Excellence in Financial Management

Course 7: Mergers & Acquisitions (Part 2)

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Part 2 of this course continues with an overview of the merger and acquisition process, including the valuation process, post merger integration and anti-takeover defenses. The purpose of this course is to give the user a solid understanding of how mergers and acquisitions work. This course deals with advanced concepts in valuation. Therefore, the user should have an understanding of cost of capital, forecasting, and value based management before taking this course. This course is recommended for 2 hours of Continuing Professional Education. In order to receive credit, you will need to pass a multiple choice exam which is administered over the internet at www.exinfm.com/training

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Chapter

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Valuation Concepts & Standards

As indicated in Part 1 of this Short Course, a major challenge within the merger and acquisition process is due diligence. One of the more critical elements within due diligence is valuation of the Target Company.

We need to assign a value or more specifically a range of values to the Target Company so that we can guide the merger and acquisition process. We need answers to several questions: How much should we pay for the target company, how much is the target worth, how does this compare to the current market value of the target company, etc.?

It should be noted that the valuation process is not intended to establish a selling price for the Target Company. In the end, the price paid is whatever the buyer and the seller agree to.

The valuation decision is treated as a capital budgeting decision using the Discounted Cash Flow (DCF) Model. The reason why we use the DCF Model for valuation is because:

- Discounted Cash Flow captures all of the elements important to valuation.
- Discounted Cash Flow is based on the concept that investments add value when returns exceed the cost of capital.
- Discounted Cash Flow has support from both research and within the marketplace.

The valuation computation includes the following steps:

1. Discounting the future expected cash flows over a forecast period.
2. Adding a terminal value to cover the period beyond the forecast period.
3. Adding investment income, excess cash, and other non-operating assets at their present values.
4. Subtracting out the fair market values of debt so that we can arrive at the value of equity.

Before we get into the valuation computation, we need to ask: What are we trying to value? Do we want to assign value to the equity of the target? Do we value the Target Company on a long-term basis or a short-term basis? For example, the valuation of a company expected to be liquidated is different from the valuation of a going concern.

Most mergers and acquisitions are directed at acquiring the equity of the Target Company. However, when you acquire ownership (equity) of the Target Company, you will assume the outstanding liabilities of the target. This will increase the purchase price of the Target Company.

Example 1 - Determine Purchase Price of Target Company

Ettco has agreed to acquire 100% ownership (equity) of Fulton for $ 100 million. Fulton has $ 35 million of liabilities outstanding.

Amount Paid to Acquire Fulton	$ 100 million
Outstanding Liabilities Assumed	35 million
Total Purchase Price	$ 135 million

Key Point → Ettco has acquired Fulton based on the assumption that Fulton's business will generate a Net Present Value of $ 135 million.

For publicly traded companies, we can get some idea of the economic value of a company by looking at the stock market price. The value of the equity plus the value of the debt is the total market value of the Target Company.

Example 2 - Total Market Value of Target Company

Referring back to Example 1, assume Fulton has 2,500,000 shares of stock outstanding. Fulton's stock is selling for $ 60.00 per share and the fair market value of Fulton's debt is $ 40 million.

Market Value of Stock (2,500,000 x $ 60.00)	$ 150 million
Market Value of Debt	40 million
Total Market Value of Fulton	$ 190 million

A word of caution about relying on market values within the stock market; stocks rarely trade in large blocks similar to merger and acquisition transactions. Consequently, if the publicly traded target has low trading volumes, then prevailing market prices are not a reliable indicator of value.

Income Streams

One of the dilemmas within the merger and acquisition process is selection of income streams for discounting. Income streams include Earnings, Earnings Before Interest & Taxes (EBIT), Earnings Before Interest Taxes Depreciation & Amortization (EBITDA), Operating Cash Flow, Free Cash Flow, Economic Value Added (EVA), etc.

In financial management, we recognize that value occurs when there is a positive gap between return on invested capital less cost of capital. Additionally, we recognize that earnings can be judgmental, subject to accounting rules and distortions. Valuations need to be rooted in "hard numbers." Therefore, valuations tend to focus on cash flows, such as operating cash flows and free cash flows over a projected forecast period.

Free Cash Flow

One of the more reliable cash flows for valuations is Free Cash Flow (FCF). FCF accounts for future investments that must be made to sustain cash flow. Compare this to EBITDA, which ignores any and all future required investments. Consequently, FCF is considerably more reliable than EBITDA and other earnings-based income streams. The basic formula for calculating Free Cash Flow (FCF) is:

FCF = EBIT (1 - t) + Depreciation - Capital Expenditures + or - Net Working Capital

(1 - t) is the after tax percent, used to convert EBIT to after taxes.
Depreciation is added back since this is a non-cash flow item within EBIT
Capital Expenditures represent investments that must be made to replenish assets and generate future revenues and cash flows.
Net Working Capital requirements may be involved when we make capital investments. At the end of a capital project, the change to working capital may get reversed.

Example 3 - Calculation of Free Cash Flow

EBIT	$ 400
Less Cash Taxes	(130)
Operating Profits after taxes	270
Add Back Depreciation	75
Gross Cash Flow	345
Change in Working Capital	42
Capital Expenditures	(270)
Operating Free Cash Flow	117
Cash from Non Operating Assets *	10
Free Cash Flow	$ 127

* Investments in Marketable Securities

In addition to paying out cash for capital investments, we may find that we have some fixed obligations. A different approach to calculating Free Cash Flow is:

FCF = After Tax Operating Tax Cash Flow - Interest (1 - t) - PD - RP - RD - E

PD: Preferred Stock Dividends
RP: Expected Redemption of Preferred Stock
RD: Expected Redemption of Debt
E: Expenditures required to sustain cash flows

Example 4 - Calculation of Free Cash Flow

The following projections have been made for the year 2005:

- Operating Cash Flow after taxes are estimated as $ 190,000
- Interest payments on debt are expected to be $ 10,000
- Redemption payments on debt are expected to be $ 40,000
- New investments are expected to be $ 20,000
- The marginal tax rate is expected to be 30%

After Tax Operating Cash Flow	$ 190,000
Less After Tax Depreciation ($10,000 x (1 - .30))	(7,000)
Debt Redemption Payment	(40,000)
New Investments	(20,000)
Free Cash Flow	$ 123,000

Discount Rate

Now that we have some idea of our income stream for valuing the Target Company, we need to determine the discount rate for calculating present values. The discount rate used should match the risk associated with the free cash flows. If the expected free cash flows are highly uncertain, this increases risk and increases the discount rate. The riskier the investment, the higher the discount rate and vice versa. Another way of looking at this is to ask yourself - What rate of return do investors require for a similar type of investment?

