

---

# BUSINESS VALUATION REPORT

---

## **Tentex Toys, Inc.**

*As of September 30, 2002*

*for*

**Jane Barclay**

*President, Tentex Toys, Inc.*

*by*

**DR. STANLEY JAY FELDMAN**  
**CHAIRMAN AND CHIEF VALUATION OFFICER**



---

## TABLE OF CONTENTS

---

*Important Notices*

*Section 1: Valuation Summary*

*Section 2: The Valuation Assignment*

*Section 3: The U.S. Economic Outlook*

*Section 4: The Industry Outlook*

*Section 5: Other Key Valuation Factors:*

*Cost of Capital, Liquidity Discount, & Control Premium*

*Section 6: Valuation Findings*

### ***Appendices***

*Appendix A: About Axiom Valuation Solutions*

*Appendix B: Professional Qualifications*

*Appendix C: Valuation and Firm Financial Data*

*Appendix D: Certification and Conditions*

## DETAILED TABLE OF CONTENTS

<b>TABLE OF CONTENTS.....</b>	<b>2</b>
DETAILED TABLE OF CONTENTS.....	3
INDEX OF CHARTS AND TABLES .....	5
<b>IMPORTANT NOTICES.....</b>	<b>6</b>
COPYRIGHT.....	6
LIMITED COPYRIGHT LICENSE.....	6
TERMS AND CONDITIONS .....	6
<b>SECTION 1: VALUATION SUMMARY .....</b>	<b>7</b>
DESCRIPTION OF VALUATION ASSIGNMENT.....	7
FINDINGS .....	7
<i>Summary Description of the Company.....</i>	7
<i>Review of Company Financials .....</i>	7
<i>Company Financial Performance.....</i>	8
<i>Owner Compensation Review.....</i>	8
<i>Discretionary Expenses.....</i>	9
<i>Normalizing the Financial Statements.....</i>	9
VALUATION RESULTS: DISCOUNTED FREE CASH FLOW METHOD .....	10
VALUATION RESULTS: MARKET MULTIPLE METHODS.....	11
<i>Valuation Using Revenue Market Multiples.....</i>	13
<i>Valuation Using EBITDA Market Multiples.....</i>	13
<i>Weighting the Valuation Methods.....</i>	14
VALUATION ASSIGNMENT TERMS AND CONDITIONS .....	15
<b>SECTION 2: THE VALUATION ASSIGNMENT .....</b>	<b>16</b>
DESCRIPTION OF THE ENTITY BEING VALUED .....	16
<i>Valuation Key Assumption.....</i>	16
REVENUE AND PROFIT .....	16
ADJUSTMENTS TO THE FIRM'S FINANCIALS.....	17
<i>Officers and Owners Compensation.....</i>	17
<i>Other Adjustments for Valuation Purposes .....</i>	18
<i>Timeliness.....</i>	19
<i>Using Twelve Months Ending September 30, 2002 Financials As the Valuation Starting Point.....</i>	19
<b>SECTION 3: THE U.S. ECONOMIC OUTLOOK.....</b>	<b>21</b>
OVERVIEW .....	21
KEY FORECAST ASSUMPTIONS.....	24
<i>Fiscal Policy.....</i>	24
<i>Monetary Policy.....</i>	25
<i>Commodity Prices and Exchange Rates .....</i>	25
THE ECONOMY FROM THE BUSINESS OWNER PERSPECTIVE .....	26
<i>The State of Small Business Owner Sentiment .....</i>	26
<i>The State of the Economy from the Business Owner Perspective .....</i>	27
<i>The State of the Consumer from the Business Owner Perspective.....</i>	27
<i>The State of Capital Spending.....</i>	28
<i>The State of Small Business Financing.....</i>	29
<i>Summary.....</i>	29
<b>SECTION 4: THE INDUSTRY OUTLOOK.....</b>	<b>30</b>
INDUSTRY FORECAST FOR GAME, TOY, & CHILDREN'S VEHICLE MANUFACTURING .....	30
<i>Determining the Appropriate Growth Segment for Tentex Toys.....</i>	31
FACTORS AFFECTING PERFORMANCE OF GAME, TOY, & CHILDREN'S VEHICLE MANUFACTURING .....	31
<i>Industry Overview .....</i>	31
THE INDUSTRY TO FIRM FORECAST CONNECTION.....	32
<i>Axiom's Industry Forecasting System.....</i>	32
<i>Axiom's Approach to Estimating Future Cash Flow for this Firm.....</i>	33
<b>SECTION 5: OTHER KEY FACTORS: COST OF CAPITAL, LIQUIDITY DISCOUNT, &amp; CONTROL PREMIUM .....</b>	<b>35</b>
COST OF CAPITAL: THE EXPECTED RATE OF RETURN .....	35
<i>Risk versus Return.....</i>	35
<i>Calculating The Firm-Specific Cost of Capital.....</i>	35
TWO KEY VALUATION ADJUSTMENTS FOR THIS FIRM .....	36
<i>The Liquidity Discount.....</i>	36
<i>The Control Premium.....</i>	37
<i>The Control Premium for this Firm.....</i>	39
<b>SECTION 6: VALUATION FINDINGS.....</b>	<b>41</b>
APPROACH TO VALUATION OF THIS FIRM .....	41

## Business Valuation Report For Tentex Toys

<i>Defining Fair Value</i> .....	41
VALUATION FUNDAMENTALS .....	42
<i>Value As an On-going Concern</i> .....	42
<i>Valuation Methods: Market and Income</i> .....	42
AXIOM'S APPROACH TO VALUATION OF THIS FIRM .....	45
<i>The Discounted Free Cash Flow Forecasting Valuation Method</i> .....	45
<i>Axiom Forecasting Process</i> .....	45
DISCOUNTED FREE CASH FLOW VALUATION OF THE FIRM .....	45
THE SOURCES OF VALUE FOR THIS FIRM – DISCOUNTED FREE CASH FLOW .....	46
<i>Liquidity Discount and Control Premium</i> .....	47
<i>Factors Impacting the Discounted Free Cash Flow Valuation</i> .....	47
VALUATION METHOD: MARKET MULTIPLES .....	48
<i>Valuation Using Revenue Market Multiples</i> .....	49
<i>Valuation Using EBITDA Market Multiples</i> .....	50
<i>Weighting the Valuation Methods</i> .....	51
APPENDIX A: ABOUT AXIOM VALUATION SOLUTIONS .....	52
<i>What We Do:</i> .....	52
APPENDIX B: PROFESSIONAL QUALIFICATIONS .....	53
STANLEY JAY FELDMAN, PH.D. ....	53
RELATED EXPERIENCE .....	53
SELECTED PUBLICATIONS .....	54
APPENDIX C: VALUATION AND FIRM FINANCIAL DATA .....	55
<i>Tentex Toys Financials for the 12 months ending October 2002 (Before Normalization)</i> .....	56
APPENDIX D: CERTIFICATION AND CONDITIONS .....	59
APPRAISAL CERTIFICATION .....	59
STATEMENT OF CONTINGENT AND LIMITING CONDITIONS .....	60

## INDEX OF CHARTS AND TABLES

TABLE 1-1: FAIR MARKET VALUE OF TENTEX TOYS AS OF 9/30/2002.....	7
TABLE 1-2: SUMMARY INCOME STATEMENT FOR TENTEX TOYS .....	8
TABLE 1-3: REVIEW OF THE OFFICERS' COMPENSATION FOR THIS FIRM.....	9
TABLE 1-4: NORMALIZED FINANCIAL STATEMENTS FOR TENTEX TOYS.....	10
TABLE 1-5: VALUATION RESULTS FOR DISCOUNTED FREE CASH FLOW METHOD .....	11
TABLE 1-6: VALUATION CALCULATION SUMMARY FOR DISCOUNTED FREE CASH FLOW METHOD .....	11
TABLE 1-7: PEER GROUP SUMMARY COMPARISON.....	12
TABLE 1-8: PEER GROUP FINANCIAL COMPARISON FOR TENTEX TOYS, INC. ....	12
TABLE 1-9: VALUATION BY PUBLIC COMPANY COMPARABLE METHOD – REVENUE MULTIPLE .....	13
TABLE 1-10: VALUATION OF PUBLIC COMPANY COMPARABLE METHOD – EBITDA MULTIPLE .....	14
TABLE 1-11: WEIGHTING OF DIFFERENT VALUATION RESULTS.....	14
TABLE 2-1: SUMMARY INCOME STATEMENT FOR TENTEX TOYS .....	17
TABLE 2-2: REVIEW OF THE OFFICERS' COMPENSATION FOR THIS FIRM.....	18
TABLE 2-3: NORMALIZED FINANCIAL STATEMENT FOR TENTEX TOYS.....	20
CHART 3-1: HISTORY AND FORECAST FOR GROSS DOMESTIC PRODUCT, CONSUMPTION, AND INVESTMENT .....	22
CHART 3-2: INFLATION AND UNEMPLOYMENT RATE: BOTH INDICATORS IMPROVE OVER THE FORECAST .....	22
CHART 3-3: GROWTH IN EXPORTS AND IMPORTS: EXPORTS AND IMPORTS REGISTER GROWTH.....	23
CHART 3-4: INTEREST RATES: A SLIGHT RISE AS THE ECONOMY IMPROVES .....	23
CHART 3-5: STANDARD& POORS 500 INDEX: STOCK PRICES RISE AFTER A TOUGH 2001 .....	24
CHART 3-6: SMALL BUSINESS OWNER SENTIMENT: POISED FOR A COMEBACK? .....	26
CHART 3-7: SMALL BUSINESS OWNER SENTIMENT: RELATIVELY NOT SO LOW .....	26
CHART 3-8: THE AXIOM VALUATION SOLUTIONS ECONOMY PERFORMANCE INDEX: THE FUTURE LOOKS BRIGHT .....	27
CHART 3-9: AXIOM VALUATION SOLUTIONS FEEL GOOD INDEX: .....	28
CHART 3-10: CAPITAL SPENDING INDEXES .....	28
CHART 3-11: THE "PRIME" RATE AND THE SMALL BUSINESS LOAN RATE .....	29
TABLE 4-1: HISTORY AND FORECAST FOR THE LOW GROWTH SEGMENT OF THE GAME, TOY, & CHILDREN'S VEHICLE MANUFACTURING INDUSTRY.....	30
TABLE 4-2: INDUSTRY STRUCTURE .....	32
TABLE 5-1: CALCULATING THE PRE-TAX COST OF CAPITAL FOR TENTEX TOYS .....	35
TABLE 5-2: FIRM-SPECIFIC NON-FINANCIAL RISKS FOR TENTEX TOYS.....	36
TABLE 5-3: REPRESENTATIVE STUDIES THAT ATTEMPT TO MEASURE THE LIQUIDITY DISCOUNT .....	37
TABLE 5-4: MERGERSTAT AGGREGATE CONTROL PREMIUMS OVER TIME .....	38
TABLE 5-5: RELATIONSHIP BETWEEN CONTROL PREMIUMS AND COST OF EQUITY BY FIRM .....	40
TABLE 6-1: VALUE BY OWNERSHIP COMPONENT .....	46
TABLE 6-2: VALUATION CALCULATION SUMMARY FOR DISCOUNTED FREE CASH FLOW METHOD .....	46
TABLE 6-3: SOURCES OF VALUE .....	47
TABLE 6-4: THE IMPACT OF CONTROL PREMIUM AND LIQUIDITY DISCOUNT ON OWNERSHIP VALUE .....	47
TABLE 6-5: PEER GROUP SUMMARY COMPARISON.....	48
TABLE 6-6: PEER GROUP FINANCIAL COMPARISON FOR TENTEX TOYS, INC. ....	49
TABLE 6-7: VALUATION BY PUBLIC COMPANY COMPARABLE METHOD – REVENUE MULTIPLE .....	50
TABLE 6-8: VALUATION OF PUBLIC COMPANY COMPARABLE METHOD – EBITDA MULTIPLE .....	50
TABLE 6-9: WEIGHTING OF DIFFERENT VALUATION RESULTS.....	51

---

## IMPORTANT NOTICES

---

### COPYRIGHT

All information and materials in this report are copyright © 2002 Axiom Valuation Solutions, 600 Suffolk Street, 4<sup>th</sup> Floor, Lowell, MA 01854. **All rights are reserved, except as noted below.** Copyright in the text and numerical information, in the layout of the information in this report, and in the graphical displays of the information is owned by Axiom Valuation Solutions unless otherwise indicated. The text, numerical, and graphical information in this report may not be redistributed, copied, sold, transferred, or modified, without the express written permission of Axiom Valuation Solutions.

### LIMITED COPYRIGHT LICENSE

Axiom Valuation Solutions grants to the owners of Tentex Toys a limited copyright license to use this Business Valuation Report in support of activities for that company as long as the information from this document is attributed as “provided by Axiom Valuation Solutions”.

### TERMS AND CONDITIONS

The business valuation result contained in this report is subject to the Appraisal Certification, and Statement of Contingent and Limiting Conditions. Appendix D of this report contains these documents.

Although we have provided you with our opinion as to the value of your business, you should still consult with your other professional advisors, such as your accountant, attorney or management team, before using the valuation for a particular purpose. There may be additional matters that you should consider before taking a particular course of action, which may or may not be impacted by the valuation, that your professional advisors are best suited to instruct you on.

## SECTION 1: VALUATION SUMMARY

### DESCRIPTION OF VALUATION ASSIGNMENT

Dr. Stanley Jay Feldman, Chairman and Chief Valuation Officer of Axiom Valuation Solutions (Axiom), has been retained to determine the fair market value of Tentex Toys, Inc., hereinafter referred to as Tentex Toys, as of 9/30/2002. The purpose of the valuation is to establish a value for gifting minority shares as part of estate planning by the owners.

### FINDINGS

The fair market value of Tentex Toys is \$1,310,010 as of 9/30/2002 and is shown below in Table 1-1, based on the weighting of income and market based valuation methods. For gifting purposes the fair market value of ownership equity is \$1,114,200, and the minority ownership equity value is \$926,723.

**Table 1-1: Fair Market Value of Tentex Toys as of 9/30/2002**

<b>Total Fair Market Value</b>	<b>Value</b>	<b>Weight</b>	<b>Weighted Value</b>
<i>Income Valuation Method: Discounted Free Cash Flow</i>	\$ 1,200,084	60%	\$ 720,051
<i>Market Valuation Method: Public Company Revenue Multiple</i>	\$ 1,330,614	20%	\$ 266,123
<i>Market Valuation Method: Public Company EBITDA Multiple</i>	\$ 1,619,181	20%	\$ 323,836
<b>Total Fair Market Value Based On Weighting of Income and Market Valuation Results</b>			<b>\$ 1,310,010</b>
<b>Minus</b>			
<i>Total Debt (book value)</i>			\$ 195,810
<i>Other Liabilities</i>			\$ 0
<b>Equals</b>			
<b>Fair Market Value of Ownership Equity With Control (Ownership of 50.1% or More of Company Stock)</b>			<b>\$ 1,114,200</b>
<b>Minus</b>			
<i>Control Premium</i>		20.2%	\$ 187,477
<b>Equals</b>			
<b>Fair Market Value of Minority Interest of Ownership Equity (Ownership of 49.9% or Less of Company Stock)</b>			<b>\$ 926,723</b>

### Summary Description of the Company

Tentex Toys is a privately held company operating primarily in the Internal Revenue Service business activity code 339932, Game, Toy, & Children's Vehicle Manufacturing. This industry definition is equivalent to SIC 3944, which covers companies that design, develop and market a broad range of toys and dolls from the traditional to high-tech.

### Review of Company Financials

I have reviewed the US Corporation Income Tax Return and associated schedules and worksheets for Tentex Toys for 1998, 1999, 2000, 2001 and the twelve months ending September 30, 2002. Summary income statement and balance sheet tables are shown in the Appendix C. I have also interviewed Jane Barclay, co-owner and president of Tentex Toys about the current and projected operating conditions of the company.

## Company Financial Performance

The company's summary income statement is shown in Table 1-2. As can be seen, the company's revenue (net receipts) increased slightly from \$1,760,026 in 1998 to \$1,781,278 during the twelve months ending on 9/30/2002, an increase of only 1.21% over the 5 year review period. While revenue rose to almost \$1.9 million in 2000, it also fell to just under \$1.7 million in 2001. The revenue value for the most recent 12 months ending October 2002, \$1,781,278 is the most reasonable starting point for the valuation analysis, since it is the most current and it falls within the recent range of revenue performance for Tentex Toys. Earnings before interest, taxes, depreciation, and amortization (EBITDA) increased from \$52,943 in 1998 to \$95,160 in the twelve months ending 9/30/2002. However, the earnings have fluctuated with industry and economic changes over the years of this review. For valuation purposes, I have normalized the earnings of the business for use in the EBITDA valuation calculations and the discounted free cash flow valuation after making other adjustments to the financials for valuation purposes.

**Table 1-2: Summary Income Statement for Tentex Toys**

Source: Tentex Toys, Inc.

Concepts		Years				
Line	Income	Twelve Months Ending September 30, 2002 <sup>1</sup>	2001	2000	1999	1998
1a	Gross receipts or sales	\$ 1,804,478	\$ 1,718,550	\$ 1,909,500	\$ 1,833,120	\$ 1,778,126
1b	Less returns and allowances	\$ 23,200	\$ 20,000	\$ 19,300	\$ 18,700	\$ 18,100
1c	Balance - Net Receipts	\$ 1,781,278	\$ 1,698,550	\$ 1,890,200	\$ 1,814,420	\$ 1,760,026
2	Cost of goods sold	\$ 1,140,018	\$ 1,087,072	\$ 1,228,630	\$ 1,215,661	\$ 1,196,818
3	Gross profit	\$ 641,260	\$ 611,478	\$ 661,570	\$ 598,759	\$ 563,208
10	Other Income	\$ 6,000	\$ 5,500	\$ 5,000	\$ 5,000	\$ 5,000
11	<b>Total income (loss)</b>	<b>\$ 647,260</b>	<b>\$ 616,978</b>	<b>\$ 666,570</b>	<b>\$ 603,759</b>	<b>\$ 568,208</b>
	<b>Expenses</b>					
18	Interest	\$ 27,900	\$ 27,200	\$ 28,560	\$ 29,988	\$ 29,688
21b	Net Depreciation	\$ 12,350	\$ 5,200	\$ 5,227	\$ 5,123	\$ 4,969
27	<b>Total deductions.</b>	<b>\$ 592,350</b>	<b>\$ 582,150</b>	<b>\$ 578,480</b>	<b>\$ 568,857</b>	<b>\$ 549,922</b>
28	Taxable income before net operating loss deduction and specials deductions	\$ 54,910	\$ 34,828	\$ 88,090	\$ 34,902	\$ 18,286
	<b>Taxable Income</b>	<b>\$ 54,910</b>	<b>\$ 34,828</b>	<b>\$ 88,090</b>	<b>\$ 34,902</b>	<b>\$ 18,286</b>
	<b>Operating Earnings (Line 3 - Line 27)</b>	<b>\$ 48,910</b>	<b>\$ 29,328</b>	<b>\$ 83,090</b>	<b>\$ 29,902</b>	<b>\$ 13,286</b>
	<b>EBITDA (Line 11 - Line 27 + Line 18 + Line 21b)</b>	<b>\$ 95,160</b>	<b>\$ 67,228</b>	<b>\$ 121,878</b>	<b>\$ 70,012</b>	<b>\$ 52,943</b>

<sup>1</sup> Values are from financial statements as of 9/30/2002.

