash flows can be evaluated on a "cash flow to equity" basis or a "cash flow to invested capital" basis. Cash flow to equity looks at the cash flow available to equity owners. Cash flow to invested capital includes cash paid to debt holders (interest expense). It is often called "debt free" cash flow because it represents cash flows as if the entity had no interest bearing debt. It allows the analysis to be performed on a debt neutral basis. The impact of any debt is then considered separately. The formula for computing cash flow to invested capital is presented in the accompanying table (see Exhibit 52).

Cash flow can be especially useful when analyzing a controlling ownership interest. For this reason an Investor would look to cash flow to invested capital to measure economic benefits.

An Investor would estimate future economic benefits by forecasting DSI's future earnings and cash flows. This is appropriate because future growth in cash flows is expected to be different from current levels.

Cash Flow Assumptions

In order to forecast future cash flows, an Investor must first forecast future earnings and future account balances. These forecasts require many assumptions, which are derived from DSI's management. Specifically, management provided a forecast for the five-year period subsequent to the Valuation Date.

Earnings Forecast Assumptions

Base Period. An Investor would build a financial forecasts using the most recent adjusted annual financial statements as presented in *Appendix B* and the adjustments previously presented.

Revenues. Management forecasted future revenues to increase by 2.5 percent, 4 percent, 5 percent, 4 percent, and 3 percent, respectively, during the forecast period and 2.25 percent thereafter. These rates of growth are slower than historical rates and appear to be in-line with market area economic conditions.

EXHIBIT 54: Future Earnings

\$ in thousands	Period 1	Period 2	Period 3	Period 4	Period 5	Residual Period
<i>Revenue growth</i>	2.50%	4.0%	5.0%	4.0%	3.0%	2.25%
Revenue	\$80,118.0	\$83,322.7	\$87,488.8	\$90,988.4	\$93,718.1	\$95,826.8
<i>Gross profit percentage</i>	43.5%	43.5%	43.5%	43.5%	43.5%	43.5%
Gross profit	34,851.3	36,245.4	38,057.6	39,580.0	40,767.4	41,684.7
<i>Commission percentage</i>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Commissions	-	-	-	-	-	-
Contribution Margin	34,851.3	36,245.4	38,057.6	39,580.0	40,767.4	41,684.7
Expenses:						
Variable general and admin.	24,035.4	24,996.8	27,121.5	29,116.3	29,989.8	29,706.3
Fixed general and admin.	7,750.0	7,924.4	8,102.7	8,285.0	8,471.4	9,055.9
Total expenses	31,785.4	32,921.2	35,224.2	37,401.3	38,461.2	38,762.2
EBITDA	3,065.9	3,324.2	2,833.4	2,178.7	2,306.2	2,922.5
Depreciation and amortization	1,849.7	1,555.2	1,178.6	882.6	485.4	425.3
Earnings before minority interest and taxes	1,216.2	1,769.0	1,654.8	1,296.1	1,820.8	2,497.2
Income taxes	(474.0)	(690.0)	(645.0)	(505.0)	(710.0)	(974.0)
Net Income	742.2	1,079.0	1,009.8	791.1	1,110.8	1,523.2

Gross Profits. Management estimates that future gross profit percentages at approximately 43.5 percent, which is similar to historical levels.

General and Administrative Expenses. Management forecasted future variable G&A expenses at 30 percent to 32 percent of revenue over the forecasted period. Fixed G&A expenses were forecasted to grow at the estimated inflation rate of 2.25 percent annually.

Depreciation. Depreciation expense was estimated based on depreciation schedules on existing assets and forecasted depreciation on expected future capital expenditures. Depreciation expense for the residual period was based on the information in the accompanying table. Recognizing that most of DSI's non-real estate assets would have seven-year depreciable lives, and assuming that 2 percent is a reasonable estimate of the long-term growth rate, an Investor would assume approximately 93.4 percent (see outlined cell in Exhibit 53) of capital expenditures will identify a reasonable estimate of depreciation expense.

Income Taxes. As a PTE DSI does not pay income taxes, and as such, income taxes have been estimated

as zero. An Investor would estimate income taxes based on the combined state and federal effective income tax rate. This is determined by the following formula:

$$\text{Combined Effective Tax Rate} = [(1 - \text{State Rate}) \times \text{Federal Rate}] + \text{State Rate}$$

The applicable income tax rate for corporations in the State of New York was 7.1 percent. Federal income tax rates are graduated for different levels of earnings. As taxable earnings increase, the tax rates general increase. The federal income tax rate used, namely 34 percent, represents the effective federal income tax rate for corporations have taxable earnings similar to the Company. From this the combined effective income tax rate was 39 percent.

Future Earnings. Based on these assumptions, the computed future earnings are presented in Exhibit 54.

Future Account Balance Assumptions

Cash. The future cash balances are the amounts that result from the forecast of all other balance sheet items.

EXHIBIT 55: Future Account Balances

As of:	dollars in thousands					
	Period 0	Period 1	Period 2	Period 3	Period 4	Period 5
Cash	\$ 3,948.1	\$ 4,951.6	\$ 6,045.4	\$ 6,380.7	\$ 6,520.1	\$ 6,733.4
<i>Days sales outstanding</i>		20	20	20	20	20
Accounts receivable	3,957.8	4,390.0	4,565.6	4,793.9	4,985.7	5,135.2
<i>Days inventory</i>		135.0	135.0	135.0	135.0	135.0
Inventory	16,292.0	16,742.5	17,412.2	18,282.8	19,014.1	19,584.5
Other current assets	352.4	397.3	411.5	440.3	467.5	480.8
Total current assets	24,550.3	26,084.1	28,023.2	29,457.4	30,519.9	31,453.1
Fixed assets	17,578.2	18,017.6	18,737.6	19,677.6	20,467.6	21,077.6
Accumulated depreciation	(9,903.8)	(11,753.5)	(13,308.7)	(14,487.3)	(15,369.9)	(15,855.3)
Net fixed assets	7,674.4	6,264.1	5,428.9	5,190.3	5,097.7	5,222.3
Intangible assets	2,233.5	2,233.5	2,233.5	2,233.5	2,233.5	2,233.5
Other assets	1,016.1	1,041.5	1,083.2	1,137.4	1,182.9	1,218.4
Total other assets	3,249.6	3,275.0	3,316.7	3,370.9	3,416.4	3,451.9
Total Assets	\$35,474.3	\$35,623.2	\$36,768.8	\$38,018.6	\$39,034.0	\$40,127.3
<i>Days payable</i>		94	94	94	94	94
Accounts payable	\$11,833.8	\$11,657.7	\$12,124.0	\$12,730.2	\$13,239.4	\$13,636.6
Accrued liabilities	518.5	531.5	552.8	580.4	603.6	621.7
Total current liabilities	12,352.3	12,189.2	12,676.8	13,310.6	13,843.0	14,258.3
Long-term liabilities	140.3	-	-	-	-	-
Total liabilities	12,492.6	12,189.2	12,676.8	13,310.6	13,843.0	14,258.3
Total equity	22,981.7	23,434.0	24,092.0	24,708.0	25,191.0	25,869.0
Total Liabilities and Equity	\$35,474.3	\$35,623.2	\$36,768.8	\$38,018.6	\$39,034.0	\$40,127.3

Accounts Receivable. Management estimated future accounts receivable balances based on an average days receivable outstanding period of 20 days. This was similar to DSI's historical DSO.

Inventory. Management estimated future inventory balances based on an average days inventory outstanding period of 135 days DIO. This was similar to historical DIO.

Other Current Assets. Other current assets, which consist of prepaid expenses, were forecasted at 1.25 percent of operating expenses before depreciation, which was similar to historical levels.

Fixed Assets. Future fixed asset balances were based on the historical amount, increased annually by the amount of forecasted capital expenditures.

Accumulated Depreciation. Future accumulated depreciation was based on the historical balance, increased annually by the amount of forecasted depreciation expense.

Intangible Assets. The intangible asset balance consisted of goodwill, which management estimates will not become impaired during the forecast period. As such, no change in the goodwill was forecasted.

EXHIBIT 56: Residual Working Capital Needs

Stabilized Revenue (\$000) ¹	\$ 95,826.8
Multiplied by Working Capital as a % of Revenue ²	10.6%
Multiplied by Long-Term Growth Rate ³	<u>2.25%</u>
Stabilized Period Incremental Working Capital Needs (\$000)	<u>\$ 228.5</u>

¹ From Exhibit 54.

² From Exhibit 30.

³ From Exhibit 41.

Other Assets. Forecasted other assets were based on the historical amount, grown at the same rate as revenue.

Accounts Payable. Management estimated future accounts payable balances based on an average days payable outstanding period of 94 days. This was similar to DSI's historical DPO.

Accrued Expenses and Current Liabilities.

Management estimated that future balances of accrued expenses and current liabilities would grow at the same rate as revenues.

Shareholder's Equity. Management expects shareholder's equity to increase annually by the amount of annual earnings.

Future Account Balance. Based on these assumptions and the previous forecasted earnings, an Investor would compute the forecasted account balances as presented in the accompanying table (see Exhibit 55).

Cash Flow Formula Variables

An Investor would use the following variables to compute the cash flow to invested capital.

Pretax Earnings. An Investor would start the computation of cash flows with the pretax earnings determined in the financial forecast (see Exhibit 54).

Interest Expense. An Investor would add the forecasted interest expense from Exhibit 54.

Normalized Income Taxes. An Investor would compute the normalized income taxes based on forecasted EBIT

EXHIBIT 57: Capitalized Cash Flows Formula

$$PV = \frac{CF}{k-g}$$

Where:

PV = Present Value

CF = Expected ongoing cash flow or economic benefit

k = Discount rate (required yield rate or total rate of return)

g = Expected ongoing future growth in cash flows or economic benefits

and the previous formula for the combined effective tax rate.

Noncash Charges. An Investor would add the depreciation and amortization expenses from Exhibit 54.

Incremental Working Capital Needed For Growth. An Investor would estimate incremental working capital needs for growth based on the previously presented balance sheet forecast. The residual period working capital needs would be computed as presented in the accompanying table (see Exhibit 56).

In this computation, the working capital as a percentage of sales was taken from DSI's actual results assuming that it represents future expectations.

Anticipated Capital Expenditures. An Investor would estimate the anticipated capital expenditure needs

EXHIBIT 58: DCF Formula

$$PV = \frac{E_1}{(1+k)} + \frac{E_2}{(1+k)^2} + \dots + \frac{E_n}{(1+k)^n} + \frac{E_n(1+g)}{(1+k)^n \frac{k-g}{k}}$$

Where:

$E_1 \dots E_n$ = Expected amounts of economic income in each period E_1 through E_n

k = Discount rate

n = Number of periods in the discrete projection period

g = Annually compounded growth rate in perpetuity for the prospective economic income, beyond the discrete projection period

based on the growth in fixed assets as shown in the forecasted balance sheets.

Residual Period. After earnings have been forecasted out to a point in time where future growth is expected to continue at a relatively constant rate, a capitalization method can be used to determine the value of cash flows from that point forward. This part of the forecast is called the residual period. The capitalization rate used for the residual period was presented earlier in this chapter.

Concluded Cash Flows to Invested Capital

Based on the previously presented pretax earnings and cash flow variable, an Investor would compute the cash flow to invested capital as presented in the accompanying table (see Exhibit 59).

Capitalization Methods

Capitalization methods compute value based on an entity's estimated future income by applying an appropriate capitalization rate to a single period estimate of future income. This capitalization rate takes into account the required rate of return an investor would expect based on the perceived investment risk, and expected growth in earnings. Capitalization methods are most useful when economic income is stable and growing at an even rate. Capitalization methods are based on the Gordon-Shapiro dividend discount valuation model and use a single period of earnings to develop a value. The formula for capitalization methods is presented in the accompanying chart (see Exhibit 57).

An Investor would not use this method to compute a value of the Company because near term cash flow growth is expected to vary significantly from current levels.

Discounted Future Cash Flow Methods

Discounted future cash flow methods involve projecting estimated future income streams and discounting those income streams by an appropriate discount rate to arrive at today's value of the estimated future earnings. The future income streams are usually estimated on an annual basis and can include either net income or cash flows. Earnings are forecasted for a number of future periods until such earnings reach a stable level of growth. Once the stable growth is achieved, a "terminal value" is determined.

The terminal value is the value of all future income streams after the point in time when a stable rate of growth has been estimated.

The appropriate discount rate is the rate of return an investor would expect to earn based on the risks of investing in a given entity. The sum of present values of projected income streams and the terminal value results in a value estimate for the entity itself (see Exhibit 58).