Since valuation of the target's equity is often the objective within the valuation process, it is useful to focus our attention on the "targeted" capital structure of the Target Company. A review of comparable firms in the marketplace can help ascertain targeted capital structures. Based on this capital structure, we can calculate an overall weighted average cost of capital (WACC). The WACC will serve as our base for discounting the free cash flows of the Target Company.

Basic Applications

Valuing a target company is more or less an extension of what we know from capital budgeting. If the Net Present Value of the investment is positive, we add value through a merger and acquisition.

Example 5 - Calculate Net Present Value

Shannon Corporation is considering acquiring Dalton Company for $ 100,000 in cash. Dalton's cost of capital is 16%. Based on market analysis, a targeted cost of capital for Dalton is 12%. Shannon has estimated that Dalton can generate $ 9,000 of free cash flows over the next 12 years. Using Net Present Value, should Shannon acquire Dalton?

Initial Cash Outlay	$ (100,000)
FCF of $ 9,000 x 6.1944 *	55,750
Net Present Value	$ (44,250)

* present value factor of annuity at 12%, 12 years.

Based on NPV, Shannon should not acquire Dalton since there is a negative NPV for this investment.

We also need to remember that some acquisitions are related to physical assets and some assets may be sold after the merger.

Example 6 - Calculate Net Present Value

Bishop Company has decided to sell its business for a sales price of $ 50,000. Bishop's Balance Sheet discloses the following:

Cash	$ 3,000
Accounts Receivable	7,000
Inventory	12,000
Equipment - Dye	115,000
Equipment - Cutting	35,000
Equipment - Packing	30,000
Total Assets	$ 202,000
Liabilities	80,000
Equity	122,000
Total Liab & Equity	$ 202,000

Allman Company is interested in acquiring two assets - Dye and Cutting Equipment. Allman intends to sell all remaining assets for $ 35,000. Allman estimates that total future free cash flows from the dye and cutting equipment will be $ 26,000 per year over the next 8 years. The cost of capital is 10% for the associated free cash flows. Ignoring taxes, should Allman acquire Bishop for $ 50,000?

Amount Paid to Bishop	$ (50,000)
Amount Due Creditors	(80,000)
Less Cash on Hand	3,000
Less Cash from Sale of Assets	35,000
Total Initial Cash Outlay	$ (92,000)
Present Value of FCF's for 8 years at 10% - $ 26,000 x 5.3349	138,707
Net Present Value (NPV)	$ 46,707

Based on NPV, Allman should acquire Bishop for $ 50,000 since there is a positive NPV of $ 46,707.

A solid estimation of incremental changes to cash flow is critical to the valuation process. Because of the variability of what can happen in the future, it is useful to run cash flow estimates through sensitivity analysis, using different variables to assess "what if" type analysis. Probability distributions are used to assign values to various variables. Simulation analysis can be used to evaluate estimates that are more complicated.

Valuation Standards

Before we get into the valuation calculation, we should recognize valuation standards. Most of us are reasonably aware that Generally Accepted Accounting Principles (GAAP) are used as standards to guide the preparation of financial statements. When we calculate the value (appraisal) of a company, there is a set of standards known as "Uniform Standards of Professional Appraisal Practice" or USAAP. USAAP's are issued by the Appraisals Standards Board. Here are some examples:

> To avoid misuse or misunderstanding when Discounted Cash Flow (DCF) analysis is used in an appraisal assignment to estimate market value, it is the responsibility of the appraiser to ensure that the controlling input is consistent with market evidence and prevailing attitudes. Market value DCF analysis should be supported by market derived data, and the assumptions should be both market and property specific. Market value DCF analysis is intended to reflect the expectations and perceptions of market participants along with available factual data.
>
> In developing a real property appraisal, an appraiser must: (a) be aware of, understand, and correctly employ those recognized methods and techniques that are necessary to produce a creditable appraisal; (b) not commit a substantial error of omission or co-omission that significantly affects an appraisal; (c) not render appraisal services in a careless or negligent manner, such as a series of errors that considered individually may not significantly affect the result of an appraisal, but which when considered in aggregate would be misleading.

Another area that can create some confusion is the definition of market value. This is particularly important where the Target Company is private (no market exists). People involved in the valuation process sometimes refer to IRS Revenue Ruling 59-60 which defines market value as:

> The price at which the property could 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.

A final point about valuation standards concerns professional certification. Two programs directly related to valuations are Certified Valuation Analyst (CVA) and Accredited in Business Valuations (ABV). The CVA is administered by the National Association of CVA's (www.nacva.com) and the ABV is administered by the American Institute of Certified Public Accountants (AICPA - www.aicpa.org). Enlisting people who carry these professional designations is highly recommended.

Chapter

5

The Valuation Process

We have set the stage for valuing the Target Company. The overall process is centered around free cash flows and the Discounted Cash Flow (DCF) Model. We will now focus on the finer points in calculating the valuation. In the book Valuation: Measuring and Managing the Value of Companies, the authors Tom Copland, Tim Koller, and Jack Murrin outline five steps for valuing a company:

1. Historical Analysis: A detail analysis of past performance, including a determination of what drives performance. Several financial calculations need to be made, such as free cash flows, return on capital, etc. Ratio analysis and benchmarking are also used to identify trends that will carry forward into the future.
2. Performance Forecast: It will be necessary to estimate the future financial performance of the target company. This requires a clear understanding of what drives performance and what synergies are expected from the merger.
3. Estimate Cost of Capital: We need to determine a weighed average cost of capital for discounting the free cash flows.
4. Estimate Terminal Value: We will add a terminal value to our forecast period to account for the time beyond the forecast period.
5. Test & Interpret Results: Finally, once the valuation is calculated, the results should be tested against independent sources, revised, finalized, and presented to senior management.

Financial Analysis

We start the valuation process with a complete analysis of historical performance. The valuation process must be rooted in factual evidence. This historical evidence includes at least the last five years (preferably the last ten years) of financial statements for the Target Company. By analyzing past performance, we can develop a synopsis or conclusion about the Target Company's future expected performance. It is also important to gain an understanding of how the Target Company generates and invests its cash flows.

One obvious place to start is to assess how the merger will affect earnings. P / E Ratios (price to earnings per share) can be used as a rough indicator for assessing the impact on earnings. The higher the P / E Ratio of the acquiring firm compared to the target company, the greater the increase in Earnings per Share (EPS) to the acquiring firm. Dilution of EPS occurs when the P / E Ratio Paid for the target exceeds the P / E Ratio of the acquiring company. The size of the target's earnings is also important; the larger the target's earnings are relative to the acquirer, the greater the increase to EPS for the combined company. The following examples will illustrate these points.

Example 7 - Calculate Combined EPS

Greer Company has plans to acquire Holt Company by exchanging stock. Greer will issue 1.5 shares of its stock for each share of Holt. Financial information for the two companies is as follows:

	Greer	Holt
Net Income	$ 400,000	$ 100,000
Shares Outstanding	200,000	25,000
Earnings per Share	$ 2.00	$ 4.00
Market Price of Stock	$ 40.00	$ 48.00

Greer expects the P / E Ratio for the combined company to be 15.