## Owner Compensation Review

I have reviewed the owner compensation in comparison to the benchmark for owner salaries (plus taxable benefits) in this industry, in this geographic area (the state of Illinois), and for firms of similar size. Our benchmark salary value is \$67,414 per owner. For Tentex Toys with two active owner/managers, the benchmark owner compensation is \$134,828. The officers' compensation as reported for Tentex Toys is \$283,500, \$148,672 above the owner salary benchmark in the Axiom database. Therefore, I have classified the officers' compensation amount above the benchmark as an owners' dividend, and removed it from company expenses for valuation purposes. As a



consequence of that change, company earnings increase by the amount of \$148,672 for the 12 months ending October 2002. The results of this review are shown in Table 1-3.

**Table 1-3: Review of the Officers' Compensation for this Firm**

**Source: Axiom Valuation Solutions and the Financial Information for Tentex Toys**

<i>Concept</i>	<i>Value</i>
1) # of Owners	2
2) Salary Cost Estimate Per Owner	\$67,414
3) Total Salary + Benefits Costs per Owner	\$67,414
4) Total Salary and Benefits Costs for the Owners	\$134,828
5) Officers' Compensation As Reported	\$283,500
6) Adjustment to Pre-tax Net Income: Row 6 –Row 5	\$148,672

### **Discretionary Expenses**

I have reviewed the company's expenses for items considered as owner discretionary. Typical examples of owner discretionary expenses include: paying family members above-market salaries; contributing to non-obligatory pension plans; paying above-market rent to closely-controlled companies; intermingling personal expenses with business necessary expenses for travel, meals, entertainment, marketing and club memberships; and advertising expenses not critical to promotion.

Based on the information provided by Jane Barclay and on the comparison of Tentex Toys' expense spending against the Axiom owner discretionary spending benchmarks, I have made adjustments to the following categories:

Advertising Expense: \$3,000 of the \$8,700 is not directly attributed to a particular promotion and therefore, I have reduced expenses by this amount and added it back to earnings. This has been an on-going expense for several years at the \$3,000 level.

Pension Plan Expense: the \$5,000 expense was at the sole discretion of the owner and was not obligatory in the employees' contracts. Accordingly, I have reduced expenses by \$5,000 and added it back to earnings. Similarly, this has been a regular expense for the last several years, though still completely at the discretion of the two owners.

### **Normalizing the Financial Statements**

As noted above, the earnings numbers for the past few years have been erratic, even after the adjustment for officers' compensation and other owner discretionary expense. Therefore, I have weighted both the base year earnings for the discounted free cash flow valuation method and EBITDA for the market multiple valuation method, using the sum of the digits method, which gives the most recent figures a higher weight. In Table 1-4, the calculations of the starting point values for earnings and EBITDA of this firm are shown, first with the adjustments for valuation purposes and then with the normalization.

**Table 1-4: Normalized Financial Statements for Tentex Toys**  
**Source: Axiom Valuation Solutions and the Financial Information for Tentex Toys**

Item	Twelve Months Ending September 30, 2002 <sup>3</sup>	2001	2000	1999
Sales	\$ 1,781,278	\$ 1,698,550	\$ 1,890,200	\$ 1,814,420
EBITDA Prior to Discretionary Adjustments	\$ 95,160	\$ 67,228	\$ 121,878	\$ 70,012
Adjustments for Valuation Purposes:				
Remove Discretionary Pension Expenses	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Remove Discretionary Advertising Expenses	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Remove Discretionary Owner's Compensation Excess	\$ 148,672	\$ 135,172	\$ 127,072	\$ 116,596
<b>EBITDA for Market Multiple Valuation Method -- Adjusted for Valuation Purposes</b>	<b>\$ 251,832</b>	<b>\$ 210,400</b>	<b>\$ 256,950</b>	<b>\$ 194,608</b>
Weights	40%	30%	20%	10%
Weighted EBITDA	\$ 100,733	\$ 63,120	\$ 51,390	\$ 19,461
<b>Normalized EBITDA for Market- Multiple Valuation Methods -- Adjusted for Valuation Purposes</b>	<b>\$ 234,703</b>			
Operating Earnings <sup>1</sup>	\$ 641,260	\$ 611,478	\$ 661,570	\$ 598,759
Total Deductions <sup>2</sup>	\$ 592,350	\$ 582,150	\$ 578,480	\$ 568,857
Operating Earnings Prior to Discretionary Adjustments	\$ 48,910	\$ 29,328	\$ 83,090	\$ 29,902
Adjustments for Valuation Purposes:				
Remove Discretionary Pension Expenses	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Remove Discretionary Advertising Expenses	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Remove Discretionary Owner's Compensation Excess	\$ 148,672	\$ 135,172	\$ 127,072	\$ 116,596
<b>Operating Earnings for DFCF Valuation Method -- Adjusted for Valuation Purposes</b>	<b>\$ 205,582</b>	<b>\$ 172,500</b>	<b>\$ 218,162</b>	<b>\$ 154,498</b>
Weights	40%	30%	20%	10%
Weighted Operating Earnings	\$ 82,233	\$ 51,750	\$ 43,632	\$ 15,450
<b>Normalized Earnings for DFCF Valuation Method -- Adjusted for Valuation Purposes</b>	<b>\$ 177,615</b>			

<sup>1</sup> Net Receipts minus Cost of Goods Sold is Operating Income. Does not take into account other income.

<sup>2</sup> Total deductions for the twelve months ending 9/30/02 are based on our estimate of total taxable deductions.

<sup>3</sup> Values are from financial statements as of 9/30/2002.

## VALUATION RESULTS: DISCOUNTED FREE CASH FLOW METHOD

Using the discounted free cash flow method, the total fair market value for Tentex Toys is \$1,200,084. The ownership composition of that estimate is shown in Table 1-5. The valuation results reported are as of 9/30/2002. The industry assumptions are Axiom's, and are based on the long-term Winter 2002 economic forecast by Inforum. Based on the company's recent past and anticipated future financial performance, I have assigned the company to the Low Growth segment of this industry.

**Table 1-5: Valuation Results for Discounted Free Cash Flow Method**

Source: Axiom Valuation Solutions

<b>Value by Ownership Component</b>	<b>Equity Components</b>	<b>Value</b>
Ownership Equity		
• Minority Value of Equity	\$835,293	
• Additional Value Due to Control	+ 168,981	
• Total Ownership Equity		1,004,274
Preferred Equity		\$ 0
Total Debt (book value)		\$195,810
Other Liabilities		\$ 0
Estimated Fair Market Value		\$1,200,084

A summary of the intermediate values used to determine the discounted free cash flow valuation is shown in Table 1-6 below.

**Table 1-6: Valuation Calculation Summary for Discounted Free Cash Flow Method**

Source: Axiom Valuation Solutions

After Tax Cash Flow to Firm	\$ 123,309
After Tax Weighted Average Cost of Capital	15.0099%
<b>Present Value of Operating Cash Flows (After Factoring in Net Capital Expenditures and Change in Working Capital for Years 1-5):</b>	
Year 1	\$ 111,038
Year 2	\$ 88,938
Year 3	\$ 82,137
Year 4	\$ 80,559
Year 5	\$ 72,039
Terminal	\$ 767,081
<b>Sum of Present Values of Operating Cash Flows</b>	<b>\$ 1,201,791</b>
Value of Other Income After Tax	\$ 38,136
Excess Cash and Securities	\$ -
Value of Tax Exempt Interest	\$ -
<b>Sum of Non-Operating Sources of Value</b>	<b>\$ 38,136</b>
After Tax Total Value	\$ 1,239,927
Total Debt + Other Long-term Liabilities	\$ 195,810
Minority Ownership Value Before Control Premium and Liquidity Discount	\$ 1,044,117
Loss of Ownership Value Due to Liquidity Discount	\$ 208,823
Minority Ownership Value of Equity	\$ 835,293
Gain in Ownership Value Due to Control Premium	\$ 168,981
<b>Total Ownership Equity</b>	<b>\$ 1,004,274</b>
Total Debt + Other Long-term Liabilities	\$ 195,810
<b>Total Fair Market Value</b>	<b>\$ 1,200,084</b>

## VALUATION RESULTS: MARKET MULTIPLE METHODS

Table 1-7 provides a brief description of the public firms in the same SIC Code as Tentex Toys. The Peer Group Product Service comparison table summarizes my efforts to measure comparability across product service lines. The analysis of peer company product, service, distribution, and competitive similarities and differences to Tentex Toys significantly extends our understanding of the company relative to these public companies.

Table 1-7: Peer Group Summary Comparison

Source: Axiom Valuation Solutions

PEER GROUP PRODUCT/SERVICE COMPARISON	
COMPANY NAME	PRODUCT/SERVICE
Tentex Toys, Inc.	Designs, develops and markets a broad range of toys and dolls from the traditional to high-tech. Sells primarily through independent toy shops.
DSI Toys, Inc.	Designs, develops, markets and distributes dolls, toys and consumer electronics products.
Hasbro, Inc.	Provider of children's and family leisure time and entertainment products and services, including the design, manufacture and marketing of games and toys.
JAKKS Pacific, Inc.	A multibrand company that designs and markets a broad range of toys and leisure products. The product categories include vehicles, action figures, infant/preschool, plush, dolls, water toys, sports activity toys, arts and crafts activity kits, etc.
Mattel, Inc.	Designs, manufactures and markets a broad variety of toy products on a worldwide basis through sales both retailers and direct to consumers. Portfolio of brands are grouped into 3 categories: girls, boys-entertainment and infant/preschool. Sample products include dolls, toy race cars, games and puzzles.
Ohio Art Company	Engaged in two lines of business: the manufacture and distribution of toys domestically and internationally and the manufacture and sale of custom metal lithography and molded plastic products to other manufacturers and consumer goods companies.
The Vermont Teddy Bear Co.	Designer, manufacturer and direct marketer of teddy bears and related products.

Table 1-8 shows the Peer Group Financial Comparison table. As can be seen, Tentex Toys operates on a much smaller scale compared to its peers. Sales of the smallest peer is over 22 times larger than Tentex Toys' sales, while EBITDA is over 15 times that of Tentex Toys.

Table 1-8: Peer Group Financial Comparison for Tentex Toys, Inc.

Source: Axiom Valuation Solutions

COMPANY NAME	TICKER	PRICE <sup>3</sup>	SALES <sup>1</sup>	EBITDA <sup>1</sup>	EBITDA/ SALES	DEBT/ EQUITY <sup>2</sup>	MARKET VALUE	PRICE/ SALES <sup>3</sup>	PRICE/ EBITDA <sup>3</sup>
Tentex Toys, Inc.			\$ 1,781,278	\$ 234,703	0.132	0.33			
DSI Toys, Inc.	DSIT	\$ 0.41	\$ 56,700,000	NM	NM	4.32	\$ 4,469,000	0.08	NM
Hasbro, Inc.	HAS	\$11.13	\$ 2,810,000,000	\$ 326,200,000	0.116	1.03	\$ 1,927,716,000	0.69	5.91
JAKKS Pacific, Inc.	JAKK	\$11.11	\$ 303,000,000	\$ 33,000,000	0.109	0.00	\$ 271,084,000	0.89	8.21
Mattel, Inc.	MAT	\$18.01	\$ 4,890,000,000	\$ 699,800,000	0.143	0.61	\$ 7,873,972,000	1.61	11.25
Ohio Art Company	OAR	\$12.75	\$ 39,600,000	\$ 3,650,000	0.092	0.19	\$ 11,309,250	0.29	3.10
The Vermont Teddy Bear Co.	BEAR	\$ 3.42	\$ 39,200,000	\$ 5,380,000	0.137	0.31	\$ 16,416,000	0.42	3.05
Average for Public Companies		\$ 9.47	\$ 1,356,416,667	\$ 213,606,000	\$ 0.12	1.08	\$ 1,684,161,042	0.66	6.31

<sup>1</sup> All values for the year yyyy or the most recent four quarters available.

<sup>2</sup> Data from the currently available balance sheet.

<sup>3</sup> On share basis, as of September 30, 2002. The Average for Public Companies excludes negative values.

NM - Negative value is Not Meaningful

NA - Values are not available

While there is general comparability between the product mix of Tentex Toys and that of peer firms, the differences in the scale of operations between the public companies and Tentex Toys limit the use of operating financial comparisons. In addition, Tentex Toys

distributes its products only through the independent toy store channel, which is shrinking in its share of the toy and games market. The public firms all use multiple channels of distribution that are growing in market share relative to independent toy stores.

There are too few public firms to develop a regression model where the price to sales multiple for each firm is regressed against a series of financial variables. After a careful review of product mix and financial characteristic differences between Tentex Toys and the peer group firms, I concluded that both revenue and earnings-based market multiples are appropriate to develop a market method fair market value.

### Valuation Using Revenue Market Multiples

I have generated a public company, revenue multiple valuation result for Tentex Toys. The steps in the process and the final result are shown in Table 1-9 below.

**Table 1-9: Valuation by Public Company Comparable Method – Revenue Multiple**  
Source: Axiom Valuation Solutions

<b>Market Method Valuation Findings Based on Revenue Multiples for Public Company Comparables</b>		
1. Revenue for Valuation Purposes		\$ 1,781,278
Multiplied by:		
2. Average of Public Company Price to Sales Ratios		0.662348
Equals:		
3. Fair Market Value of Ownership Equity –Public Company Basis		\$ 1,179,825
Minus:		
4. Liquidity Discount for Privately-held Firms (Line 3 Multiplied by Liquidity Discount Factor)	20.0%	\$ 235,965
Equals:		
5. Fair Market Value of Ownership Equity –Private Company Basis		\$ 943,860
Plus:		
6. Control Premium (Line 5 Multiplied by Control Premium Percentage)	20.23012%	\$ 190,944
Equals:		
7. Fair Market Value of Ownership Equity		\$ 1,134,804
Plus:		
8. Debt and Other Long-Term Liabilities		\$ 195,810
Equals:		
9. Total Fair Market Value – Market Method of Valuation - Revenue Multiple		\$ 1,330,614

### Valuation Using EBITDA Market Multiples

In addition, I have also generated a public company, EBITDA multiple valuation result for Tentex Toys. The steps in the process and the final result are shown in table 1-10.

**Table 1-10: Valuation of Public Company Comparable Method – EBITDA Multiple****Source: Axiom Valuation Solutions**

<b>Market Method Valuation Findings Based on EBITDA Multiples for Public Company Comparables</b>		
1. EBITDA for Valuation Purposes		\$ 234,703
<i>Multiplied by:</i>		
2. Average of Public Company Price to EBITDA Ratios		6.305150
<i>Equals:</i>		
3. Fair Market Value of Ownership Equity –Public Company Basis		\$ 1,479,841
<i>Minus:</i>		
4. Liquidity Discount for Privately-held Firms (Line 3 Multiplied by Liquidity Discount Factor)	20.0%	\$ 295,968
<i>Equals:</i>		
5. Fair Market Value of Ownership Equity –Private Company Basis		\$ 1,183,873
<i>Plus:</i>		
6. Control Premium (Line 5 Multiplied by Control Premium Percentage)	20.23012%	\$ 239,499
<i>Equals:</i>		
7. Fair Market Value of Ownership Equity		\$ 1,423,371
<i>Plus:</i>		
8. Debt and Other Long-Term Liabilities		\$ 195,810
<i>Equals:</i>		
9. Total Fair Market Value – Market Method of Valuation - Revenue Multiple		\$ 1,619,181

**Weighting the Valuation Methods**

To determine a final value for the minority ownership interest in Tentex Toys, I have carefully considered the degree to which the facts of this assignment are consistent with the key assumptions of the methods of valuation used in this assignment, public company market multiples and discounted free cash flow. It is my judgment that the public companies available for use as comparables are of limited use as comparables due to the significant differences in size compared to Tentex Toys, especially the Mattel comparable. Tentex also has limited distribution opportunities because it sells primarily through independent stores, which are shrinking in market share compared to large chains and direct marketing by phone and over the Internet. There are no facts in this assignment that limit the appropriateness of the discounted free cash flow method to the valuation of Tentex Toys. Accordingly, I have assigned the weights as shown in Table 1-11 to the valuation results generated by the different methods employed in this assignment. These have been applied to produce the results shown in Table 1-1.

**Table 1-11: Weighting of Different Valuation Results****Source: Axiom Valuation Solutions**

<b>Valuation Weighting for Tentex Toys as of 9/30/2002</b>	
<b>Valuation Method</b>	<b>Weight</b>
Discounted Cash Flow Valuation	60%
Public Company Comparable - Value to Revenue Multiple	20%
Public Company Comparable - Value to EBITDA Multiple	20%
<b>Sum of the Valuation Weights</b>	<b>100%</b>

## VALUATION ASSIGNMENT TERMS AND CONDITIONS

Axiom is independent of the Tentex Toys, Inc. and related organizations, and neither Axiom nor I have any financial interest in the securities subject to appraisal. Our fee for this valuation is in no way influenced by the result of our valuation conclusion. This valuation report is prepared solely for the purpose stated herein.

The remaining sections and appendices further describe the analyses performed and the conclusions reached during this valuation. The attached certification, limitation of liability, statement of contingent and limited conditions, and my qualifications are integral parts of this valuation opinion.

---

Dr. Stanley Jay Feldman, Chief Valuation Officer

---

Date



---

## SECTION 2: THE VALUATION ASSIGNMENT

---

### DESCRIPTION OF THE ENTITY BEING VALUED

Tentex Toys is a privately held company operating primarily in the Game, Toy, and Children's Vehicle Manufacturing sector, hereinafter referred to as Game, Toy, & Children's Vehicle Manufacturing. The corporate address is located in the state of Illinois. The valuation results are based on information from the company's financial results for the twelve months ending September 30, 2002, a review of four years of income statements and four years of balance sheets for this firm, and a valuation interview by phone conducted by the Axiom staff.

The valuation is for the income generated by the total entity from the main business operations, from the income generated by other non-operating activities, such as investments in real estate or in other companies, and for the value of assets on the balance sheet in excess of those needed for working capital.