If an entity's earnings or cash flows are growing at a constant rate into perpetuity, the discounted cash flow formula is mathematically equivalent to the capitalization

EXHIBIT 59: DCF Method

\$ in thousands	Period 1	Period 2	Period 3	Period 4	Period 5	Residual Period
Adjusted earnings before taxes ¹	\$ 1,216.2	\$ 1,769.0	\$ 1,654.8	\$ 1,296.1	\$ 1,820.8	\$ 2,497.2
Income taxes ²	(474.3)	(689.9)	(645.4)	(505.5)	(710.1)	(973.9)
After tax earnings to invested capital	741.9	1,079.1	1,009.4	790.6	1,110.7	1,523.3
Depreciation and amortization ¹	1,849.7	1,555.2	1,178.6	882.6	485.4	425.3
Incremental working capital needs ³	(693.4)	(357.7)	(465.1)	(390.7)	(304.6)	(228.5)
Capital expenditures ⁴	(439.4)	(720.0)	(940.0)	(790.0)	(610.0)	(623.7)
Cash Flow to Invested Capital	1,459.0	1,557.0	783.0	492.0	682.0	1,096.0
Divided by the residual period capitalization rate ⁵						14.00%
Capitalized residual amount						\$ 7,829
Mid-period convention	0.50	1.50	2.50	3.50	4.50	
Present value factors ⁶	0.91863	0.77522	0.65419	0.55206	0.46587	0.46587
Present Values	\$ 1,340.3	\$ 1,207.0	\$ 512.2	\$ 271.6	\$ 317.7	\$ 3,647.3
Sum of the Present Values						\$ 7,296.1
Add cash ⁷						3,948.1
Less Interest Bearing Debt ⁸						-
Indication of the Value of Operations (sum of the present values)						\$11,244.2

¹ From Exhibit 54.

² Computed based on an effective tax rate of 0.39.

³ From Exhibit 51.

⁴ The change in Fixed Assets from Exhibit 55.

⁵ From Exhibit 41.

⁶ Based on the Discount Rate from Exhibit 40.

⁷ From Exhibit 48.

⁸ Sum of current portion of long-term debt and notes payable from Appendix B.

method. However, when an entity's near-term rate of growth is different from the long-term trend, or when near-term factors are influencing results (in a way that can be reasonably predicted), a discounted future earnings method can capture the valuation impacts of such differences more reliably than a capitalization method.

In this case an Investor would use the discounted cash flows method to estimate the fair market value of the Subject Interest because near-term rates of growth are expected to be different than long-term growth rates.

Adjusted Present Value Method

The adjusted present value (APV) method computes a value by separating the value of an enterprise into two parts. It first computes the value of un-leveraged cash flows at an equity rate of return. Next, it computes the value of benefits from the tax deductibility of interest expenses (referred to as the "tax shield") at a rate reflecting the risk of achieving such benefits. These two parts are then summed to arrive at the value of an enterprise.

Traditional DCF and CCF methods assume a static capital structure. The APV method is especially useful when a company expects to change its interest-bearing debt from current levels. In this case an Investor would

recognize that the capital structure, on an adjusted basis, should remain relatively constant.

Excess Earnings Method

The excess earnings method was originally set forth in IRS Appeals and Review Memorandum 34 in 1920. It was updated by Revenue Ruling 68-609. It was published as “ARM 34” and was known as the “Treasury Method”. The excess earnings method is based on the theory that earnings over and above a reasonable return on tangible assets represents a return on intangible assets. This method involves estimating the value of tangible assets and a reasonable return on those assets, and then determining a value of intangible assets based on any earnings that exceed the return on tangible assets. This method is a hybrid of the asset and income approaches, using elements of both.

This method involves the following steps:

- ◆ Determine the value of the entity’s net tangible assets.
- ◆ Normalize the cash flow of the entity.
- ◆ Determine an appropriate rate of return for the tangible assets.
- ◆ Determine the cash flows attributable to the net tangible assets by multiplying the net tangible assets by the appropriate rate of return for such tangible assets.
- ◆ Deduct the cash flows attributable to the net tangible assets from the normalized cash flow of the entity.

- ◆ Determine an appropriate rate of return for the intangible assets.
- ◆ Divide the earnings attributable to intangible assets by a capitalization rate appropriate for intangibles, to estimate the total value attributable to the intangibles assets.
- ◆ Add the value of the net tangible assets to the value of the intangible assets to estimate an overall value.

While some valuation analysts use this method to value equity ownership interests, the ruling makes no reference to using the method for that purpose. IRS Revenue Ruling 68-609 states that the excess earnings method is appropriate when no better method exists. An Investor would not use this method because better methods were available.

Indication of Value – Discounted Future Cash Flows

To compute a preliminary indication of value, an Investor will multiply the previously determined estimate of future cash flows by the applicable discount factors to arrive at a present value for each forecasted period. An investor will compute the discount factors based on the formula at Exhibit 58. An Investor will apply a mid-year convention in determining the discount factors because DSI cash flows are received evenly throughout the year. An Investor will sum the present values to arrive at a preliminary indication of value (see Exhibit 59).

Market Approach

An Investor will not use the market approach to estimate the fair market value of the Subject Interest. However, an Investor would use the publicly traded guideline company method as a reasonableness check of other conclusions.

An Investor would consider the market approach as presented in this chapter. Methods under the market approach include actual transactions involving ownership of the valuation subject, private company transactions where the valuation subject is compared to transactions involving private companies, and the publicly traded guideline company method where the valuation subject is compared to publicly traded companies.

Actual Transactions

With regard to actual transactions, Rev. Rul. 59-60 states:

Forced or distress sales do not ordinarily reflect fair market value nor do isolated sales in small amounts necessarily control as the measure of value.⁴⁸

From our inquiries with management and observations, we did not identify any arms-length transactions involving the Company's equity ownership interests in the recent past. As a result, an Investor would not use actual Company transactions to develop a value.

Private Company Transaction Method

The private company transaction method estimates value by comparing the subject entity to private companies that have been bought and sold. Information about the transactions is used to develop a valuation

multiple that can then be applied to the subject entity to develop a value. Information on such transactions is available from several transaction databases. An Investor would search private transaction databases to find transactions involving holding companies. Specifically an Investor would search for entities having the North American Industrial Classification System (NAICS) code 451110, Sporting Goods Stores.

The search resulted in a number of transactions involving business with the same NAICS code as DSI. The vast majority of these transactions involved businesses with revenues below \$5 million. Only three of these transactions, occurring in the last six years (subsequent to the financial meltdown in 2008) involved businesses with more than \$5 million in revenue.

Of those three, one was an Internet commerce business and the other two were described as a "sporting goods store" and an "outdoor recreation products." Based only on the descriptions, these last two appear most similar to DSI. However, two data points appears to be an insufficient basis on which to develop a value.

The transactions in the various databases generally involve privately held businesses where a controlling interest (usually 100 percent) has been transacted. One difficulty with using the information is that an Investor will not know the motivations of either the buyer or the seller. Nor would an Investor know if the buyer had synergies or economies of scale to gain from the transaction, nor do

48. Internal Revenue Service, Revenue Ruling 59-60, §4.02(g).

we know if the seller was in distress or in a “fire” sale situation.

When looking to use of the closely-held company databases, an Investor will consider the following:

The following transaction databases were reviewed for this article: Pratt’s Stats, BIZCOMPS and The Institute of Business Appraisers (IBA). It is up to each analyst to read the pertinent information, absorb it and apply it. However, there are some areas of concern that, while openly presented by the vendors, may not be initially obvious...⁴⁹

The author then goes on to review various business valuation standards including ASA and USPAP and concludes,

Overall, the standards quoted above collectively require the following:

- Similar qualitative and quantitative comparisons
- Verifiability
- Whether transaction was arm’s length
- Due diligence and due care
- Obtain and analyze relevant financial and operating data
- Minimize the differences in accounting treatments
- Information about the buyer and seller
- Unusual and nonrecurring items should be analyzed and adjusted
- Degree of control
- Degree of marketability and/or liquidity

- Timing differences between market transactions and the valuation date
- Strategic or investment value issues
- Size, depth of management, diversification of markets, products and services, and relative growth and risk
- The dates and, consequently, the relevance of the market data
- Rationale and support for methods selected
- Not commit a substantial error of omission or commission
- Not render appraisal services in a careless or negligent manner
- Obtain sufficient relevant data
- Supportable opinion

The databases discussed here meet few of the requirements as described above. If not addressed properly, this can lead to potential violations of various business valuation standards.⁵⁰

Because of the issues referred to above, an Investor would not use the private company transaction method.

Guideline Public Company Method

The guideline public company method estimates value by comparing the subject entity to publicly traded companies that have their shares bought and sold on a stock exchange or over-the-counter. To repeat what was expressed previously in this report, IRS Revenue Ruling 59-60 states that consideration should be given to:

The market price of stocks of corporations engaged in the same or a similar line of business having their stocks actively traded in a free and open market, either on an exchange or over-the-counter.⁵¹

49. Hitchner, James R., “Transaction Databases: Useful or Not?” *Financial Valuation and Litigation Expert*, Oct/Nov 2009, p.1.

50. Ibid.,

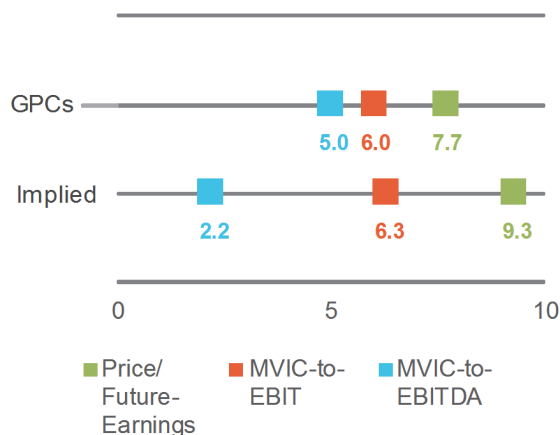
Financial information for publicly traded companies is a matter of public record, and their financial statements are available through the Securities and Exchange Commission (SEC). The trading prices for shares of publicly traded companies are available at any given time throughout a trading day. Historical daily low, high, and closing prices are published by various sources. This financial and other available information can be used to determine comparability of a GPC and the subject entity. Further, such financial information, along with trading price data can be used to develop valuation multiples that can then be used to value the subject entity.

Results of the GPC Method

An Investor would not specifically use the GPC method to develop a value for the Company, but would use it as a reasonableness check on results under other methods. To do so, an Investor would take the selected adjusted valuation multiples computed in the *Cost of Capital* chapter of this report, and compare them to valuation multiples implied by the results under other methods.

To compute the implied multiples, an Investor would start with the concluded value from the *Conclusion* chapter of this report, and divided it by the measure of economic benefit (in this case DSI's price-to-future-earnings, MVIC-to-EBITDA, MVIC-to-EBIT multiple). As presented in the accompanying table (see Exhibit 60), the implied

EXHIBIT 60: Implied Valuation Multiple



valuation multiples derived from the income approach were wide ranging with the implied MVIC-to-EBITDA multiple falling below the range found with the GPCs and the implied price-to-future-earnings multiple falling above the GPC range. The implied MVIC-to-EBIT multiple was similar to the GPCs. This suggests that the conclusion under the income approach was reasonable.

51. Ibid., §4.01(h).

Effects of Control on Value

An Investor would not make an adjustment for the Subject Interest's ability to exercise control. The method used to estimate the fair market value of the Subject Interest inherently captures the impact of control.

It is commonly recognized and well documented that an ownership interest lacking control will sell at a lower price than an equivalent controlling ownership interest. When control is not conveyed with the sale of an ownership interest, a downward adjustment to the preliminary indication of value may apply. This is commonly referred to as a "discount for lack of control" (a.k.a. minority discount). In some instances a premium (as opposed to a discount) for control may be applied when valuing a controlling ownership interest.

A controlling position in a business enterprise is typically worth more on a pro-rata basis than a non-controlling minority position for many reasons, including the rights of controlling owners to do any or all of the following:

- ◆ elect management/directors;
- ◆ select and/or remove management;
- ◆ set dividend/distribution policies;
- ◆ establish compensation and benefits;
- ◆ set business strategies and goals;
- ◆ acquire and liquidate assets;
- ◆ self-dissolve, or recapitalize the entity;
- ◆ revise organizational documents;
- ◆ establish or change buy-sell agreements or clauses; and
- ◆ cause the entity to become publicly traded.

A non-controlling interest holder cannot cause these actions to occur.

