

FORECASTING FINANCIAL STATEMENTS USING RISK MANAGEMENT ASSOCIATES INDUSTRY DATA

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ABSTRACT

Finance professionals must frequently forecast financial statements. The common practice for forecasting financial statements is to apply the percentage of sales method. In this paper, we develop a new method for forecasting financial statements based data available from The Risk Management Association. This method offers three advantages over the percentage of sales method. First, it specifies the appropriate percentages for each account using industry average data. Second, it allows the developer to use any figure in the income statement or balance sheet as a starting point. For example, an investor who knows only that they have \$100,000 available to start a company can forecast a balance sheet and income statement. Third, the percentage of sales method applies only to the income statement, while the method developed here allows estimation of both the income statement and balance sheet. Statements produced using the technique presented here are easily defensible to skeptical bankers.

JEL: A22, A23, C52, C53, C58

KEYWORDS: Forecasting, Banking, Entrepreneurship

INTRODUCTION

This paper presents a new method to forecast financial statements. The approach relies on industry financial data available from Risk Management Associates (RMA), Annual Statement Studies. RMA Annual Statement Studies provide historical financial statements for some 760 industries based on the statements of firms that operate within each industry. The approach requires the user to provide a single estimate of sales or owner's equity contribution. From this estimate, a full balance sheet and income statement are prepared. This methodology is founded in scientific principles and derived from industry average data. As such, the resulting statements are more credible than percentage of sales or ad-hoc estimates. This added credibility should lead to better funding opportunities and lower capital costs. The method also allows financial analysts to make better recommendations and entrepreneurs to make better project selection decisions.

The remainder of the paper is organized as follows: In the next section, we discuss the related literature. The following section discussed the RMA data. Next, financial statement forecasts based on an estimate of firm sales and an estimate of owner's equity contribution combined with RMA data are provided. The paper closes with some concluding comments and precautionary notes.

LITERATURE REVIEW

Many sources provide guidance for forecasting financials and preparing pro forma statements. The guidance suggests two basic approaches: percent of sales and comparable methods. The percent of sales approach uses history to forecast income statement and balance sheet accounts as a percent of projected sales. The judgmental approach improves on the strict percent of sales method by allowing for incorporation of additional information such as financial ratios to determine forecast levels of certain

accounts that do not vary directly with sales volume. These accounts include capital expenditures and debt levels. Both methods require a sales forecast as a starting point.

Corporate Finance texts concentrate on forecasting required new funds or external sources of financing for large established firms with a history of operating results (Block, Hirt and Danielson, 2009), (Gitman, 2009), (Brealey, Myers and Marcus, 2009) and (Ross, Westerfield and Jordan, 2010). Both approaches are well-suited for the analysis of long-term capital requirements of established firms. Financial Statement Analysis texts suggest preparing pro forma financial statements for prospective and credit analysis of established firms using a judgmental approach (Penman, 2010), (Subramayam and Wild, 2009), and (Revsine, Collins, Johnson and Mittelstaedt, 2009). The percent of sales and judgmental methods work well for companies that have past data to draw on but are not useful for a proposed or start-up company that needs to present a viable business plan to a lending institution.

Similar to what we propose but lacking detail, entrepreneurial texts suggest a comparables method for preparing pro forma statements as part of the business plan for companies in the proposal or start-up phases (Allen, 2006), (Kuratko, 2009), (Rogers, 2009), (Barringer and Ireland, 2010), (Adelman and Marks, 2004) and (Timmons, Zacharakis and Spinelli, 2004). Comparable companies operate in the same industry and provide a model for what the start-up wants to achieve. Using comparable financials as a base, pro forma statements are developed and revised according to the start-up's particular market, competition, and location. Entrepreneurial texts generally discuss the reasoning behind preparing pro forma statements based on comparables and in some cases even suggesting useful sources of information such as RMA needed to accomplish the plan. However, the entrepreneurial texts do not discuss the intricacies, offer comprehensive examples or provide templates of how to prepare an actual financial plan that can be used for financial planning, including investment, cash and financing needs.

There is a substantial and growing literature that documents the efficacy of using financial databases such as Compustat and Value Line to enhance student learning in finance courses by introducing "real world data" and hands-on analysis. Representative of this literature is (Loviscek, Crowley and Anderson, 2003), (Hess, 2006), (Kish and Hogan, 2001), (King and Jennings, 2004), (Kalra and Weber, 2004), (Gullett and Redman, 2004) and (Weaver, 2003) which finds increased student engagement, understanding and retention in Principles, Investments, Statement Analysis, Portfolio Management and Personal Finance courses. Using RMA data for forecasting is consistent with the best practices pedagogy that links theory with practice for the student by building analysis of real problems using actual data with all its inherent intricacy and ambiguity that is too often stripped away from textbook exercises.

DATA

Data for this paper were obtained from The Risk Management Association (RMA), Annual Statement Studies. Each year, RMA compiles information on the financial statements of firms by industry. The data includes balance sheet data, income statement data as well as sixteen financial ratios. The data are categorized based on the firm's asset level and sales level. Firms are sorted into six different asset levels and six different sales levels. RMA provides current financial data for each classification and several periods of historical data for each industry. Regional data is also available, but is not used in this study.