### Valuation Key Assumption:

A key assumption of this valuation is that the assets of Tentex Toys, such as production equipment, technology, patents, intangible assets, or real estate holdings, have no greater value as standalone assets than they have as profit-generating assets for this business. Based on the information provided on this entity, I have determined that no adjustment to the valuation is necessary for assets with greater market value than their current income stream.

### REVENUE AND PROFIT

Revenue net of returns and allowances for Tentex Toys in the twelve months ending September 30, 2002 is \$1,781,278, as can be seen in Table 2-1. Before tax operating earnings defined as net receipts less all expenses excluding taxes paid is \$48,910. The before tax operating profit margin is 2.7%.<sup>1</sup> The before tax operating profit margin indicates on average how much profit the firm generates per \$1 dollar of revenue.

---

<sup>1</sup> Before tax operating margin is defined as before tax operating profits divided by net receipts



**Table 2-1: Summary Income Statement for Tentex Toys****Source: Tentex Toys, Inc.**

Concepts		Years				
Line	Income	Twelve Months Ending September 30, 2002 <sup>1</sup>	2001	2000	1999	1998
1a	Gross receipts or sales	\$ 1,804,478	\$ 1,718,550	\$ 1,909,500	\$ 1,833,120	\$ 1,778,126
1b	Less returns and allowances	\$ 23,200	\$ 20,000	\$ 19,300	\$ 18,700	\$ 18,100
1c	Balance - Net Receipts	\$ 1,781,278	\$ 1,698,550	\$ 1,890,200	\$ 1,814,420	\$ 1,760,026
2	Cost of goods sold	\$ 1,140,018	\$ 1,087,072	\$ 1,228,630	\$ 1,215,661	\$ 1,196,818
3	Gross profit	\$ 641,260	\$ 611,478	\$ 661,570	\$ 598,759	\$ 563,208
10	Other Income	\$ 6,000	\$ 5,500	\$ 5,000	\$ 5,000	\$ 5,000
11	<b>Total income (loss)</b>	<b>\$ 647,260</b>	<b>\$ 616,978</b>	<b>\$ 666,570</b>	<b>\$ 603,759</b>	<b>\$ 568,208</b>
<b>Expenses</b>						
18	Interest	\$ 27,900	\$ 27,200	\$ 28,560	\$ 29,988	\$ 29,688
21b	Net Depreciation	\$ 12,350	\$ 5,200	\$ 5,227	\$ 5,123	\$ 4,969
27	<b>Total deductions.</b>	<b>\$ 592,350</b>	<b>\$ 582,150</b>	<b>\$ 578,480</b>	<b>\$ 568,857</b>	<b>\$ 549,922</b>
28	Taxable income before net operating loss deduction and specials deductions	\$ 54,910	\$ 34,828	\$ 88,090	\$ 34,902	\$ 18,286
	<b>Taxable Income</b>	<b>\$ 54,910</b>	<b>\$ 34,828</b>	<b>\$ 88,090</b>	<b>\$ 34,902</b>	<b>\$ 18,286</b>
	<b>Operating Earnings (Line 3 - Line 27)</b>	<b>\$ 48,910</b>	<b>\$ 29,328</b>	<b>\$ 83,090</b>	<b>\$ 29,902</b>	<b>\$ 13,286</b>
	<b>EBITDA (Line 11 - Line 27 + Line 18 + Line 21b)</b>	<b>\$ 95,160</b>	<b>\$ 67,228</b>	<b>\$ 121,878</b>	<b>\$ 70,012</b>	<b>\$ 52,943</b>

<sup>1</sup> Values are from financial statements as of 9/30/2002.

## ADJUSTMENTS TO THE FIRM'S FINANCIALS

Generally accepted valuation practices require the valuation expert to review the financials of the company along a few key dimensions to determine whether any adjustments should be made to the financials.

### Officers and Owners Compensation

Owners of privately held companies have the discretion to set their own compensation. As part of an expert valuation, the compensation of the officers (and owners, if different from the officers) must be reviewed to determine whether his/her/their reported compensation exceeds an estimate of the average officers' compensation for companies in the same industry, of similar size, and located in the same state. If the reported officers' compensation is greater for a company than the Axiom estimate of the average officers' compensation for companies in the same industry, of similar size, and located in the same geographic area, then the amount of the difference is reclassified as profit for the company. This adjustment is the best available proxy for determining how much of officers' compensation is the market-determined salary, and how much, if any, is a dividend for the owner (s).

Axiom has developed a database on CEO salaries (not including bonuses or dividends) by industry and firm asset size class, starting with the latest available data from the United States Bureau of Labor Statistics Occupational Employment Survey (BLS-OES). Using a rigorous and consistent methodology, we have extrapolated, where necessary, the BLS-OES data to cover our 980 plus NAICS-based sectors. The information is further mapped using relevant target indicators by asset class by sector. Finally, we apply the latest BLS-OES geographic differentials for CEO compensation to adjust the

compensation values for differences in pay levels across states and metropolitan statistical areas. The resulting dataset has been checked for reasonableness by asset class, industry, and location. The values generally reflect the fact that owner salaries tend to be less for smaller than larger firms.

Owners of most privately-held firms pay themselves a sum that reflects both the cost of their labor, what it would cost the firm to hire someone of equal skill to do what the owner does, and a variable amount that reflects the return on the owner's business investment. The sum of these payments should show up on the Officers' Compensation line from the tax returns.

Axiom has calculated a benchmark owner compensation amount based on the CEO salary from our database (for this industry, size of business, and geographical area) of owner(s), and the number of active owners. The remainder, the difference between what total owner compensation and estimated salary income, if any, is added to the firm's taxable net income. The review of Officers' Compensation is shown In Table 2-2.

**Table 2-2: Review of the Officers' Compensation for this Firm**

**Source: Axiom Valuation Solutions and the Financial Information for Tentex Toys**

<i>Concept</i>	<i>Value</i>
1) # of Owners	2
2) Salary Cost Estimate Per Owner	\$67,414
3) Total Salary + Benefits Costs per Owner	\$67,414
4) Total Salary and Benefits Costs for the Owners	\$134,828
5) Officers' Compensation As Reported	\$283,500
6) Adjustment to Pre-tax Net Income: Row 6 –Row 5	\$148,672

Based on Axiom's review of Officers' Compensation for Tentex Toys, these payments exceed the owner average salary and benefits costs for a firm in the Game, Toy, & Children's Vehicle Manufacturing industry of similar asset size and operating in Illinois. The difference between reported Officers' Compensation and the total salary benchmark for the owners has been added back to Tentex Toys' reported profit for the tax year. This difference is the best available estimate of the return to capital that was paid to the owner(s) of this capital as a bonus. This is equivalent to a dividend paid to shareholders of a public company except in this case the managers and the owners of the business are the same people.

### **Other Adjustments for Valuation Purposes**

Based on information provided in the valuation interview about owner discretionary spending and other related items, adjustments to company earnings have been made according to generally accepted valuation principles. This results in reducing total expenses for the discretionary pension and advertising expenses and increasing

earnings by an equivalent amount. For this valuation of Tentex Toys as of 9/30/2002, the total of these adjustments to expenses and earnings is \$8,000.

### **Timeliness**

Another key dimension of the valuation is timeliness. This means that the ending period for the latest available financial results of the company being valued should be as close to the valuation as of date as possible. For the valuation of Tentex Toys, the valuation as of date is 9/30/2002 and the ending date of the company financials used for the base year is September 30, 2002. Based on our review of the timeliness, the financials for Tentex Toys used for the valuation adequately reflect the business situation as of 9/30/2002.

### **Using Twelve Months Ending September 30, 2002 Financials As the Valuation Starting Point**

Another key question in this valuation assignment is whether the financial results of Tentex Toys for the twelve months ending September 30, 2002 are generally consistent with the last few years of financial performance. Although we adjust the input data in a number of significant ways in order to represent the cash generating potential of the firm being valued, the forecasts of future operating profits are based on a starting value, which is constructed from financial statement inputs for the 10/1/2001 to 9/30/2002 period. The natural question is: if the year in question is an exceptionally good or bad year, should adjustments be made to normalize this base value?

I have reviewed the income statements and balance sheets from the tax statements of Tentex Toys from 1998 to 2001. I also reviewed the financial statements for the most recent twelve months ending September 30, 2002. I find that the values for the twelve months ending September 2002 are the most appropriate starting point figures for this valuation for revenue, because these figures are consistent with the recent growth pattern of this firm and its industry.

However, for earnings and EBITDA, the company's results have fluctuated significantly over the period of review, even after adjusting for owner compensation and owner discretionary expenses. Consequently, I have normalized the earnings and EBITDA values used for the valuation, as shown in Table 2-3.

Table 2-3: Normalized Financial Statement for Tentex Toys

Source: Axiom Valuation Solutions and the Financial Information for Tentex Toys

Item	Twelve Months Ending September 30, 2002 <sup>3</sup>	2001	2000	1999
Sales	\$ 1,781,278	\$ 1,698,550	\$ 1,890,200	\$ 1,814,420
EBITDA Prior to Discretionary Adjustments	\$ 95,160	\$ 67,228	\$ 121,878	\$ 70,012
Adjustments for Valuation Purposes:				
Remove Discretionary Pension Expenses	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Remove Discretionary Advertising Expenses	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Remove Discretionary Owner's Compensation Excess	\$ 148,672	\$ 135,172	\$ 127,072	\$ 116,596
<b>EBITDA for Market Multiple Valuation Method -- Adjusted for Valuation Purposes</b>	<b>\$ 251,832</b>	<b>\$ 210,400</b>	<b>\$ 256,950</b>	<b>\$ 194,608</b>
Weights	40%	30%	20%	10%
Weighted EBITDA	\$ 100,733	\$ 63,120	\$ 51,390	\$ 19,461
<b>Normalized EBITDA for Market- Multiple Valuation Methods -- Adjusted for Valuation Purposes</b>	<b>\$ 234,703</b>			
Operating Earnings <sup>1</sup>	\$ 641,260	\$ 611,478	\$ 661,570	\$ 598,759
Total Deductions <sup>2</sup>	\$ 592,350	\$ 582,150	\$ 578,480	\$ 568,857
Operating Earnings Prior to Discretionary Adjustments	\$ 48,910	\$ 29,328	\$ 83,090	\$ 29,902
Adjustments for Valuation Purposes:				
Remove Discretionary Pension Expenses	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Remove Discretionary Advertising Expenses	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000
Remove Discretionary Owner's Compensation Excess	\$ 148,672	\$ 135,172	\$ 127,072	\$ 116,596
<b>Operating Earnings for DFCF Valuation Method -- Adjusted for Valuation Purposes</b>	<b>\$ 205,582</b>	<b>\$ 172,500</b>	<b>\$ 218,162</b>	<b>\$ 154,498</b>
Weights	40%	30%	20%	10%
Weighted Operating Earnings	\$ 82,233	\$ 51,750	\$ 43,632	\$ 15,450
<b>Normalized Earnings for DFCF Valuation Method -- Adjusted for Valuation Purposes</b>	<b>\$ 177,615</b>			

<sup>1</sup> Net Receipts minus Cost of Goods Sold is Operating Income. Does not take into account other income.<sup>2</sup> Total deductions for the twelve months ending 9/30/02 are based on our estimate of total taxable deductions.<sup>3</sup> Values are from financial statements as of 9/30/2002.

---

## SECTION 3: THE U.S. ECONOMIC OUTLOOK<sup>2</sup>

---

### OVERVIEW

Since our Spring Outlook, the economic situation has changed significantly. The events of September 11 and afterwards have surely been responsible for a darkening of both the domestic and the international economic prognosis. It is true that the decline in the stock market, the dot-com failures, and the weakness in equipment investment already foreshadowed an end to the economic expansion well before the terrorists attacked the World Trade Towers and the Pentagon. However, economy watchers have recently been subjected to a barrage of negative economic news: the -0.4% real GDP growth in the 3<sup>rd</sup> quarter; the rise in the unemployment rate to 5.4 percent; twelve consecutive monthly declines in industrial production; a fall in consumer confidence; and a whopping 1.8 percent monthly decline in personal spending.

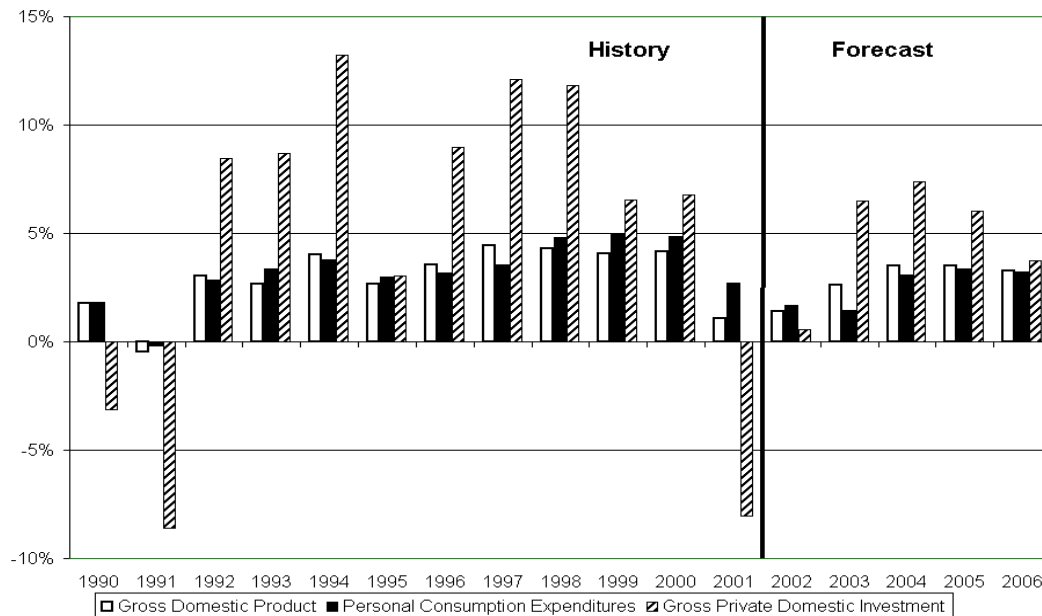
Despite all these pessimistic news items, there are signs of stimulus. Inventory disinvestments have been a strong drag on the economy in 2001, but it has bottomed out by early 2002. In response to the looming recession, the Fed has cut rates 10 times, which over time should stimulate plant and equipment investment as well as home buying. The summer tax rebate put more disposable income in consumers' pockets, and tax rates will fall further next year. Federal government spending is due to increase as bailout packages and anti-terrorism measures go into effect, and as defense spending ramps up for what promises to be a prolonged conflict.

We expect the final numbers for real GDP growth for 2001 to be 1.1 percent, followed by growth of 1.4 percent in 2002. As we look beyond 2002, we project a return to strong real GDP growth. Growth in the 5 years after 2002 (2003-2007) is projected to average 3.2 percent.

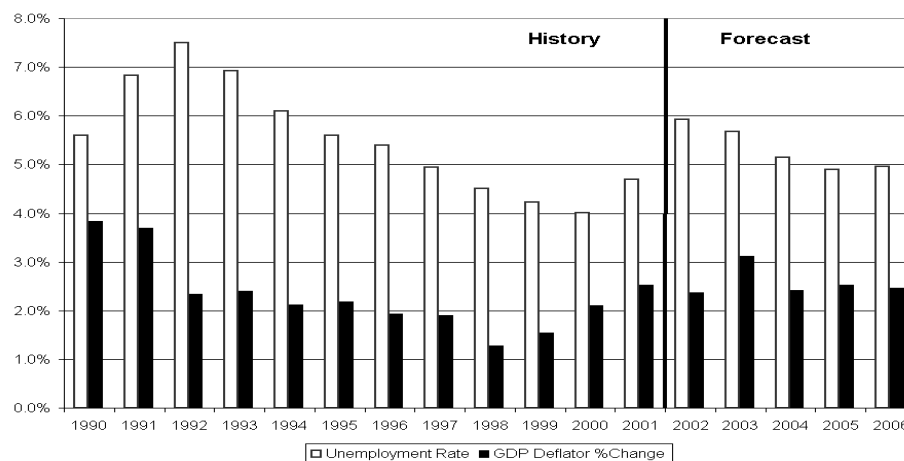
The Inforum long-term forecast projects inflation, measured by the GDP deflator, to be slightly more than 2 percent annually for the next 15 years. Short-term interest rates are expected to rise again as growth resumes. We expect the unemployment rate to climb to a high of 5.9 percent in 2002, but return to a range around 5 percent for the rest of the forecast. The annual percentage changes in constant dollar gross domestic product, consumption, and investment over the history from 1990 to 2001, and the forecast from 2002 to 2006 are shown in Chart 3-1.

---

<sup>2</sup> Adapted from Inforum Semi-Annual Industry Forecast: Winter 2002, Copyright IERF, Inc.

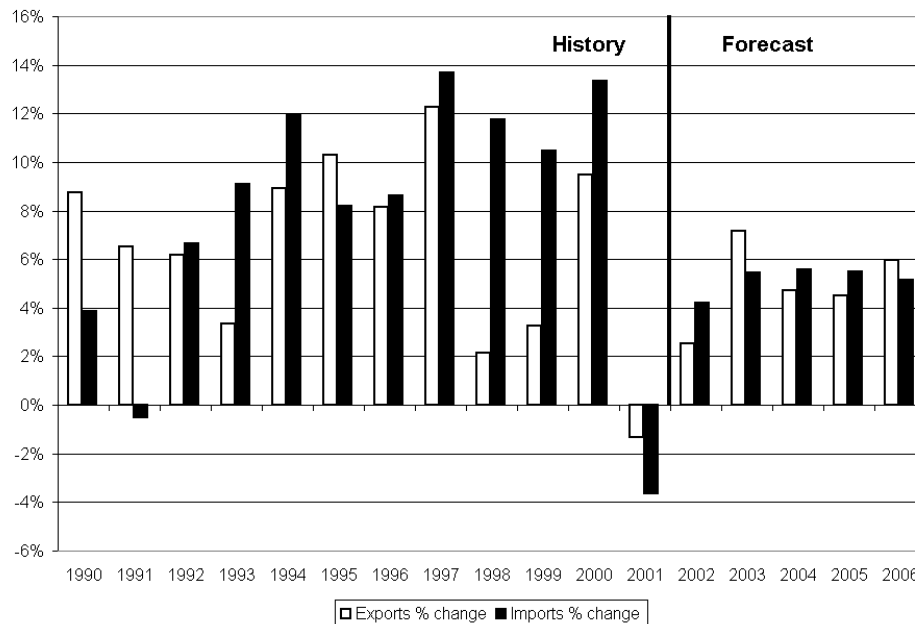
**Chart 3-1: History and Forecast for Gross Domestic Product, Consumption, and Investment****(Annual Percentage Change in Real 1996\$)****Source: Inforum Winter 2002 and Axiom Valuation Solutions**

Overall, the forecast projects inflation, measured by the GDP deflator, to grow at about 2.6 percent annually for the forecast period. Moderate growth, coupled with low inflation, produces reasonably low interest rates. Rates on 3-month Treasury bills average 3 percent over the forecast period. All of this occurs within the context of an economy that maintains the unemployment rate between 4.9 and 5.9 percent of the labor force, shown in Chart 3-2.