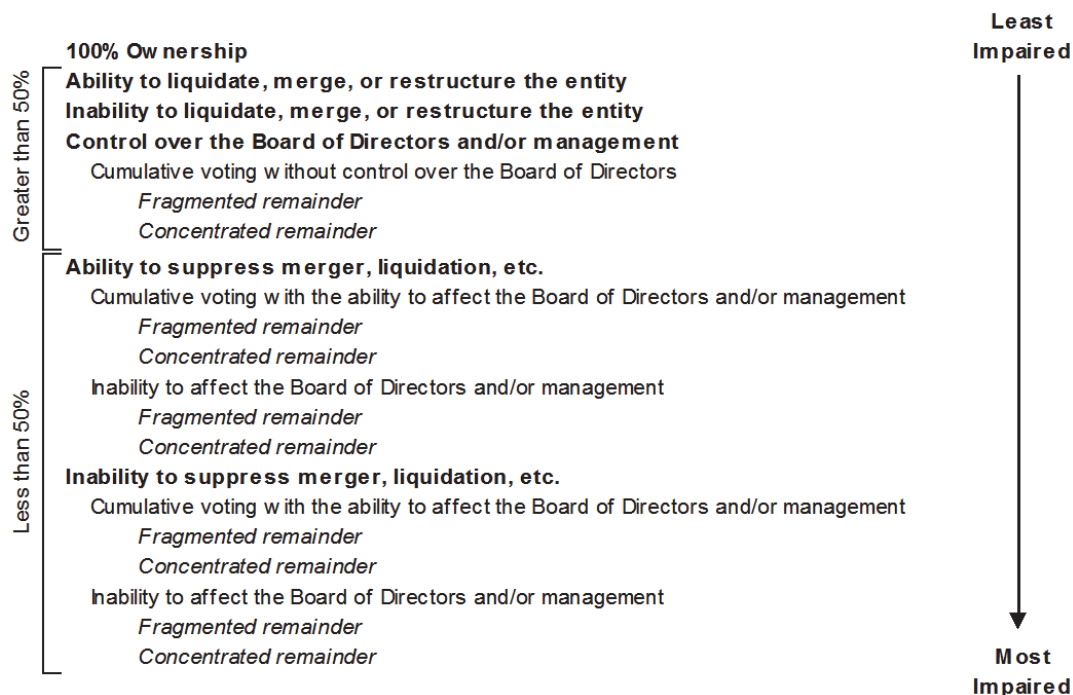
Other factors such as the rights of non-controlling owners and the distribution of ownership can also impact the value of an ownership interest. When assessing the value of an ownership interest it is important to consider the following factors:

Relative Ownership Distribution. The size of the ownership block being valued in relation to other blocks is important in establishing the degree of control. In a business enterprise that has hundreds of owners, a 20 percent interest can have a tremendous amount of control while in a business enterprise with only two owners, the owner of a 20 percent interest may have no control. If there are two owners, each holding 50 percent, neither has absolute control, but both have the ability to block any decision requiring a majority vote.

Swing Vote Characteristics. The existence of "swing vote" characteristics can significantly impact the value of a particular ownership interest. For instance, in a situation where a business enterprise has only three owners, two of them owning 49 percent each and the third owning 2 percent, the 2 percent owner can effectively exert significant control by casting the "swing vote."

Supermajority Statutes. Many states require a supermajority vote, usually 66 2/3 percent, before certain actions, such as a merger, can take place. In situations requiring a supermajority, a single owner with only a 34 percent interest is able to "block" the actions of the majority owner(s).

EXHIBIT 61: Control Spectrum



Source: David W. Simpson, "Minority Interest and Marketability Discounts: A Perspective: Part I," *Business Valuation Review* (March 1991).

Note: The above assumes the ability of an owner to vote for board members or managers. The inability to do so may cause the value of ownership interests greater than 50% to be similar in value (on a pro-rata basis) to ownership interest less than 50% that can vote.

Minority Dissolution Statutes. Some states permit minority interests to sue for dissolution. The specific applicable circumstances and size of the interest varies by state.

Organizational Documents. The rights and restrictions of owners contained in the articles of incorporation, bylaws, and organizational agreements can vary greatly from entity to entity. Such rights and restrictions can affect the ability to control or influence an entity in innumerable ways. The rights and restrictions that are most commonly addressed in organizational documents involve voting rights such as:

Nonvoting Interest. A holder of a nonvoting interest has little influence over the affairs of a business enterprise. If the holder cannot vote for board members or any other matter that requires a vote of the owners, such a holder has no control and little or no influence

over the company, even if such owner has 99 percent of the outstanding ownership interest.

Cumulative Voting. Cumulative voting is a system whereby owners are allowed votes in proportion to their ownership percentage. The effect of cumulative voting can be illustrated by considering a vote of owners to elect directors. Under cumulative voting, a 20 percent owner can elect 20 percent of the board members. In situations where cumulative voting is not present, a 51 percent owner can elect all of the board members and deny board representation to all others. In some states, cumulative voting is mandated by statute.

Contractual Agreements. Certain contractual arrangements may also restrict control. Ownership agreements may preclude owners from exerting certain rights. Additionally, owners may forfeit, by contract, the

right to do certain things, such as obtaining additional debt.

David W. Simpson illustrated the relationship between ownership rights and ownership distribution in an article published in the Business Valuation Review (see Exhibit 61). The table illustrates that influence and control increases by degrees, and that the impact of control or lack thereof must be analyzed in such manner.

Adjustment for Control

The value of controlling a firm derives from the fact that you believe that you or someone else would operate the firm differently for the way it is operated currently.⁵²

If the value of control is derived from the ability to manage the Company in a more effective and efficient

manner, the application of an adjustment for control depends on if the method used reflects that more effective and efficient management. If a valuation method inherently represents a controlling interest, then no adjustment is needed when valuing a controlling interest. Likewise, if a valuation method inherently represents a non-controlling interest, then no adjustments is needed when valuing a non-controlling interest.

In this case, the Subject Interest is a 100 percent controlling interest. The method used, the discounted future cash flows method, arrives at an indication of value that is inherently on a controlling basis when computed as it has been in this report. For this reason, an Investor would not make an adjustment for the lack of control.

52. Damodaran, Aswath, "The Value of Control: Implications for Control Premia, Minority Discounts and Voting Share Differentials," White Paper, June, 2005, p.3.

Effect of Marketability on Value

An Investor would apply an adjustment for lack of marketability of 5 percent in arriving at the estimate of the fair market value of the Subject Interest.

An ownership interest that can be sold easily and converted to cash is more valuable than an equivalent interest that cannot be sold easily. The ability to sell is called marketability, and the ability to convert to cash is called liquidity.

Marketability is:

*The capability and ease of transfer or salability of an asset, business, business interest, or security.*⁵³

Closely related to marketability is liquidity. Liquidity is:

*The ability to readily convert an asset, business, business ownership interest, or security to cash without significant loss of principal.*⁵⁴

An Investor will consider marketability and liquidity in combination, and these will be referred to in aggregate as “marketability,” unless otherwise indicated.

When an ownership interest lacks certain elements of marketability an adjustment from the preliminary indication of value may be applicable. This is commonly referred to as a discount for lack of marketability.

The standard for marketability is publicly traded stocks that enjoy significant trading volume on a major stock exchange. Owners of these stocks can know the value of their interests on a minute-by-minute basis, and can

buy or sell these stocks at a moment’s notice with the proceeds (net of fees) delivered in a matter of days.

A privately held business enterprise does not enjoy such marketability. Liquidating a position in a privately held entity is more costly and time consuming. Fees may need to be paid to a business broker and other marketing costs may be incurred. Time is required to find a buyer, negotiate a price and draw up the necessary legal documents. In many cases the purchase price is paid over a period of years.

In some cases, more onerous restrictions are placed on the ownership of privately held enterprises through by-laws or shareholder agreements. These can include rights of first refusal, giving existing owners the right to purchase an ownership interest before it is sold to an outside party, and in some cases, an outright ban on the transferability. For these reasons, the marketability of a Subject Interest is important to estimating its value.

Factors Impacting Marketability

The following is a discussion of several factors that can impact the marketability of an equity ownership interest in a business enterprise. Many of these factors were set forth in the Mandelbaum Tax Court decision. In 1995, the Tax Court issued a decision on the Estate of Mandelbaum (T.C. Memo 1995-255, June 12, 1995). The Mandelbaum court considered various studies on the lack of marketability as benchmarks and adjusted the benchmark discounts for several factors affecting marketability. The following is an analysis of the

53. International Glossary of Business Valuation Terms.

54. *ibid.*

Mandelbaum factors, as well as other factors, to help assess the marketability of the Subject Interest.

Financial Statement Analysis. The previously performed financial statement analysis found DSI's financial position was notable for relatively strong working capital balance but also high debt levels. In addition, its profitability lagged behind the industry peers. An Investor would consider this factor in the previously presented *Risk Profile* chapter and in the development of an appropriate discount rate. To avoid double counting an Investor would not consider this factor in determining an appropriate adjustment for lack of marketability.

Company's Distribution Policy. DSI has no history of paying distributions in the recent past and management did not include the payment of distributions in its financial forecast. This factor would tend to diminish the marketability of the Subject Interest.

Ability to Transfer Ownership. DSI's equity ownership interest are restricted from transfer by a right of first refusal, but the fact that a 100 percent ownership interest in being valued suggests that such restrictions could be easily overcome. In addition, the Subject Interest is restricted by federal and state securities laws. An Investor will recognize the impact of this factor on the adjustment for lack of marketability relative to publicly traded stocks which have no such restrictions.

Amount of Control in Subject Interest. Control reflects an owner's ability to direct a business enterprise in its daily operations. Control of a closely-held business enterprise represents an element of value that justifies a higher value for a controlling block of stock. A non-controlling owner's interest has less marketability given its inability to control. The Subject Interest represents 100 percent of the outstanding ownership interest, and as such has complete control. This factor would tend to enhance the marketability of the Subject Interest.

Nature of the Company, its History, Position in the Industry and the Economic Outlook. An Investor would consider these factors in the previously presented *Risk Profile* chapter and in the development of an appropriate discount rate. To avoid double counting these items an Investor would not considered these

items in the development of an adjustment for lack of marketability.

Company Management. An Investor would consider this in the previously presented *Risk Profile* chapter and in the development of an appropriate discount rate. To avoid double counting an Investor would not consider this in the adjustment for lack of marketability.

Holding Period for the Subject Interest. An investment is less marketable if an Investor must hold it for an extended period of time in order to reap a sufficient profit. Market risk increases and marketability decreases as the required holding period increases. The Trustees intend on paying benefits to Plan Participants as soon as practicable, and expect this to occur about 90 days after retirement.

Costs Associated with Making a Public Offering. An above average adjustment may be warranted if the buyer completely bears the cost of registering a private stock. The adjustment is lessened if the buyer can minimize his or her registration cost. Due to the relative size of the Company, IPO costs, relative to the Company's total expenses and overall profitability, would tend to be above average. This factor would tend to decrease the marketability of the Subject Interest.

Listing Requirements. Although not specifically mentioned in Mandlebaum, the requirement imposed by stock exchanges can impact marketability. Stock exchanges require minimum capitalization, corporate governance requirements, independent directors, audit committees and other requirements, of the entities listed on such exchanges. These requirements can serve to lower the risk of an investment in entities traded on stock exchanges. DSI has no such requirements. This factor would tend to decrease the marketability of the Subject Interest.

Access to Information. Although not specifically mentioned in Mandlebaum, investors in restricted stocks of SEC reporting companies can access vast amounts of information about the issuing entity through required SEC filing. An investor in DSI does not have the same level of access to information. This factor would tend to decrease the marketability of the Subject Interest.

Based on these facts, an Investor would consider the marketability of the Subject Interest is impaired relative to a highly marketable investment such as a publicly traded stock, and that an disinterested, third party investor would require a discount to the purchase price to be enticed to invest in the Subject Interest.

Quantifying Adjustments for Marketability

Diverse methods exist to estimate and quantify the impact of marketability on the value of a privately held business enterprise. These methods include studies of empirical data and computational methods. Each of these is presented as well as their applicability to DSI.

Studies of Empirical Data

Studies of empirical data measuring adjustments for marketability include studies of restricted stocks and studies of pre-IPO transactions. Both of these methods of measuring adjustments for marketability have been presented.

Restricted Stock Method

The restricted stock approach estimates the discount for lack of marketability by measuring the difference between transactions of a company's restricted shares and their freely traded counterparts. "Restricted shares" (also called "letter stocks" or "restricted stock") are shares of publicly traded companies that are restricted from being sold on the open market. These securities generally possess the same attributes as their freely-traded counterparts, except that they have restrictions imposed by the Securities and Exchange Commission. By measuring the difference between what investors are willing to pay for the restricted shares and what they are willing to pay for the freely traded shares, the effect of marketability, or lack thereof, can be quantified.

Rev. Rul. 77-287 defines a restricted security as follows:

... these particular securities cannot lawfully be distributed to the general public until a registration statement relating to the corporation underlying the securities has been

55. Internal Revenue Service, Revenue Ruling 77-287.

EXHIBIT 62: Restricted Stock Studies

Study	2 Year Holding Period (Rule 144)	2 Year Holding Period (Rule 144A)	1 Year Holding Period (Rule 144A)
Institutional Investor Study	32.60%		
Gelman	33.00%		
Trout	33.45%		
Moroney	35.60%		
Maher	35.40%		
Pittock & Stryker	45.00%		
Silber	33.80%		
Hall & Polaceck ¹		21.00%	
Oliver Meyers ¹		26.70%	
Johnson ¹		21.00%	
Aschwald			13.00%

¹ As adjusted by Columbia Financial Advisors, Inc.

filed, and has also become effective under the rules promulgated and enforced by the United States Securities and Exchange Commission (SEC) pursuant to the Federal securities laws.⁵⁵

Such restrictions are imposed by the SEC under Rule 144. Originally this rule required that owners of restricted stocks needed to hold the shares for two years before selling the shares to qualified investors. In 1990, the SEC issued Rule 144A, allowing qualified institutional investors the right to trade unregistered securities among themselves. On April 29, 1997, the SEC revised Rule 144, reducing the two-year holding period to one year.