RMA ratios are developed based on the financial statements of some 285,000 firms. Data for each industry is averaged across the U.S. In addition average data by industry are available for six regions within the U.S. The data includes ratio averages for some 760 industries and is updated annually. The printed books, which include only national average data for each industry, are available from the RMA website with pricing starting at about \$390. RMA sells individual industry reports for \$140 each. An internet search suggests that many university libraries subscribe to the product. Used versions of the

books, with previous year data, are available for about \$100. Web and CD based versions, including both national and regionally segregated data, are available with similar pricing (www.rmahq.org).

The appendix contains specimen of the RMA, Annual Statement Study data for the 2010 retail floor covering stores (NAICS 444210) classification. The specimen are reprinted with permission from Risk Management Associates. The appendix shows the samples using current data sorted by sales and assets respectively. Additional information on default probabilities provided by RMA are also included. The left six columns of the table labeled Current Data Sorted by Assets show the data categorized by assets. The first of these six columns shows the data for firms with total assets between zero and \$500,000. The second column shows data for firms with sales of \$500,000-\$2 million and so forth. The two columns right of the labels show historical data. The leftmost column contains data for April 1, 2005-March 31, 2006. The next column presents data for the period April 1, 2006-March 31, 2007 and so forth through 2010. The Type of Statement area indicates the data source for each company and the total number of firms within the category. The careful reader will notice that for some ratio's each category includes three figures. In these instances, the top figure in the cell is the ratio for the upper quartile, the middle figure is for the median and the lower figure is for the lower quartile of firms.

FORECASTING FINANCIAL STATEMENTS

To forecast financial statements, the user must select the appropriate industry. While RMA provides data for many industries, some firms may not fall exactly into one of these industries. In this case, the user faces two options: select data for the closest matching industry or average the data for two or more industries. Users should select the method that most closely approximates their own firm. Next, users provide a kernel or starting point for the forecasting process. The starting point can be any income statement or balance sheet item. Common starting points are total sales or the owner's equity contribution to the firm. The development of financial statement forecasts using these two starting points follow.

Sales Estimate Starting Point

Consider an entrepreneur who wishes to start a retail floor covering store that will achieve annual sales of \$1,500,000. When the process begins with a sales estimate, current or historical data sorted by sales should be used to formulate the statement estimates. The user should select the appropriate column corresponding with the sales estimate. In this case, the sales estimate falls between \$1 Million and \$3 Million, so the second column is selected.

The income statement is estimated first. Estimation of the income statement is straightforward. Each appropriate percentage must simply be multiplied by the sales estimate to obtain the correct figure. Table 1, Panel A presents the resulting calculations. The careful reader will notice that RMA does not provide cost of goods sold (COGS) percentages. However, COGS can be imputed as the difference between sales and gross profit. ($\$1,500,000 - \$606,000 = \$894,000$) The income statement stops at earnings before taxes. This occurs because RMA data does not provide tax estimates. The entrepreneur should use their own tax situation to provide a tax rate estimate and complete the net income calculations.

To estimate the balance sheet, a link between the income statement and balance sheet must be identified. The sales-to-total assets ratio, *STA*, reported by RMA provides an easy link. For this demonstration the median value of 3.4 is selected. The following sales-to-total assets formula is used to compute the asset amount: $STA = \frac{Sales}{Total Assets}$. Imputing data from the example gives: $3.4 = \frac{\$1,500,000}{Total Assets}$. Solving the equation produces a total assets estimate of \$441,176.47. From this figure and noting that total assets must equal total liabilities plus equity, the remainder of the balance sheet is estimated using RMA percentages. Table 1, Panel B presents the balance sheet results.

The careful reader will notice that the other current assets amount has been changed from the RMA figures of 0.0022 to 0.0023 in the current tables. This procedure is often necessary to address rounding issues that occur in RMA data. The dollar amounts involved in these rounding procedures are generally small.

Table 1: Financial Statement Estimates starting from a Sales Estimate

Panel A: Income Statement		
Item	Percentage	Dollar Amount
Sales	1	\$1,500,000
Cost of Goods Sold		\$894,000
Gross Profit	0.404	\$606,000
Operating Expenses	0.401	\$601,500
EBIT	0.003	\$4,500
Other Expenses	0.007	\$10,500
EBT	-0.004	-\$6,000
Panel B: Balance Sheet		
Cash	0.121	\$53,382.35
Trade Receivables	0.179	\$78,970.59
Inventory	0.391	\$172,500.00
Other Current Assets	0.023*	\$10,147.06
Total Current Assets	0.714	\$315,000.00
Net Fixed Assets	0.176	\$77,647.06
Intangibles	0.034	\$15,000.00
Other Non Current Assets	0.076	\$33,529.41
Total Assets		\$441,176.47
Notes Payable	0.159	\$70,147.06
Current Mat. Long Term Debt	0.062	\$27,352.94
Trade Payables	0.169	\$74,558.82
Income Taxes Payable	0.001	\$441.18
All Other Current	0.195	\$86,029.41
Total Current	0.586	\$258,529.41
Long Term Debt	0.16	\$70,588.24
Deferred Taxes	0	\$0.00
All Other Non-Current	0.122	\$53,823.53
Net Worth	0.132	\$58,235.29
Total Liabilities and Net Worth	1	\$441,176.47