**Chart 3-2: Inflation and Unemployment Rate: Both Indicators Improve over the Forecast****Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions**

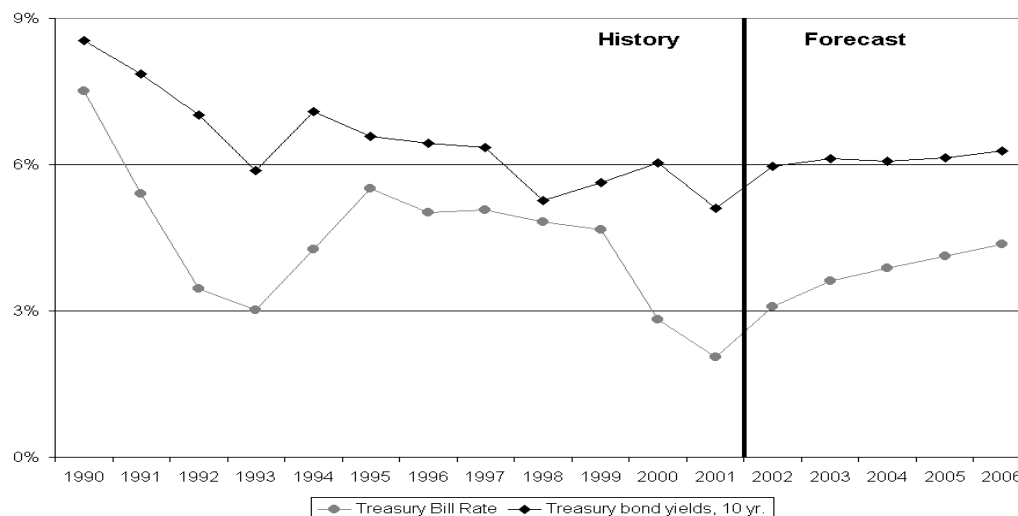
Over the forecast period, exports and imports are expected to grow at close to the same rate. The U.S. trade deficit is expected to rise as traditionally occurs during economic recoveries, as shown in Chart 3-3.

**Chart 3-3: Growth in Exports and Imports: Exports and Imports Register Growth**  
**Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions**



The interest rate outlook in the near-term reflects the Federal Reserve's intention to keep interest rates low to assist in the economic recovery. Once the economy is back on a clear growth path, interest rates should rise slightly over the forecast period, as shown in Chart 3-4.

**Chart 3-4: Interest Rates: A Slight Rise as the Economy Improves**  
**Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions**

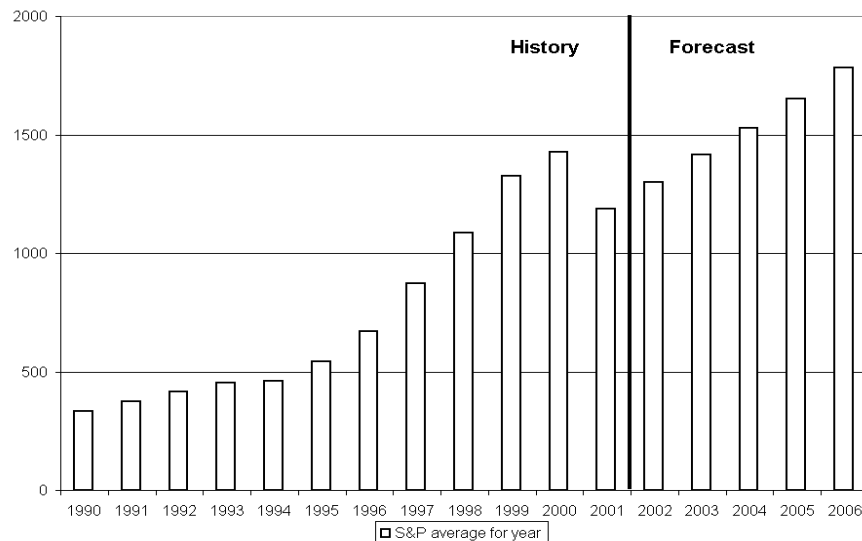


Despite a weak economy at the beginning of 2002, both earnings and the continuation of low interest rates are expected to propel the value of U.S. stocks (as measured by the

S&P 500 Index) upward, as shown in Chart 3-5. While the S&P500 has declined significantly from its high in March of 2000, and stock prices in general have languished for some time; many analysts believe that even at current levels the stock market is too expensive. They point to the fact that the price to earnings ratio for the S&P 500 is historically high, and past behavior suggests that stock prices generally do not increase under this circumstance. However, when one considers both the low level of interest rates and the expected profit growth that accompanies economic recovery, the chances are quite good that the stock market will be poised for an upward move.

**Chart 3-5: Standard& Poors 500 Index: Stock Prices Rise after A Tough 2001**

**Source: Axiom Valuation Solutions**



## KEY FORECAST ASSUMPTIONS

### Fiscal Policy

The Bush tax cut package (the Economic Growth and Tax Relief Reconciliation Act of 2001) was passed in June, with personal tax rebates contributing almost \$40 billion to disposable income in the 3<sup>rd</sup> quarter of 2001. Continued declines in the personal income tax rate are projected until 2010. We have based our estimated personal income tax rates on ratios of projected taxes paid to the projected tax base in the CBO *Budget and Economic Outlook: An Update*, from August. The tax reduction was implemented simply as a reduction in the implied federal income tax rate variable, which is exogenous. Rather than revoke the tax cuts in 2011, we let the tax rates continue to drift down slowly. We did not change the payroll tax rate.

The tax cut reduces the federal revenue share of GDP from 20.8 percent in 2000 to 19.8 percent in 2010, after which the ratio declines slowly. It's useful to remember that only part of the decline in the revenue/GDP ratio reflects a cut in federal tax rates. Another factor behind the falling federal revenue share of GDP is a return to a more normal growth of capital gains tax revenue, which has been unusually high over the last few years, and which has contributed to the surpluses that have emerged since 1999.



To project federal spending, we rely on projections from other sources or on behavioral or “accounting” relationships. For example, Medicare and Social Security outlay projections, as shares of nominal GDP, are taken from the respective trust fund reports. Outlays for unemployment insurance rely on the number of people unemployed and an assumption about the real, yearly transfer per unemployed person. These kinds of relationships account for the bulk of the projection of federal spending.

Defense spending also rises rapidly as the war on terrorism gives rise to expenditures on munitions, tanks, aircraft, and a broad cross section of high tech electronics.

### **Monetary Policy**

With 10 federal fund rate cuts so far this year, monetary policy has certainly been in the headlines. The rate cuts translate directly into declines in short-term interest rates, represented by the 3-month Treasury bill rate. We are assuming that the Federal Reserve continues to “lean against the wind,” by raising short-term interest rates when the economy begins to press on its capacity to produce.

### **Commodity Prices and Exchange Rates**

Our projection contains a few assumptions about key commodity/sectoral prices, which are naturally exogenous to the model. The major prices we set are:

- ❑ The producer price for agriculture, forestry, and fishery products is set to grow 0.5 percentage points slower than the consumption deflator.
- ❑ The producer price for crude petroleum is set in dollars per barrel through 2002. The indicator we use is the Energy Information Administration’s domestic first purchase price. That price averaged \$26.72 per barrel in 2000, and we expect the price to average \$23.00 through 2002. After 2002, oil prices rise 0.25 percentage points faster than the GNP deflator.
- ❑ The producer price for natural gas at the wellhead is expected to mimic the movements in the crude oil price over the forecast period.

In general, we project that, following on the heels of the sharp appreciation of the dollar vis-à-vis Euro currencies in 2000 and slight appreciation in 2001, the dollar slowly depreciates against Euro currencies. In general, the long-term depreciation brings the Euro to approximate parity with the dollar by 2010. For Canada, we assume the current exchange rates will be maintained during the entire forecast period. For the Mexican peso, the dollar will appreciate a little next year and then remain constant throughout the rest of the forecast horizon.

Over the next year, we assume that the dollar will depreciate slightly against the yen and then remain stable. For China, we assume that there will be no major depreciation or appreciation with respect to the dollar.

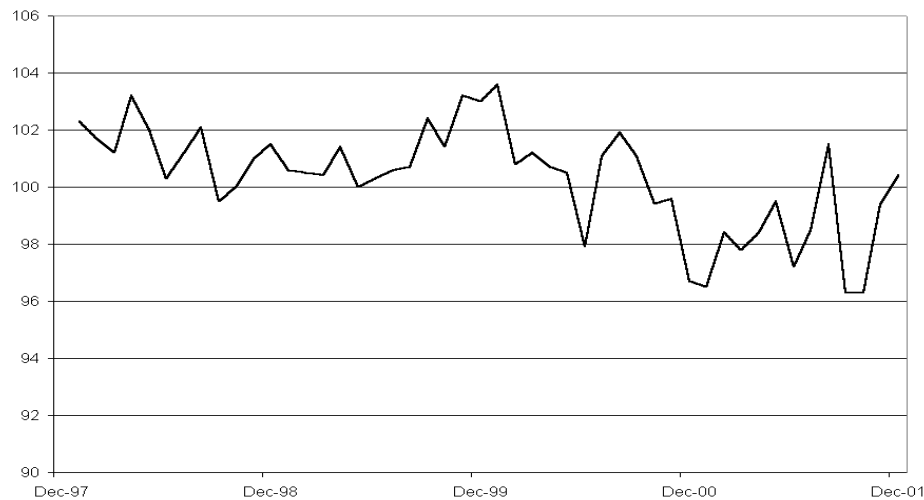
## THE ECONOMY FROM THE BUSINESS OWNER PERSPECTIVE

### The State of Small Business Owner Sentiment

Over the last year, the NFIB Small Business Owner Sentiment index has been on a roller coaster-like ride down from its most recent high point in August 2001, as shown in Chart 3-6. Small business owners had an early read on the economic slowdown that became widely recognized by the fall of 2000. The NFIB index hit a low point in January 2001, rebounded for a time, declined to its January 2001 level, and recorded a major increase in December 2001. This suggests that business owners are expecting an economic recovery and can be expected to increase their spending accordingly.

**Chart 3-6: Small Business Owner Sentiment: Poised for a Comeback?**

**Source: National Federation of Independent Business, as reported on FreeLunch.com**



Looking back over the last several years, the recent lows for the NFIB Small Business Owner Sentiment are still well above the lows recorded in early 1991 and mid 1993, as shown in Chart 3-7. This relatively strong level of confidence in the small business sector is one of the reasons underlying the forecasted turnaround in the economy.

**Chart 3-7: Small Business Owner Sentiment: Relatively Not So Low**

**Source: National Federation of Independent Business, as reported on FreeLunch.com**



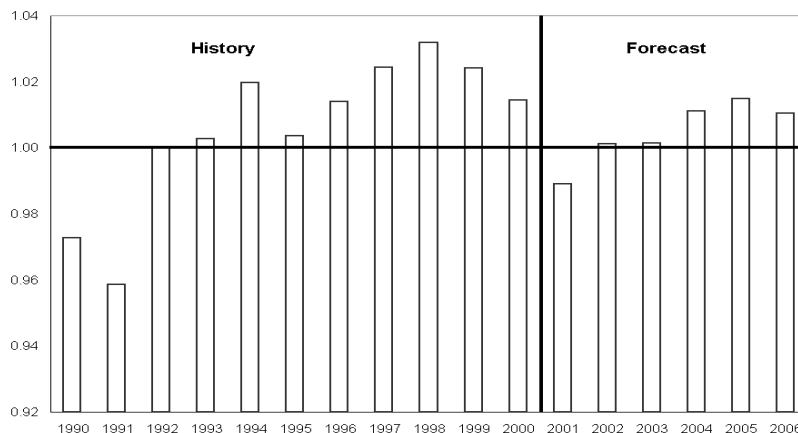
## The State of the Economy from the Business Owner Perspective

Looking forward using the Inforum forecast, after the slowdown in 2001, small business owners should generally experience a rebound in 2002 and 2003, and then solid, but modest growth from 2004 to 2006. The Axiom Economy Performance Index shown in Chart 3-8 is calculated by starting with 1.0 and then adding the percentage growth of real economic growth and finally subtracting the percentage increase in inflation. When the value is 1, then economic growth is being matched by growth in inflation. When inflation exceeds real economic growth, the index is less than 1.

From this perspective, the 1997 to 2000 years were great, as real economic growth soared in a time of low inflation. The performance of the economy over the forecast period is not as good, but more in line with the 1993 to 1996 period, which was certainly a positive growth period for the U.S. economy; and 2001 has been nowhere as tough as 1990 and 1991.

**Chart 3-8: The Axiom Valuation Solutions Economy Performance Index: The Future Looks Bright**

**Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions**

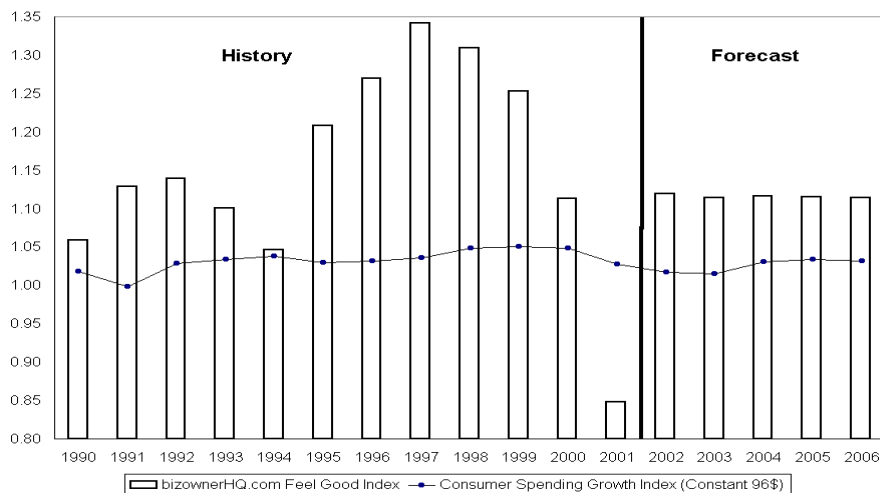


## The State of the Consumer from the Business Owner Perspective

Consumer spending has continued to grow throughout the 2001 slowdown, but at a rate of 2.7%, is less than the 2000 consumer growth of 4.8%. The Axiom Feel Good Index (shown in Chart 3-9) that combines the change in disposable income with a wealth effect (the change in the stock market as measured by the S&P 500 Index) shows how sharply consumer perceptions of how good they felt about their economic fortunes changed in 2001.

The Feel Good Index for this year will likely be below 1.0 for the first time in recent memory. This below normal value reflects that the decline in the stock market measure outweighed the relatively small increase in disposable income for 2001. When we plug the Inforum forecast values into the Axiom Feel Good Index, we see a bounce back to values greater than 1.0 territory in 2002, after a very tough 2001. Over the remaining forecast years, the Feel Good Index stays in that range, but is lower than most years in the 1990s. Our forecast of relatively slow growth in the stock market is the primary factor underlying the lower Feel Good Index forecast.

**Chart 3-9: Axiom Valuation Solutions Feel Good Index:  
Coming Down from Late 1990s Highs, Will Bounce Back Moderately**  
Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions

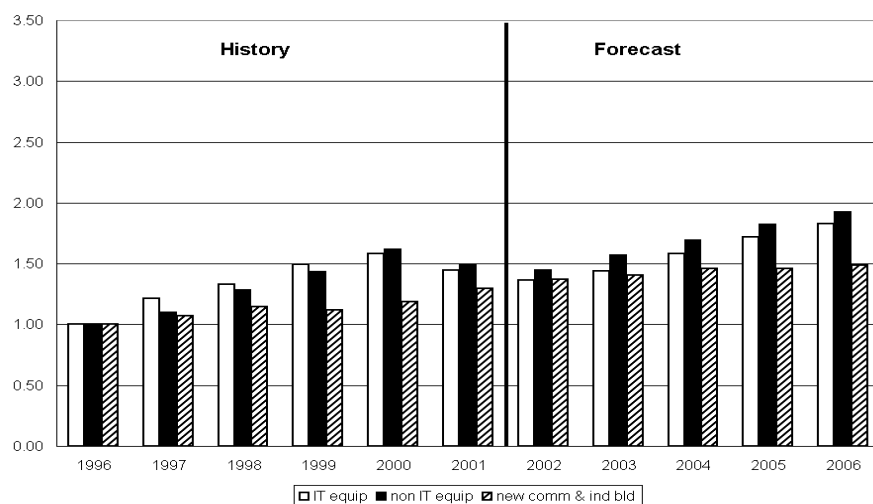


Small businesses that sell primarily to consumers should experience improvements in consumer spending by Summer 2002. However, the high growth times of the mid to late 1990s are unlikely to return.

### The State of Capital Spending

Capital spending is the key to future economic growth. The economy is in the midst of a major technology shift that requires large and small firms alike to make investments in information technology capital. This trend will continue despite the fact that there is a capital spending growth slowdown currently, as shown in Chart 3-10.

**Chart 3-10: Capital Spending Indexes**  
Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions  
(Each Series is Indexed to 1 in 1996)



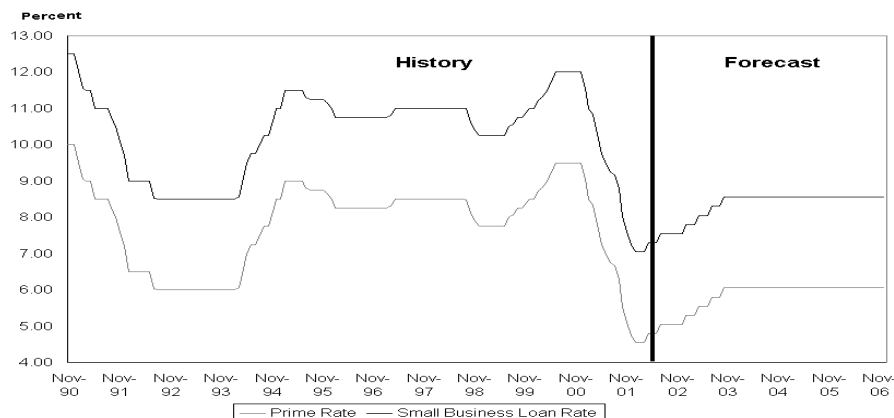
According to the Inforum forecast, investment in information technology (IT) equipment will show modest growth. Investment in non-IT equipment will decline in 2002, before

staging a modest recovery over the forecast period. Commercial and industrial building will increase in line with the overall economy.