Combined EPS = ($ 400,000 + $ 100,000) / (200,000 shares + (25,000 x 1.5)) = $ 500,000 / 237,500 = $ 2.11

Expected P / E Ratio	x 15
Expected Price of Stock	$ 31.65

Before we move to our next example, we should explain exchange ratios. The exchange ratio is the number of shares offered by the acquiring company in relation to each share of the Target Company. We can calculate the exchange ratio as:

Price Offered by Acquiring Firm / Market Price of Acquiring Firm

Example 8 - Determine Dilution of EPS

Romer Company will acquire all of the outstanding stock of Dayton Company through an exchange of stock. Romer is offering $ 65.00 per share for Dayton. Financial information for the two companies is as follows:

	Romer	Dayton
Net Income	$ 50,000	$ 10,000
Shares Outstanding	5,000	2,000
Earnings per Share	$ 10.00	$ 5.00
Market Price of Stock	$ 150.00	
P / E Ratio	15	

(1) Calculate shares to be issued by Romer: $ 65 / $ 150 x 2,000 shares = 867 shares to be issued.
(2) Calculate Combined EPS: ($ 50,000 + $ 10,000) / (5,000 + 867) = $ 10.23
(3) Calculate P / E Ratio Paid: Price Offered / EPS of Target or $ 65.00 / $ 5.00 = 13
(4) Compare P / E Ratio Paid to current P / E Ratio: Since 13 is less than the current ratio of 15, there should be no dilution of EPS for the combined company.
(5) Calculate maximum price before dilution of EPS: 15 = price / $ 5.00 or $ 75.00 per share. $ 75.00 is the maximum price that Romer should pay before EPS are diluted.

It is important to note that we do not want to get overly pre-occupied with earnings when it comes to financial analysis. Most of our attention should be directed at drivers of value, such as return on capital. For example, free cash flow and economic value added are much more important drivers of value than EPS and P / E Ratios. Therefore, our financial analysis should determine how does the target company create value - does it come from equity, what capital structure is used, etc.? In order to answer these questions, we need to:

1. Calculate value drivers, such as free cash flow.
2. Analyze the results, looking for trends and comparing the results to other companies.
3. Looking back historically in order to ascertain a "normal" level of performance.
4. Analyzing the details to uncover how the Target Company creates value and noting what changes have taken place.

Value Drivers

Three core financial drivers of value are:

1. Return on Invested Capital (NOPAT / Invested Capital)

2. Free Cash Flows

3. Economic Value Added (NOPAT - Cost of Capital)

NOPAT: Net Operating Profits After Taxes

A value driver can represent any variable that affects the value of the company, ranging from great customer service to innovative products. Once we have identified these value drivers, we gain a solid understanding about how the company functions. The key is to have these value drivers fit between the Target Company and the Acquiring Company. When we have a good fit or alignment, management will have the ability to influence these drivers and generate higher values.

In the book Valuation: Measuring and Managing the Value of Companies, the authors break down value drivers into three categories:

Type of Value Driver	Management's Ability to Influence
Level 1 - Generic	Low
Level 2 - Business Units	Moderate
Level 3 - Operating	High

For example, sales revenue is a generic value driver (level 1), customer mix would be a business unit value driver (level 2), and customers retained would be an operating value driver (level 3). Since value drivers are inter-related and since management will have more influence over level 3 drivers, the key is to ascertain if the merger will give management more or less influence over the operating value driver. If yes, then a merger and acquisition could lead to revenue or expense synergies. Be advised that you should not work in reverse order; i.e. from level 1 down to level 3. For example, an increase in sales pricing will add more value to level 1, but in the long-run you will hurt customers retained (level 3) and thus, you may end-up destroying value.

Once we have identified value drivers, we can develop a strategic view of the Target Company. This strategic view along with drivers of value must be considered in making a performance forecast of the Target Company. We want to know how will the Target Company perform in the future. In order to answer this question, we must have a clear understanding of the advantages that the Target Company has in relation to the competition. These competitive advantages can include things like customer mix, brand names, market share, business processes, barriers to competition, etc. An understanding of competitive advantages will give us insights into future expected growth for the Target Company.

Forecasting Performance

Now that we have some insights into future growth, we can develop a set of performance scenarios. Since no-one can accurately predict the future, we should develop at least three performance scenarios:

1. Conservative Scenario: Future growth will be slow and decline over time.

2. General Industry Scenario: Continued moderate growth similar to the overall industry.

3. Improved Growth Scenario: Management has the ability to influence level 1 value drivers and we can expect above average growth.

Keep in mind that performance scenarios have a lot of assumptions and many of these assumptions are based on things like future competition, new technologies, changes in the economy, changes in consumer behavior, etc. The end-result is to arrive at a "most likely" value between the different scenarios.

Example 9 - Overall Value per Three Scenarios

You have calculated three Net Present Value's (NPV) over a 12 year forecast period. Based on your analysis of value drivers, strategies, competition, and other variables, you have assigned the following values to each scenario:

Scenario	Probability	x	Net Present Value	=	Expected Value
Conservative	20%		$ 180,000		$ 36,000
Normal	65%		460,000		299,000
M & A Growth	15%		590,000		88,500
Overall Value of Target Company					$ 423,500

The Valuation Model should include a complete set of forecasted financial statements. Usually a set of forecasted financial statements will start with the Sales Forecast since sales is a driver behind many account balances. A good sales forecast will reflect future expected changes in sales prices, volumes, and other variables.

NOTE: For more information about preparing forecasted financial statements, refer to Short Course 2 - Financial Planning & Forecasting.

Two important points when preparing your forecast are:

Historical Perspective: Make sure the pieces of your forecast fit together and flow from historical performance. Historical values are very important for predicting the future. You can gain an historical perspective by simply plotting financial trends (see Example 10).

Forecast Period: Your forecast period should cover a long enough period for the target company to reach a stable and consistent performance level. For example, a company has reached a stable point when it can earn a constant rate of return on capital for an indefinite period and the company has the ability to reinvest a constant proportion of earnings back into the business.

Rarely is the forecast period less than seven years. When in doubt, use a longer forecast than a shorter forecast.

The final step in forecasting the financials is to estimate the value drivers and verify the value drivers against historical facts. As we indicated, three core drivers are return on capital, free cash flow, and economic value added. Make sure you test your results; are key drivers consistent with what has happened in the past, what are the trends for future growth, what are the competitive trends, how will this impact performance, etc.?