*This table shows financial statement forecasts starting from a sales estimate of \$1,500,000. Panel A shows the income statement and Panel B shows the balance sheet. Other expenses in the RMA data are assumed to be exclusively interest expenses. * RMA figure changed from 0.022 to 0.0023 to facilitate balancing.*

Equity Contribution Starting Point

Sometimes an entrepreneur cannot formulate a reliable sales estimate. The entrepreneur might only know the amount of money they have available to invest in the firm. In this section, we use the owner's equity contribution into the firm as a starting point for the analysis. Table 2 shows the resulting financial statements. Because the analysis is based on a balance sheet estimate, we use current data sorted by assets for the forecast. Consider an entrepreneur who has accumulated \$200,000 that he wishes to invest in a business. The entrepreneur wishes to remain the sole equity holder in the firm. From this figure, the financial statements can be estimated.

The estimation requires calculation of the firm's total liabilities and equity. To do this, the RMA percentage figure for net worth is observed. Identifying the appropriate RMA data column requires an approximation, because the total asset amount has not yet been established. We observe that net worth as a percentage of total assets ranges from about 16 percent to 36 percent. Given a net worth starting value of \$200,000, it is probable that total assets will fall between \$500,000 and \$2 million and so the second column is selected. Total assets, TA , are estimated using the following formula:

$TA = \frac{\text{Equity Contribution}}{\text{Equity Percentage of Total Assets}}$. RMA data shows that Equity (Net Worth) is 29.1 percent of Total Assets, so the calculations for our example are: $TA = \frac{\$200,000}{0.291} = \$687,285.22$. Using this total asset estimate, the remaining balance sheet items are calculated using the appropriate percentages.

Next, the balance sheet is linked to the income statement. This is done, as before, using the sales to total assets ratio: $STA = \frac{\text{Sales}}{\text{Total Assets}}$. In this case, we know the total asset amount of \$607,902.74 and the ratio of sales to total assets from RMA of 3.4. Thus the formula becomes: $3.4 = \frac{\text{Sales}}{\$687,285.22}$. Solving the equation for sales gives \$2,336,769.76. The remaining income statement items are computed using the sales estimate and the appropriate RMA percentages.

Table 2: Financial Statement Estimates starting from an Owners Equity Estimate

Panel A: Income Statement		
Item	Percentage	Dollar Amount
Sales	1	\$2,336,769.76
Cost of Goods Sold		\$1,483,848.80
Gross Profit	0.365	\$852,920.96
Operating Expenses	0.342	\$799,175.26
EBIT	0.023	\$53,745.70
Other Expenses	0.004	\$9,347.08
EBT	0.019	\$44,398.63
Panel B: Balance Sheet		
Cash	0.104*	\$71,477.66
Trade Receivables	0.241	\$165,635.74
Inventory	0.347	\$238,487.97
Other Current Assets	0.039	\$26,804.12
Total Current Assets	0.731	\$502,405.50
Net Fixed Assets	0.146	\$100,343.64
Intangibles	0.04	\$27,491.41
Other Non Current Assets	0.083	\$57,044.67
Total Assets		\$687,285.22
Notes Payable	0.159	\$109,278.35
Current Mat. Long Term Debt	0.052	\$35,738.83
Trade Payables	0.163	\$112,027.49
Income Taxes Payable	0.003	\$2,061.86
All Other Current	0.165	\$113,402.06
Total Current	0.542	\$372,508.59
Long Term Debt	0.108	\$74,226.80
Deferred Taxes	0	\$0.00
All Other Non-Current	0.059	\$40,549.83
Net Worth	0.291	\$200,000.00
Total Liabilities and Net Worth	1	\$687,285.22

*This table shows financial statement forecasts starting from an owner's capital contribution of \$200,000. Panel A shows the income statement and Panel B shows the balance sheet. Other expenses in the RMA data are assumed to be exclusively interest expenses. * RMA figure changed from 0.105 to 0.104 to facilitate balancing.*

JUDGMENT ENHANCED STATEMENTS

In some instances it may be necessary to make adjustments to the data provided by RMA to reflecting the preparer's judgment. This might be necessary for several reasons. First, data may not be available for an industry or the sample size for an industry may not be sufficient to provide a reliable average. Adjustments might also be necessary if the industry or economy has experienced a shock such as the events of September 11, 2001. In these cases, historical based financial statement estimates created from RMA data might not fairly represent future expectation. In these and certainly other instances adjustments to the historical figures are appropriate based on the judgment of the preparer.

CLASSROOM IMPLEMENTATION AND ASSESSMENT

The financial statement forecasting techniques demonstrated here are suitable for use in finance, accounting or management courses. The authors have successfully integrated the technique into the principles of finance courses, required of every business student at one university. The technique is also utilized in the small business finance course, which is offered as an upper division business elective for business majors. In both cases the technique is taught in conjunction with financial statement and ratio analysis. Demonstrating the technique requires about 40 minutes of class time. Students are also assigned an out of class project requiring them to obtain RMA data from the University library and forecast financial statements.

Assurance of learning is an important function of any business program and teaching tool. To date efforts have not been undertaken to assess this technique in comparison to other financial statement forecasting techniques. One method to assess the technique would be to provide forecasts based on RMA financial statements and those developed using other methods to a series of bankers. The bankers might be asked to assess the quality of the financial statement forecasts from the two methods.