### The State of Small Business Financing

The availability of debt financing for small businesses has tightened somewhat during the economic slowdown in 2001. Although interest rates (shown in Chart 3-11) will rise, liquidity will be plentiful. Nevertheless, small business will continue to face tight credit standards. Weakness in the economy always translates to increased credit risk, and bankers are very sensitive to this. Banks are cautious, despite the generally good credit record small businesses have had during periods of economic weakness. This banking mindset will not change this time around. While working capital and asset based financing will be available at affordable rates, the non-monetary terms of these contracts are likely to be less flexible. This is likely to translate into a higher cost of capital than the current small business-lending rate reflects. As the economy expands in 2002 and beyond, these constraints will be reduced and overall credit standards applied to small business borrowers will loosen.

**Chart 3-11: The "Prime" Rate and the Small Business Loan Rate**  
**Source: Inforum Winter 2002 Forecast and Axiom Valuation Solutions**



### Summary

Despite a significant slowdown across the U.S. economy in 2001, the Inforum forecast as well as most other mainstream forecasters predict that the economy will rebound in 2002 and continue on a reasonable growth path over the forecast period. It appears unlikely that the U.S. economy will return to the high levels of growth of the past 5 years. It also appears unlikely that the U.S. economy will fall into a prolonged recession.

The overall U.S. economic outlook should have a modestly positive impact on the value of Tentex Toys over the next few years. A balanced economic outlook with modest growth, low inflation, low unemployment, and moderate interest rates presents an environment conducive to meeting the financing needs of businesses of all sizes.

## SECTION 4: THE INDUSTRY OUTLOOK

### INDUSTRY FORECAST FOR GAME, TOY, & CHILDREN'S VEHICLE MANUFACTURING

Tentex Toys operates in the Game, Toy, & Children's Vehicle Manufacturing industry. Based on the company's recent past and anticipated future financial performance of Tentex Toys, I have assigned this firm to the Low Growth segment of this industry. This means that this firm's earnings should grow at the same rate as the low growth segment's average.

In Table 4-1, we show the history and forecast for the valuation drivers used to project the free cash flows for this company. These drivers are the annual percentage growth rates for industry revenue and operating profit.

**Table 4-1: History and Forecast for the Low Growth Segment of the Game, Toy, & Children's Vehicle Manufacturing Industry**

<i>Year</i>	<i>Revenue Growth</i>	<i>Operating Profit Growth</i>
1997	- 1.6%	18.4%
1998	- 4.5%	18.1%
1999	8.5%	19.1%
2000	3.0%	2.7%
2001	0.7%	- 0.6%
<i>Average Growth Rate 1997 - 2001</i>	1.1%	11.2%
2002	- 0.7%	6.4%
2003	1.0%	7.1%
2004	4.1%	8.2%
2005	3.1%	5.1%
2006	1.6%	3.6%
<i>Average Growth Rate 2002 - 2006</i>	1.8%	6.1%
<i>Terminal Growth Rate</i>	N/A	4.0%

Growth in operating profit for this industry over 2002 to 2006 will average 6.1%. This growth is less than the previous five years. Growth in revenue over the forecast period will average 1.8%, greater than the previous five years.

A projected operating profit growth rate beyond 5 years is also needed to calculate the "terminal" value of the business. The terminal operating profit growth rate for companies in this industry using the Low Growth forecast path is 4.0%. This represents the expected long-term growth in profits without any net new investment. The assumption for this long-term growth rate is that companies in the Low Growth segment have long-

term profit growth prospects 1% lower than the long-term growth rate of the U.S. economy in current dollars.

### **Determining the Appropriate Growth Segment for Tentex Toys**

The choice of the growth segment going forward for Tentex Toys involves several considerations. Tentex Toys has experienced fluctuations in revenue and earnings over the last five years, as has its industry as shown above in Table 4-1. I have already made normalizing adjustments to earnings and EBITDA in the base year values to reflect this volatility.

Based on the Inforum/Axiom projections, the Game, Toy, & Children's Vehicle Manufacturing industry is forecasted to have higher than average growth in earnings, although with relatively low revenue growth. Even the Low Growth segment's earnings growth rate for Game, Toy, & Children's Vehicle Manufacturing is 6.1%, which is higher than overall economy growth rate.

During the valuation interview, Jane Barclay said that she and the other co-owner of Tentex Toys have been satisfied with the approximate revenue size and earnings productions of the company over the recent past. They think that the investments necessary for to achieve higher rates of growth would require changes in the ownership structure to access more capital. Ms. Barclay and her co-owner are not interested in making those kinds of changes to raise additional capital for growth.

Given these ownership objectives and the relatively weaker market position that the company faces from having limited distribution channels, the Low Growth Segment earnings growth rate for Game, Toy, & Children's Vehicle Manufacturing is the most appropriate proxymore sense for the near-term outlook for the company.

The long-term or terminal growth rate for Low Growth segment companies is 4.0%. The long-term growth rate generally has a larger impact on the total valuation results than the near-term projections. This long-term growth rate of 4.0% seems more in line for the future path of Tentex Toys, as outlined in the valuation interview.

After careful consideration, I have chosen the Low Growth segment as the best measure for the discounted free cash flow valuation method for Tentex Toys.

### **FACTORS AFFECTING PERFORMANCE OF GAME, TOY, & CHILDREN S VEHICLE MANUFACTURING**

#### **Industry Overview**

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles). The structure of this industry is given in Table 4-2.

**Table 4-2: Industry Structure**  
**Source: 1997 Economic Census**

<i>NAICS</i>	<i>Industry Name</i>	<i>Establishments</i>	<i>Annual Sales (1000's of Dollars)</i>	<i>Paid Employees</i>	<i>Annual Payroll (1000's of Dollars)</i>	<i>Sales (1000's of Dollars)/ Paid Employees</i>	<i>Sales (1000's of Dollars)/ Establish- ments</i>	<i>Non- Labor Income per Sales</i>
339932	Game, toy, & children's vehicle manufacturing	785	\$4,534,497	29,622	\$773,459	\$153	\$5,776	83%
339	Miscellaneous manufacturing	31,554	\$101,024,753	735,337	\$22,001,090	\$137	\$3,201	78%

The above table indicates that sales per employee are higher for Game, Toy, & Children's Vehicle Manufacturing than Miscellaneous Manufacturing. This means that Game, Toy, & Children's Vehicle Manufacturing are more productive than Miscellaneous Manufacturing as a whole. This conclusion is supported by sales per establishment also being more than Miscellaneous Manufacturing in general. The relative productivity performance of Game, Toy, & Children's Vehicle Manufacturing appears to flow through to profits, which can be seen by noting non-labor income to sales, a gross profit measure, is larger for Game, Toy, & Children's Vehicle Manufacturing than for Miscellaneous Manufacturing.

### THE INDUSTRY TO FIRM FORECAST CONNECTION

The value of Tentex Toys is directly related to the performance of the Game, Toy, & Children's Vehicle Manufacturing industry. Axiom has developed this forecast for the Game, Toy, & Children's Vehicle Manufacturing industry, as part of an integrated industry forecasting system for over 980 industries. This system provides reliable and consistent measures of operating profits, revenue, and operating profit margin growth by industry.

### Axiom's Industry Forecasting System

One of the biggest challenges facing a valuation consultant is how to develop a reliable forecast of a company's revenues and profits. Some valuation consultants make projections of a company's future revenue and profit performance based on the recent history of the firm. As we show later in this section, the consensus of financial academic research is that this approach rarely produces accurate results, measured on an after-the-fact basis.

Other valuation consultants look for a forecast of the industry's performance from a third party source, often a so-called industry expert. The valuation consultant uses this industry forecast as the guide to forecasting the performance of the company. The main weakness of this one industry forecasting approach is the tendency for industry experts to be "cheerleaders" for the industry.

Axiom has focused significant resources to develop a reasonable solution to this key challenge to valuation consultants. Based on our review of the financial academic literature, we determined that using an industry-based system was unquestionably the



most reliable approach for providing target growth rates to drive the company's revenue and profits forward.

To avoid the problem of potential bias of the expert for a single industry, we chose to go with a detailed cross-industry, multi-stage modeling approach. The starting point for this modeling system is the Inforum macroeconomic and industry forecasting models. These models are the most rigorously developed, commercially available input-output models in the U.S. The central attribute of input-output models is that the forecasts for every one of the detailed sectors is tied into the forecasts of all of its supplying sectors (inputs) and of all of its customer industries (outputs). This approach ensures a consistent set of forecasts at a very detailed industry level. From the Inforum starting forecast, Axiom has developed a proprietary system for forecasting profits and operating margins for over 980 industries.

### **Axiom's Approach to Estimating Future Cash Flow for this Firm**

All business valuations require estimates of future revenue, profits, and capital needs. This is the case even when revenue or earnings multiples are used as the valuation methodology. Most people using the simple multiples approach are not aware that this approach is also dependent upon future estimates of the firm's key measures.

The approach used by Axiom is based on the well- founded research result that the value of any business is related to the growth in its expected cash flows. To get a sense of what these expected cash flows might be it is quite common to use history as a guide. The implication then is if the future replicates the past in some important way, then we can use a firm's historical cash flows as a guide to what they are likely to be in the future. For example, if the firm's cash flows have grown at 20% per over the last five years, can one be very confident that they will grow by 20% a year for the next five years? The answer is likely to be yes if two conditions are met:

1. The economy's future growth allows this to happen; and
2. The future growth of the industry the firm is in allows this to happen.

This exceptional future 20% growth is not likely to occur if the economy goes through a recession and subsequent slower growth. Hence, it is not likely that a firm's past cash flow growth will be a very good guide to its future performance.

Academic research strongly supports this conclusion. Linter and Glauber<sup>3</sup> show that less than 2% of the variation in future firm earnings is explained by past earnings and even when modifications were made to the research design, the explained variation did not exceed 10% for most time periods and most cases studied. Brealey<sup>4</sup> demonstrates a very similar result using a different research design and data set. In short, we conclude that past earnings offer very little guide to the future. One can reasonably ask that if one cannot appeal to past earnings as a guide what can one appeal to?

---

<sup>3</sup> Linter, John, and Glauber, Robert. "Higgeldy-Piggeldy Growth in America", unpublished manuscript, 1969.

<sup>4</sup> Brealey Richard. An Introduction to Risk and Return from Common Stocks (Cambridge, MA: M.I.T. Press, 1969)

Again, we look to academic research on this topic. This work seems to suggest that over 40% of a firm's earnings variability is due to economy and industry factors. This percentage varies significantly by industry with tobacco and cosmetics having percentages in the 20% range and department stores having a percentage of 67%. Reilly and Brown in their textbook on investment analysis and portfolio management summed up the research in this area by stating:

*"First the studies indicated that most changes in an individual firm's earnings could be attributed to changes in aggregate corporate earnings and changes in the firm's industry, with aggregate earnings changes being more important. Although the relative influence of the general economy and the industry on a firm's earnings varied among individual firms, the results consistently demonstrated that the economic environment had a significant effect on firm earnings."*<sup>5</sup>

The Axiom approach builds on the research cited above. Axiom has developed time series of operating profits for 981 sectors, including Game, Toy, & Children's Vehicle Manufacturing industry, as defined by the NAICS classification system. The NAICS system is the basis for the 400 plus business activity codes used by the IRS to classify business tax returns. These operating profit growth forecasts are a function of expected industry revenue and profit margin growth for each industry segment. The industry segment revenue estimates were developed in conjunction with Inforum, a well known economic and industry forecasting firm.

The operating margin growth forecasting models were developed by relating the operating margin growth for the overall economy to the operating margin growth for each of the three segments within each industry we follow. Using these models, forecasts of the operating profit margin for the aggregate business sector, and Axiom analyst input, forecasts of operating profit margin growth are produced for each segment within each industry followed. Axiom grows the last year of adjusted firm after-tax earnings using the growth index developed for the industry segment the firm is in. These firm-specific earnings values are reduced by the projected change in net fixed capital expenditures and the change in working capital. These last two variables are estimated by Axiom by assuming that the stock of net fixed and working capital grow at the rate of expected industry segment revenue. This approach generates a set of expected free cash flow values that drive the valuation of the firm.

---

<sup>5</sup> Reilly, Frank, and Keith C., Brown. Investment Analysis and Portfolio Management (The Dryden Press, 2000). P.441.

## SECTION 5: OTHER KEY FACTORS: COST OF CAPITAL, LIQUIDITY DISCOUNT, & CONTROL PREMIUM

### COST OF CAPITAL: THE EXPECTED RATE OF RETURN

#### Risk versus Return

Important factors in determining the value of a company are the growth in operating profits and rate of return that investors require. The rate of return investors require depends on a number of factors all of which relate to how risky they believe the company to be. The greater the risk or uncertainty about the expected operating profits growth, the greater the return investors require to compensate them for taking this risk. This relationship has been borne out time and time again by researchers. The common sense of this is best underscored by noting that research has shown that a portfolio of risky stocks has returned on average 8% more per year than a one year Treasury Bill. This incremental return is the incremental reward that investors receive for taking the risk of investing in risky assets like a portfolio of stocks, rather than in riskless Treasury Bills. For the valuation of Tentex Toys, we must calculate its cost of capital. This is the return investors would require, if the firm were a public company. An adjustment for the fact that this firm is a private company is made later in the form of a liquidity discount.

#### Calculating The Firm-Specific Cost of Capital

The cost of capital for Tentex Toys is constructed from factors related to economy-wide indicators, to industry- and size-specific measures, and to the firm-specific debt to equity ratio. By combining sophisticated financial risk analysis and credit scoring with historical estimates of risk factors makes it possible for Axiom to generate a firm-specific cost of capital measure, as shown in Table 5-1. For this valuation, we also considered firm-specific non-financial risks in determining the cost of equity for this firm. The results of this review are shown in Table 5-2.

**Table 5-1: Calculating the Pre-tax Cost of Capital for Tentex Toys**  
**Source: Axiom Valuation Solutions and Inforum Winter 2002 Forecast**

<i>Cost of Capital Components for Tentex Toys</i>	
<b><i>Cost of Common Equity and its Components</i></b>	
<i>One Year Treasury Bill Rate</i>	1.44%
<i>Business Risk Premium</i>	0.96%
<i>Firm-Specific Risk Premium</i>	2.00%
<i>Financial Risk Premium</i>	2.97%
<i>Size Premium</i>	10.85%
<i>Cost of Common Equity</i>	18.22%
<b><i>Cost of Long- and Short-Term Debt</i></b>	
<i>Cost of Long-term Debt</i>	10.81%
<i>Cost of Short-Term Debt</i>	7.25%
<b><i>Cost of Capital including Equity and Debt</i></b>	
<i>Debt to Equity Ratio</i>	0.33
<i>After-tax Weighted Average Cost of Capital</i>	15.01%

**Table 5-2: Firm-Specific Non-Financial Risks for Tentex Toys**  
**Source: Axiom Valuation Solutions and Valuation Interview**

<i>Firm-Specific Non-Financial Risks for Tentex Toys</i>		
<i>Risk Concept</i>	<i>Measurement</i>	<i>Assessment</i>
<i>Business Stability</i>	<i>How long has the company been in business?</i> 1-3 Years - High Risk 4-6 Years - Moderate Risk More than 6 Years – Low Risk	<i>Low Risk</i>
<i>Business Transparency</i>	<i>Does the firm produce an audited financial statement at least once a year?</i> Yes - Low Risk No - High Risk	<i>High Risk</i>
<i>Customer Concentration</i>	<i>Does the firm receive more than 30% of its revenue from less than 5 customers?</i> Yes - High Risk No - Low Risk	<i>Low Risk</i>
<i>Supplier Reliance</i>	<i>Can the firm change suppliers without sacrificing product/service quality or increasing costs?</i> Yes - Low Risk No - High Risk	<i>High Risk</i>
<i>Reliance on Key People</i>	<i>Are there any personnel critical to the success of the business that cannot be replaced in a timely way at the current market wage?</i> Yes - High Risk No - Low Risk	<i>Low Risk</i>
<i>Intensity of Competition</i>	<i>What is the intensity of firm competition?</i> Very Intense - High Risk Moderately Intense - Moderate Risk Not Very Intense - Low Risk	<i>Moderate Risk</i>
<i>Firm-Specific Risk Premium Addition to the Cost of Common Equity</i>		<i>2.00%</i>

## TWO KEY VALUATION ADJUSTMENTS FOR THIS FIRM

There are two important adjustments that should be made in the valuation of a privately held firm, when the valuation is centered on the total business entity. These are the liquidity discount and the control premium. In any valuation where these adjustments are made, it is important to understand the rationale for making these adjustments and the basis on which a valuation expert selected the values to use in making these adjustments. These adjustment factors can be large, often ranging from 20% to 45% of the total business value before adjustment; and yet the general explanations in the valuation literature of how to choose a value for either the liquidity discount or control premium appear to be based on weak analysis or questionable data. My calculations of the liquidity discount and control premium for Tentex Toys are described in the following sections.

### The Liquidity Discount

The liquidity discount reduces the ownership value to reflect the fact that the ownership interest cannot be easily sold. Any potential buyer of the ownership value faces the risk that he/she cannot sell the ownership interest in a timely way because there are a limited number of potential buyers. This is to be contrasted to shares of stock that trade on the New York Stock Exchange for example. These shares can be readily purchased and sold and, except for rare cases, the price received will reflect the fair market value of these shares. Thus, the liquidity discount reflects the additional risk that the buyer faces because he/she may not be able to receive a price that would be obtained if ownership interest in Tentex Toys were sold in a highly liquid market.

Although much has been written on the liquidity discount and several organizations have routinely attempted to measure it, the values traditionally reported are far too high. The reason is that what is reported as marketability or liquidity discount is really a private company discount. This private company discount reflects a number of factors that are not related to lack of liquidity. The differences between private firm valuations and those of public peers can occur because of differing cash flow growth prospects, timing of cash flows and differing ratios of debt to equity. The result is that reported discounts for marketability are too high and private company valuations that use them are too low. Table 5-3 offers evidence of the variation in private company discounts.

