

USING THE PRO FORMA SPREADSHEET

The spreadsheet in this appendix can be downloaded (Interactive Financial Statement Template.xls) and used in either of two ways. First, it can be used to measure the cash shortfall for which financing is required or the surpluses that can be distributed to investors. Second, it can be used to reflect the effects of financing and disbursement decisions.

General Steps for Completing the Pro Forma Statements

A period length (month, quarter, year, etc.) should be selected that is appropriate for the purpose of the analysis. Start the projections with the Sales Forecast (lines 3 and 6) and beginning balances (first column) of accounts in the balance sheet.

Cost of Goods Sold (line 7 – based on the line numbers in column A of the spreadsheet) often can be estimated as a percentage of sales, possibly based on industry norms for ventures of similar size or engineering studies of manufacturing cost.

Operating Expense items (lines 9 through 12) can include fixed and variable components, and often can be estimated in a manner similar to Cost of Goods Sold. Depreciation Expense (line 11) is determined by previous asset acquisitions and accounting and tax policies.

Interest Expense (line 15) can be estimated based on the balance of interest-bearing debt outstanding at the end of the prior period. If the period is long, it may be necessary to consider changes in the level of debt during the period.

Interest Revenue (line 16) can be estimated in a manner similar to Interest Expense, but for interest-earning assets.

Income Tax (line 18) can be estimated using the statutory tax rate and adjusting for any tax loss carry forwards.

Net Income plus Depreciation Expense (line 45) is determined by adding noncash expenses such as Depreciation expense back to Net Income (line 19).

Steps for Using the Template to Project Cash Shortfall or Surplus

Determine desired or expected levels of Current Assets except for Cash (line 23), and of Current Liabilities except for Current Portion of Long-term Debt (line 34, which is determined by the contractual provisions of financing decisions made in previous periods), and Notes Payable (line 31, which may be affected by a new financing decision), and record in the Balance Sheet. Thus, for example, the ending balance of Accounts Payable (line 30) can sometimes be estimated based on industry norms of the ratio of Accounts Payable to Cost of Goods Sold, or a similar ratio. Ending balances of other current accounts except Notes Payable, Current Portion of Long-term Debt, and Cash can be estimated in similar ways. Record the new balance of Notes Payable, giving effect only to existing financing contracts.

Using the Balance Sheet information for the period and for the prior period, determine the changes in each current account except for Cash and Equivalents and the Current Portion of Long-term Debt, and record the changes in the Cash Flow Statement.

Under Net Cash from Financing Activities (line 52), record only the contractually committed repayments of long-term debt and any desired distributions to equity holders. Repayments of Notes Payable are captured by the change in Notes Payable.

Under Net Investment Outlays (line 53), determine the desired level of new gross investment in fixed assets and offset with any expected asset sales or other dispositions. This may be based on consideration of the level required to support sales for the period, or it may be based on longer-term considerations.

Complete the Cash Flow Statement to determine the Ending Cash Balance (line 56) assuming no new financing.

Record Net Fixed Assets (line 27) in the Balance Sheet as the prior balance, less Depreciation Expense and the book value of asset dispositions, and plus the cost of fixed assets acquired.

At this point, Notes Payable, Current Portion of Long-term Debt, and Long-term Debt are determined by the contractual provisions of previous financing decisions. The balance of Common Stock (line 38) is unchanged from the prior period, and Retained Earnings (line 39) is computed as Net Income less any dividends desired to be distributed to investors.

The cash shortfall or surplus of the venture can be determined by comparing the Ending Cash Balance (line 56) to the desired level of Cash and Equivalents (line 23). The difference is the amount of new financing required.

Steps Reflecting Financing Decisions

Revise the balance of Cash and Equivalents (line 23) to reflect the desired level of cash.

In the event of a cash shortfall, determine the desired sources of additional financing (Notes Payable, Long-term Debt or Equity) and adjust the Balance Sheet accounts accordingly. In the event of a surplus, decide whether to repay debt early or make additional distributions to equity. Depending on the choice, it may be necessary to adjust other accounts related to dividend distributions and interest expense.

Revise Net Cash from Financing Activities (line 52) to reflect the financing decisions.

Re-compute the Ending Cash Balance (line 56), which should now equal the desired level of Cash and Equivalents in the Balance Sheet.

Sources of Information for Forecasting

Macroeconomic variables:

- Bureau of the Census: www.census.gov/
- Bureau of Economic Analysis: www.bea.doc.gov/
- Economic Report of the President
- US Statistical Abstract
- Bureau of Labor Statistics: www.stats.bls.gov/
- Department of Commerce, Survey of Current Business

Firm Data:

- Standard and Poor's Stock Reports
- Standard and Poor's Compustat
- Moody's Industry Review
- Moody's Manuals
- Securities and Exchange Commission: www.sec.gov/
- SEC filings: 10-K, 10Q, Proxy statement, 13D, Insider trading
- Dun & Bradstreet Business Rankings
- Dun & Bradstreet Million Dollar Directories

- Dun & Bradstreet Corporate Affiliations
- Value Line Investment Survey

Industry Data:

- US Industrial Outlook: description of two-digit and three-digit SIC industry groups; industry
- sales forecasts
- Census of Manufacturing
- RMA Annual Statement Studies
- Almanac of Business and Industrial Financial Ratios
- Moody's Industry Review: comparative statistics for major companies within an industry classification
- Standard & Poor's Industry Reports
- Predicast: summary of industry data, employment, capital expenditures, etc.
- General Management:
- Anbar Electronic Intelligence: contains reviewed article summaries; literature searches available www.anbar.com

Regional Data:

- US Department of Commerce, Bureau of the Census:
- State and Metropolitan Area Data Book: data on social, economic, and political subjects
- USA Counties: includes over 4000 data times for all counties with State and US totals for comparison.
- Covers population, housing, labor force, income, and more.

International Data:

- Morgan Guaranty Trust Company, World Financial Markets: data on financial markets in many countries
- Central Intelligence Agency, CIA World Factbook (annual)
- International Monetary Fund (IMF): World Economic Outlook (biannual, general economic survey), International Financial Statistics (monthly), Labor Force Statistics (annual); Quarterly Labor Force Statistics; Monthly Statistics of Foreign Trade; Directory of Trade (monthly); Balance of Payments Statistics (monthly)

Many sources of data from foreign governments are available in English, such as the Monthly Report of the Deutsche Bundesbank (German Central Bank), Economic Statistics Monthly; Bank of Japan Quarterly Review and Economic Trends; and UK Economic Accounts and the Bank of England Quarterly Review World Bank, World Tables; World Development Report; OECD, National Accounts of OECD Countries (annual) United Nations, Statistical Yearbook.