Example 10 - Plotting Historical Trends to help with preparing forecasted financial statements

	1990	1991	1992	1993	1994
Operations:					
Growth in Revenues	14%	12%	11%	11%	10%
Growth in Margins	7%	7%	6%	5%	5%
Working Capital:					
Cash	2%	2%	2%	3%	3%
Accts Rec	12%	13%	13%	13%	14%
Accts Payable	4%	4%	5%	5%	5%
Investments:					
Assets to Sales	30%	31%	28%	29%	28%
Return on Capital	14%	12%	13%	13%	12%

When we have completed the Valuation Model, we will have a set of forecasted financial statements supporting each of our scenarios:

- Forecasted Income Statement - 3 Scenarios
- Forecasted Balance Sheet - 3 Scenarios
- Forecasted Free Cash Flows - 3 Scenarios
- Forecasted Return on Capital - 3 Scenarios
- Forecasted Performance Ratios - 3 Scenarios

Example 11 - Forecasted Income Statement for Scenario 2 - Moderate
($ million)

	2001	2002	2003	2004	2005	2006	2007
Revenues	$ 6.50	$ 6.70	$ 6.85	$6.95	$7.05	$7.09	$7.12
Less Operating	3.20	3.30	3.41	3.53	3.65	3.72	3.78
Less Depreciation	.56	.54	.52	.85	.80	.77	.72
EBIT	2.74	2.86	2.92	2.57	2.60	2.60	2.62
Less Interest	.405	.380	.365	.450	.440	.410	.390
Earnings Before Tax	2.335	2.480	2.555	2.12	2.16	2.19	2.23
Less Taxes	.780	.810	.870	.650	.660	.71	.73
Net Income	1.555	1.670	1.685	1.470	1.500	1.48	1.50

Terminal Values

It is quite possible that free cash flows will be generated well beyond our forecast period. Therefore, many valuations will add a terminal value to the valuation forecast. The terminal value represents the total present value that we will receive after the forecast period.

Example 12 - Adding Terminal Value to Valuation Forecast

Net Present Value for forecast period (Example 9)	$ 423,500
Terminal Value for beyond forecast period	183,600
Total NPV of Target Company	$ 607,100

There are several approaches to calculating the terminal value:

Dividend Growth: Simply take the free cash flow in the final year of the forecast, add a nominal growth rate to this flow and discount the free cash flow as a perpetuity. Terminal value is calculated as:

Terminal Value = FCF (t + 1) / wacc - g
(t + 1) refers to the first year beyond the forecast period
wacc: weighted average cost of capital
g: growth rate, usually a very nominal rate similar to the overall economy

It should be noted that FCF used for calculating terminal values is a normalized free cash flow (FCF) representative of the forecast period.

Example 13 - Calculate Terminal Value Using Dividend Growth

You have prepared a forecast for ten years and the normalized free cash flow is $ 45,000. The growth rate expected after the forecast period is 3%. The wacc for the Target Company is 12%.

($ 45,000 x 1.03) / (.12 - .03) = $ 46,350 / .09 = $ 515,000

If we wanted to exclude the growth rate in Example 13, we would calculate terminal value as $ 46,350 / .12 = $ 386,250. This gives us a much more conservative estimate.

Adjusted Growth: Growth is included to the extent that we can generate returns higher than our cost of capital. As a company grows, you must reinvest back into the business and thus free cash flows will fall. Therefore, the Adjusted Growth approach is one of the more appropriate models for calculating terminal values.

Terminal Value = EBIT (1 - tr) (1 - g / r) / wacc - g
tr: tax rate g: growth rate r: rate of return on new investments

Example 14 - Calculate Terminal Value Using Adjusted Growth

Normalized EBIT is $ 60,000 and the expected normal tax rate is 30%. The overall long-term growth rate is 3% and the weighted average cost of capital is 12%. We expect to obtain a rate of return on new investments of 15%.

$ 61,800 (1 - .30) (1 - .03 / .15) / (.12 - .03) =
$ 43,260 (.80) / .09 = $ 384,533

If we use Free Cash Flows, we would have the following type of calculation:

Earnings Before Interest Taxes (EBIT)	$ 60,000
Remove taxes (1 - tr)	x .70
Operating Income After Taxes	42,000
Depreciation (non cash item)	12,000
Less Capital Expenditures	(9,000)
Less Changes to Working Capital	(1,000)
Free Cash Flow	44,000
Growth Rate @ 3%	x 1.03
Free Cash Flow (t + 1)	45,320
Adjust Growth > Return on Capital	x .80
Adjusted FCF (t + 1)	36,256
Divided by wacc - g or .12 - .03	.09
Terminal Value	$ 402,844

EVA Approach: If your valuation is based on economic value added (EVA), then you should extend this concept to your terminal value calculation:

Terminal Value = NOPAT (t + 1) x (1 - g / rc) / wacc - g
NOPAT: Net Operating Profits After Taxes rc: return on invested capital

Terminal values should be calculated using the same basic model you used within the forecast period. You should **not** use P / E multiples to calculate terminal values since the price paid for a target company is not derived from earnings, but from free cash flows or EVA. Finally, terminal values are appropriate when two conditions exist:

1. The Target Company has consistent profitability and turnover of capital for generating a constant return on capital.
2. The Target Company is able to reinvest a constant level of cash flow because of consistency in growth.

If these two criteria do not exist, you may need to consider a more conservative approach to calculating terminal value or simply exclude the terminal value altogether.

Example 15 - Summarize Valuation Calculation Based on Expected Values under Three Scenarios

Present Value of FCF's for 10 year forecast period	$ 62,500
Terminal Value based on Perpetuity	87,200
Present Value of Non Operating Assets	8,600
Total Value of Target Company	158,300
Less Outstanding Debt at Fair Market Value:	
Short-Term Notes Payable	(6,850)
Long-Term Bonds (25 year Grade BB)	(26,450)
Long-Term Bonds (10 year Grade AAA)	(31,900)
Long-Term Bonds (5 year Grade BBB)	(22,700)
Present Value of Lease Obligations	(17,880)
Total Value Assigned to Equity	52,520
Outstanding Shares of Stock	7,000
Value per Share ($ 52,520 / 7,000)	$ 7.50

Example 16 - Calculate Value per Share

You have completed the following forecast of free cash flows for an eight year period, capturing the normal business cycle of Arbor Company:

Year	FCF
2001	$ 1,550
2002	1,573
2003	1,598
2004	1,626
2005	1,656
2006	1,680
2007	1,703
2008	1,725

Arbor has non-operating assets of $ 150. These assets have an estimated present value of $ 500. Based on the present value of future payments, the present value of debt is $ 2,800. Terminal value is calculated using the dividend growth model. A nominal growth rate of 2% will be used. Arbor's targeted cost of capital is 14%. Arbor has 3,000 shares of stock outstanding. What is Arbor's Value per Share?