**Table 5-3: Representative Studies That Attempt to Measure the Liquidity Discount**

Source: Axiom Valuation Solutions

<b>Author(s)</b>	<b>Peer Review</b>	<b>Discount</b>	<b>Reported Dispersion</b>	<b>Type of Study</b>
<i>William Silber</i>	Yes	35%	<i>14% for large creditworthy companies; 50% for small firms with negative earnings</i>	<i>Restricted stock study</i>
<i>M. Hertz and Richard Smith</i>	Yes	<i>Not Reported</i>	<i>.2 % - 43.7 %</i>	<i>Private Equity Study</i>
<i>John Emory</i>	Yes	47%	<i>Not Reported</i>	<i>Pre-IPO Study</i>
<i>John Koeplin et.al.</i>	Yes	20.39%	<i>Depending on the multiple used, discount varied from 0% based on sales revenue to 28.26% using the ratio of Enterprise Value to EBIT</i>	<i>Identified all acquisitions of private firms from 1984 to 1998</i>
<i>Willamette Associates</i>	No	40.1%	<i>Wide dispersion from a premium to a maximum discount of 99%</i>	<i>Pre-IPO Study</i>

The Willamette results are the best known and as can be seen are generally consistent with those reported by other researchers. The problem with Willamette's results is that their data is proprietary and Willamette has not disclosed this information for peer review and analysis by academic researchers. This is an important qualification. This creates the potential that the empirical work presented may simply be fraught with errors. The peer review process, while it does not completely remove this possibility, nevertheless, minimizes the potential for drawing incorrect conclusions due to errors related to measurement, research design, and statistical method. It is particularly important to utilize peer-reviewed research when one is valuing a private asset since many of the issues that arise have been addressed by finance scholars and for which there is a well-developed academic literature.

This peer review issue aside, Willamette's numbers appear far too high to only account for a private firm's lack of liquidity. Based on Axiom's review of this research, we believe the most appropriate value to use is the average private company discount published in the Koeplin study. This conclusion is based on two factors. First, their research controls for capital structure differences. Second, selection of the private company's public company peer was dictated by whether they were in the same four digit SIC industry. Based on this, Axiom uses 20% as the liquidity discount adjustment factor.

### **The Control Premium**

The control premium is an additional sum that an investor would pay above the fair market value of a minority interest of the firm in question. This means that if a share of common stock of a public company is selling for \$100, and an investor is willing to

purchase all shares for \$140 per share, the control premium is 40%. Axiom first calculates the minority interest ownership value of Tentex Toys. We then factor up this value to reflect a control premium. There are multiple factors that give rise to a control premium. They include:

- ❑ The ability of the owner to manage the cash flow of the firm in a way that is consistent with life style and family responsibilities.
- ❑ The nature and magnitude of business non-operating assets.
- ❑ The quality of management.
- ❑ Synergies between the buying and target firm. These might include removal of overlapping functions and therefore reducing expenses per dollar of revenue.
- ❑ Taking advantage of growth opportunities that would either not be possible or highly expensive to take advantage of without purchasing the assets of the target firm.

The approach used by Axiom to estimate the control premium for this firm reflects several factors. They include the firm's business risk, which is directly related to its industry as well as the firm's size and capital structure. As a general rule, most business appraisers apply a median markup value to the minority equity value to obtain the majority equity value. The source of this median value and related control premium statistics is the annual ***Mergerstat Review***, which is published by Houlihan Lokey Howard and Zukin of Los Angeles. ***Mergerstat*** compiles data on publicly announced mergers, acquisitions and divestitures involving operating entities, where the transfer involves at least 10% of the subject company's equity, the purchase price is at least \$1 million, and where at least one of the parties to the transaction is a US entity. ***Mergerstat*** sells data on control premiums by industry, but only at a very aggregate level, and data for individual firm transactions. Table 5-4 indicates the extent to which median control values change over time.

**Table 5-4: Mergerstat Aggregate Control Premiums over Time**

Source: Mergerstat

<b>Control Premiums Change Over Time</b>		
<b>Year</b>	<b># of Transactions</b>	<b>Historical Control Premiums: Median Values</b>
1998	512	30.1%
1997	487	27.5%
1996	381	27.3%
1995	324	29.2%
1994	260	35%
1993	173	33%
1992	142	34.7%
1991	137	29.4%
1990	175	32%
1989	303	29%



As can be seen, median control values indeed vary reaching a low of 27.3% in 1996 to a high of 35.0% in 1994. There has been a good deal of academic research that has addressed the issue of the factors that determine the size of control premiums. These studies have analyzed the following variables:

- ❑ Method of payment: cash versus stock;
- ❑ Size of acquirer;
- ❑ Purpose of acquisition, including purchasing a new product line, entering a new domestic or foreign market, purchasing patents and other intangible assets, and leveraging financial synergy based on a mismatch between growth opportunities between the target and acquiring firm.

Published research in refereed journals has not shown any of the above variables to consistently or powerfully contribute to the size of the control premium. For this and other reasons, business appraisers often default to using the median control value. This is generally the wrong value to use based on both theoretical considerations and the large variability in reported control premiums.

- ❑ **Public Company Comparison** - When adjusting a private asset value for control, one should ask what the premium would be if the firm in question were a public firm that is being purchased. The answer, as it turns out, is related to the purchased firm's cost of equity capital. The reason is that the greater the risk, the less a rational buyer would be willing to pay for the cash flows despite whatever strategic value the firm's assets might have. Thus, by applying the median control premium to a firm that is below average risk, one would be underestimating the value of control. Similarly, one would be overestimating the value for control if the firm is of above average risk.
- ❑ **Lack of Industry Specificity** - The median control premium is not industry specific and thus using it in a year when there were few transactions in the firm's industry may provide a biased benchmark, the above comments notwithstanding.
- ❑ **Significant Variation in Values** - One should be very cautious about applying a median value as a markup factor, since there is wide variation around these values. For example, in 1998, of the 560 transactions reported by *Mergerstat*, the maximum control premium value was 423.5%, the minimum was 0%, the average was 40.4% and the standard deviation was 43.4%. This means that the chances are high that simply applying the median control premium will result in considerable error.

### The Control Premium for this Firm

For these reasons, Axiom estimates the control premium directly. This premium varies by our industry detail and is further customized to the size and equity capital structure of Tentex Toys, the firm being valued. Table 5-5 shows the relationship between the cost of equity for firms of this size in this industry and the control premium.

Table 5-5: Relationship between Control Premiums and Cost of Equity by Firm

Source: Axiom Valuation Solutions

<i>Cost of Equity Capital</i>	<i>Control Premium</i>
10%	42.9%
11%	37.5%
12%	33.3%
13%	30.0%
14%	27.3%
15%	25.0%
16%	23.1%
17%	21.4%
18%	20.0%
19%	18.8%
20%	17.6%
21%	16.7%
22%	15.8%

The control premium applied to this firm is 20.2%. This is based on a cost of equity capital of 17.8%



---

## SECTION 6: VALUATION FINDINGS

---

### APPROACH TO VALUATION OF THIS FIRM

The Internal Revenue Service has established guidelines for conducting a proper business valuation. These guidelines are set down in Revenue Ruling 59-60, and the valuation presented herein is generally consistent with these guidelines. According to Revenue Ruling 59-60, the factors that should be considered when doing a business valuation include:

- ☐ 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 the firm is in.
- ☐ The financial condition of the business.
- ☐ The earnings and dividend capacity of the company.
- ☐ Whether or not the company has good will or other intangible value, like patents for example.
- ☐ Whether the whole company or only a minority interest in the company is being valued.
- ☐ The market prices of stock of companies 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, like the New York Stock Exchange, or over-the-counter, like the NASDAQ.

### Defining Fair Value

In the United States, the most widely accepted standard for valuing a closely held business is fair market value. This is the standard used in all matters related to state and federal tax matters including estate taxes, gift taxes, income taxes etc. Axiom applies a valuation method that it believes is consistent with the standard of fair market value established by the IRS. The American Society of Appraisers has defined fair market value as “the amount at which property would change hands between a willing seller and a willing buyer when neither is acting under compulsion and when both have reasonable knowledge of the relevant facts”.

The Internal Revenue Service, again in Revenue Ruling 59-60, defines 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. Court decisions frequently state 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 concerning the market for such property.*<sup>6</sup>

## VALUATION FUNDAMENTALS

A business valuation is an analytical process for estimating the price a willing buyer would pay for a business and a willing selling would accept – without having to actually sell the business. Many commentators have noted that business valuation is both an art and a science, since there are subjective factors that must be considered along with objective information in this analytical process. However, by drawing upon the latest, peer-reviewed research and databases with industry- and size-specific benchmarks, Axiom has been able to emphasize the science, and reduce the art in the business valuation process.

### Value As an On-going Concern

The first issue to be addressed is whether the valuation is for a business as an on-going concern, or a business in liquidation. For an on-going business, the objective of the valuation is to analyze the company from a prospective buyer's perspective, i.e., what is the likely future flow of earnings from this company. For a business in liquidation, the value of the business is the market price of its assets minus its liabilities. For Tentex Toys, this is a valuation as an on-going concern.

### Valuation Methods: Market and Income

Valuation analysts have developed several methods that can be used to value an on-going concern. These methods can be grouped into two categories: market-based and income-based methods. Market-based methods use measures of revenue and EBITDA valuation multiples from comparable companies. For public company comparables, the information is readily available on the value of these companies from the stock exchanges. For private companies, the source of comparables is recent private company sales. Income-based methods use estimates of future earnings discounted back to the present using a cost of capital for the company being valued.

Every valuation methodology has its own set of assumptions necessary to develop this proxy for fair market value. For example, the valuation method of using market prices from private sales of comparable companies has two key assumptions that must be met for the resulting valuation to be accurate. First, the firm sold and the firm being valued must be similar in their business size and performance. Second, the sale should be very recent to the date of the valuation, so the external conditions that influence valuations are approximately the same.

In practice, these two assumptions are difficult to validate. Many private transactions are not reported, while some that are reported have some seller or third party financing involved which complicates measuring the actual price paid. Assessing comparability of the businesses can also be challenging for many types of businesses.

---

<sup>6</sup> Revenue Ruling 59-60

As noted above, the IRS Revenue Ruling 59-60 suggests the use the market prices for publicly held companies as a valuation method. In this approach, value to revenue and value to earnings (usually earnings before interest, tax, depreciation, and amortization (EBITDA) from for “proxy” public companies are used as the guidelines for valuing a private firm. These guideline firms are typically in the same aggregate industry sector (usually 2 or perhaps 3 digit SIC (Standard Industrial Classification)). Even if more detailed industry classifications are available, the guideline firms are placed in these classifications by their primary SIC code. This would not be a problem except for the fact that most public companies are in multiple SIC codes and the primary one, which is determined by the firm’s SIC that makes up the lion’s share of its revenue, may not be the SIC that accounts for the lions share of the firm’s cash flow. industry

A second assumption for the public company comparables is that the operating characteristics of the business being valued are similar to the characteristics of the public companies. A third assumption is that the capital structure of the business being valued is similar to the capital structure of the public companies.

In practice, these assumptions are difficult to validate in a valuation. For example, in many situations, there are few similarities between the operations of a firm with \$5 million in revenue and firms with \$5 billion or more in revenue.

Income-based methods of valuation include capitalized earnings, excess earnings, discounted cash flow, and discounted free cash flow. Each of these valuation methodologies has its own set of assumptions and necessary data inputs. The accuracy of these methods is dependent upon how well the assumptions are met and the accuracy of the inputs.

Since each valuation assignment is unique, it is important to keep an open mind about which method or set of methods will be best suited for the assignment. However, it is also important to track how well different methods perform in predicting what the actual price will be when a business is sold. For help on this, we turn to a classic academic research paper by Steven N. Kaplan, University of Chicago and Richard S. Ruback, Harvard Business School the authors state the following:

*Investment bankers and dealmakers typically price acquisitions, leveraged buyouts, IPOs, and other transactions using multiples of current earnings or cash flow for comparable companies or transactions. For example, if a company for sale has \$100 million of current earnings before interest tax and depreciation, and the standard multiple for similar companies is five times EBITDA, then the price of the company would be estimated at \$500 million. -----*  
**As we report in this article, our study provides evidence of a strong relationship between market values of transactions in our sample and the discounted value of their cash flow forecasts.----- Although some of the “comparable “ or “multiple” methods performed as well on an average basis, the discounted cash flow methods were more reliable in the sense**

***that the discounted cash flow estimates were clustered more tightly around the actual values.*** <sup>7</sup> (emphasis added)

These findings suggest that simply multiplying a firm's current revenue or earnings by what one believes is a comparable revenue and/or earnings transaction multiple to obtain an estimate of firm value is not prudent and in the end is not supported by the available academic research.

One must also keep in mind that Kaplan and Ruback's study used data on public company transactions. Valuation of private firms using private company comparable multiples is likely to be even more error prone than the company sample used by Kaplan and Ruback. The reasons are:

- ❑ Private companies that are directly comparable to the private company to be valued are virtually impossible to find. Hence, one is often forced to use what we call "proxy" comparables. Using these "proxy" multiples assumes that the private firm in question has the same cash flow growth potential and the ratio of debt to equity as the proxy firm or what is even more unlikely the firm to be valued has the cash flow and/or the capital structure of the median of a set of proxy firms. Any real similarity between the firm to be valued and the proxy firm would only occur coincidentally. Thus, for example, multiplying the median "proxy" revenue or EBITDA (earnings before interest, tax, depreciation and amortization) multiple by a firm's last year revenue and/or EBITDA values respectively, will result in a value that may be too low or too high and in any case would not be correct.
- ❑ Suitable comparable transactions may not be available at the time the private firm in question is being valued. Applying the median multiple for transactions that happened as recently as three months ago may not be appropriate. For example, if interest rates at the valuation date are different from those that existed when the comparable transactions took place, the multiples will also be different. If the current long term government interest rate were 1% lower today than when the median for the comparable transactions took place, applying the comparable's multiple would result in a value that is far LOWER than it should be.<sup>8</sup>

<sup>7</sup> Steven N. Kaplan and Richard Ruback, "The Market Pricing of Cash Flow Forecasts: Discounted Cash Flow vs. The Method of Comparables", Journal of Applied Corporate Finance, Winter 1996, p.45

<sup>8</sup> Consider the simple Gordon-Shapiro model.  $\text{Value/Earnings} = (1+g)/(i-g)$  where  $i$  is the interest rate,  $g$  is the growth in earnings for the median firm and Value/Earnings is the median earnings multiple. Let us assume that  $g$  is .05 and  $i$  is .10. The earnings multiple is then 21. Let us say that these were the exact circumstances that were in place 3 months ago. Firm A with earnings of \$100,000 was sold for \$2.1 million ( $21 \times \$100,000$ ) 3 months ago. Firm B is currently up for sale and also has earnings of \$100,000. Since Firm A was sold, interest rates fell from 10% to 9%. The earnings multiple is now 26.25 and Firm B is worth \$2,625,000. If the old multiple, 21, were used, then the owner of Firm B would have received \$525,000 too little for his firm.

## AXIOM'S APPROACH TO VALUATION OF THIS FIRM

Per the requirements of Revenue Ruling 59-60, I have used multiple methods to generate valuation estimates for this firm. The first method described is the discounted free cash flow method.

### The Discounted Free Cash Flow Forecasting Valuation Method

For the discounted free cash flow forecasting, there are key assumptions that must be made in order to develop a reliable valuation. This approach relies on the assumption that a reliable estimate of future cash flows can be generated for a company, and on the assumption that the risk characteristics of the company can also be estimated.

### Axiom Forecasting Process

We start with a macroeconomic forecast and detailed industry revenue forecast produced by **Inforum**, a well-known economic forecasting firm, based at the University of Maryland.

Inforum provides the most detailed industry forecasting capability available, which is important for providing the closest industry category match to the business being valued. In the case of Tentex Toys, the industry sector is Game, Toy, & Children's Vehicle Manufacturing, the closest industry match to the company's principal business activity.

Then we apply our proprietary statistical models to forecast operating profits and operating profit margins for each industry based on data developed from government sources and benchmarked to the Census, Annual Survey and Bureau of Economic Analysis data sources. These data sources allow us to create detailed industry-specific data sets on a consistent basis thus reflecting the economic dynamics of each of the 980+ industries we follow.

## DISCOUNTED FREE CASH FLOW VALUATION OF THE FIRM

I have evaluated and forecasted the revenue, cash flow, and financial risk outlook for the Game, Toy, & Children's Vehicle Manufacturing industry using a unique combination of proprietary databases, statistical models and experienced analyst input. This combination of resources along with Axiom's valuation model provides the basis for developing a discounted cash flow valuation of Tentex Toys. **Total fair market value is what a willing buyer should pay a willing seller for total control of the business as of 9/30/2002.**

The total fair market value for Tentex Toys is \$1,200,084. The ownership composition of that estimate is shown in Table 6-1. The valuation results reported are as of 9/30/2002. The industry assumptions are Axiom's, and are based on the long-term Winter 2002 economic forecast by Inforum. Based on the company's recent past and anticipated future financial performance, I have assigned the company to the Low Growth segment of this industry.

**Table 6-1: Value by Ownership Component**  
**Source: Axiom Valuation Solutions**

<b>Value by Ownership Component</b>	<b>Equity Components</b>	<b>Value</b>
Ownership Equity		
• Minority Value of Equity	\$835,293	
• Additional Value Due to Control	+ \$168,981	
• Total Ownership Equity		\$1,004,274
Preferred Equity		
Total Debt (book value)		\$195,810
Other Liabilities		\$ 0
Estimated Fair Market Value		\$1,200,084

Ownership Equity is defined as total value less the book values of preferred equity holdings, short and long-term debt and other long-term liabilities. Ownership Equity divided by the number of ownership shares outstanding equals the fair market value per share of the outstanding equity for Tentex Toys. The minority value of equity is \$835,293. This is what the equity of Tentex Toys is worth to a buyer who has a right to the firm's cash flow but does not have control over how the firm's assets are used to produce this cash flow. A summary of the intermediate values used to determine the discounted free cash flow valuation is shown in Table 6-2 below.

**Table 6-2: Valuation Calculation Summary for Discounted Free Cash Flow Method**  
**Source: Axiom Valuation Solutions**

After Tax Cash Flow to Firm	\$ 123,309
After Tax Weighted Average Cost of Capital	15.0099%
<b>Present Value of Operating Cash Flows (After Factoring in Net Capital Expenditures and Change in Working Capital for Years 1-5):</b>	
Year 1	\$ 111,038
Year 2	\$ 88,938
Year 3	\$ 82,137
Year 4	\$ 80,559
Year 5	\$ 72,039
Terminal	\$ 767,081
<b>Sum of Present Values of Operating Cash Flows</b>	<b>\$ 1,201,791</b>
Value of Other Income After Tax	\$ 38,136
Excess Cash and Securities	\$ -
Value of Tax Exempt Interest	\$ -
<b>Sum of Non-Operating Sources of Value</b>	<b>\$ 38,136</b>
After Tax Total Value	\$ 1,239,927
Total Debt + Other Long-term Liabilities	\$ 195,810
Minority Ownership Value Before Control Premium and Liquidity Discount	\$ 1,044,117
Loss of Ownership Value Due to Liquidity Discount	\$ 208,823
Minority Ownership Value of Equity	\$ 835,293
Gain in Ownership Value Due to Control Premium	\$ 168,981
<b>Total Ownership Equity</b>	<b>\$ 1,004,274</b>
Total Debt + Other Long-term Liabilities	\$ 195,810
<b>Total Fair Market Value</b>	<b>\$ 1,200,084</b>

## THE SOURCES OF VALUE FOR THIS FIRM – DISCOUNTED FREE CASH FLOW

In Table 6-3, the sources of value from the discounted free cash flow valuation for Tentex Toys are shown.