While direct assessment of the technique has not been completed, some casual observations can be noted. First, students completing the Principles of Finance Course complete a teacher evaluation at the end of the course. One open ended question asked on the evaluation is “What is the most valuable element of the course?” With some frequency, students note that financial statement forecasting was among the most valuable elements learned in the course.

CONCLUDING COMMENTS AND PRECAUTIONARY NOTES

This paper demonstrates a method to forecast financial statements using industry average information available from Risk Management Associates. The methodology developed here offers three advantages over the percentage of sales method commonly found in financial textbooks. The method here specifies the appropriate percentages for each account using industry average data. It allows the developer to use any figure in the income statement or balance sheet as a starting point. Third, the technique developed here is applicable to both the income statement and balance sheet while the percentage of sales method is applicable only to the income statement. The resulting financial statements are founded in science and thus are defensible to a skeptical banker or other interested party.

Several precautionary notes are in order. The figures presented by RMA represent averages for established companies. An individual starting a company might experience substantially different results, particularly in the earlier years of operation. Second, sometimes data presented by RMA is based on a small sample of firms. In these instances, the reported results might not be representative of what an entrepreneur might experience. Third, the data presented here are based on national averages. Regional data, also available from RMA might provide additional insights. Finally, the data presented by RMA is historical in nature. In some instances history may not be a good approximation of the future. This is likely to be the case in some industries around a major shock such as the events of September 11, 2001. Despite these limitations, the statements provided here provide an important improvement over the percentage of sales estimate or a best guess estimate.

APPENDIX

RETAIL—Floor Covering Stores NAICS 442210

Current Data Sorted by Assets						Comparative Historical Data		
		1	6	1	1	Type of Statement		
3	14	33	1	1		Unqualified	11	17
14	24	14	1			Reviewed	47	49
45	56	14	3			Compiled	83	91
23	48	35	13	5	3	Tax Returns	93	92
						Other	115	109
	64 (4/1-9/30/09)		295 (10/1/09-3/31/10)				4/1/05-	4/1/06-
0-500M	500M-2MM	2-10MM	10-50MM	50-100MM	100-250MM	NUMBER OF STATEMENTS	3/31/06	3/31/07
85	142	97	24	7	4	ALL	ALL	ALL
%	%	%	%	%	%	ASSETS		
11.2	10.5	10.3	5.5			Cash & Equivalents	7.5	8.5
15.4	24.1	23.0	20.9			Trade Receivables (net)	29.0	31.1
35.4	34.7	30.8	38.3			Inventory	36.2	32.2
3.3	3.9	3.9	2.5			All Other Current	2.4	2.8
65.4	73.1	68.0	67.1			Total Current	75.1	74.6
21.8	14.6	20.2	17.1			Fixed Assets (net)	15.6	16.4
2.9	4.0	3.2	8.8			Intangibles (net)	3.0	2.6
9.9	8.3	8.7	7.0			All Other Non-Current	6.3	6.4
100.0	100.0	100.0	100.0			Total	100.0	100.0
						LIABILITIES		
20.4	15.9	11.0	10.5			Notes Payable-Short Term	12.0	13.9
4.4	5.2	2.1	4.3			Cur. Mat.-L.T.D.	1.9	2.8
26.3	16.3	17.0	19.1			Trade Payables	21.3	19.8
.1	.3	.4	.1			Income Taxes Payable	.4	.2
21.5	16.5	17.2	13.2			All Other Current	15.7	15.7
72.7	54.2	47.8	47.1			Total Current	51.2	52.3
24.8	10.8	10.6	11.0			Long-Term Debt	12.9	12.0
.0	.0	.1	.7			Deferred Taxes	.1	.1
19.3	5.9	5.8	8.5			All Other Non-Current	4.5	4.6
-16.8	29.1	35.7	32.7			Net Worth	31.4	31.0
100.0	100.0	100.0	100.0			Total Liabilities & Net Worth	100.0	100.0
						INCOME DATA		
100.0	100.0	100.0	100.0			Net Sales	100.0	100.0
39.4	36.5	37.9	33.4			Gross Profit	35.3	33.9
40.7	36.3	37.6	33.6			Operating Expenses	32.5	30.7
-1.3	.2	-.3	-.2			Operating Profit	2.8	3.1
.6	.4	.6	1.3			All Other Expenses (net)	.2	.4
-1.9	-.2	-.3	-1.4			Profit Before Taxes	2.6	2.7
						RATIOS		
2.4	2.5	2.8	1.7				2.4	2.4
1.2	1.4	1.4	1.4			Current	1.5	1.5
.6	.9	1.1	1.2				1.1	1.1
1.2	1.4	1.3	.7			Quick	1.3	1.4
(84)	.5	.6	.5				(348)	.7
.1	.3	.3	.3					.4
0	9	9	8			Sales/Receivables	11	12
10	23	23	22				25	26
21	37	44	42				42	43
15	24	26	35			Cost of Sales/Inventory	24	20
42	49	51	83				50	38
79	92	97	189				89	77
7	13	15	20			Cost of Sales/Payables	16	13
21	22	26	31				29	24
45	37	46	58				47	40
11.3	5.7	6.2	7.2			Sales/Working Capital	7.2	7.7
53.6	16.6	13.0	10.4				15.8	14.3
-17.5	-54.4	80.1	42.0				81.0	71.5
6.0	6.0	4.7	4.0			EBIT/Interest	13.7	14.9
(67)	1.0 (117)	1.0 (83)	1.1 (22)				(303)	(320)
-8.3	-3.6	-3.9	-4.3				1.4	1.4
	4.1	9.0				Net Profit + Depr., Dep., Amort./Cur. Mat. L/T/D	7.3	5.0
	(11)	1.7 (15)	1.8				(43)	(49)
	-2	-1					1.4	1.0
.3	.1	.1	.4			Fixed/Worth	.1	.1
2.0	.5	.5	.6				.4	.4
-.3	49.6	1.4	1.5				1.5	1.6
.9	.8	.7	.9			Debt/Worth	.8	.9
10.2	2.3	1.6	1.9				2.2	2.1
-2.3	168.9	5.8	5.1				8.3	6.1
68.2	30.3	19.7	12.1			% Profit Before Taxes/Tangible Net Worth	53.1	59.9
(49)	11.1 (108)	5.0 (86)	2.6 (19)				(299)	(318)
-9.6	-26.4	-15.4	-4.2				3.3	7.2
10.9	8.6	6.7	4.5			% Profit Before Taxes/Total Assets	16.2	19.2
.0	1.5	.9	-.1				5.9	7.7
-35.7	-8.2	-4.7	-12.5				1.0	1.8
97.2	73.4	50.2	43.4			Sales/Net Fixed Assets	78.9	89.6
27.0	35.3	20.3	13.5				34.8	37.4
14.3	18.1	7.3	6.9				17.2	17.3
7.3	4.6	3.5	3.7			Sales/Total Assets	4.6	5.1
4.5	3.4	2.7	2.1				3.6	3.8
2.7	2.2	1.8	1.6				2.7	2.8
.5	.4	.5	.8			% Depr., Dep., Amort./Sales	.4	.3
(63)	1.0 (111)	.7 (82)	.9 (19)				(288)	(293)
1.8	1.4	1.8	1.6				1.1	1.2
3.3	2.1	1.4				% Officers', Directors' Owners' Comp/Sales	2.0	1.7
(44)	5.9 (87)	3.9 (51)	3.3				(216)	(221)
9.1	5.9	7.2					6.7	5.9
92532M	532954M	1100202M	1689826M	2096393M	2454988M	Net Sales (\$)	5309673M	5433190M
21065M	151315M	399546M	504385M	573444M	692636M	Total Assets (\$)	1374048M	1528665M