Year	FCF x	P.V. @ 14%	Present Value
2001	$ 1,550	.8772	$ 1,360
2002	1,573	.7695	1,210
2003	1,598	.6750	1,079
2004	1,626	.5921	963
2005	1,656	.5194	860
2006	1,680	.4556	765
2007	1,703	.3996	681

2008	1,725	.3506	605	
Total Present Value for Forecast Period				$ 7,523
Terminal Value = ($ 1,725 x 1.02) / (.14 - .02) =				14,663
Value of Non Operating Assets				500
Total Value of Arbor				22,686
Less Value of Debt				(2,800)
Value of Equity				19,886
Shares Outstanding				3,000
Value per Share				$ 6.63

Special Problems

Before we leave valuations, we should note some special problems that can influence the valuation calculation.

Private Companies: When valuing a private company, there is no marketplace for the private company. This can make comparisons and other analysis very difficult. Additionally, complete historical information may not be available. Consequently, it is common practice to add to the discount rate when valuing a private company since there is much more uncertainty and risk.

Foreign Companies: If the target company is a foreign company, you will need to consider several additional variables, including translation of foreign currencies, differences in regulations and taxes, lack of good information, and political risk. Your forecast should be consistent with the inflation rates in the foreign country. Also, look for hidden assets since foreign assets can have significant differences between book values and market values.

Complete Control: If the target company agrees to relinquish complete and total control over to the acquiring firm, this can increase the value of the target. The value assigned to control is expressed as:

$$CV = C + M$$

CV: Controlling Value
C: Maximum price the buyer is willing to pay for control of the target company
M: Minority Value or the present value of cash flows to minority shareholders.

If the merger is not expected to result in enhanced values (synergies), then the acquiring firm cannot justify paying a price above the minority value. Minority value is sometimes referred to as stand-alone value.

Chapter

6

Post Merger Integration

We have now reached the fifth and final phase within the merger and acquisition process, integration of the two companies. Up to this point, the process has focused on putting a deal together. Now comes the hard part, making the merger and acquisition work. If we did a good job with due diligence, we should have the foundation for post merger integration. However, despite due diligence, we will need to address a multitude of issues, such as:

- Finalizing a common strategy for the new organization. We need to be careful not to impose one strategy onto the other company since it may not fit.
- Consolidating duplicative services, such as human resources, finance, legal, etc.
- Consolidating compensation plans, corporate policies, and other operating procedures.
- Deciding on what level of integration should take place.
- Deciding on who will govern the new organization, what authority people will have, etc.

It is ironic that in many cases, senior management is actively involved in putting the merger together, but once everything has been finalized, the job of integrating the two companies is dumped on middle level management. Therefore, one of the first things that should happen within post merger integration is for senior management to:

- Develop an overall plan for integrating the two companies, including a time frame since synergy values need to be recovered quickly. If synergy values are dependent upon the target's customers, markets, assets, etc., then a fast integration process should be planned. If expected synergies come from strategies and intellectual capital of the target, a more cautious approach to integration may be appropriate.
- Directing and guiding the integration process, establishing governance, and assigning project managers to integration projects.
- Leading change through great communication, bringing people together, resolving issues before they magnify, establishing expectations, etc.

Once the two companies announce their merger, an entire set of dynamics goes into motion. Uncertainty and change suddenly impact both companies. Several issues need to be managed to prevent the escape of synergy values.

Managing the Process

The integration of two companies is managed within a single, centralized structure in order to reduce duplication and minimize confusion. A centralized structure is also needed to pull everything together since the integration process tends to create a lot of divergent forces. A Senior Project Team will be responsible for managing post merger integration (PMI). This includes things like coordination of projects, assigning task, providing support, etc. As previously indicated, it is important for both senior management and middle management to share in the integration process:

Senior Management	Senior Project Team
Cultural & Social Integration	Functional Integration
Strategic Fit between the Companies	Selection of Best Practices
Communication	Set up Task Forces
	Identify Critical Issues
	Problem Solving

The Senior Project Team will consist of representatives from both companies, covering several functional areas (human resources, marketing, operations, finance, etc.). Team members should have a very strong understanding of the business since they are trying to capture synergy values throughout PMI.

Special task forces will be established by the Senior Project Team to integrate various functions (finance, information technology, human resources, etc.). Task forces are also used to address specific issues, such as customer retention, non-disruption of operations, retention of key personnel, etc. Task forces can create sub-teams to split an issue by geographic area, product line, etc.

All of these teams must have a clear understanding of the reasons behind the merger since it is everybody's job to capture synergies. There is no way senior management can fully identify all of the expected synergies from a merger and acquisition.

It is not unusual for some task forces to begin meeting before the merger is announced. If integration begins before announcement of the merger, team members will have to act in a confidential manner, exercising care on who they share information with. The best approach is to act as though a merger will not take place.

Example 17 - Timeline leading up to Post Merger Integration (PMI)

June 21, 1998: Officers from both companies plan post merger integration.
July 17, 1998: Orientation meeting for key management personnel from both companies.
July 30, 1998: Project Managers are assigned to Task Forces.
August 16, 1998: Launch Task Forces.
August 27, 1998: Critical Issues are identified by Task Forces. Set goals and time frames.
October 26, 1998: Task Force develops detail plan for PMI.
October 30, 1998: Reach consensus on final plan.

November 6, 1998: Officers from both companies approve detail integration plans.
November 11, 1998: Operating (action steps) are outlined for implementing the PMI Plan.
January 17, 1999: Begin Post Merger Integration

Example 18 - Outline for Post Merger Integration (PMI) by Senior Task Force or Senior Project Team

1. Assess current situation - where do we stand?
2. Collect information and identify critical issues for integration.
3. Develop plans to resolve critical issues.
4. Obtain consensus and agree on PMI Plan.
5. Train personnel, prepare for integration, work out logistics, map out the process, etc.
6. Implement PMI Plan - conduct meetings, setup teams, provide direction, make key decisions, etc.
7. Revise the PMI Plan - measure and monitor progress, make adjustments, issue progress reports to executive management, etc.
8. Delegate - Move the integration process down into lower levels of the organization, allow staff personnel to control certain integration decisions, etc.
9. Complete - Move aggressively into full integration, coordinate and communicate progress until integration is complete.

Decision Making

Post merger integration (PMI) will require very quick decision-making. This is due in part to the fact that fast integration's work better than slow integration's. The new organization has to be established quickly so people can get back to servicing customers, designing products, etc. The more time people spend thinking about the merger, the less likely they will perform at high levels.

Many decisions within PMI will be difficult, such as establishing the new organizational structure, re-assigning personnel, selling-off assets, etc. However, it is necessary to get these decisions behind you as quickly as possible since the synergy meter is running. In addition, failure to act will leave the impression of indecisiveness and inability to manage PMI.

In order to make decisions, it is necessary to define roles; people need to know who is in charge. People who are responsible for integration should be highly skilled in coordinating projects, leading people, and thinking on their feet while staying focused on the strategies behind the merger and acquisition.

