

Projected Financial Statements

8.7 Develop projected financial statements to reveal the impact of strategy recommendations.

Projected financial statement analysis is a technique that allows an organization to examine the expected results of strategies being implemented. This analysis can be used to forecast the impact of various implementation decisions (for example, to increase promotion expenditures by 50 percent to support a market-development strategy or to increase research and development expenditures by 70 percent to support product development). Most financial institutions require at least three years of projected financial statements whenever a business seeks capital. A projected income statement and balance sheet allows an organization to compute projected financial ratios under various scenarios. When compared to prior years and to industry averages, financial ratios provide valuable insights into the feasibility of various strategy-implementation approaches.

A 2017 projected income statement and a balance sheet for the Litten Company are provided in Table 8-6. The projected statements for Litten are based on five assumptions: (1) The company needs to raise \$45 million to finance expansion into foreign markets; (2) \$30 million of this total will be raised through increased debt and \$15 million through common stock; (3) sales are expected to increase 50 percent; (4) three new facilities, costing a total of \$30 million, will be constructed in foreign markets; and (5) land for the new facilities is already owned by the company. Note in Table 8-6 that Litten's strategies and their implementation are expected to result in a sales increase from \$100 million to \$150 million and in a net increase in income from \$6 million to \$9.75 million in the forecasted year.

Table 8-6 A Projected Income Statement and Balance Sheet for the Litten Company (in millions)

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	Prior Year 2016	Projected Year 2017	Remarks
PROJECTED INCOME STATEMENT			
Sales	\$100	\$150.00	50% increase
Cost of Goods Sold	70	105.00	70% of sales
Gross Margin	30	45.00	
Selling Expense	10	15.00	10% of sales
Administrative Expense	5	7.50	5% of sales
Earnings Before Interest and Taxes	15	22.50	
Interest	3	3.00	
Earnings Before Taxes	12	19.50	
Taxes	6	9.75	50% rate
Net Income	6	9.75	
Dividends	2	5.00	
Retained Earnings	4	4.75	
PROJECTED BALANCE SHEET			

Assets			
Cash	5	7.75	Plug figure
Accounts Receivable	2	4.00	100% increase
Inventory	20	45.00	
Total Current Assets	27	56.75	
Land	15	35.00	Purchased land
Plant and Equipment	50	80.00	Add three new plants at \$10 million each
Less Depreciation	10	20.00	
Net Plant and Equipment	40	60.00	
Total Fixed Assets	55	75.00	
Total Assets	82	151.75	
Liabilities			
Accounts Payable	10	10.00	
Notes Payable	10	10.00	
Total Current Liabilities	20	20.00	
Long-Term Debt	40	70.00	Borrowed \$30 million

Additional Paid-in-Capital	20	35.00	Issued 100,000 shares at \$150 each
Retained Earnings	2	6.75	\$2 + \$4.75
Total Liabilities and Net Worth	82	151.75	

Projected financial analysis can be explained in seven steps:

1. Prepare the projected income statement before the balance sheet. Start by forecasting sales as accurately as possible. Be careful not to blindly push historical percentages into the future with regard to revenue (sales) increases. Be mindful of what the firm did to achieve those past sales increases, which may not be appropriate for the future unless the firm takes similar or analogous actions (such as opening a similar number of stores, for example). If dealing with a manufacturing firm, also be mindful that if the firm is operating at 100 percent capacity running three 8-hour shifts per day, then probably new manufacturing facilities (land, plant, and equipment) will be needed to increase sales further.
2. Use the percentage-of-sales method to project cost of goods sold (CGS) and the expense items in the income statement. For example, if CGS is 70 percent of sales in the prior year (as it is in Table 8-6), then use that same percentage to calculate CGS in the future year—unless there is a reason to use a different percentage. Items such as interest, dividends, and taxes must be treated independently and cannot be forecasted using the percentage-of-sales method.
3. Calculate the projected net income.
4. Subtract from the net income any dividends to be paid for that year. This remaining net income is retained earnings (RE). Bring this retained earnings amount for that year ($NI - DIV = RE$) over to the balance sheet by adding it to the prior year's RE shown on the balance sheet. In other words, every year, a firm adds its RE for that particular year (from the income statement) to its historical RE total on the balance sheet.