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M = \$ thousand MM = \$ million

RETAIL—Floor Covering Stores NAICS 442210

Comparative Historical Data			Current Data Sorted by Sales						
			Type of Statement						
13	11	9	Unqualified	1	6	7	23	12	9
52	49	52	Reviewed	12	16	10	8	5	3
70	78	53	Complied	33	46	16	14	7	2
88	110	121	Tax Returns	12	32	21	22	18	5
114	118	124	Other						19
4/1/07-3/31/08	4/1/08-3/31/09	4/1/09-3/31/10		64 (4/1-9/30/09)		295 (10/1/09-3/31/10)			
ALL	ALL	ALL	NUMBER OF STATEMENTS	0-1MM	1-3MM	3-5MM	5-10MM	10-25MM	25MM & OVER
337	366	359	ASSETS	58	100	54	67	42	38
%	%	%	Cash & Equivalents	%	%	%	%	%	%
28.7	25.2	21.1	Trade Receivables (net)	12.1	17.9	23.6	30.0	23.6	21.8
31.9	34.4	33.7	Inventory	40.8	39.1	26.7	25.0	33.8	34.2
4.0	2.8	3.6	All Other Current	3.8	2.2	5.9	4.8	2.2	3.2
73.9	70.7	68.8	Total Current	65.1	71.4	68.8	69.5	68.9	66.0
16.9	17.6	18.3	Fixed Assets (net)	21.3	17.6	16.1	18.2	18.5	18.3
2.4	3.9	4.2	Intangibles (net)	3.9	3.4	4.9	2.4	4.6	8.0
6.8	7.8	8.8	All Other Non-Current	9.7	7.6	10.2	9.9	8.1	7.7
100.0	100.0	100.0	Total	100.0	100.0	100.0	100.0	100.0	100.0
			LIABILITIES						
14.4	15.6	15.2	Notes Payable-Short Term	15.9	15.9	13.9	18.0	13.3	11.5
3.0	4.7	4.1	Cur. Mat.-L.T.D.	5.2	6.2	3.1	2.1	1.9	4.3
19.4	19.4	19.4	Trade Payables	25.9	16.9	16.6	18.2	19.4	21.6
.3	.1	.3	Income Taxes Payable	.1	.1	.7	.5	.1	.2
14.7	17.3	17.7	All Other Current	18.9	19.5	17.8	13.0	12.8	25.2
51.8	57.1	56.7	Total Current	66.1	58.6	52.2	51.8	47.4	62.8
14.5	13.0	14.7	Long-Term Debt	28.2	16.0	9.4	8.2	9.7	15.5
.1	.1	.1	Deferred Taxes	.0	.0	.0	.0	.2	.4
5.3	6.8	9.5	All Other Non-Current	15.0	12.2	6.3	6.0	4.6	10.3
28.3	23.0	19.0	Net Worth	-9.3	13.2	32.1	33.9	38.1	11.0
100.0	100.0	100.0	Total Liabilities & Net Worth	100.0	100.0	100.0	100.0	100.0	100.0
			INCOME DATA						
100.0	100.0	100.0	Net Sales	100.0	100.0	100.0	100.0	100.0	100.0
35.3	34.7	37.5	Gross Profit	42.0	40.4	35.9	34.7	32.9	35.7
32.7	34.0	37.6	Operating Expenses	44.0	40.1	35.1	35.5	32.0	34.8
2.6	.8	-1.1	Operating Profit	-2.1	.3	.8	-9.9	1.0	.9
.4	.4	.6	All Other Expenses (net)	1.4	.7	.0	.4	.1	.9
2.2	.4	-7.7	Profit Before Taxes	-3.4	-4.4	.8	-1.3	.9	-1.1
			RATIOS						
2.5	2.2	2.4	Current	3.6	3.5	3.9	2.1	2.0	1.7
1.5	1.4	1.4		1.2	1.4	1.4	1.4	1.4	1.3
1.1	1.0	.9		.6	.8	.9	1.0	1.2	1.0
1.3	1.2	1.2	Quick	1.1	1.5	1.5	1.3	1.1	.9
.7	(365)	.6		(57)	.4	.5	.8	.7	.5
.4	.3	.2		.1	.2	.3	.4	.3	.2
11	33.1	8	48.4	6	57.0				
25	14.4	23	15.6	20	18.5				
43	8.5	39	9.4	32	11.3				
19	19.3	22	16.8	24	15.4				
41	8.9	45	8.1	49	7.4				
76	4.8	94	3.9	92	4.0				
13	27.3	13	27.8	14	26.9				
24	15.4	23	15.9	25	14.8				
43	8.5	40	9.0	43	8.5				
7.5	8.4	6.7	Sales/Receivables	0	UND	5	78.1	9	40.3
14.4	18.5	17.2	Cost of Sales/Inventory	9	41.1	14	25.3	22	16.5
109.4	-230.7	-50.2	Cost of Sales/Payables	26	14.1	27	13.6	38	9.5
11.0	6.4	5.3	Sales/Working Capital	26	13.8	24	15.3	20	18.3
(293)	3.3	(315)	EBIT/Interest	85	4.3	56	6.5	41	8.9
1.2	-7	-4.1	Net Profit + Depr., Dep., Amort./Cur. Mat. L/T/D	243	1.5	126	2.9	72	5.1
4.4	4.7	3.9	Fixed/Worth	6	61.7	14	26.7	13	27.2
.6	-2	-2	Debt/Worth	20	17.8	26	13.9	22	16.6
1.4	6.3	165.0	% Profit Before Taxes/Tangible Net Worth	69	5.3	44	8.3	35	10.4
1.0	.9	.8	% Profit Before Taxes/Total Assets	3.9	5.7	5.7	8.6	8.2	7.8
2.3	2.5	2.4	Sales/Net Fixed Assets	18.7	17.8	18.9	20.9	14.8	17.3
7.2	26.5	-70.7	% Depr., Dep., Amort./Sales	-9.8	-28.6	-48.9	-415.3	42.3	-130.8
52.2	36.5	26.1	% Officers', Directors' Owners' Comp/Sales	2.4	5.1	15.2	3.7	4.5	5.7
(288)	21.5	(292)	Total Assets (\$)	(41)	-5	(87)	1.2	(43)	2.6
16.3	9.2	8.6	Total Assets (\$)	-8.6	-3.8	-1.8	-6.2	-3.9	-3.5
5.8	2.3	.9	Net Sales (\$)						
.6	-4.2	-9.3	Total Assets (\$)						
86.5	76.8	65.7	35484M	188780M	203567M	474691M	664700M	6399673M	
33.1	32.4	28.1	30519M	88016M	74506M	151663M	215598M	1782089M	
15.3	15.4	12.0							
4.8	5.1	4.7							
3.7	3.6	3.3							
2.5	2.3	2.1							
.4	.4	.4							
.7	(288)	.7							
1.2	1.2	1.6							
1.9	1.7	2.1							
3.6	(210)	3.3							
6.6	6.3	7.2							

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M = \$ thousand MM = \$ million