From the mid-1960's through the late-1990's, various studies were performed that quantified the value differences between freely-traded common shares of certain public companies and their restricted shares. Studies in this category include the SEC Institutional Investor Study and the Moroney Study, among others.

EXHIBIT 63: TVA Study Benchmark

	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Revenue (000)	\$0 to \$1,495	\$1,496 to \$28,249	\$28,250 to \$85,332	\$85,332 and above
Median Discount	23.97%	14.91%	11.93%	9.63%
DSI	-	-	\$78,164	-
Total Assets (000)	\$0 to \$17,777	\$17,778 to \$67,142	\$67,143 to \$395,327	\$395,327 and above
Median Discount	26.12%	11.09%	14.91%	8.82%
DSI	-	\$41,760	-	-
Book Value (000)	\$0 to \$5,246	\$5,247 to \$22,241	\$22,242 to \$92,041	\$92,041 and above
Median Discount	23.75%	16.97%	10.89%	8.87%
DSI	-	-	\$29,267	-
Debt Ratio	below to 32%	33% to 59%	60% to 90%	91% and above
Median Discount	14.11%	14.82%	11.21%	14.68%
DSI	30%	-	-	-

Based on adjusted amounts.

Restricted stock studies can provide compelling evidence about the lack of marketability of an ownership interest.

These studies found average discounts ranging from 32.6 percent to 45 percent under Rule 144, 21 percent to 26.7 percent under Rule 144A with a two year holding period, and 13 percent to 22.5 percent under Rule 144 with a one year holding period (see Exhibit 62). It makes sense that the overall discounts for restricted stocks would decrease as the restriction period decreased. This reduction was demonstrated in the Aschwald Study and FMV Opinions Study, but it probably does not accurately quantify the decline because of the limited number of transactions in the study. In addition, the number of public companies in the various studies was even more limited, as many of the transactions studied involved restricted stocks of the same publicly traded company.

While the averages found in the studies were similar, the actual data in the studies showed large variations in the range of discounts observed, and even found premiums paid for restricted stocks in some instances. Overall an

Investor would look to the restricted stock studies as providing compelling evidence that investors generally require a discount to the purchase price for investments that lack marketability. However, the general results of these studies do little to help quantify an adjustment applicable to the Subject Interest.

Several studies provide additional statistical information that can be used to focus in on data that is more applicable to a specific entity. An Investor would look to the Trugman Valuation Associates, Inc. (TVA) Restricted Stock Study to further refine the wide range found with the various restricted stock studies.

TVA Study. The authors of the TVA study analyzed 136 transactions involving restricted shares of companies that also had publicly traded shares. The differential between the publicly traded price and the price of restricted shares ranged from a discount as high as 73.5 percent and a premium of 10.2 percent with a median of 14.3 percent and an average of 16.6 percent. This study stratified the discounts by nine different factors, five of which only related to companies with publicly traded shares (see Exhibit 63).

An Investor would use this additional data as a benchmark in measuring an applicable adjustment for lack of marketability for the Subject Interest. DSI's revenue and adjusted book value fell within the 3rd quartile of the study, while its adjusted total assets fell within the 2nd quartile, and its debt ratio fell within the 1st quartile. This suggests that an appropriate discount for the Subject Interest ranges from approximately 11 percent to 14 percent assuming a one year holding period. A shorter holding period suggests that an appropriate adjustment would be lower. This being the case, the TVA Study is an indication of the upper boundary for adjustments for lack of marketability.

Initial Public Offering Method

There are several studies that estimate the discount for lack of marketability by comparing transactions involving privately held shares, and the trading price of shares in the same company after they have undergone an IPO (initial public offering). After the IPO, shares in the company became freely traded, and the difference in the trading price and the price paid before the IPO is to represent the value investors place on marketability.

The SEC requires companies undergoing an IPO to disclose the terms of recent insider transactions in the prospectus. This enables a comparison of prices before and after "marketability" being achieved via the IPO. For example, if a shareholder disposes of company stock at \$6.00 per share and the stock is subsequently brought public at \$10.00 per share, it suggests an adjustment for marketability of 40 percent.

Emory Studies. John Emory, ASA, examined the transaction values of privately held company stock (not freely traded) prior to its initial public offering and compared them with prices paid for the shares when the company's stock was taken public.

In Mr. Emory's studies, pre-IPO transactions are limited to the five-month period preceding the IPO, implying that most buyers and sellers are aware of the impending IPO and the potential marketability of the stock. In eight separate studies conducted over 18-month periods since 1980, Mr. Emory examined 310 companies and found a mean average discount of 46 percent between the pre-IPO trades and the actual IPO price.

Willamette Management Associates Studies.

Willamette Management Associates has performed studies of pre-IPO transactions occurring from 1975 through 2000. They specifically looked at transactions occurring from one to 36 months prior to the IPO, and made adjustments to the data to account for differences in market conditions between the date of the transaction and the date of the IPO. These studies found median implied discounts ranging from a low of 27.7 percent in the 1999 study, to a high of 73.1 percent in the 1984 study. The average of the medians was approximately 48 percent.

Hitchner Studies. James R. Hitchner and Katherine E. Morris performed further analysis on the Emory Studies by separating the transactions into those occurring five months, four months and three months prior to the IPO. Generally, their analysis found that discounts decreased for transactions occurring closer to the date of the IPO.

Valuation Advisors Studies. Valuation Advisors, LLC has compiled a searchable database of nearly 3,000 pre-IPO transactions occurring from 1999 through 2004. This database separates the data into three-month increments for the year prior to the IPO and then groups together transactions occurring between one and two years prior to the IPO. These studies also found that the closer the IPO date to the transaction, the smaller the discount. The median discounts ranged from 28 percent for transactions occurring between zero and three months prior to the IPO, to 72.2 percent for transactions occurring between one and two years prior to the IPO.

There are several criticisms of the restricted stock and IPO studies. Perhaps the criticism most relevant in this case is that blind reliance on empirical studies may be over simplistic and does not adequately consider the unique facts and circumstances of a specific entity. Despite this criticism, we believe these empirical studies provide valuable guidance as to the general range of discounts that may be applicable, as well as empirical evidence that as the length of the holding period before a liquidity event increases, the magnitude of the discount should also increase. Further, the more detailed data provided in the PI and FMV studies help target their data to parameters specific to the Subject Interest.

EXHIBIT 64: Longstaff Study Summary

Holding Period	Price Volatility					
	10%	20%	30%	40%	50%	60%
30 days	2.30%	4.70%	7.00%	9.50%	12.00%	14.50%
180 days	5.70%	11.70%	18.00%	24.50%	31.20%	38.30%
1 year	8.20%	17.00%	26.30%	36.10%	46.60%	57.60%
2 years	11.80%	24.60%	38.60%	53.70%	70.10%	87.10%
5 years	19.10%	41.00%	65.80%	93.70%	125.00%	159.90%

The above matrix presents sample results from the Longstaff Study for adjustments for lack of marketability varied by holding period and price volatility.

Computational Methods

We have considered three computational methods to estimate an applicable adjustment for lack of marketability, option theory, the Quantitative Marketability Discount Model (QMDM) and the Abbott method.

Option Theory

A tactic used by investors to protect the value of an appreciated security is to purchase a put option. A put option gives the holder the right to sell a security at a predetermined price. If the market value of the security declines, the put allows the investor to sell it at the higher option price, thus protecting the investor from the decline in value. The holder of a non-marketable security runs the risk of declining value while he/she is waiting for a marketability event. Based on option theory, he/she would require a discount to the price equal to the cost of purchasing a put option. The two primary methods for measuring adjustments for lack of marketability under option theory are the Longstaff study and the Black-Scholes model.

Longstaff Study. Francis A. Longstaff, professor of finance at UCLA, argues that a “lookback” option measures the upper bound of adjustments for lack of marketability. A lookback option is a nonexistent, hypothetical option that would allow the holder at the end of the option term, to retroactively look back in time and select the optimal date on which to exercise the option. This would provide the holder of the option the maximum benefit, and thus it is used to measure the upper limit to an adjustment for lack of marketability.

As with most option pricing models, the Longstaff Study measures the value of an option as a function of, among other things, the holding period and the price volatility of the underlying stock. The results of the Longstaff Study are presented in the accompanying table. This table presents a matrix of results from the Longstaff Study for different holding periods and different price volatilities (see Exhibit 64).

To apply this data, an Investor will estimate an applicable holding period and the price volatility for the Subject Interest, and look up on the accompanying chart the adjustment that corresponds to the holding period and price volatility. For example, the Longstaff Study tells us that a security with a 10 percent price volatility and a 30 day holding period would have an applicable adjustment for lack of marketability of 2.32 percent.

An Investor would estimate a holding period for the Subject Interest as being approximately 90 days. As previously presented, the trustee intends to pay ESOP retirement benefits to Plan Participants over in approximately 90 days after retirement. Because the sample results of the Longstaff Study only present holding periods of 30 days and 180 days, an Investor would assume a straight-line relationship to estimate the results for a 90 day holding period.

An Investor would look to the publicly traded guideline companies as proxies for price volatility. These had median forecasted price volatility of 29.8 percent for a 90 day holding period. An Investor would adjust the

EXHIBIT 65: Adjusted Volatility

Ticker Symbol	Unadj. Volatilities ¹	GPC Standard Deviation ²	DSI Standard Deviation ³	Adj. Factor ³	Size Adjusted Volatility ⁴	GPC Equity Pct.	Asset Volatility ⁵	DSI Equity Pct.	Adjusted Volatility ⁶
BGFV	41.3%	20.4%	26.8%	1.31	54.1%	82.0%	44.4%	100.0%	44.4%
CAB	40.3%	20.4%	26.8%	1.31	52.8%	46.9%	24.8%	100.0%	24.8%
DKS	28.1%	20.4%	26.8%	1.31	36.8%	99.9%	36.8%	100.0%	36.8%
FL	29.8%	20.4%	26.8%	1.31	39.0%	98.2%	38.3%	100.0%	38.3%
HIBB	28.7%	20.4%	26.8%	1.31	37.6%	99.7%	37.5%	100.0%	37.5%
Average	33.6%				44.1%				36.4%
Median	29.8%				39.0%				37.5%

¹ Computed based on data from Yahoo! Finance.

² Median of the Standard Deviation of Returns for the eight measures of size as presented in the Valuation Handbook as applicable to each GPC and DSI.

³ DSI Standard Deviations divided by the GPCs Standard Deviation.

⁴ The Unadjusted Volatilities multiplied by the Adjustment Factors.

⁵ Size Adjusted Volatility multiplied by the GPC Equity Percentage.

⁶ Asset Volatility divided by DSI's Equity Percentage.

volatilities found with the GPCs for differences in size and capital structure.

Data from the *Valuation Handbook* shows that standard deviations (volatility) of returns increase as the size of business entities decrease. From this data, an Investor would compute a size adjusted price volatility applicable to DSI. From there an Investor would adjust for differences in capital structure by multiplying the size adjusted volatility of each GPC by the percentage of equity in its capital structure. The result would then be divided by the percentage of equity in DSI's capital structure. This results in volatility estimates that are more applicable to DSI. The computation can be found in the accompanying table (see Exhibit 65). For use with the Longstaff Study an Investor would round the volatility to 35 percent.

By looking to a 35 percent price volatility and an extrapolated holding period of 90 days yields an estimated adjustment for lack of marketability of approximately 13.5 percent (see outlined amount in Exhibit 66).

EXHIBIT 66: Extrapolated Longstaff Results

Holding Periods	Price Volatilities		
	30%	35%	40%
30 days	7.0%	8.3%	9.5%
60 days	9.2%	10.9%	12.5%
90 days	11.4%	13.5%	15.5%
120 days	13.6%	16.1%	18.5%
150 days	15.8%	18.7%	21.5%
180 days	18.0%	21.3%	24.5%

Bolded items represent actual percentages from the Longstaff Study. Shaded items have been extrapolated. The outlined percentage is the amount applicable to the

Black-Scholes Model. Option models for European options provide an appropriate substitute for measuring an adjustment for lack of liquidity. European options can only be exercised (and therefore can only provide liquidity) on the expiration date and while the option holder waits for the expiration date, the price of the

underlying stock can change to the benefit or detriment of the option holder. Likewise, the Subject Interest can only be liquidated after a buyer is found, and the value of the interest may change during that time. As previously indicated, the purchase of a put option protects the investor from this downside potential.