Therefore, the RE amount on the balance sheet is a cumulative number rather than money available for strategy implementation. Note that retained earnings is the first projected balance sheet item to be entered. As a result of this accounting procedure in developing projected financial statements, the RE amount on the balance sheet is usually a large number. However, it also can be a low or even negative number if the firm has been incurring losses. The only way for RE to decrease from one year to the next on the balance sheet is (1) if the firm incurred an earnings loss that year or (2) the firm had positive net income for the year but paid out dividends more than the net income. Be mindful that RE is the key link between a projected income statement and balance sheet, so be careful to make this calculation correctly.

5. Project the balance sheet items, beginning with retained earnings and then forecasting shareholders' equity, long-term liabilities, current liabilities, total liabilities, total assets, fixed assets, and current assets (in that order), working from the bottom to the top of the balance sheet.
6. Use the cash account as the plug figure—that is, use the cash account to make the assets total the liabilities and net worth. Then make appropriate adjustments. For example, if the cash needed to balance the statements is too small (or too large), make appropriate changes to borrow more (or less) money than planned. If the projected cash account number is too high, a firm could reduce the cash number and concurrently reduce a liability or equity account the same amount to keep the statement in balance. Rarely is the cash account number perfect on the first pass-through, so adjustments are needed and made.
7. List commentary (remarks) on the projected statements. Any time a significant change is made in an item from a prior year to the projected year, an explanation (comment) should be provided.
Comments/remarks are essential because otherwise changes can be difficult to understand.

The U.S. Securities and Exchange Commission (SEC) conducts fraud investigations if projected numbers are misleading or if they omit information that is important to investors. Projected statements must conform with generally accepted accounting principles (GAAP) and must not be designed to hide poor expected results. The Sarbanes-Oxley Act requires CEOs and CFOs of

corporations to personally sign their firms' financial statements attesting to their accuracy. These executives could thus be held personally liable for misleading or inaccurate statements. Some firms still "inflate" their financial projections and call them "pro formas," so investors, shareholders, and other stakeholders must still be wary of different companies' financial projections. ⁷ □

On financial statements, different companies use different terms for various items, such as *revenues* or *sales* used for the same item. *Net income*, *earnings*, or *profits* can refer to the same item on an income statement, depending on the company.

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Projected Financial Statement Analysis for D. R. Horton

Because so many strategic management students have limited experience developing projected financial statements, let us apply the steps outlined on the previous pages to the largest American homebuilder company by revenues, D. R. Horton (DRH). The projected statements, developed on January 14, 2014, considered that D.R. Horton would go forward with the following four recommendations in 2014–2016, and incur the following expected costs:

1. Acquire four building products firms: (a) Universal Forest Products, (b) Scotch and Gulf Lumber, (c) United Plywood and Lumber, and (d) Dixie Plywood. **Total Cost = \$850 million**
2. Expand home-building services to North and South Dakota to gain 5% of the market by the end of 2016. (Start with an office in Bismarck, ND, the second-largest city in ND. It is close enough to the ND/SD border to serve both states, and it is located where Bismarck and Minneapolis can both help serve Fargo/Moorhead. If all goes well, place a second location in Rapid City, SD, the second-largest city in SD. It is located where Rapid City and Minneapolis can both help serve Sioux Falls, and is located close enough to Casper, WY, and Scottsbluff, NE, for possible future service expansions.) **Total Cost = \$232 million**
3. Increase the number of communities that DRH services by 50% in California and Nevada by 2016 (20 more communities in California and 10 more communities in Nevada). **Total Cost = \$290 million**
4. Develop and launch a nationwide marketing campaign. Topics should include D. R. Horton's low prices in the industry (while still stressing they provide value), home owning is still more cost effective than renting, green solutions offered by DRH, corporate social responsibility efforts by DRH, and targeting the 55 to 75 age group for buying homes. **Total Cost = \$35 million**

Based on these recommendations, DHR's actual and projected income statements are given in Table 8-7. Note the large increase in sales in 2014 were due to DRH potentially acquiring four smaller homebuilder companies. Note

also at the bottom of Table 8-7 the dividends to be paid and resultant annual retained earnings to be carried forward to the DRH projected balance sheets. Commentary regarding DRH's actual and projected income statements is provided in Table 8-8.