RETAIL—Floor Covering Stores NAICS 442210

Current Data Sorted by Assets						Type of Statement	Comparative Historical Data	
						Unqualified	10	15
						Reviewed	45	48
						Compiled	75	81
						Tax Returns	75	83
						Other	79	88
						Assets Size	4/1/05-3/31/06 ALL	4/1/06-3/31/07 ALL
						Number of Statements	284	315
0-500M	500M-2MM	2-10MM	10-50MM	50-100MM	100-250MM	EXPECTED DEFAULT FREQUENCY	%	%
74	110	81	21	5	3	Risk Calc EDF (1 yr)	.25	.26
							(254) .63	(293) .52
							1.24	1.19
						Moody's EDF Rating (see note)	Baa2 2.45	Baa2 2.43
							Ba1 4.63	Baa3 4.13
							Ba3 7.77	Ba2 6.96
						CASH FLOW MEASURES	%	%
						Cash from Trading/Sales	40.8	38.8
							31.3	31.1
							23.9	23.6
						Cash after Operations/Sales	5.1	5.9
							1.9	2.8
							-8	-3
						Net Cash after Operations/Sales	5.4	6.1
							2.4	3.0
							.0	.3
						Net Cash after Debt Amortization/Sales	2.9	3.2
							.3	.2
							-2.2	-2.6
						Debt Service P&I Coverage	7.3	7.5
							(264) 1.9	(290) 2.2
							.0	.1
						Interest Coverage (Operating Cash)	15.6	12.4
							(261) 3.8	(285) 4.5
							-2	.2
						Δ Inventory	30.7	27.5
							(274) 9.2	(301) 2.9
							-3.6	-11.4
						Δ Total Current Assets	31.6	25.2
							12.9	5.7
							-3.1	-6.2
						Δ Total Assets	28.3	20.0
							10.9	4.2
							-2	-4.7
						Δ Retained Earnings	38.0	36.5
							(282) 8.7	(313) 8.4
							-4.0	-5.6
						Δ Net Sales	22.4	18.7
							7.3	6.8
							-1.5	-3.4
						Δ Cost of Goods Sold	23.0	19.5
							(283) 7.5	7.3
							-3.5	-4.8
						Δ Profit before Int. & Taxes	93.9	111.3
							(283) 24.3	16.8
							-28.9	-26.8
						Δ Depr./Depl./Amort.	27.7	24.9
							(272) .0	(295) -3.6
							-32.8	-33.3
						RATIOS		
						Sustainable Growth Rate	25.5	27.8
							(279) 5.2	7.3
							-10.6	-8.3
						Funded Debt/EBITDA	.5	.3
							2.0	1.7
							4.8	4.4
						Net Sales (\$)	4951179M	4186246M
						Total Assets (\$)	1233660M	1251801M
81592M	406945M	883072M	1480387M	1022279M	1364978M			
17663M	114517M	326549M	424261M	408563M	457583M			

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M = \$ thousand MM = \$ million
Note: The ratings are Moody's edf rating (e.g. Ba1.edf) and not Moody's Investor Services Long-Term Bond Ratings.
If a number of statements appears for the Risk Calc EDF (1 yr), it also applies to the (5 yr).