The Black-Scholes model estimates the value of a European option. It was developed by Fischer Black and Myron Scholes in 1973, and they received the Nobel Prize for economics for their work. The Black-Scholes model requires the input of several variables that are used to compute the value of a European style option. These inputs include, the risk free rate of return at the valuation date, the price of the underlying stock, the price volatility of the underlying stock, and the expiration date of the option.

An Investor would use the following inputs to the Black-Scholes model to estimate the appropriate adjustment for the lack of marketability.

Risk-Free Rate. An Investor would use yields for U.S. Government securities having a three-month maturity as representative of the risk free rate. This rate was 0.04 percent for a three-month maturity at December 31, 2014.

Price of the Underlying Stock. Because an Investor would measuring the adjustment for lack of marketability as a percentage, 100 would be used as the price of the underlying stock.

Price Volatility. An Investor would look to the trading price of the GPCs as surrogates for price volatility, as described previously. The median forecasted adjusted price volatility of the GPC was 37.5 percent for a three-month holding period. An Investor would then adjust this for use the rounded amount of 38 percent as an input to the Black-Scholes model.

Expiration Date. An Investor would estimated this based on the expected holding period of 90 days, as presented previously.

Results. From these inputs, the Black-Scholes model computes an adjustment for lack of liquidity of approximately 7.5 percent.

QMDM

Z. Christopher Mercer of Mercer Capital published the book, *Quantifying Marketability Discounts*, in 1997, where he presented the Quantitative Marketability Discount Model (QMDM). The QMDM is based on time value of money principles and attempts to value illiquid interests of privately owned businesses based on specific cash flow characteristics of the business.

It uses five variables as inputs into the QMDM formula to compute an adjustment for lack of marketability. These inputs are:

- ◆ The non-controlling, marketable value of the Subject Interest
- ◆ The expected rate of growth in the value of the Subject Interest
- ◆ The expected holding period for the Subject Interest
- ◆ The required rate of return for the Subject Interest
- ◆ Expected dividend payments.

The developer of the QMDM states that it should not be used for a controlling interest. As such, an Investor would not used the QMDM to estimate an adjustment for lack of marketability.

Abbott Method

Ashok Abbott, Ph.D., of Business Valuation LLC has developed a method of measuring adjustments for the lack of marketability which separates the liquidity and marketability components of the adjustment.

Lack of Marketability. This method measures the adjustment for marketability as the cost of causing the investment to become liquid through an IPO. By analyzing 8,000 IPOs since 1993, Mr. Abbott has developed a formula that estimates this cost by looking at the size of an entity, the percentage of the entity be offered in the IPO, and other factors (see Exhibit 67).

Based on Dr. Abbott's data, the market capitalization variable (m) applicable to small entities is 5.663 percent. The market liquidity variable (λ) was set to zero due to the lack of liquidity of the Subject Interest. The other

items in the formula, as they relate to DSI, virtually offset each other. As a result, the estimated cost of performing an IPO based on the Abbott formula was approximately 10 percent (0.04305 plus 0.05663, rounded).

Lack of Liquidity. Dr. Abbott uses stock option valuation theory to estimate the lack of liquidity. Because a privately held stock cannot be liquidated in a timely manner, stock option valuation theory can measure the uncertainty of changes in the stock price during the period it would take to sell the shares, thus, measuring the discount attributable to the lack of liquidity. Specifically, he uses the Longstaff Study to measure liquidity.

Based on Dr. Abbott's model, an Investor would add the estimated adjustment for lack of marketability of 10 percent and the estimated adjustment for lack of liquidity of 14 percent, to arrive at a combined adjustment for lack of marketability and liquidity of 24 percent.

Summary

The summary of the various methods of determining an adjustment for lack of marketability are presented in the accompanying chart (see Exhibit 68). Each of the methods for quantifying an adjustment for lack of marketability can be criticized for its deficiencies. The restricted stock studies and pre-IPO studies are very general in nature and do not take into consideration the specifics of the Subject Interest, and have a large degree of variation in their results. One method of overcoming these issues is to look at specific data points within the studies. An Investor would find the TMV study helpful in this regard. By using the more detailed data provided in this study, an Investor would be able to narrow the range of adjustments based on information specific to DSI. But, this only applies to the restricted stock studies, not the IPO studies. Because of this an Investor would not directly use the pre-IPO studies to develop an appropriate adjustment for lack of marketability.

The computational methods required inputs that were specific to the Subject Interest, and therefore an Investor would consider these methods as better than using a generalized average from a study. These methods (the Longstaff and Abbott methods) also have criticisms and deficiencies.

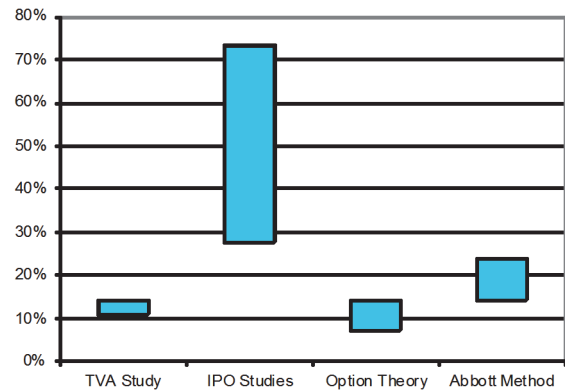
EXHIBIT 67: IPO Cost Formula

$$C=0.04305+m+0.03311\lambda-0.00593b-0.00014v$$

Where:

- C = The cost of an IPO expressed as a percentage.
- m = Variable related to the market capitalization of the business enterprise.
- λ = Market Liquidity of the appropriate size category.
- b = Ownership percentage represented by the Subject Interest.
- v = Marketable value of the Subject Interest.

EXHIBIT 68: Summary of Methods for Lack of Marketability



The Abbott method relies, in part, on formulas derived from market data on publicly traded stocks, which reverts back to the criticism of the pre-IPO studies, that they are too generalized. An Investor would consider this to be partially offset by other inputs that are specific to the Subject Interest. Further, the valuation community has yet to arrive at a consensus as to the separation of the adjustment for lack of marketability into its liquidity and marketability components.

By using the TVA Study as a upper boundary and the Black Scholes method as a lower boundary, an Investor would narrow the range of adjustments. By considering this, and the fact that the Subject Interest is a 100

percent controlling interest, an Investor select an adjustment below this range. Accordingly, an Investor would apply an adjustment for lack of marketability of 5 percent.

Conclusion

We have performed this valuation engagement based on the consideration of relevant factors. Our estimate (opinion) of the fair market value of 25,000 shares of the voting common stock of Doubleday Sports, Inc. as of December 31, 2014 on a controlling, non-marketable basis as held by the ESOT is:

**Eighteen Million Four Hundred Seventy-Five
Thousand Dollars
\$18,475,000**

which equates to

**Seven Hundred Thirty-Nine Dollars per Share
\$739/share
(see Exhibit 69)**

This valuation was performed solely to comply with regulatory requirements as defined by the U.S. Department of Labor related to the annual valuation of shares held by Doubleday Sports, Inc. Employee Stock Ownership Trust. The resulting estimate of value should not be used for any other purpose or by any other party.

The previous letter and this report are to be considered a single document, distributed only in their entirety, and intended and restricted only for use by the trustee of Doubleday Sports, Inc. Employee Stock Ownership Trust. This report is not to be copied or made available to any persons without the express written consent of Gibraltar Business Valuations.

This valuation engagement was conducted in accordance with the SSVA of the AICPA and the BVS of

EXHIBIT 69: Conclusion of Value

Preliminary Indication of Value of Operations ¹	\$ 11,244,200
Preliminary Value of Non-Operating Real Estate ²	<u>8,210,000</u>
Value of Equity on a Marketable Basis	\$ 19,454,200
Divided by the Total Number of Units Outstanding	<u>25,000</u>
Per Share Value on a Marketable Basis	\$ 778.17
Adjustment for Lack of Marketability at 5%	<u>(38.91)</u>
Fair Market Value Per Share	<u>\$ 739.26</u>
Rounded	\$ 739
Multiplied by the Number of Shares Under Consideration	<u>25,000</u>
Fair Market Value of 25,000 Shares of Common Stock of Doubleday Sports, Inc. as of December 31, 2014 on a Controlling, Non-Marketable Basis	<u>\$ 18,475,000</u>

¹ From Exhibit 59.

² From Exhibit 49.

the ASA, and USPAP, and is subject to the Statement of Assumptions and Limiting Conditions as presented in the appendices to this report.

We have no present or contemplated financial interest in Doubleday Sports, Inc. Our fees for this analysis were based on our customary billing rates, and are in no way

contingent upon the results of our findings. We have no obligation or responsibility to update this report for events, circumstances or information that comes to our attention subsequent to the date of this report, although I will be pleased to perform an update should one be required.

Appendix A: Representations/ Certification



Intentionally Left Blank to Accommodate Double-Sided Printing

We certify that, to the best of our knowledge and belief:

- ◆ The statements of fact contained in this report are true and correct.
- ◆ The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- ◆ We have no present or prospective interest in the property that is the subject of this report, and I have no personal interest with respect to the parties involved.
- ◆ We have performed valuation services, as an appraiser/valuation analyst regarding the property that is the subject report within the three-year period immediately preceding acceptance of this assignment.
- ◆ We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- ◆ Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- ◆ Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- ◆ Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the American Institute of Certified Public Accountants Statement on Standards for Valuation Services, and the Uniform Standards of Professional Appraisal Practice standards for conducting and reporting on business valuations.
- ◆ No one provided significant professional assistance to the persons signing this report.
- ◆ The economic, macroenvironmental and industry data included in this report have been obtained from various printed or electronic reference sources that the valuation analyst believes to be reliable. The valuation analyst has not performed any corroborating procedures to substantiate that date.
- ◆ The parties for which the information and use of the valuation report is restricted are identified; the valuation report is not intended to be and should not be used by anyone other than such parties.
- ◆ We have relied on the work of an outside specialist. This specialist, Peter Rose, MAI of Peter Rose Real Estate Appraisal performed a real estate appraisal on property held by Doubleday Sports, Inc..
- ◆ We have no obligation to update the report or the opinion of value for information that comes to our attention after the date of the report.



Don M. Drysdale, CPA/ABV, ASA
February 1, 2015

Intentionally Left Blank to Accommodate Double-Sided Printing

Appendix B: Financial Information



Doubleday Sports, Inc.
Historical Balance Sheets

As of:	12/31/2010		12/31/2011	
Current assets				
Cash and equivalents	\$ 3,321,300	9.1%	\$ 6,920,893	16.8%
Accounts receivable	1,057,586	2.9%	1,132,200	2.7%
Total Inventory	10,909,221	29.7%	10,603,457	25.7%
Total other current assets	298,914	0.8%	303,493	0.7%
Total current assets	15,587,021	42.5%	18,960,043	46.0%
Fixed assets				
Land	3,629,957	9.9%	3,639,407	8.8%
Buildings	11,846,700	32.3%	12,436,436	30.1%
Fixtures and equipment	9,534,600	26.0%	11,064,064	26.8%
Capital leases	307,779	0.8%	307,779	0.7%
Rental equipment	-	0.0%	-	0.0%
Fixed assets	25,319,036	69.0%	27,447,686	66.5%
Accumulated depreciation	(7,791,600)	-21.2%	(8,871,279)	-21.5%
Net fixed assets	17,527,436	47.8%	18,576,407	45.0%
Other noncurrent assets				
Net intangible assets	2,233,521	6.1%	2,233,521	5.4%
Other assets	1,348,714	3.7%	1,479,171	3.6%
Other noncurrent assets	3,582,235	9.8%	3,712,692	9.0%
Total Assets	\$ 36,696,692	100.0%	\$ 41,249,142	100.0%
Current liabilities				
Accounts payable	\$ 7,570,007	20.6%	\$ 8,796,171	21.3%
Current portion of long-term debt	4,929	0.0%	179,721	0.4%
Accrued liabilities	423,714	1.2%	431,750	1.0%
Total current liabilities	7,998,650	21.8%	9,407,642	22.8%
Long-term liabilities				
Notes payable	11,924,308	32.5%	11,059,178	26.8%
Other long-term liabilities	-	0.0%	565,007	1.4%
Total long-term liabilities	11,924,308	32.5%	11,624,185	28.2%
Total liabilities	19,922,958	54.3%	21,031,827	51.0%
Equity				
Common shares	25,000	0.1%	25,000	0.1%
Additional paid in capital	225,000	0.6%	225,000	0.5%
Retained earnings	16,765,393	45.7%	20,094,706	48.7%
Treasury stock	(241,659)	-0.7%	(127,391)	-0.3%
Total equity	16,773,734	45.7%	20,217,315	49.0%
Total Liabilities and Equity	\$ 36,696,692	100.0%	\$ 41,249,142	100.0%
Working Capital	\$ 7,588,371		\$ 9,552,401	

Source: CPA audited financial statements.