People Issues

Productivity and performance will usually drop once a merger is announced. The reason is simple; people are concerned about what will happen. In the book The Complete Guide to Mergers and Acquisitions, the authors note that "at least 360,000 hours of lost productivity can be lost during an acquisition of just a thousand person operation."

Quick and open communication is essential for managing people issues. Constant communication is required for addressing the rumors and questions that arise within PMI. People must know what is going on if they are expected to remain focused on their jobs. Communication should be deep and broad, reaching out to as many people as possible. Face to face communication works best since there is an opportunity for feedback. Even cursory communication is better than no communication at all.

> "Get all the facts out. Give people the rationale for change, laying it out in the clearest, most dramatic terms. When everybody gets the same facts, they'll generally come to the same conclusion. Only after everyone agrees on the reality and resistance is lowered can you get buy-in to the needed changes." - Jack Welch, CEO, General Electric

It is also a good idea to train people in change management. Most people will lack the knowledge and skills required for PMI. Immediately after the merger is announced, key personnel should receive training in how to manage change and make quick decisions. People must feel competent about their abilities to pull off the integration.

Managing Resistance

The failure to manage resistance is a major reason for failed mergers. Resistance is natural and not necessarily indicative of something wrong. However, it cannot be ignored. Four important tools for managing resistance are:

Communicate: As we just indicated, you have to make sure people know what is going on if you expect to minimize resistance. Rumors should not be the main form of communication. The following quote from a middle level manager at a meeting with executive management says it all:

> "How can I tell my people what needs to be done to integrate the two companies, when I have heard nothing about what is going on."

Training: As we just noted, people must possess the necessary skills to manage PMI. Investing in people through training can help achieve "buy-in" and thus, lower resistance.

Involvement: Resistance can be reduced by including people in the decision making process. Active engagement can also help identify problem areas.

Alignment: One way to buffer against resistance is to align yourself with those people who have accepted the merger. Ultimately, it will be the non-resistors who bring about the integration. Do not waste excessive resources on detractors; they will never come around.

Closing the Cultural Gap

One of the biggest challenges within PMI is to close the cultural divide between the two companies. Cultural differences should have been identified within Phase II Due Diligence. One way of closing the cultural gap is to invent a third, new corporate culture as opposed to forcing one culture onto another company. A re-design approach can include:

- Reducing the number of rules and policies that control people. In today's empowered world, it has become important to unleash the human capacities within the organization.
- Create a set of corporate policies centered around the strategic goals and objectives of the new organization.
- Implement new innovative approaches to human resource management, such as the 360-degree evaluation.
- Eliminate various forms of communication that continue with the "old way" of doing things.
- Re-enforce the new ways with incentive programs, rewards, recognition, special events, etc.

Specific Areas of Integration

As we move forward with the integration process, a new organizational structure will unfold. There will be new reporting structures based on the needs of the new company. Structures are built around workflows. For best results, collaboration should take place between the two companies; mixing people, combining offices, sharing facilities, etc. This collaboration helps pull the new organization together. As noted earlier, a centralized organization will experience less difficulty with PMI than a decentralized organization. Collaboration is also enhanced when there are:

- Shared Goals - The more common the goals and objectives of the two companies, the easier it is to integrate the two companies.
- Shared Cultures - The more common the cultures of the two companies, the easier the integration.
- Shared Services - The closer both company's can come to developing a set of shared services (human resource management, finance, etc.), the more likely synergies can be realized through elimination of duplicative services.

Many functional areas will have to be integrated. Each will have its own integration plan, led by a Task Force. Two areas of concern are compensation and technologies.

Compensation Plans: It is important to make compensation plans between the two companies as uniform as possible. Failure to close the compensation gap can lead to division within the workforce. Compensation plans should be designed based on a balance between past practices and future needs of the company. Since lost productivity is a major issue, compensation based on performance should be a major focus.

Technologies: When deciding which information system to keep between the two companies, make sure you ask yourself the following questions:

- Do we really need this information?
- Is the information timely?

- Is the information accurate?
- Is the information accessible?

One of the misconceptions that may emerge is to retain the most current, leading-edge technology. This may be a mistake since older legacy systems may be well tested and reliable for future needs of the organization. If both systems between the two companies are outdated, a whole new system may be required.

Retaining Key Personnel

Mergers often result in the loss of key (essential) personnel. Since synergies are highly dependent upon quality personnel, it will be important to take steps for retaining the high performers of the Target Company.

The first step is to identify key personnel. Ask yourself, if these people were to leave, what impact would it have on the company? For example, suppose a Marketing Manager decided to resign, resulting in the loss of critical customers. Other people may be critical to strategic thinking and innovation.

Once you have a list of key personnel, the next step is to determine what motivates essential personnel. Some people are motivated by their work while others are interested in climbing the corporate ladder. Retention programs are designed around these motivating factors.

The third step is to implement your retention programs. Personally communicate with key personnel; let them know what their position will be in the new company. If compensation is a motivating factor, offer key personnel a "stay" bonus. If people are motivated by career advancement, invite them to important management meetings and have them participate in decision making. Don't forget to reinforce retention by recognizing the contributions made by key personnel. It is also a good idea to recruit key personnel just as if you would recruit any other key management position. This solidifies the retention process.

Finally, you will need to evaluate and modify retention programs. For example, if key people continue to resign, then conduct an exit interview and find out why they are leaving. Use this information to change your retention programs; otherwise, more people will be defecting.

Retaining Customers

Mergers will obviously create some disruptions. One area where disruptions must be minimized is customer service. Once a merger is announced, communicate to your customers, informing them that products and services will not deteriorate due to the merger. Additionally, employees directly involved with customer service cannot be distracted by the merger.

If customers are expected to defect, consider offering special deals and programs to reinforce customer retention. As a minimum, consider setting up a customer hotline to answer questions. Finally, do not forget to communicate with vendors, suppliers, and others involved in the value chain. They too are your customers.

Measuring PMI

The last area we want to touch on is measurement of post merger integration (PMI). Results of the integration process need to be captured and measured so that you can identify problem areas and make corrections. For example, are we able to retain key personnel? How effective is our communication? We need answers to these types of questions if we expect success in PMI.

One way of ensuring feedback is to retain the current measurement systems that are in place; especially those involved with critical areas like customer service and financial reporting. Day to day operations will need to be monitored for sudden changes in customer complaints, return merchandise, cancelled orders, production stoppages, etc. New measurements for PMI will have to be simple and easy to deploy since there is little time for formal design. For example, in one case the PMI relied on a web site log to capture critical data, identify synergy projects, and report PMI progress. On-line survey forms were used to solicit input and identify problem areas. A clean and simple approach works best.

A measurement system starts with a list of critical success factors (CSF) related to PMI. These CSF's will reflect the strategic outcomes associated with the merger. For example, combining two overlapping business units might represent a CSF for a merger. From these CSF's, we can develop key performance indicators. Collectively, a complete system known as the Balanced Scorecard can be used to monitor PMI. Process leaders are assigned to each perspective within the scorecard, collecting the necessary data for measurement.