RETAIL—Floor Covering Stores NAICS 442210

Comparative Historical Data			Type of Statement	Current Data Sorted by Sales						
10	8	9	Unqualified							
45	44	47	Reviewed	1	6	7	23	8	2	
53	56	47	Compiled	11	15	8	7	4	2	
77	81	100	Tax Returns	24	42	12	12	6	4	
90	90	91	Other	7	24	17	17	13	13	
4/1/07-3/31/08	4/1/08-3/31/09	4/1/09-3/31/10	Sales Size	52 (4/1-9/30/09)						
ALL	ALL	ALL	Number of Statements	0-1MM	1-3MM	3-5MM	5-10MM	10-25MM	25MM & OVER	
275	279	294		43	87	44	59	31	30	
			EXPECTED DEFAULT FREQUENCY							
%	%	%		%	%	%	%	%	%	
.73	1.50	.87		2.29	1.16	.75	.76	.73	.80	
(272) 1.65	(273) 4.45	(290) 2.98	Risk Calc EDF	7.15	(86) 4.86	(43) 2.24	(58) 1.77	(30) 1.11	2.33	
4.03	10.25	8.39	(1 yr)	15.52	10.39	6.54	6.94	4.13	7.77	
Baa3 4.23	Ba2 6.45	Ba1 4.77	Moody's EDF	Ba3 8.29	Ba1 5.69	Baa3 3.93	Baa3 3.94	Baa3 3.65	Baa3 4.29	
Ba3 7.93	B1 11.89	Ba3 9.31	Risk Calc EDF	B3 21.60	B1 11.91	Ba3 8.81	Ba2 7.32	Ba1 5.18	Ba2 7.50	
B2 13.77	Caa-C 24.91	B3 21.64	Rating (see note)	Caa-C 36.92	Caa-C 30.28	B3 17.52	B2 16.84	Ba3 9.73	B3 18.22	
			CASH FLOW MEASURES							
%	%	%		%	%	%	%	%	%	
44.9	43.2	47.1		55.3	50.1	43.1	44.6	42.3	47.9	
(274) 34.0	(277) 34.1	(290) 38.5	Cash from	(42) 42.7	(86) 38.5	(43) 37.7	(58) 39.4	33.7	36.1	
26.2	26.6	29.3	Trading/Sales	34.1	32.1	29.6	27.5	27.6	27.1	
6.7	5.9	6.8		11.0	6.4	5.8	5.4	8.7	6.9	
(274) 3.2	(277) 2.2	(290) 2.4	Cash after	(42) .8	(86) 2.0	(43) 2.6	(58) 2.1	3.5	4.7	
.1	-.3	-1.3	Operations/Sales	-4.6	-1.9	.4	-1.1	.1	1.5	
6.9	6.0	7.1		12.9	7.7	5.7	5.7	8.2	7.2	
(274) 3.5	(277) 2.4	(290) 3.0	Net Cash after	(42) 4.0	(86) 2.6	(43) 3.1	(58) 1.8	2.9	4.3	
.1	-.3	-1.0	Operations/Sales	-4.0	-1.3	.3	-9	-1.2	1.9	
3.2	2.4	3.6		5.6	3.0	4.2	2.7	5.2	5.0	
(274) .4	(277) -.2	(290) -.1	Net Cash after Debt	(42) -.1	(86) -.8	(43) -.2	(58) -.6	.6	1.8	
-2.0	-3.3	-3.6	Amortization/Sales	-4.9	-3.8	-5.7	-2.4	-2.6	-1.8	
8.0	6.3	6.2		2.5	5.6	12.0	6.2	8.9	15.3	
(246) 1.8	(249) 1.6	(256) 1.4	Debt Service	(30) .8	(79) 1.3	(36) 2.1	(55) .9	(28) 1.7	(28) 3.3	
.0	.0	-.8	P&I Coverage	-1.4	-.9	.0	-1.2	-1.5	.4	
11.7	9.9	12.8		4.5	13.2	16.1	10.2	15.5	36.3	
(240) 3.3	(240) 3.1	(250) 2.8	Interest Coverage	(30) .8	(77) 2.6	(35) 3.4	(54) 2.9	(26) 3.5	(28) 9.6	