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Table 8-7 DRH's Actual and Projected Income Statements (in millions)

	Actual Year 2013	Projected 2014	Projected 2015	Projected 2016
Sales	\$6,259.00	\$10,607.94	\$12,520.69	\$14,776.03
Costs of Goods Sold	\$4,854.00	\$8,570.14	\$10,115.44	\$11,937.52
Gross Margin	\$1,405.00	\$2,037.81	\$2,405.25	\$2,838.50
Selling & Administrative	\$766.00	\$1,298.24	\$1,532.33	\$1,808.35
Other Operating	-\$15.00	-\$25.42	-\$30.01	-\$35.41
EBIT	\$654.00	\$764.99	\$902.93	\$1,065.57
Interest	\$5.00	\$8.47	\$10.00	\$11.80
Other Income	\$9.00	\$15.25	\$18.00	\$21.25
EBT	\$658.00	\$771.77	\$910.93	\$1,075.01
Taxes	\$195.00	\$228.72	\$269.96	\$318.58
Net Income	\$463.00	\$543.05	\$640.97	\$756.43
Dividends	\$60.20	\$70.45	\$72.57	\$74.74
Retained Earnings	\$402.80	\$472.60	\$568.41	\$681.69

Table 8-8 Comments Regarding DRH's Actual and Projected Income Statements

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In millions	Comments	
Sales	New home building up 18% in last year. 15% increase year to year seems fair (works out to about 15% in the housing market and 10% in building supplies). Plus, the goal of 1% increase in market share (0.33%/yr). Plus, \$3,000 in year 1 from acquisitions.	
Costs of Goods Sold	80.8% of sales after acquisitions	
Gross Margin		
Selling and Admin. Expense	12.25% of sales	
Other Operating Expenses	0.25% of sales	
EBIT		
Interest	0.08% of sales	
Other Income	0.14% of sales	
EBT		

In millions	Comments	
Taxes	29.65% of EBT	
Net Income		
Dividends	3% increase year to year. Plus, \$8.2M in year 1 from acquisitions.	
Retained Earnings	NI – Dividends	

Table 8-9[□] reveals DRH's actual and projected balance sheets given the four recommendations listed earlier and the annual retained earnings carried forward to the balance sheet. Table 8-10[□] provides commentary regarding the projected balance sheet changes.

Table 8-9 DRH's Actual and Projected Balance Sheets (in millions)

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	Actual Year 2013	Projected Year 2014	Projected Year 2015	Projected Year 2016
Assets				
Cash	\$937.00	\$1,091.30	\$891.72	\$652.53
Inventory	\$6,197.00	\$7,955.96	\$9,390.52	\$11,082.02
Deferred Income Taxes	\$587.00	\$994.87	\$1,174.25	\$1,385.77
Other Current Assets	\$77.00	\$99.00	\$99.00	\$99.00
Total Current Assets	\$7,798.00	\$10,141.12	\$11,555.49	\$13,294.06
Land, Plant, and Equipment	\$237.00	\$924.76	\$943.40	\$962.98
Less Depreciation	\$130.00	\$500.00	\$530.00	\$560.00
Goodwill	\$39.00	\$199.00	\$199.00	\$199.00
Other Long-Term Assets	\$913.00	\$981.40	\$1,053.23	\$1,128.64
Total Fixed Assets	\$1,059.00	\$1,605.16	\$1,665.63	\$1,730.62
Total Assets	\$8,857.00	\$11,746.28	\$13,221.12	\$14,949.94