12/31/2012		12/31/2013		12/31/2014	
\$ 6,558,043	14.2%	\$ 4,762,779	7.2%	\$ 10,233,643	13.5%
2,148,107	4.7%	1,934,957	2.9%	3,957,750	5.2%
11,840,893	25.6%	13,818,921	21.0%	16,291,993	21.5%
389,271	0.8%	337,171	0.5%	352,443	0.5%
20,936,314	45.3%	20,853,828	31.6%	30,835,829	40.8%
3,983,914	8.6%	8,646,273	13.1%	8,724,030	11.5%
15,952,029	34.5%	27,610,321	41.9%	29,029,988	38.4%
11,826,515	25.6%	17,094,839	25.9%	17,297,429	22.9%
284,036	0.6%	334,521	0.5%	280,736	0.4%
-	0.0%	-	0.0%	-	0.0%
32,046,494	69.4%	53,685,954	81.4%	55,332,183	73.1%
(10,153,864)	-22.0%	(11,787,879)	-17.9%	(13,759,779)	-18.2%
21,892,630	47.4%	41,898,075	63.5%	41,572,404	54.9%
2,233,521	4.8%	2,233,521	3.4%	2,233,521	3.0%
1,123,671	2.4%	949,350	1.4%	1,016,100	1.3%
3,357,192	7.3%	3,182,871	4.8%	3,249,621	4.3%
\$ 46,186,136	100.0%	\$ 65,934,774	100.0%	\$ 75,657,854	100.0%
\$ 9,984,536	21.6%	\$ 9,970,136	15.1%	\$ 11,833,779	15.6%
180,043	0.4%	180,386	0.3%	10,198,586	13.5%
464,350	1.0%	573,129	0.9%	518,493	0.7%
10,628,929	23.0%	10,723,651	16.3%	22,550,858	29.8%
11,023,558	23.9%	31,969,074	48.5%	27,876,754	36.8%
226,521	0.5%	66,814	0.1%	140,271	0.2%
11,250,079	24.4%	32,035,888	48.6%	28,017,025	37.0%
21,879,008	47.4%	42,759,539	64.9%	50,567,883	66.8%
25,000	0.1%	25,000	0.0%	25,000	0.0%
225,000	0.5%	225,000	0.3%	225,000	0.3%
24,439,757	52.9%	27,925,235	42.4%	31,339,971	41.4%
(382,629)	-0.8%	(5,000,000)	-7.6%	(6,500,000)	-8.6%
24,307,128	52.6%	23,175,235	35.1%	25,089,971	33.2%
\$ 46,186,136	100.0%	\$ 65,934,774	100.0%	\$ 75,657,854	100.0%
\$ 10,307,385		\$ 10,130,177		\$ 8,284,971	

Doubleday Sports, Inc.
Historical Income Statements

For the years ended:	12/31/2010		1/1/2012	
Revenue	57,069,471	100.0%	60,239,271	100.0%
Cost of sales	33,759,621	59.2%	34,569,621	57.4%
Gross profit	23,309,850	40.8%	25,669,650	42.6%
Operating expenses	19,187,250	33.6%	20,445,536	33.9%
EBITDA	4,122,600	7.2%	5,224,114	8.7%
Depreciation and amortization	1,497,257	2.6%	1,528,779	2.5%
Income from operations	2,625,343	4.6%	3,695,335	6.1%
Other income (expenses)				
Interest expense	(588,043)	-1.0%	(523,436)	-0.9%
Gain (loss) on disposal of assets	157,714	0.3%	157,414	0.3%
Other income (expenses)	(430,329)	-0.8%	(366,022)	-0.6%
Income before taxes	2,195,014	3.8%	3,329,313	5.5%
Income taxes	-	0.0%	-	0.0%
Net Income	\$ 2,195,014	3.8%	\$ 3,329,313	5.5%

5-Year Average Net Income

5-Year Average EBITDA

Source: CPA reviewed financial statements.

12/31/2012		12/31/2013		12/31/2014	
66,700,329	100.0%	77,133,793	100.0%	78,163,929	100.0%
37,924,243	56.9%	43,517,764	56.4%	44,149,050	56.5%
28,776,086	43.1%	33,616,029	43.6%	34,014,879	43.5%
22,432,736	33.6%	27,746,836	36.0%	27,814,107	35.6%
6,343,350	9.5%	5,869,193	7.6%	6,200,772	7.9%
1,698,621	2.5%	2,001,579	2.6%	2,423,507	3.1%
4,644,729	7.0%	3,867,614	5.0%	3,777,265	4.8%
(431,207)	-0.6%	(468,300)	-0.6%	(468,043)	-0.6%
131,529	0.2%	86,164	0.1%	105,514	0.1%
(299,678)	-0.4%	(382,136)	-0.5%	(362,529)	-0.5%
4,345,051	6.5%	3,485,478	4.5%	3,414,736	4.4%
-	0.0%	-	0.0%	-	0.0%
\$ 4,345,051	6.5%	\$ 3,485,478	4.5%	\$ 3,414,736	4.4%
				3,353,918	
				5,552,006	

Doubleday Sports, Inc.
Historical Financial Ratios

For the Years Ended:	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
Liquidity Ratios:					
Current ratio	1.9	2.0	2.0	1.9	1.4
Quick ratio	0.5	0.9	0.8	0.6	0.6
Sales to working capital	7.5	6.3	6.5	7.6	9.4
Working capital as a % of Sales	13.3%	15.9%	15.5%	13.1%	10.6%
Leverage Ratios:					
Debt to equity	1.2	1.0	0.9	1.8	2.0
Assets to equity	2.2	2.0	1.9	2.8	3.0
EBITDA to Interest	7.0	10.0	14.7	12.5	13.2
Activity Ratios:					
Accounts receivable turnover	54.0	53.2	31.1	39.9	19.7
Accounts receivable turnover, days	7	7	12	9	19
Inventory turnover	3.1	3.3	3.2	3.1	2.7
Inventory turnover, days	118	111	114	118	135
Accounts payable turnover	4.5	3.9	3.8	4.4	3.7
Accounts payable turnover, days	81	94	96	83	99
Cash conversion cycle, days	44	24	30	44	55
Asset Utilization Ratios:					
Revenues to total assets	1.6	1.5	1.4	1.2	1.0
Number of employees	280	300	330	370	375
Revenue per employee	\$ 203,820	\$ 200,798	\$ 202,122	\$ 208,470	\$ 208,437
Profitability Ratios:					
Gross Margin (%of sales)	40.8%	42.6%	43.1%	43.6%	43.5%
Pre-Tax Profit Margin (%of sales)	3.8%	5.5%	6.5%	4.5%	4.4%
Operating Expense Margin	36.2%	36.4%	36.1%	38.6%	38.7%
EBITDA Margin	7.2%	8.7%	9.5%	7.6%	7.9%
Pre-tax return on total assets	6.0%	8.5%	9.9%	6.2%	4.8%
Pre-tax return on equity	13.1%	18.0%	19.5%	14.7%	14.1%

Doubleday Sports, Inc.
Altman Z Score

	<u>Ratio</u>	<u>Multiplier</u>	<u>Extended</u>
Working Capital to Total Assets	0.1	6.56	0.7
Retained Earnings to Total Assets	0.4	3.26	1.3
EBIT to Total Assets	0.10	6.72	0.7
Book Value of Common Equity to Total Liabilities	0.5	1.05	<u>0.5</u>
Altman Z Score			<u>3.2</u>

According to the Duff & Phelps Risk Premium Report, a business enterprise with score below 1.1 is considered "distressed." If the score is between 1.1 and 2.6, the enterprise is in the "grey" zone, and above 2.6 is considered the "safe" zone.

This page intentionally left blank to accommodate double sided printing

Appendix C: Adjustments to Public Guideline Companies



Adjusted GPC Market Value of Invested Capital Multiples

Company	Ticker	Market Value of Invested Capital to:		
		Unadjusted LTM MVIC/EBITDA	Implied Capitalization Rate	€ MVIC Adjustment
Big 5 Sporting Goods Corp	BGFV	8.2	12.3%	0.85
Cabelas Inc.	CAB	16.9	5.9%	0.50
Dicks Sporting Goods Inc.	DKS	7.9	12.6%	1.04
Foot Locker Inc.	FL	7.8	12.9%	1.11
Hibbett Sports Inc.	HIBB	8.6	11.6%	1.07
25th Percentile		7.8		
Median		8.2		
75th Percentile		12.8		
Standard Deviation		3.5		
Coefficient of Variation		0.36		

Company	Ticker	Unadjusted	Implied	€
		LTM MVIC/EBIT	Capitalization Rate	MVIC Adjustment
Big 5 Sporting Goods Corp	BGFV	15.1	6.6%	0.85
Cabelas Inc.	CAB	22.6	4.4%	0.50
Dicks Sporting Goods Inc.	DKS	10.5	9.5%	1.04
Foot Locker Inc.	FL	9.1	11.0%	1.11
Hibbett Sports Inc.	HIBB	9.8	10.2%	1.07
25th Percentile		7.8		
Median		8.2		
75th Percentile		12.8		
Standard Deviation		3.5		
Coefficient of Variation		0.36		

Market Value of Invested Capital to:

θ Size Adjustment	μ Unsystematic Risk Adjustment	λ Growth Rate Adjustment	Adjusted Capitalization Rate	Adjusted LTM MVIC/EBITDA
0.0180	0.0308	0.0402	20.5%	4.9
0.0450	0.0030	0.0295	11.3%	8.9
0.0470	(0.0097)	0.0333	19.8%	5.0
0.0490	(0.0061)	0.0380	21.5%	4.7
0.0270	0.0200	0.0228	18.9%	5.3
				4.8
				5.0
				7.1
				1.6
				0.27

θ Size Adjustment	μ Unsystematic Risk Adjustment	λ Growth Rate Adjustment	Adjusted Capitalization Rate	Adjusted LTM MVIC/EBIT
0.0180	0.0308	0.0402	14.8%	6.8
0.0450	0.0030	0.0295	9.8%	10.3
0.0470	(0.0097)	0.0333	16.7%	6.0
0.0490	(0.0061)	0.0380	19.6%	5.1
0.0270	0.0200	0.0228	17.5%	5.7
				4.8
				5.0
				7.1
				1.6
				0.27

Adjusted GPC Market Value of Equity Multiples

Company	Ticker	Market Value of Equity to:	
		Unadjusted Future Price/ Pretax NI	Implied Capitalization Rate
Big 5 Sporting Goods Corp	BGFV	20.0	5.0%
Cabelas Inc.	CAB	18.8	5.3%
Dicks Sporting Goods Inc.	DKS	17.3	5.8%
Foot Locker Inc.	FL	13.3	7.5%
Hibbett Sports Inc.	HIBB	16.7	6.0%
Low		13.3	
25th Percentile		15.0	
Mean		17.2	
Median		17.3	
75th Percentile		19.4	
Standard Deviation		2.3	
Coefficient of Variation		0.13	

GPC Valuation Multiple Adjustments (\$ in thousands)

Company	Ticker	Market		ε
		Value Equity	MVIC	MVIC Adj.
Big 5 Sporting Goods Corp	BGFV	323,806	380,967	0.85
Cabelas Inc.	CAB	3,788,682	7,590,815	0.50
Dicks Sporting Goods Inc.	DKS	6,019,467	5,804,238	1.04
Foot Locker Inc.	FL	8,202,280	7,369,280	1.11
Hibbett Sports Inc.	HIBB	1,240,777	1,155,845	1.07

Market Value of Equity to:

θ Size Adjustment	μ Unsystematic Risk Adjustment	λ Growth Rate Adjustment	Adjusted Capitalization Rate	Adjusted Future Price/ Pretax NI
0.0180	0.0308	0.0402	13.9%	7.2
0.0450	0.0030	0.0295	13.1%	7.7
0.0470	(0.0097)	0.0333	12.9%	7.8
0.0490	(0.0061)	0.0380	15.6%	6.4
0.0270	0.0200	0.0228	13.0%	7.7
				6.4
				6.8
				7.4
				7.7
				7.8
				0.5
				0.07

Size Adjustment			Unsystematic Risk Adjustment			Growth Adjustment		
Size Premium of Subject	Size Premium of GPC	θ Size Adj.	Risk of Subject	Risk of GPC	μ Adj.	Growth Estimate of GPC	Growth Estimate of Subject	λ Growth Adj.
13.50%	11.70%	1.80%	1.00%	-2.08%	3.08%	6.27%	2.25%	4.02%
13.50%	9.00%	4.50%	1.00%	0.70%	0.30%	5.20%	2.25%	2.95%
13.50%	8.80%	4.70%	1.00%	1.97%	-0.97%	5.58%	2.25%	3.33%
13.50%	8.60%	4.90%	1.00%	1.61%	-0.61%	6.05%	2.25%	3.80%
13.50%	10.80%	2.70%	1.00%	-1.00%	2.00%	4.53%	2.25%	2.28%