Example 19 - Balanced Scorecard for Post Merger Integration (PMI)

Perspective	Key Performance Indicator
Customers	- Retention of Existing Customers
"	- Efficiency in Delivering Services
Financial	- Synergy Components Captured to Date
"	- Timely Financial Reporting
"	- Timely Cash Flow Management
Operational	- Completion of Systems Analysis
"	- Reassignments to all Operating Units
"	- Resources Allocated for Workloads
Human Resource	- Percentage of Personnel Defections
"	- Change Management Training
"	- Communication Feedbacks
Organizational	- Cultural Gaps between company's
"	- Number of Critical Processes Defined
"	- Lower level involvement in integration

Chapter

7

Anti-Takeover Defenses

Throughout this entire short course (parts 1 & 2), we have focused our attention on making the merger and acquisition process work. In this final chapter, we will do just the opposite; we will look at ways of discouraging the merger and acquisition process. If a company is concerned about being acquired by another company, several anti-takeover defenses can be implemented. As a minimum, most companies concerned about takeovers will closely monitor the trading of their stock for large volume changes.

Poison Pills

One of the most popular anti-takeover defenses is the poison pill. Poison pills represent rights or options issued to shareholders and bondholders. These rights trade in conjunction with other securities and they usually have an expiration date. When a merger occurs, the rights are detached from the security and exercised, giving the holder an opportunity to buy more securities at a deep discount. For example, stock rights are issued to shareholders, giving them an opportunity to buy stock in the acquiring company at an extremely low price. The rights cannot be exercised unless a tender offer of 20% or more is made by another company. This type of issue is designed to reduce the value of the Target Company. Flip-over rights provide for purchase of the Acquiring Company while flip-in rights give the shareholder the right to acquire more stock in the Target Company. Put options are used with bondholders, allowing them to sell-off bonds in the event that an unfriendly takeover occurs. By selling off the bonds, large principal payments come due and this lowers the value of the Target Company.

Golden Parachutes

Another popular anti-takeover defense is the Golden Parachute. Golden parachutes are large compensation payments to executive management, payable if they depart unexpectedly. Lump sum payments are made upon termination of employment. The amount of compensation is usually based on annual compensation and years of service. Golden parachutes are narrowly applied to only the most elite executives and thus, they are sometimes viewed negatively by shareholders and others. In relation to other types of takeover defenses, golden parachutes are not very effective.

Changes to the Corporate Charter

If management can obtain shareholder approval, several changes can be made to the Corporate Charter for discouraging mergers. These changes include:

Staggered Terms for Board Members: Only a few board members are elected each year. When an acquiring firm gains control of the Target Company, important decisions are more difficult since the acquirer lacks full board membership. A staggered board usually provides that one-third are elected each year for a 3 year term. Since acquiring firms often gain control directly from shareholders, staggered boards are not a major anti-takeover defense.

Super-majority Requirement: Typically, simple majorities of shareholders are required for various actions. However, the corporate charter can be amended, requiring that a super-majority (such as 80%) is required for approval of a merger. Usually an "escape clause" is added to the charter, not requiring a super-majority for mergers that have been approved by the Board of Directors. In cases where a partial tender offer has been made, the super-majority requirement can discourage the merger.

Fair Pricing Provision: In the event that a partial tender offer is made, the charter can require that minority shareholders receive a fair price for their stock. Since many states have adopted fair pricing laws, inclusion of a fair pricing provision in the corporate charter may be a moot point. However, in the case of a two-tiered offer where there is no fair pricing law, the acquiring firm will be forced to pay a "blended" price for the stock.

Dual Capitalization: Instead of having one class of equity stock, the company has a dual equity structure. One class of stock, held by management, will have much stronger voting rights than the other publicly traded stock. Since management holds superior voting power, management has increased control over the company. A word of caution: The SEC no longer allows dual capitalization's; although existing plans can remain in effect.

Recapitalizations

One way for a company to avoid a merger is to make a major change in its capital structure. For example, the company can issue large volumes of debt and initiate a self-offer or buy back of its own stock. If the company seeks to buy-back all of its stock, it can go private through a leveraged buy out (LBO). However, leveraged recapitalizations require stable earnings and cash flows for servicing the high debt loads. And the company should not have plans for major capital investments in the near future. Therefore, leveraged recaps should stand on their own merits and offer additional values to shareholders. Maintaining high debt levels can make it more difficult for the acquiring company since a low debt level allows the acquiring company to borrow easily against the assets of the Target Company.

Instead of issuing more debt, the Target Company can issue more stock. In many cases, the Target Company will have a friendly investor known as a "white squire" which seeks a quality investment and does not seek control of the Target Company. Once the additional shares have been issued to the white squire, it now takes more shares to obtain control over the Target Company.

Finally, the Target Company can do things to boost valuations, such as stock buy-backs and spinning off parts of the company. In some cases, the target company may want to consider liquidation, selling-off assets and paying out a liquidating dividend to shareholders. It is important to emphasize that all restructurings should be directed at increasing shareholder value and not at trying to stop a merger.

Other Anti Takeover Defenses

Finally, if an unfriendly takeover does occur, the company does have some defenses to discourage the proposed merger:

1. Stand Still Agreement: The acquiring company and the target company can reach agreement whereby the acquiring company ceases to acquire stock in the target for a specified period of time. This stand still period gives the Target Company time to explore its options. However, most stand still agreements will require compensation to the acquiring firm since the acquirer is running the risk of losing synergy values.
2. Green Mail: If the acquirer is an investor or group of investors, it might be possible to buy back their stock at a special offering price. The two parties hold private negotiations and settle for a price. However, this type of targeted repurchase of stock runs contrary to fair and equal treatment for all shareholders. Therefore, green mail is not a widely accepted anti-takeover defense.
3. White Knight: If the target company wants to avoid a hostile merger, one option is to seek out another company for a more suitable merger. Usually, the Target Company will enlist the services of an investment banker to locate a "white knight." The White Knight Company comes in and rescues the Target Company from the hostile takeover attempt. In order to stop the hostile merger, the White Knight will pay a price more favorable than the price offered by the hostile bidder.
4. Litigation: One of the more common approaches to stopping a merger is to legally challenge the merger. The Target Company will seek an injunction to stop the takeover from proceeding. This gives the target company time to mount a defense. For example, the Target Company will routinely challenge the acquiring company as failing to give proper notice of the merger and failing to disclose all relevant information to shareholders.
5. Pac Man Defense: As a last resort, the target company can make a tender offer to acquire the stock of the hostile bidder. This is a very extreme type of anti-takeover defense and usually signals desperation.