	Actual Year 2013	Projected Year 2014	Projected Year 2015	Projected Year 2016
Liabilities				
Accounts Payable	\$400.00	\$583.44	\$688.64	\$812.68
Taxes Payable	\$60.00	\$60.00	\$60.00	\$60.00
Accrued Liabilities	\$211.00	\$318.24	\$375.62	\$443.28
Other Current Liabilities	\$615.00	\$615.00	\$615.00	\$615.00
Total Current Liabilities	\$1,286.00	\$1,576.68	\$1,739.26	\$1,930.96
Long-Term Debt	\$3,509.00	\$4,959.00	\$5,702.85	\$6,558.28
Minority Interest	\$3.00	\$3.00	\$3.00	\$3.00
Total Noncurrent Liabilities	\$3,512.00	\$4,962.00	\$5,705.85	\$6,561.28
Total Liabilities	\$4,798.00	\$6,538.68	\$7,445.11	\$8,492.24
Additional Paid-in Capital	\$2,042.00	\$2,218.00	\$2,218.00	\$2,218.00

	Actual Year 2013	Projected Year 2014	Projected Year 2015	Projected Year 2016
Common Stock	\$3.00	\$3.00	\$3.00	\$3.00
Retained Earnings	\$2,146.00	\$3,118.60	\$3,687.01	\$4,368.70
Treasury Stock	-\$134.00	-\$134.00	-\$134.00	-\$134.00
Other Accumulated Income	\$2.00	\$2.00	\$2.00	\$2.00
Total Stockholders' Equity	\$4,059.00	\$5,207.60	\$5,776.01	\$6,532.44
Total Liabilities and Net Worth	\$8,857.00	\$11,746.28	\$13,221.12	\$14,949.94

Table 8-10 Comments Regarding DRH's Actual and Projected Balance Sheets

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Comments		
Assets		
Cash	Plug Variable	
Inventory	75% of sales after acquisitions	
Deferred Income Taxes	9.4% of sales	
Other Current Assets	\$22 increase in year one due to acquisition	
Total Current Assets		
Land, Plant, and Equipment	Currently 63 locations, Average = 3.75 million. Upgrading 5 facilities at 50% and adding 2 new facilities in the next 3 years. Plus 5% average increase with market share per year. Plus \$670 in year 1 from acquisitions	
Less Depreciation	\$340 increase in year 1 from acquisitions plus 30 million per year	
Goodwill	\$160 increase due to acquisitions	
Other Long- Term Assets	Increase at the same percentage as Land, Plant, and Equipment, less acquisitions	
Total Fixed Assets		

Comments		
Total Assets		
Liabilities		
Accounts Payable	5.5% of sales after acquisitions	
Taxes Payable		
Accrued Liabilities	3.0% of sales after acquisitions	
Other Current Liabilities		
Total Current Liabilities		
Long-Term Debt	Borrowed \$1450 for acquisitions and expansions in year 1. Plus 15% thereafter.	
Minority Interest		
Total Noncurrent Liabilities		
Total Liabilities		

Comments		
Additional Paid-in Capital	\$176 increase in year one due to acquisitions	
Common Stock		
Retained Earnings	Prior RE + the new annual RE	
Treasury Stock		
Other Income		
Total Stockholders' Equity		
Total Liabilities and SE		

Note in Table 8-9 that DRH increased its retained earnings on the projected balance sheets correctly, expecting to pay out the dividend amounts indicated in Table 8-8. Note in Table 8-9 that the projections show DRH not buying back any of its own stock (treasury stock), as indicated by the \$134 number staying unchanged. Many companies lately have been aggressively buying their own stock, reflecting optimism about their future. However, some analysts argue that stock buybacks eat cash that a firm could better use to grow the firm. Stock

buybacks do however reduce a firm's number of shares outstanding, which increases a firm's EPS, so firms reap this "intangible benefit" with stock buybacks. Sometimes firms will thus increase their treasury stock near the end of the quarter, or near the end of the year, to "artificially" inflate their EPS, which oftentimes makes the stock price go up. For example, FedEx bought \$2.8 billion worth of its own stock in its 2014 fiscal fourth quarter, contributing 15 cents to the company's EPS of \$2.10, thus beating Wall Street's expectation of \$1.95. In fact, 25 percent of the S&P 500 companies in the third quarter of 2014 alone increased their EPS by 4 percent or more simply by buying back their own stock.

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