**Table 6-3: Sources of Value**  
**Source: Axiom Valuation Solutions**

<i>Sources of Value</i>	<i>Value (\$)</i>	<i>Share of Value (%)</i>
<i>Total Fair Market Value of Company</i>	<i>\$1,200,084</i>	<i>100%</i>
<i>- Value of Non-Operating Income</i>	<i>\$36,680</i>	<i>3.1%</i>
<i>- Value of Tax Pass Thru</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
<i>- Value of Extra Cash &amp; Securities</i>	<i>\$ 0</i>	<i>0.0%</i>
<i>= Value of Primary Business Operations</i>	<i>\$1,163,404</i>	<i>96.9%</i>

### Liquidity Discount and Control Premium

Since the firm is private, this value reflects a discount of 20% from what the shares would hypothetically sell at if they traded in the public stock market; this is called the Liquidity Discount.

The additional value due to control is \$168,981. This value reflects the premium above the minority equity value that a buyer would pay for the right for majority control of Tentex Toys and all of the firm's assets. The impacts of these two adjustments are shown in Table 6-4.

**Table 6-4: The Impact of Control Premium and Liquidity Discount on Ownership Value**  
**Source: Axiom Valuation Solutions**

<i>Adjusting Ownership Value for Control and Liquidity</i>	<i>\$ Value</i>
<i>1) Minority Ownership Value: Value Before Control Premium and Liquidity Discount</i>	<i>\$1,044,117</i>
<i>2) Loss of Ownership Value Due to Liquidity Discount – 20%</i>	<i>\$208,823</i>
<i>3) Minority Ownership Value After Liquidity Discount (Row 1 - Row 2)</i>	<i>\$835,293</i>
<i>4) Gain in Ownership Value Due to Applying Control Premium - 20.2%</i>	<i>\$168,981</i>
<i>5) Final Estimated Ownership Value (Row 3 + Row 4)</i>	<i>\$1,004,274</i>

### Factors Impacting the Discounted Free Cash Flow Valuation

The valuation results are dependent on the following set of factors:

- ☐ The nature of the business and its current financial condition based on the latest company financial information.
- ☐ The economic outlook in general and the prospects for the firm's industry.
- ☐ Cash flow from identified non-business operations is valued separately from cash flow streams associated with primary business operations.
- ☐ The expected cash flow growth of the industry over the next five years, and the on-going growth expectation.
- ☐ The rate of return investors require for owning a business that has a risk profile similar to this firm.

- ❑ A liquidity discount applied to the initial value reflecting the fact that there are a limited number of buyers for this firm.
- ❑ A premium added to the calculated initial value reflecting the fact that the new owner has a controlling interest in firm purchased as opposed to a minority interest. A controlling or a majority interest in the firm is more valuable than a minority interest. The reason is that controlling interest confers the right on the controlling buyer to make decisions about how the assets of the business are to be used. A minority interest does not confer this right and therefore is less valuable. A minority interest only confers on the minority owner the right to his/her pro-rata share of the firm's earnings.

### VALUATION METHOD: MARKET MULTIPLES

Table 6-5 shows public firms that are in the same SIC Code as Tentex Toys. The Peer Group Financial Comparison table is shown in Section 6 of this report. The Peer Group Product Service comparison table allows one to measure comparability across product service lines. The analysis of products, services, distribution, and financial similarities and differences between Tentex Toys and these peer companies significantly extends our understanding of Tentex Toys relative to these public companies.

**Table 6-5: Peer Group Summary Comparison**

Source: Axiom Valuation Solutions

PEER GROUP PRODUCT/SERVICE COMPARISON	
COMPANY NAME	PRODUCT/SERVICE
<b>Tentex Toys, Inc.</b>	<b>Designs, develops and markets a broad range of toys and dolls from the traditional to high-tech. Sells primarily through independent toy shops.</b>
DSI Toys, Inc.	Designs, develops, markets and distributes dolls, toys and consumer electronics products.
Hasbro, Inc.	Provider of children's and family leisure time and entertainment products and services, including the design, manufacture and marketing of games and toys.
JAKKS Pacific, Inc.	A multibrand company that designs and markets a broad range of toys and leisure products. The product categories include vehicles, action figures, infant/preschool, plush, dolls, water toys, sports activity toys, arts and crafts activity kits, etc.
Mattel, Inc.	Designs, manufactures and markets a broad variety of toy products on a worldwide basis through sales both retailers and direct to consumers. Portfolio of brands are grouped into 3 categories: girls, boys-entertainment and infant/preschool. Sample products include dolls, toy race cars, games and puzzles.
Ohio Art Company	Engaged in two lines of business: the manufacture and distribution of toys domestically and internationally and the manufacture and sale of custom metal lithography and molded plastic products to other manufacturers and consumer goods companies.
The Vermont Teddy Bear Co.	Designer, manufacturer and direct marketer of teddy bears and related products.

Table 6-6 shows the Peer Group Financial Comparison table. As can be seen, Tentex Toys operates on a much smaller scale compared to its peers. Sales of the smallest peer are over 22 times larger than Tentex Toys' sales, while EBITDA is nearly 15 times that of Tentex Toys.



**Table 6-6: Peer Group Financial Comparison for Tentex Toys, Inc.**  
**Source: Axiom Valuation Solutions**

COMPANY NAME	TICKER	PRICE <sup>3</sup>	SALES <sup>1</sup>	EBITDA <sup>1</sup>	EBITDA/ SALES	DEBT/ EQUITY <sup>2</sup>	MARKET VALUE	PRICE/ SALES <sup>3</sup>	PRICE/ EBITDA <sup>3</sup>
Tentex Toys, Inc.			\$ 1,781,278	\$ 234,703	0.132	0.33			
DSI Toys, Inc.	DSIT	\$ 0.41	\$ 56,700,000	NM	NM	4.32	\$ 4,469,000	0.08	NM
Hasbro, Inc.	HAS	\$11.13	\$ 2,810,000,000	\$ 326,200,000	0.116	1.03	\$ 1,927,716,000	0.69	5.91
JAKKS Pacific, Inc.	JAKK	\$11.11	\$ 303,000,000	\$ 33,000,000	0.109	0.00	\$ 271,084,000	0.89	8.21
Mattel, Inc.	MAT	\$18.01	\$ 4,890,000,000	\$ 699,800,000	0.143	0.61	\$ 7,873,972,000	1.61	11.25
Ohio Art Company	OAR	\$12.75	\$ 39,600,000	\$ 3,650,000	0.092	0.19	\$ 11,309,250	0.29	3.10
The Vermont Teddy Bear Co.	BEAR	\$ 3.42	\$ 39,200,000	\$ 5,380,000	0.137	0.31	\$ 16,416,000	0.42	3.05
<b>Average for Public Companies</b>		<b>\$ 9.47</b>	<b>\$ 1,356,416,667</b>	<b>\$ 213,606,000</b>	<b>\$ 0.12</b>	<b>1.08</b>	<b>\$ 1,684,161,042</b>	<b>0.66</b>	<b>6.31</b>

<sup>1</sup> All values for the year yyyy or the most recent four quarters available.

<sup>2</sup> Data from the currently available balance sheet.

<sup>3</sup> On share basis, as of September 30, 2002. The Average for Public Companies excludes negative values.

NM - Negative value is Not Meaningful

NA - Values are not available

While there is general comparability between the product mix of Tentex Toys and that of peer firms, the differences in the scale of operations between the public companies and Tentex Toys limit the use of operating financial comparisons. In addition, Tentex Toys distributes its products only through the independent toy store channel, which is shrinking in its share of the toy and games market. The public firms all use multiple channels of distribution that are growing in market share relative to independent toy stores.

There are too few public firms to develop a regression model where the price to sales multiple for each firm is regressed against a series of financial variables. After a careful review of product mix and financial characteristic differences between Tentex Toys and the peer group firms, I concluded that both revenue and earnings-based market multiples are appropriate to develop a market method fair market value.

### Valuation Using Revenue Market Multiples

I have generated a public company, revenue multiple valuation result for Tentex Toys. The steps in the process and the final result are shown in Table 6-7 below.

**Table 6-7: Valuation by Public Company Comparable Method – Revenue Multiple****Source: Axiom Valuation Solutions**

<b>Market Method Valuation Findings Based on Revenue Multiples for Public Company Comparables</b>		
1. Revenue for Valuation Purposes		\$ 1,781,278
Multiplied by:		
2. Average of Public Company Price to Sales Ratios		0.662348
Equals:		
3. Fair Market Value of Ownership Equity –Public Company Basis		\$ 1,179,825
Minus:		
4. Liquidity Discount for Privately-held Firms (Line 3 Multiplied by Liquidity Discount Factor)	20.0%	\$ 235,965
Equals:		
5. Fair Market Value of Ownership Equity –Private Company Basis		\$ 943,860
Plus:		
6. Control Premium (Line 5 Multiplied by Control Premium Percentage)	20.23012%	\$ 190,944
Equals:		
7. Fair Market Value of Ownership Equity		\$ 1,134,804
Plus:		
8. Debt and Other Long-Term Liabilities		\$ 195,810
Equals:		
9. Total Fair Market Value – Market Method of Valuation - Revenue Multiple		\$ 1,330,614

**Valuation Using EBITDA Market Multiples**

In addition, I have also generated a public company, EBITDA multiple valuation result for Tentex Toys. The steps in the process and the final result are shown in table 6-8.

**Table 6-8: Valuation of Public Company Comparable Method – EBITDA Multiple****Source: Axiom Valuation Solutions**

<b>Market Method Valuation Findings Based on EBITDA Multiples for Public Company Comparables</b>		
1. EBITDA for Valuation Purposes		\$ 234,703
Multiplied by:		
2. Average of Public Company Price to EBITDA Ratios		6.305150
Equals:		
3. Fair Market Value of Ownership Equity –Public Company Basis		\$ 1,479,841
Minus:		
4. Liquidity Discount for Privately-held Firms (Line 3 Multiplied by Liquidity Discount Factor)	20.0%	\$ 295,968
Equals:		
5. Fair Market Value of Ownership Equity –Private Company Basis		\$ 1,183,873
Plus:		
6. Control Premium (Line 5 Multiplied by Control Premium Percentage)	20.23012%	\$ 239,499
Equals:		
7. Fair Market Value of Ownership Equity		\$ 1,423,371
Plus:		
8. Debt and Other Long-Term Liabilities		\$ 195,810
Equals:		
9. Total Fair Market Value – Market Method of Valuation - Revenue Multiple		\$ 1,619,181

## Weighting the Valuation Methods

To determine a final value for the minority ownership interest in Tentex Toys, I have carefully considered the degree to which the facts of this assignment are consistent with the key assumptions of the methods of valuation used in this assignment, public company market multiples and discounted free cash flow. It is my judgment that the public companies available for use as comparables are of limited use as comparables due to the significant differences in size compared to Tentex Toys, especially the Mattel comparable. Tentex also has limited distribution opportunities because it sells primarily through independent stores, which are shrinking in market share compared to large chains and direct marketing by phone and over the Internet. There are no facts in this assignment that limit the appropriateness of the discounted free cash flow method to the valuation of Tentex Toys. Accordingly, I have assigned the weights as shown in Table 6-9 to the valuation results generated by the different methods employed in this assignment.

**Table 6-9: Weighting of Different Valuation Results**

**Source: Axiom Valuation Solutions**

<i>Valuation Weighting for Tentex Toys as of 9/30/2002</i>	
<b>Valuation Method</b>	<b>Weight</b>
<i>Discounted Cash Flow Valuation</i>	60%
<i>Public Company Comparable - Value to Revenue Multiple</i>	20%
<i>Public Company Comparable - Value to EBITDA Multiple</i>	20%
<b>Sum of the Valuation Weights</b>	100%

## APPENDIX A: ABOUT AXIOM VALUATION

### What We Do:

Axiom provides independent, reliable information on what a business is worth - documented in a customized report. Our standard services meet almost all business valuation needs, including estate & gift tax filings that require a fair market valuation signed by an expert. Led by Dr. Stan Feldman, Axiom's chairman, we have streamlined traditional valuation processes using expert system technology, detailed industry databases, and Internet efficiencies. We complement our "high tech" approach with "high touch" phone support by our valuation staff.

Valuation of a business is a central activity to managing most business life events. Business life events are "high stakes" issues, such as selling a business, managing owner risks, and planning for retirement and estate taxes. How these events are managed typically has a major impact on an owner's financial success; and most are one-time events, and thus are usually outside an owner's experience.

<b><i>Business Life Events</i></b>	<b><i>Typical Issues</i></b>
<i>Selling (or buying) a Business</i>	<i>Selling a business</i> <i>Buying a competitor</i> <i>Establishing an ESOP</i> <i>Changing ownership structure, such as allowing managers to buy into ownership</i> <i>Valuing spousal share of ownership in a divorce</i>
<i>Managing Owner Risks</i>	<i>Protecting owner income, e.g., setting up owner and/or key employee disability insurance</i> <i>Protecting owner equity, e.g., setting up key person life insurance or business protection insurance</i>
<i>Planning Ahead</i>	<i>Preparing for ownership transition</i> <i>Evaluating retirement funding including the business value</i> <i>Assessing estate planning needs in light of estate tax phase out and the current value of the business</i>

Our expert system technology utilizing the Internet provides the platform that enables our valuation staff to generate accurate business valuation results quickly and very cost-effectively. Quality control is built into the system, and updates to valuation rules and practices can be implemented quickly and uniformly. The valuation results are explained in our comprehensive and customized, professional valuation reports. These reports provide a transparent, clearly documented rationale for the valuation results.

Our role is limited to providing this objective and reliable foundation of information and advice for a fixed fee. Axiom does not participate in business brokerage, insurance sales, or other activities that might create a conflict with the core mission of providing accurate, fast, and cost-effective business valuations.

---

## APPENDIX B: PROFESSIONAL QUALIFICATIONS

---

### STANLEY JAY FELDMAN, PH.D.

Dr. Feldman is Chairman and co-founder of Axiom Valuation Solutions, based in Lowell, Massachusetts. He is an expert in the valuation of privately held businesses. He has both consulting and academic experience in valuation. He has conducted valuations over the last decade as president of SJF Associates, LLC. He has taught and researched valuation related issues as Associate Professor of Finance at Bentley College in Waltham, Massachusetts. He is the principal author of *What Every Business Owner Should Know about Valuing Their Business*, published by McGraw-Hill Professional Books in January 2003.

Dr. Feldman is also an expert on industry revenue and profit forecasting. He served as Senior Vice President for Industry and Regional Services at DRI/McGraw-Hill in the late 1980s. He directed DRI's successful expansion into detailed industry forecasting by region and by state for private sector and government clients.

A sample of Dr. Feldman's valuation-related experience includes:

- ☐ Valuing customer lists and non-compete agreements for twenty-five acquired veterinary practices
- ☐ Valuing a software professional services firm and its derivative securities for purposes of valuing warrants
- ☐ Valuing an assisted living facility donated to a private foundation
- ☐ Valuing a dental practice for a divorce settlement
- ☐ Valuing a computer services firm for a gift tax return
- ☐ Valuing a bookshop for an estate tax return
- ☐ Valuing the minority interest of a moving business
- ☐ Determining the value of a consulting firm
- ☐ Determining the value of a residual disability claim for a professional practice
- ☐ Evaluating a major money-center bank's C&I loan credit risk model
- ☐ Determining financial liability in a breach of contract law suit
- ☐ Estimating the value of a term contract to provide Internet services
- ☐ Estimating the impact on firm value as a result of improving environmental performance
- ☐ Determining the private value of public assets
- ☐ Developing a new funding vehicle to aid financing of small defense companies transitioning to non-defense businesses
- ☐ Helping small defense companies identify promising non-defense lines of business and developing strategies for funding transitions to new product lines
- ☐ Developing a primer on financial markets for the FHWA.

### RELATED EXPERIENCE

Dr. Feldman currently teaches courses in corporate finance, business and financial policy, and investments at both the graduate and undergraduate levels at Bentley College - Waltham, MA. He is currently a member of the Board of Directors of the New England Economics Project, a regional forecasting consortium. Professor Feldman has written extensively on issues related to business valuation and small business financing for both the Boston Herald and the Boston Business Journal. Professor Feldman is currently engaged in research related to firm valuation and analysis of commercial damages related to breach of contract, bankruptcy and shareholder/bondholder claims.

Prior to joining Data Resources, Professor Feldman was a senior economist with Prudential Insurance

Company. In this capacity, he analyzed financial markets, forecasted interest rates and helped develop asset allocation strategies for those retirement assets that were actively managed by Prudential. Before joining Prudential, Professor Feldman was an economist with the Federal Reserve Bank of New York. Professor Feldman received a B.A. in economics from Hunter College, City University of New York, and a Ph.D. from New York University.

## **SELECTED PUBLICATIONS**

What Every Business Owner Should Know About Valuing Their Business (with Dr. Tim Sullivan and Roger Winsby), McGraw-Hill Professional Books, February 2003

"A Note of the Size of the Liquidity Discount", submitted to the Business Valuation Journal, June 2002.

"Calculating Goodwill Impairment: Valuation Issues Raised by Financial Accounting Statement 142", Terra-Firma Publications, May 2002

"Investor Attitudes Toward the Value of Corporate Environmentalism: New Survey Findings" (with Peter Soyka) Journal of Environmental Quality Management, Autumn 1998.

"Does Improving a Firm's Environmental Management System and Environmental Performance Result in a Higher Stock Price?" (with Peter Soyka and Paul Ameer ). Journal of Investing, Winter, 1997.

"Capturing the Business Value of EH&S Excellence" (with Peter Soyka). Environmental Management Journal, Winter, 1997.

"Sources of Structural Change in the United States, 1963-1978: An Input-Output Perspective" (with David McClain and Karen Palmer). Review of Economics and Statistics, Vol. LXIX, No. 3, August, 1987, pp. 503-510.

"Industry Analysis and Investment Decision-making Under Conditions of Uncertainty." Managerial and Decision Economics, Vol. 4, No. 3, 1983, pp. 193-207.

"The Determinants of Profit Growth in the Manufacturing Sectors" (with Richard DeKaser). Profits, Deficits, and Instability, D.B. Papadimitriou ed., Macmillan, 1992.