Size Adjusted Equity Risk Premium (\$ in thousands)

Company	Ticker	Market Value of Equity	Log of MV of Equity	Slope	Constant	Size Adj. ERP
Big 5 Sporting Goods Corp	BGFV	323,806	2.51028	(0.03418)	0.21167	0.12587
Cabelas Inc.	CAB	3,788,682	3.57849	(0.03418)	0.21167	0.08936
Dicks Sporting Goods Inc.	DKS	6,019,467	3.77956	(0.03418)	0.21167	0.08248
Foot Locker Inc.	FL	8,202,280	3.91393	(0.03418)	0.21167	0.07789
Hibbett Sports Inc.	HIBB	1,240,777	3.09369	(0.03418)	0.21167	0.10593
Low						0.07789
25th Percentile						0.08019
Mean						0.09631
Median						0.08936
75th Percentile						0.11590
High						0.12587
Standard Deviation						1.76%
Coefficient of Variation						0.18

Company	Ticker	5-Year Avg. Net Income	Log of 5-yr Avg. NI	Slope	Constant	Size Adj. ERP
Big 5 Sporting Goods Corp	BGFV	17,994	1.25513	(0.02644)	0.14953	0.11634
Cabelas Inc.	CAB	170,879	2.23269	(0.02644)	0.14953	0.09050
Dicks Sporting Goods Inc.	DKS	241,930	2.38369	(0.02644)	0.14953	0.08651
Foot Locker Inc.	FL	264,200	2.42193	(0.02644)	0.14953	0.08549
Hibbett Sports Inc.	HIBB	56,294	1.75046	(0.02644)	0.14953	0.10325
Low						0.08549
25th Percentile						0.08600
Mean						0.09642
Median						0.09050
75th Percentile						0.10980
High						0.11634
Standard Deviation						1.18%
Coefficient of Variation						0.12

Book Value of Equity	Log of BV of Equity	Slope	Constant	Size Adj. ERP
195,004	2.29004	(0.02540)	0.17084	0.11267
1,817,510	3.25948	(0.02540)	0.17084	0.08805
1,832,225	3.26298	(0.02540)	0.17084	0.08796
2,496,000	3.39724	(0.02540)	0.17084	0.08455
324,781	2.51159	(0.02540)	0.17084	0.10705
				0.08455
				0.08626
				0.09606
				0.08805
				0.10986
				0.11267
				1.15%
				0.12

MVIC	Log of MVIC	Slope	Constant	Size Adj. ERP
380,967	2.58089	(0.03282)	0.21024	0.12554
7,590,815	3.88029	(0.03282)	0.21024	0.08289
5,804,238	3.76375	(0.03282)	0.21024	0.08671
7,369,280	3.86743	(0.03282)	0.21024	0.08331
1,155,845	3.06290	(0.03282)	0.21024	0.10972
				0.08289
				0.08310
				0.09763
				0.08671
				0.11763
				0.12554
				1.71%
				0.18

Size Adjusted Equity Risk Premium (\$ in thousands) - cont.

Company	Ticker	Assets	Log of Assets	Slope	Constant	Size Adj. ERP
Big 5 Sporting Goods Corp	BGFV	455,576	2.65856	(0.02699)	0.18743	0.11568
Cabelas Inc.	CAB	7,675,317	3.88510	(0.02699)	0.18743	0.08257
Dicks Sporting Goods Inc.	DKS	3,436,198	3.53608	(0.02699)	0.18743	0.09199
Foot Locker Inc.	FL	3,577,000	3.55352	(0.02699)	0.18743	0.09152
Hibbett Sports Inc.	HIBB	452,397	2.65552	(0.02699)	0.18743	0.11576
Low						0.08257
25th Percentile						0.08705
Mean						0.09950
Median						0.09199
75th Percentile						0.11572
High						0.11576
Standard Deviation						1.37%
Coefficient of Variation						0.14

Company	Ticker	Revenue	Log of Revenue	Slope	Constant	Size Adj. ERP
Big 5 Sporting Goods Corp	BGFV	977,860.0	2.99028	(0.02103)	0.16769	0.10480
Cabelas Inc.	CAB	3,647,650.0	3.56201	(0.02103)	0.16769	0.09278
Dicks Sporting Goods Inc.	DKS	6,814,479.0	3.83343	(0.02103)	0.16769	0.08707
Foot Locker Inc.	FL	7,151,000.0	3.85437	(0.02103)	0.16769	0.08663
Hibbett Sports Inc.	HIBB	913,486.0	2.96070	(0.02103)	0.16769	0.10543
Low						0.08663
25th Percentile						0.08685
Mean						0.09534
Median						0.09278
75th Percentile						0.10512
High						0.10543
						0.83%
						0.09

5-Yr Avg. EBITDA	Log of 5-Yr Avg. EBITDA	Slope	Constant	Size Adj. ERP
49,946	1.69850	(0.02685)	0.16366	0.11806
372,491	2.57112	(0.02685)	0.16366	0.09463
529,077	2.72352	(0.02685)	0.16366	0.09053
540,400	2.73272	(0.02685)	0.16366	0.09029
103,393	2.01449	(0.02685)	0.16366	0.10957
				0.09029
				0.09041
				0.10062
				0.09463
				0.11382
				0.11806
				1.12%
				0.11

Employees	Log of Employees	Slope	Constant	Size Adj. ERP	Average	Median
9,000	3.95424	(0.02010)	0.17329	0.09381	0.6	0.1
19,300	4.28556	(0.02010)	0.17329	0.08715	0.6	0.1
12,000	4.07918	(0.02010)	0.17329	0.09130	0.6	0.1
14,567	4.16337	(0.02010)	0.17329	0.08961	0.6	0.1
3,200	3.50515	(0.02010)	0.17329	0.10284	0.5	0.1
				0.08715		
				0.08838		
				0.09294		
				0.09130		
				0.09833		
				0.10284		
				0.54%		
				0.06		

GPC's Blended Growth Estimates

Company	Ticker	Growth Estimates				Implied Disc. Rate	Blended Growth Est.
		Current Yr Growth Est.	Next Yr Growth Est.	5-Yr Growth Est.	Perpetual Growth Est.		
Big 5 Sporting Goods Corp	BGFV	9.00%	5.50%	15.00%	2.25%	13.52%	6.27%
Cabelas Inc.	CAB	-0.30%	11.50%	10.84%	2.25%	13.60%	5.20%
Dicks Sporting Goods Inc.	DKS	1.40%	12.00%	11.34%	2.25%	14.67%	5.58%
Foot Locker Inc.	FL	19.00%	11.50%	13.15%	2.25%	14.11%	6.05%
Hibbett Sports Inc.	HIBB	0.70%	7.60%	8.64%	2.25%	13.70%	4.53%

Implied GPC Discount Rates

Ticker	P/E	Implied Cap. Rate	Long-Term Growth Est.	Implied Disc. Rate	Risk-Free Rate	Size Adj. ERP	ERP Adjustment	Implied Unsystematic
BGFV	13.8	7.25%	6.27%	13.52%	4.00%	11.70%	-0.10%	-2.08%
CAB	11.9	8.40%	5.20%	13.60%	4.00%	9.00%	-0.10%	0.70%
DKS	11.0	9.09%	5.58%	14.67%	4.00%	8.80%	-0.10%	1.97%
FL	12.4	8.06%	6.05%	14.11%	4.00%	8.60%	-0.10%	1.61%
HIBB	10.9	9.17%	4.53%	13.70%	4.00%	10.80%	-0.10%	-1.00%

Appendix D: Sources of Information



This page intentionally left blank to accommodate double sided printing

In performing this analysis, we were provided with and/or relied upon various sources of information, including but not limited to:

- ◆ Doubleday Sports, Inc. financial statements as of and for the years ended December 31, 2010 through 2014, reviewed by Shilling & Johnson, Certified Public Accountants;
- ◆ Doubleday Sports, Inc. internally prepared forecast of revenues, expenses and account balances for the future year ending December 31, 2015 through 2019;
- ◆ Restated Articles of Incorporation of Doubleday Sports, Inc. dated June 30, 2007;
- ◆ Restated Bylaws of Doubleday Sports, Inc. adopted June 30, 2007;
- ◆ Minutes of meetings of the Board of Directors during the years 2010 through 2014;
- ◆ Doubleday Sports, Inc. Employee Stock Ownership Plan, Effective December 31, 1989;
- ◆ Amended Doubleday Sports, Inc. Employee Stock Ownership Plan dated January 29, 2007.
- ◆ General information about the Company as presented on the web site, www.doubledaysports.com;
- ◆ Unaudited supplemental information, including, but not limited to:
 - History of the Company;
 - Sales and operating profitability statements;
 - Officer compensation;
 - Ownership breakdown of the shares;
 - General information on the Company's marketing, competitors, suppliers, customers, and other information from an interview with the Company's management;
- ◆ Analysis of information on possible publicly traded and privately held comparable companies and industry information including the following:
 - Search of the Electronic Data Gathering and Retrieval (EDGAR) database of public company filings with the Securities and Exchange Commission;
 - Analysis of possible public company and industry information via computer database;
 - Specific company annual reports, 10-K's, 10-Q's of publicly held companies;
 - Database searches and review of articles, forecasts and abstracts via the Internet;
 - Analysis of possible privately held comparable companies obtained from BizComps and Pratts Stats databases;
- ◆ Information regarding macroenvironmental factors including the economic outlook for the region, as well as the overall U.S. economy, technical innovations, government regulations and other factors;
- ◆ Information regarding the present conditions and outlook for the industry in which the Company operates;
- ◆ Resources regarding business valuation issues, including the following:
 - *Business Valuation Review*, a publication of the Business Valuation Committee of the American Society of Appraisers;

- ASA Business Valuation Standards of the American Society of Appraisers, and the Uniform Standards of Professional Appraisal Practice, published by the Appraisal Foundation;
 - *Financial Valuation: Applications and Models*, Third Edition, 2011, Hitchner;
 - *2015 Valuation Handbook - Guide to Cost of Capital* a publication of Duff & Phelps, LLC; and,
- ◆ Other various relevant information.

Appendix E: Qualifications



This page intentionally left blank to accommodate double sided printing

DON M. DRYSDALE

Certified Public Accountant (CPA)
Accredited in Business Valuation (ABV)
Accredited Senior Appraiser (ASA)
ddrysdale@4aValue.com

Professional Designations:

- Certified Public Accountant, Arizona #7549-E
- Accredited in Business Valuation #600
- Certified Public Accountant, Utah #289292-2601
- Accredited Senior Appraiser

Professional Memberships:

- American Institute of Certified Public Accountants
- Appraisal Issues Task Force
- American Society of Appraisers

Previous Employment History:

- **Yeanoplos Drysdale Group, PLLC**
Member, Tucson, Arizona
- **Beacon Valuation Group, LTD**
Manager, Tucson, Arizona
- **Certified Public Accounting Firms**
Salt Lake City, Utah and Phoenix, Arizona
Including KPMG Peat Marwick
- **Bank One of Arizona**
Accountant, Phoenix, Arizona

Education and Training:

- **Weber State University**
Bachelor of Arts - Accounting
- **Nat'l Assoc. of Certified Valuation Analysts**
Fundamental & Techniques for Small Businesses
- **American Institute of CPAs**
Certificate of Educational Achievement
Various National Business Valuation Conferences
National Auto Dealers Conference
Construction Industry Executive Forum
- **Arizona Society of CPAs**
Various Annual Business Valuation and Litigation
Support Conferences
- **Financial Consulting Group**
Various Member Firm Conferences
Various Annual "BV Universities"
- **Utah Association of CPAs**
Various Annual Business Valuation Symposia

Articles and publications:

Co-Author, "Adjusting Guideline Multiples for Size," *Valuation Strategies*, Sept./Oct. 2001.

Co-Author, "Best Valuation Approaches to Use and Why," *Industry Valuation Update, Volume Three, Construction*, Business Valuation Resources, 2004.

Author of the Construction section of the Special Industries Chapter, "Financial Valuation: Applications and Models, third edition, 2011.

Author, "Squaring the Circle: Can the Income and Market Approaches be Reconciled?" *Journal of Business Valuation*, 2011 Volume 2.

Presentations and Lectures:

Common Approaches to Business Valuation, Presentation given for National Business Institute, 1998.

Valuation, Presentation given for National Business Institute, 1999.

Business Valuation: Case Study Round Table Discussion, Presentation given at the National Association of Certified Valuation Analysts Utah Chapter Meeting, 1999.

Effective Business Valuation Report Writing, Presentation given at the Utah Association of CPAs '99 Business Valuation Symposium, 1999.

Determining Appropriate Business Valuation Methodologies, Presentation given at the Utah Association of CPAs 2000 Business Valuation Symposium, 2000.

Valuation Premiums and Discounts, Presentation prepared for the Utah Association of CPAs 2000 Business Valuation Symposium, 2000.

The Business of Valuation – Discounts, Presentation prepared for the Southern Arizona Estate Planning Council, 2000.