.1	-.3	-1.6	(Operating Cash)	-8.4	-1.7	.0	-2.5	-3.2	1.7	
15.1	11.8	9.1		8.8	6.6	21.2	15.8	4.4	2.6	
(264) -2.3	(267) -2.4	(278) -5.6	Δ Inventory	(40) -5.8	(82) -3.7	(42) -13.2	(55) -4.8	(30) -11.3	(29) -6.1	
-15.2	-21.7	-23.3		-27.7	-16.5	-36.3	-23.9	-28.8	-19.2	
20.0	9.7	5.8		4.8	5.8	14.8	1.6	4.9	18.4	
3.0	-6.9	-11.6	Δ Total Current Assets	-10.8	-11.8	-12.9	-12.8	-12.2	-8.1	
-13.6	-19.4	-24.8		-36.3	-25.5	-27.5	-27.2	-28.1	-14.5	
16.4	8.5	3.3		-.2	2.5	6.0	-.9	6.8	9.1	
2.3	-3.4	-8.8	Δ Total Assets	-7.1	-9.2	-3.4	-12.2	-2.9	-8.7	
-8.3	-13.9	-19.5		-23.2	-21.3	-18.5	-19.2	-20.8	-10.0	
33.3	17.5	8.6		-1.7	8.7	19.6	5.2	35.3	6.8	
(272) 6.2	(276) -1.0	(290) -5.8	Δ Retained Earnings	(42) -14.9	(85) -10.2	-6.7	(58) -4.4	5.5	.4	
-15.5	-28.8	-35.4		-58.8	-34.5	-39.4	-38.6	-15.4	-20.6	
12.8	2.9	-7.9		-9.4	-7.1	-8.5	-4.8	-7.4	-7.9	
-2.0	-7.7	-17.9	Δ Net Sales	-26.8	-19.9	-16.7	-17.9	-14.8	-15.4	
-13.3	-18.5	-29.3		-41.8	-30.7	-27.7	-29.3	-27.0	-19.4	
12.6	3.0	-8.7		-13.5	-5.4	-10.8	-5.3	-2.9	-9.1	
(274) -3.0	(278) -9.2	-19.2	Δ Cost of Goods Sold	-33.9	-21.9	-17.8	-19.1	-14.6	-13.6	
-17.2	-20.1	-31.7		-44.3	-33.4	-31.9	-29.5	-25.3	-21.9	
67.6	40.7	87.2		72.9	103.2	104.8	87.4	71.2	99.6	
-2.2	-27.7	(291) -20.0	Δ Profit before	(41) -26.7	-17.4	-22.1	(58) -15.4	-3.1	-31.9	
-58.5	-88.5	-85.0	Int. & Taxes	-104.5	-88.9	-107.6	-123.6	-54.6	-91.9	
25.5	15.3	3.2		.0	.0	12.8	5.9	3.7	2.6	
(257) -6.3	(261) -9.1	(271) -10.0	Δ Depr./Dep./Amort.	(37) -8.3	(83) -19.7	(40) -15.9	(56) -8.4	(29) -5.7	(26) -3.8	
-35.1	-38.7	-40.0		-45.0	-51.3	-44.6	-33.4	-50.3	-12.4	
			RATIOS							
29.7	16.4	13.1		34.8	7.0	4.1	10.3	17.2	14.0	
(272) 4.2	(277) .3	(292) -1.7	Sustainable	2.7	(86) -5.7	(43) -10.7	-1.6	4.8	2.8	
-12.8	-21.1	-24.8	Growth Rate	-13.6	-34.9	-38.9	-30.1	-22.6	-6.0	
.4	.8	.5		.0	.5	.5	.7	.5	.3	
2.2	3.5	3.5	Funded Debt/EBITDA	20.6	3.7	2.2	3.3	2.2	4.0	
5.6	14.0	-.8		-1.6	-4	NM	-1.2	5.9	17.4	
4883721M	4461331M	5239253M	Net Sales (\$)	25869M	162309M	166505M	416498M	503127M	3964945M	
1396611M	1417006M	1749136M	Total Assets (\$)	20495M	72486M	62844M	134253M	174538M	1284520M	

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