"The Impact of Productivity, Pricing, and Sales on Shareholder Wealth" (with Timothy Sullivan). Data Resources Long-term Review, Summer, 1992, pp. 19-23.

"Has the Private Rate of Return on Industry R&D Increased?" (with Timothy Sullivan and Richard DeKaser). Data Resources Long-Term Review, Winter, 1991, pp. 21-24.

Evaluation of Citibank's Debt Rating Model. This report reviewed Citibank's debt rating model, made suggestions for possible improvements and reviewed the literature on credit risk and default modeling, October, 1997.

A Primer on the Nature and Role of the Financial Markets: A Guide for State and Local Transportation Officials as They Consider Innovative Financing Mechanisms to Fund Future Highway and Road Construction, September, 1995, prepared for the Federal Highway Administration under contract DTFH61-93-C-00206, work order DRI-94-011.

# APPENDIX C: VALUATION AND FIRM FINANCIAL DATA

## Financial, Industry Growth, and Compensation Factors for Tentex Toys

Financial Factors		Industry Growth Factors		
Economy Financial Inputs		Game, Toy, & Children's Vehicle Manufacturing		
Treasury Bill Rate, 1 Year	1.44%	Year	Operating Profit Growth	Revenue Growth
Treasury Bond Rate, 10 Year	3.60%	1997	18.4%	- 1.6%
Prime Rate	4.75%	1998	18.1%	- 4.5%
Beta (unlevered) for:		1999	19.1%	8.5%
Game, Toy, & Children's Vehicle Mfg	0.37	2000	2.7%	3.0%
Tax Rate (Average of Federal, State, and Local)	40.0%	2001	- 0.6%	0.7%
		2002	6.4%	- 0.7%
		2003	7.1%	1.0%
		2004	8.2%	4.1%
		2005	5.1%	3.1%
		2006	3.6%	1.6%
		Terminal	4.0%	N/A
Company-specific Financial Factors		Industry Compensation Factors		
Cost of Capital (before tax, weighted average)	16.37%	Owner Salary	\$67,414	
Cost of Capital (after tax, weighted average)	15.01%	(Market Determined Wage for Owners in this Industry, Predetermined Size Class, and State of the Business - Illinois)		
Cost of Common Equity (before tax)	18.22%	Owner Fringe Benefits Ratio	0.0%	
Cost of Common Equity (after tax)	17.83%	(For C Type Corporations, No Fringe Benefit Adjustment to Owner Compensation is Made)		
Cost of Long-Term Debt	10.81%			
Cost of Short-Term Debt	7.25%			
Risk Premium	8.00%			
(Additional Return Investors Require for Investing in a Diversified Portfolio of Stocks Rather than The One Year Treasury Bill)				
Size Premium	10.85%			
(Additional Return Investors Require for Investing in a Diversified Portfolio of Small Company Stocks)				
Company-specific Valuation Adjustments				
Control Premium	20.2%			
(Percentage Increase in the Value of the Firm Resulting from Having Control of How the Firms Assets are Deployed)				
Liquidity Discount	20.0%			
(Percent Reduction in the Value of the Privately Held Firm Due to Lack of Liquidity)				

**Tentex Toys Financials for the 12 months ending October 2002  
(Before Normalization)**

<b>Page 1</b>		
<i>Line</i>	<i>Concept</i>	<i>Value</i>
1c	Gross receipts less returns and allowances	\$1,781,278
2	Cost of goods sold	\$1,140,018
4	Dividends	\$ 0
5	Interest	\$ 0
6	Gross Rents	\$ 0
7	Gross Royalties	\$ 0
10	Other income	\$6,000
12	Compensation of officers	\$283,500
14	Repairs and maintenance	\$ 900
15	Bad debts	\$1,800
16	Rents	\$9,200
18	Interest	\$27,900
25	Employee benefit programs	\$5,000
27	Total deductions (Before Normalization)	\$592,350
29b	Special deductions	\$ 0
<b>Schedule K</b>		
K2a	Business activity code no	339932
<b>Schedule L</b>		
L1 col (b)	Cash, beginning of tax year	\$28,331
L1 col (d)	Cash, end of tax year	\$29,748
L2a col (a)	Trade notes and accounts receivable, beginning of tax year	\$153,700
L2a col (c)	Trade notes and accounts receivable, end of tax year	\$161,385
L2b col (a)	Less allowance for bad debts, beginning of tax year	\$ 0
L2b col (c)	Less allowance for bad debts, end of tax year	\$ 0
L3 col (b)	Inventories, beginning of tax year	\$298,400
L3 col (d)	Inventories, end of tax year	\$328,240
L4 col (b)	U.S. Government obligations, beginning of tax year	\$ 0
L4 col (d)	U.S. Government obligations, end of tax year	\$ 0
L5 col (b)	Tax-exempt securities, beginning of tax year	\$ 0
L5 col (d)	Tax-exempt securities, end of tax year	\$ 0
L6 col (b)	Other current assets, beginning of tax year	\$67,266
L6 col (d)	Other current assets, end of tax year	\$70,629
L10a col (a)	Buildings and other depreciable assets, beginning of tax year	\$296,700
L10a col (c)	Buildings and other depreciable assets, end of tax year	\$311,535
L10b col (a)	Less accumulated depreciation, beginning of tax year	\$104,280
L10b col (c)	Less accumulated depreciation, end of tax year	\$109,494
L15 col (d)	Total assets, end of tax year	\$833,273
L16 col (b)	Accounts payable, beginning of tax year	\$34,834



# **Business Valuation Report For Tentex Toys**

L16 col (d)	Accounts payable, end of tax year	\$36,576
L17 col (d)	Mortgages, notes, bonds payable in less than 1 year, end of tax year	\$4,300
L18 col (b)	Other current liabilities, beginning of tax year	\$7,400
L18 col (d)	Other current liabilities, end of tax year	\$5,665
L20 col (d)	Mortgages, notes, bonds payable in 1 year or more, end of tax year	\$191,510
L21 col (d)	Other liabilities, end of tax year	\$ 0
L22a col (c)	Capital stock: (a) preferred stock	\$ 0
L28 col (d)	Total liabilities and shareholders' equity, end of tax year	\$833,273
<b>Schedule M-1</b>		
7	Tax-exempt interest \$	\$ 0

**Table C-2 Balance Sheet History for Tentex Toys**

Concepts		End of Tax Year				
Line	Assets	12 Months Ending September 30, 2002 <sup>1</sup>	2001	2000	1999	1998
1	Cash	\$ 29,748	\$ 28,331	\$ 14,700	\$ 15,435	\$ 14,200
2a	Trade notes and accounts receivable	\$ 161,385	\$ 153,700	\$ 98,400	\$ 103,320	\$ 95,054
2b	Less allowance for bad debts	\$ -	\$ -	\$ -	\$ -	\$ -
2c	Net Trade notes and accounts receivable	\$ 161,385	\$ 153,700	\$ 98,400	\$ 103,320	\$ 95,054
3	Inventories	\$ 328,240	\$ 298,400	\$ 126,000	\$ 119,700	\$ 101,745
4	U.S. Government obligations	\$ -	\$ -	\$ -	\$ -	\$ -
5	Tax-exempt securities	\$ -	\$ -	\$ 100,000	\$ 85,000	\$ 80,000
6	Other current assets	\$ 70,629	\$ 67,266	\$ 26,300	\$ 23,670	\$ 24,143
7	Loans to shareholders	\$ -	\$ -	\$ -	\$ -	\$ -
8	Mortgage and real estate loans	\$ -	\$ -	\$ -	\$ -	\$ -
9	Other investments	\$ -	\$ -	\$ 100,000	\$ 125,000	\$ 130,000
10a	Buildings and other depreciable assets	\$ 311,535	\$ 296,700	\$ 272,400	\$ 245,160	\$ 220,644
10b	Less accumulated depreciation	\$ 109,494	\$ 104,280	\$ 88,300	\$ 79,470	\$ 71,523
10c	Net Buildings and other depreciable assets	\$ 202,041	\$ 192,420	\$ 184,100	\$ 165,690	\$ 149,121
11a	Depletable assets	\$ -	\$ -	\$ -	\$ -	\$ -
11b	Less accumulated depletion	\$ -	\$ -	\$ -	\$ -	\$ -
11c	Net Depletable assets	\$ -	\$ -	\$ -	\$ -	\$ -
12	Land (net of any amortization)	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
13a	Intangible assets (amortizable only)	\$ -	\$ -	\$ -	\$ -	\$ -
13b	Less accumulated amortization	\$ -	\$ -	\$ -	\$ -	\$ -
13c	Net Intangible Assets	\$ -	\$ -	\$ -	\$ -	\$ -
14	Other assets	\$ 21,230	\$ 19,300	\$ 14,800	\$ 16,280	\$ 15,954
15	<b>Total Assets</b>	<b>\$ 833,273</b>	<b>\$ 779,417</b>	<b>\$ 684,300</b>	<b>\$ 674,095</b>	<b>\$ 630,218</b>
<b>Liabilities and Shareholder's Equity</b>						
16	Accounts payable	\$ 36,576	\$ 34,834	\$ 28,500	\$ 25,650	\$ 23,085
17	Mortgages, notes, bonds payable in less than 1 year	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300
18	Other current liabilities	\$ 5,665	\$ 7,400	\$ 6,800	\$ 5,575	\$ 6,133
19	Loans from shareholder	\$ -	\$ -	\$ -	\$ -	\$ -
20	Mortgages, notes, bonds payable in 1 year or more	\$ 191,510	\$ 164,100	\$ 176,700	\$ 194,370	\$ 184,631
21	Other liabilities	\$ -	\$ -	\$ -	\$ -	\$ -
22	Capital stock: a) Preferred stock	\$ -	\$ -	\$ -	\$ -	\$ -
22b	b) Common stock	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
23	Additional paid-in capital	\$ -	\$ -	\$ -	\$ -	\$ -
24	Retained earnings-Appropriated	\$ 50,000	\$ 40,000	\$ 30,000	\$ 30,000	\$ 30,000
25	Retained earnings-Unappropriated	\$ 345,222	\$ 328,783	\$ 238,000	\$ 214,200	\$ 182,070
26	Adjustments to shareholders' equity	\$ -	\$ -	\$ -	\$ -	\$ -
27	Less cost of treasury stock	\$ -	\$ -	\$ -	\$ -	\$ -
28	<b>Total liabilities and shareholders' equity</b>	<b>\$ 833,273</b>	<b>\$ 779,417</b>	<b>\$ 684,300</b>	<b>\$ 674,095</b>	<b>\$ 630,218</b>

<sup>1</sup> Values are from financial statements as of 9/30/2002.

Table C-3 Income Statement History for Tentex Toys

## Tentex Toys, Inc.

Concepts		Years				
Line	Income	Twelve Months Ending September 30, 2002 <sup>1</sup>	2001	2000	1999	1998
1a	Gross receipts or sales	\$ 1,804,478	\$ 1,718,550	\$ 1,909,500	\$ 1,833,120	\$ 1,778,126
1b	Less returns and allowances	\$ 23,200	\$ 20,000	\$ 19,300	\$ 18,700	\$ 18,100
1c	Balance - Net Receipts	\$ 1,781,278	\$ 1,698,550	\$ 1,890,200	\$ 1,814,420	\$ 1,760,026
2	Cost of goods sold	\$ 1,140,018	\$ 1,087,072	\$ 1,228,630	\$ 1,215,661	\$ 1,196,818
3	Gross profit	\$ 641,260	\$ 611,478	\$ 661,570	\$ 598,759	\$ 563,208
4	Dividends	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest	\$ -	\$ -	\$ -	\$ -	\$ -
6	Gross rents	\$ -	\$ -	\$ -	\$ -	\$ -
7	Gross royalties	\$ -	\$ -	\$ -	\$ -	\$ -
8	Capital net income	\$ -	\$ -	\$ -	\$ -	\$ -
9	Net gain or (loss)	\$ -	\$ -	\$ -	\$ -	\$ -
10	Other Income	\$ 6,000	\$ 5,500	\$ 5,000	\$ 5,000	\$ 5,000
11	<b>Total income (loss)</b>	<b>\$ 647,260</b>	<b>\$ 616,978</b>	<b>\$ 666,570</b>	<b>\$ 603,759</b>	<b>\$ 568,208</b>
	<b>Expenses</b>					
12	Compensation of officers	\$ 283,500	\$ 270,000	\$ 261,900	\$ 251,424	\$ 238,853
13	Salaries and wages	\$ 140,000	\$ 138,000	\$ 136,620	\$ 135,254	\$ 133,901
14	Repairs and maintenance	\$ 900	\$ 800	\$ 750	\$ 725	\$ 695
15	Bad debts	\$ 1,800	\$ 1,600	\$ 1,500	\$ 1,750	\$ 1,550
16	Rents	\$ 9,200	\$ 9,200	\$ 9,200	\$ 9,200	\$ 9,200
17	Taxes and licenses	\$ 15,500	\$ 15,000	\$ 14,500	\$ 15,600	\$ 14,200
18	Interest	\$ 27,900	\$ 27,200	\$ 28,560	\$ 29,988	\$ 29,688
19	Charitable Contributions	\$ 22,000	\$ 23,150	\$ 24,308	\$ 25,523	\$ 25,012
20	Depreciation	\$ 27,650	\$ 17,600	\$ 17,424	\$ 17,076	\$ 16,563
21a	Depreciation claimed on Schedule A and elsewhere	\$ 15,300	\$ 12,400	\$ 12,197	\$ 11,953	\$ 11,594
21b	Net Depreciation	\$ 12,350	\$ 5,200	\$ 5,227	\$ 5,123	\$ 4,969
22	Depletion	\$ -	\$ -	\$ -	\$ -	\$ -
23	Advertising	\$ 8,700	\$ 8,700	\$ 8,700	\$ 8,700	\$ 8,700
24	Pension, profit-sharing plans	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
25	Employee benefit programs	\$ -	\$ -	\$ -	\$ -	\$ -
26	Other deductions	\$ 65,500	\$ 78,300	\$ 82,215	\$ 80,571	\$ 78,154
27	<b>Total deductions.</b>	<b>\$ 592,350</b>	<b>\$ 582,150</b>	<b>\$ 578,480</b>	<b>\$ 568,857</b>	<b>\$ 549,922</b>
28	Taxable income before net operating loss deduction and specials deductions	\$ 54,910	\$ 34,828	\$ 88,090	\$ 34,902	\$ 18,286
29a	Less: Net operating loss deduction	\$ -	\$ -	\$ -	\$ -	\$ -
29b	Less: Special deductions	\$ -	\$ -	\$ -	\$ -	\$ -
29c	Net operating loss deduction	\$ -	\$ -	\$ -	\$ -	\$ -
	<b>Taxable Income</b>	<b>\$ 54,910</b>	<b>\$ 34,828</b>	<b>\$ 88,090</b>	<b>\$ 34,902</b>	<b>\$ 18,286</b>
	<b>Operating Earnings (Line 3 - Line 27)</b>	<b>\$ 48,910</b>	<b>\$ 29,328</b>	<b>\$ 83,090</b>	<b>\$ 29,902</b>	<b>\$ 13,286</b>
	<b>EBITDA (Line 11 - Line 27 + Line 18 + Line 21b)</b>	<b>\$ 95,160</b>	<b>\$ 67,228</b>	<b>\$ 121,878</b>	<b>\$ 70,012</b>	<b>\$ 52,943</b>

<sup>1</sup> Values are from financial statements as of 9/30/2002.

---

## APPENDIX D: CERTIFICATION AND CONDITIONS

---

### APPRAISAL CERTIFICATION

Axiom hereby certify the following statements regarding this business valuation:

- ☐ We have not personally inspected the assets, properties, or business interests encompassed by this appraisal.
- ☐ We have no present or prospective future interest in the assets, properties, or business interests that are the subject of this business valuation.
- ☐ We have no personal interest or bias with respect to the subject matter of this report or the parties involved.
- ☐ Our compensation for making the appraisal is in no way contingent upon the value reported or upon any predetermined value.
- ☐ To the best of our knowledge and belief, the statements of facts contained in this report, upon which the analyses, conclusions, and opinions expressed herein are based, are true and correct
- ☐ Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice, as promulgated by The Appraisal Foundation, except where noted.
- ☐ Subject to certain limitations the reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and the Standards of Professional Appraisal Practice of The Appraisal Institute, of the American Society of Appraisers, and of the other professional organizations, unless otherwise stated.
- ☐ We have performed a historical analysis of the business's financial statements. We assume that the financial and related information supplied by the firm's representative reflects the normal operation of the business. To the extent this is not an accurate representation, the analysis and conclusions drawn are not valid and shall not be represented in any context that implicitly or explicitly suggests that Axiom and its representatives believe the business valuation to be accurate.

## STATEMENT OF CONTINGENT AND LIMITING CONDITIONS

This appraisal is made subject to these general contingent and limiting conditions:

- ☐ We assume no responsibility for the legal description or matters including legal or title considerations. Title to the subject assets, properties, or business interests is assumed to be good and marketable unless otherwise stated.
- ☐ The subject assets, properties, or business interests are appraised free and clear of any or all liens or encumbrances unless otherwise stated.
- ☐ We assume responsible ownership and competent management with respect to the subject assets, properties, or business interests
- ☐ The information furnished by others is believed to be reliable. However, we issue no warranty or other form of assurance regarding its accuracy.
- ☐ We assume no hidden or unapparent conditions regarding its accuracy.
- ☐ We assume that there is full compliance with all applicable federal, state, and local regulations and laws unless the lack of compliance is stated, defined, and considered in the appraisal report.
- ☐ We assume that all required licenses, certificates of occupancy, consents, or legislative or administrative authority from any local, state, or national government, or private entity or organization have been or can be obtained or reviewed for any use on which the opinion contained in this report is based.
- ☐ Unless otherwise stated in this report, we did not observe, and we have no knowledge of, the existence of hazardous materials with regard to the subject assets, properties, or business interests. However, we are not qualified to detect such substances. We assume no responsibility for such conditions or for any expertise required to discover them.
- ☐ Possession of this report does not carry with it the right of publication. It may not be used for any purpose by any person other than the client whom it is addressed without our written consent and, in any event, only with proper written qualifications and only its entirety.
- ☐ We, by reason of this opinion, are not required to furnish a complete valuation report, or to give testimony, or to be in attendance in court with reference to the assets, properties, or business interests in question unless arrangements have been previously made.
- ☐ Neither all nor any part of the contents of this report shall be disseminated to the public through advertising, public relations, news, sales, or other media without our prior written consent and approval.
- ☐ The analyses, opinions, and conclusions presented in this report apply to this engagement only and may not be used out of context presented herein. This report is valid only for the effective date(s) specified herein and only for the purpose(s) specified herein.