Signed, Sealed and Delivered: Complying With IRS Regulations on Adequate Disclosure of Gifts, Presentation given at the Society of Louisiana CPAs 2000 Louisiana Tax Conference, 2000.

Business Valuation, Presentation given to graduate taxation students at the University of Arizona, 2001.

Signed, Sealed and Delivered: Complying With IRS Regulations on Adequate Disclosure of Gifts, Presentation given to the Tucson CPA/Law Forum, 2001.

Don't Slam the Door on the Way Out, Presentation given to the Risk Management Association, Tucson Chapter, 2001.

Controversial Issues Panel: Is the Guideline Public Company Method Control or Minority?, Panel Member, Financial Consulting Group Member Firm Conference 2001, New Orleans, Louisiana, 2001.

Turning Goliath into David: Making Valuation Multiples More Applicable for Private Companies, Presentation given at the Utah Association of CPAs 2001 Business Valuation Symposium, 2001.

Controversial Issues Panel: The Quantitative Marketability Discount Model, Panel Member, Financial Consulting Group Member Firm Conference 2002, Denver, Colorado, 2002.

Professional Practices: What's Your Time Really Worth?, Presentation given at the Utah Association of CPAs 2002 Business Valuation Symposium, 2002.

Finance: The Basics (Learn to Read and Understand Balance Sheets, Income and Cash Flow Statements), Presentation given for Lorman Education Services, 2002.

Getting Down to Brass Tax! Exploring Taxation Issues in Domestic Relations, Presentation given at the Joint Tax Litigation Seminar for the American Women's Society of CPAs, Tucson Affiliate, Arizona Society of CPAs, Southern Chapter and the Arizona Women's Law Association, 2002.

Exploring the Taxing Financial Issues of Divorce, Presentation given for the CPA/Law Forum of Tucson, 2003.

Exploring Issues in Valuing Stock Options and Other Assets You Can't See, Co-discussion leader for a one day AICPA course sponsored by the ASCPA, Phoenix, Arizona, 2003.

Small Business Valuation Case Study: Let's Work Through the Issues!, Discussion leader for a one day AICPA course sponsored by the ASCPA, Phoenix, Arizona, 2003.

Best Valuation Approaches to Use and Why?, Guest author for Industry Valuation Update, Volume Three, Construction, published by BVRResources.

Niche Vignette: Construction, Presentation given to the American Institute of CPAs, 2004 National Business Valuation Conference, Orlando, Florida, 2004.

Business Valuation, Presentation given to the Risk Management Association, Tucson Chapter, 2005.

Finance: The Basics (Learn to Read and Understand Balance Sheets, Income and Cash Flow Statements), Presentation given for Lorman Education Services, 2006.

Building a Value of Construction Companies, Presentation given at the 21st Annual Construction Industry Conference of the Arizona Society of CPAs, 2006.

Construction Companies: Building a Better Value, Presentation given at the 15th Annual Consultants' Conference of the National Association of Certified Valuation Analysts, 2008.

Adjusting Public Multiples for Size, Guest lecture given as part of an elective graduate finance course, University of Arizona, Eller College of Management, 2008.

Square Pegs in Round Holes: Adjusting Multiples from Public Guidelines for Private Firms, Presentation given at the National Association of Certified Valuation Analysts and Institute of Business Appraisers 2009 Annual Consultants' Conference, 2009.

Valuing Construction Companies, Teleconference presentation given for Business Valuation Resources, 2010.

Square Pegs in Round Holes: Adjusting Multiples from Public Guidelines, Presentation given at the Business Valuation Committee meeting of the California Society of CPAs, 2010.

Squaring the Circle: Can the Income and Market Approaches be Reconciled? Presentation given at the joint Business Valuation Conference of the American Society of Appraisers and the Canadian Institute of Chartered Business Valuators, 2010.

Taming the Insidious Beast: A Case Study of Accounting Standards Codification 350 / 805, Presentation given to the Greater Miami Chapter of the American Society of Appraisers, 2011.

Squaring the Circle: Can the Income and Market Approaches be Reconciled? Presentation given to the Greater Miami Chapter of the American Society of Appraisers, 2011.

A Look Behind The Curtain: General Musings on Valuing Private Companies, guest lecture to Executive MBA students at the University of Utah, 2013.

Special Purpose Valuations: Mergers & Acquisitions and Fair Value, guest lecture to graduate and undergraduate business students at the University of Utah, 2015.



1325 Dry Creek Drive
Suite 201
Longmont, CO 80503

CO 303.532.2545
IL 630.799.8310
UT 801.466.5410

DUSTIN CRESPIN

dcrespin@4aValue.com

Employment History:

- **Gibraltar Business Appraisals**
Financial Analyst, Longmont, Colorado

Education and Training:

- **Colorado State University**
Bachelor of Science in Business Administrations,
Accounting Concentration

This page intentionally left blank to accommodate double sided printing

Appendix F: Statement of Assumptions and Limiting Conditions



This page intentionally left blank to accommodate double sided printing

Valuation Misstatement

The Pension Protection Act of 2006 allows the United States Treasury Department to impose civil and monetary penalties on appraisers for “substantial” or “gross” valuation misstatements. A “substantial” misstatement exists when the appraised value is 65 percent or less of the amount determined to be correct by the IRS. A “gross” misstatement exists when the appraised value is 40 percent or less of the amount determined to be correct by the IRS. Unless otherwise agreed in writing, DSI warrants and agrees that it shall not, nor any owner, officer, employee or representative of DSI shall accept any settlement with any governmental authority that may result in a “substantial” or “gross” valuation misstatement or other penalty imposed on Gibraltar, its owners or officers, without first informing and consulting with Gibraltar.

We have relied upon information:

We have based our report on historical and prospective financial information, historical and current entity information, and other information provided by owners, management, and third parties. We have not audited or reviewed this information and the resulting report should not be construed, or referred to as an audit, examination or review. Had I audited or reviewed the underlying data and information, matters may have come to our attention that would have resulted in our using amounts that differ from those provided. Accordingly, I take no responsibility for the underlying data presented or relied upon in this report. We have assumed that all of the representations and information supplied by the Company, its management and agents are true, accurate, and complete.

We have relied on public and other information sources I believe to be reliable. However, I make no representation as the accuracy, completeness or correctness of such information and have performed no procedures to corroborate the information.

We have relied upon the representations of the owners, management, and third parties concerning the value and useful condition of all equipment, real estate, investments used in the business, and any other assets or liabilities except as specifically stated to the contrary in this report. We have not attempted to confirm whether or not all assets of the business are free and clear of liens and encumbrances, or that the Company has good title to all assets. Gibraltar assumes no responsibility for matters of a legal or tax-oriented nature affecting any of the property valued or any opinion of value.

We based this valuation in part on forecasts of revenues, earnings, and other matters as estimated by the management of the Doubleday Sports, Inc. Some assumptions inevitably will not materialize, and numerous unanticipated events and circumstances may occur. Therefore, the actual performance in the areas forecasted will vary from the forecasts and the variations may be material. Gibraltar expresses no form of assurance whatsoever on the likelihood of achieving the forecasts or on the reasonableness of the assumptions, representations and conclusions.

Any such forecasts are presented for valuation purposes only, and are not intended to be used separately or for any other purpose, including: to obtain credit, make investment decisions, make purchase decisions, or solicit investors. Any such potential parties must independently examine the outlook for the Company and make their own separate determinations. The parties should employ qualified advisors to assist them in doing so.

The report will not be used for:

We have performed this valuation only for the Company and the purpose stated herein. The report and any information contained within are not to be used for any other purpose by any other party. Such other use will render the report invalid and is not authorized. This report or its findings are not to be included in, or referred to, in any offering memorandum (public or private) or prospectus of any kind.

The report, its information and findings are confidential and are not to be published, copied, reproduced, disclosed, or disseminated in any way by any means, in whole or in part, without the express prior written permission of a duly authorized officer of Gibraltar. This report is copyrighted and remains the property of Gibraltar. Neither all nor any part of the contents of this report shall be conveyed to the public through advertising, public relations, news, sales or other media without the prior written consent and approval of Gibraltar.

Assumptions (not all inclusive):

In determining the opinion of value included in this report, we have assumed that the existing management will maintain the character and integrity of the Company through any reorganization or reduction of any existing owner's/ manager's participation in the activities of the Company.

We have assumed that there are no factors such as restrictive agreements of any kind, other than those noted herein, which will affect or impair value in any way or the ability to affect an expedient sale of the ownership interest being valued.

We have assumed for valuation purposes that the Company is in good standing and is not in violation of any laws or regulatory statute of any kind; this has not been independently verified. We have also assumed that there are no contingent or other liabilities of any kind, including pending or threatened lawsuits, environmental or hazardous waste or other similar matters except as noted herein.

The dollar amount of any value reported is based on the purchasing power of the U.S. dollar as of the valuation date. The appraiser assumes no responsibility for economic or physical factors occurring subsequent to the date that may affect the opinions reported.

Gibraltar is not an environmental consultant, engineer or auditor, and takes no responsibility for any actual or potential liability from environmental contamination or injury from such contaminants or hazardous substances. Gibraltar has not independently determined whether the subject business enterprise is subject to any present or future liability relating to environmental matters (including but not limited to CERCLA/Superfund liability, contamination of soil, water or air, or release of any substance that could damage the environment or individuals) nor the scope of any such liabilities. We take no such liabilities into account, except as they have been reported to us by the subject company or by an environmental consultant working for the subject company, and then only to the extent that the liability was report to us in an actual or estimated dollar amount. Such matters, if any, are noted in the report. To the extent such information has been reported to us, Gibraltar has relied on it without verification and offers no warranty or representation as to its accuracy or completeness.

The estimate of fair market value assumes that the Company is a "going concern," based on an all cash purchase, or equivalent terms thereof. The Company would have a materially different value in liquidation. No estimate of the value that could be achieved in liquidation is included in this report.

If the business is sold or transferred:

Drysdale Valuation, PLLC dba Gibraltar Business Valuations, Don M. Drysdale, CPA/ABV, ASA, and Dustin Crespin do not purport to be guarantors of value. Valuations involving closely held companies is an imprecise science, with value being a question of fact, and reasonable people differing in their opinions of value. However, Gibraltar and the individual analyst(s) have used conceptually sound and commonly accepted methods and procedures of valuation in determining the opinion of value included in this report.

Nothing in this report is intended to recommend, imply or provide any guarantees, representations, or opinions of any kind whatsoever regarding the financial prudence, collateral, investment potential or debt service ability of the

Company or any investment in its stock or assets by any party, including investors of any kind, financial institutions and all other individuals or entities. Such parties should undertake a full due diligence review of the Company and make their own independent determinations of its future prospects, financial and otherwise, and the financial prudence, tax, legal, and all other ramifications of any contemplated transaction and should retain independent and qualified advisors.

Nothing in this report should be construed as providing a “due diligence” study of the Company, as such a study has not been undertaken. Such a study could uncover factors not considered herein which could result in a materially different estimate of value. No “fairness opinion” of any kind is expressed herein regarding an ownership interest in the subject entity or for any pending or contemplated transaction.

GBV has not been retained to provide, nor has performed purchase price allocation, asset impairment testing, or intangible asset valuation service.

Nothing in this report constitutes a recommendation regarding the purchase or sale of any securities or assets. Gibraltar expresses no opinion, guarantees or form of assurance of any kind, expressed or implied, on the potential investment performance resulting from a purchase of an interest in the Company or its assets.

This report is neither an offer to sell, nor a solicitation to buy securities, and/or equity in, or assets of, the subject entity.

Other:

We have no present or contemplated financial interest in the Company. Our fee for this analysis is based upon our customary billing rates plus out-of-pocket expenses, and is in no way contingent upon the results of our findings. We have no responsibility or obligation to update this report for events or circumstances occurring subsequent to the date of this report, although we would be happy to do so should prior arrangements be made, including providing expert testimony or to be in attendance in court or at any government hearing with reference to the matters contained herein. The opinion expressed herein is valid only for the stated effective date, December 31, 2014, and only for the stated valuation purpose. The actual value realized at a date subsequent to the valuation date may vary from the value set forth and such variations may be material.

No change of any item in the report shall be made by anyone other than Gibraltar, and I shall have no responsibility for any such unauthorized change.

The valuation date is stated in the report without any guarantees as to the fair market value at the valuation date or any future date, or any contrary opinions as to the value as of the same date.

Possession of the report or work papers or other written documentation regarding the analysis does not carry with it the right of publication of all or part of it, nor may it be used or relied upon without previous written consent for any purpose other than that set forth above. No third parties are intended to be benefited. Gibraltar assumes no responsibility for any liability for damages of any kind resulting from reliance on this report by the Company or any other party. Schedules, information and other work papers developed during the assignment by Gibraltar or supplied by the client are the sole property of Gibraltar and are not subject to examination or production to the client at any time during or after the engagement.

This page intentionally left blank to accommodate double sided printing