One very important issue about anti-takeover defenses is valuations. Many anti-takeover defenses (such as poison pills, golden parachutes, etc.) have a tendency to protect management as opposed to the shareholder. Consequently, companies with anti-takeover defenses usually have less upside potential with valuations as opposed to companies that lack anti-takeover defenses. Additionally, most studies show that anti-takeover defenses are not successful in preventing mergers. They simply add to the premiums that acquiring companies must pay for target companies.

Proxy Fights

One last point to make about changes in ownership concerns the fact that shareholders can sometimes initiate a takeover attempt. Since shareholders have voting rights, they can attempt to make changes within a company. Proxy fights usually attempt to remove management by filling new positions within the Board of Directors. The insurgent shareholder(s) will cast votes to replace the current board.

Proxy fights begin when shareholders request a change in the board. The next step is to solicit all shareholders and allow them to vote by "proxy." Shareholders will send in a card to a designated collector (usually a broker) where votes are tallied. Some important factors that will influence the success of a proxy fight are:

1. The degree of support for management from shareholders not directly involved in the proxy fight. If other shareholders are satisfied with management, then a proxy fight will be difficult.
2. The historical performance of the company. If the company is starting to fail, then shareholders will be much more receptive to a change in management.
3. A specific plan to turn the company around. If the shareholders who are leading the proxy fight have a plan for improving performance and increasing shareholder value, then other shareholders will probably support the proxy fight.

Proxy fights are less costly than tender offers in changing control within a company. However, most proxy fights fail to remove management. The upside of a proxy fight is that it usually brings about a boost in shareholder value since management is forced to act on poor performance. It is worth noting that proxy fights are sometimes led by former managers with the Target Company who recognize what needs to be done to turn the company around. In any event, studies clearly show that changes in management are much more likely to occur externally (tender offers) as opposed to internally (proxy fights).

Course Summary

A merger is like a marriage; the two partners must be compatible. Each side should add value so that together the two are much stronger. Unfortunately, many mergers fail to work. Overpaying for the acquisition is a common mistake because of an incomplete valuation model. Therefore, it is essential to develop a complete valuation model, including analysis under different scenarios with recognition of value drivers. A good starting point for determining value is to extend the Discounted Cash Flow Model since it corresponds well to market values. Core value drivers (such as free cash flows) should be emphasized over traditional type earnings (such as EBITDA).

Some key points to remember in the valuation process include:

1. Most valuations will focus on valuing the equity of the Target Company.
2. The discount rate used should match-up with the associated risk of cash flows.
3. The forecast should focus on long-term cash flows over a period of time that captures a normal operating cycle for the company.
4. The forecast should be realistic by fitting with historical facts.
5. A comprehensive model is required based on an understanding of what drives value for the company.
6. The final forecast should be tested against independent sources.

If pre merger phases are complete, we can move forward to integrate the two companies. This will require the conversion of information systems, combining of workforces, and other projects. Many failures can be traced to people problems, such as cultural differences between the companies, which can lead to resistance. Additionally, if you fail to retain key personnel, the integration process will be much more difficult. The best defense against personnel defections is to have a great place to work. If the company has a bad reputation as an employer, then defections will surely occur.

Some of the risk factors associated with post merger integration are:

1. What level of integration do we implement?
2. What can we do to retain key personnel?
3. How serious are the cultural differences between the companies?
4. What kinds of conflicts and competition can we expect during integration?
5. To what extent do the people of both company's understand the merger?
6. Who will govern and control the new company?

Success with post merger integration is improved when:

1. The two companies have a history of effective planning and strategizing.
2. The two companies have a history of successful change management.
3. The merger will improve the strategies of both companies.
4. Sufficient resources are allocated for integrating the two companies.
5. Integration takes place by design and not by chance.
6. Both company's have prepared for integration in advance through due diligence.
7. Human and cultural issues are directly addressed as part of integration.
8. The integration process is viewed as evolutionary with several concurrent projects going on, trying to integrate the two companies as quickly as possible.

Finally, not all companies will openly embrace mergers; substituting internal investment for external investment. Some companies are very successful with their internal investment programs and a sudden shift to external investments (mergers) may not fit with the company. A number of measures can be employed for preventing a merger, including:

- Poison Pills - Issuing rights to shareholders, exercised when a takeover attempt occurs.
- Golden Parachutes - Special compensation paid to executives should they depart within one year of a merger.
- Changes to the Corporate Charter - Staggering the terms of board members and requiring a super-majority approval for a merger.
- Recapitalizations - Making major changes to the capital structure, such as large issues of debt to buy back the stock.

However, despite all of these anti-takeover defenses, most acquiring companies are successful in taking control of the Target Company. Additionally, the stock prices for companies with anti-takeover defenses are discounted for the obstacles encountered in trying to remove management.

Final Exam

Select the best answer for each question. Exams are graded and administered by installing the exe file version of this course. The exe file version of this course can be downloaded over the internet at www.exinfm.com/training.

1. Assuming we are valuing a going concern, which of the following types of income streams would be most appropriate for valuing the company?

   a. Earnings Before Interest and Taxes

   b. Free Cash Flows

   c. Operating Income After Taxes

   d. Price to Earnings Ratio

2. The following estimates have been made for the year 2006:

Operating Income (EBIT)	$ 6,000
Depreciation	500
Cash Taxes to be paid	950
Income from non operating assets	60

   No capital investments or changes to working capital are expected. Based on this information, the projected free cash flows for 2006 are:

   a. $ 5,610.

   b. $ 4,550.

   c. $ 4,490

   d. $ 6,550

3. Marshall Company is considering acquiring Lincoln Associates for $ 600,000. Lincoln has total outstanding liabilities valued at $ 200,000. The total purchase price for Marshall to acquire Lincoln is:

   a. $ 200,000

   b. $ 400,000

   c. $ 600,000

   d. $ 800,000

4. The Valuation Process will often analyze several value drivers in order to understand where value comes from. Which of the following value drivers would be **least** important to the valuation?

    a. Return on Invested Capital

    b. Earnings per Share

    c. Cash Flow Return on Investment

    d. Economic Value Added

5. You have been asked to calculate a terminal value for a valuation forecast. The normalized free cash flow within the forecast is $ 11,400. A nominal growth rate of 3% will be applied along with a weighted average cost of capital of 15%. Using the dividend growth model, the terminal value that should be added to the forecast is:

    a. $ 78,280

    b. $ 86,200

    c. $ 95,000

    d. $ 97,850

6. Information from a valuation model for Gemini Corporation is summarized below:

Total present value of forecasted free cash flows	$ 150,000
Terminal value added	450,000
Total present value of non-operating assets	20,000
Total present value of outstanding debts	120,000

    If Gemini has 20,000 shares of outstanding stock, the value per share of Gemini is:

    a. $ 15.00

    b. $ 25.00

    c. $ 30.00

    d. $ 35.00

7. Once a merger has been finalized, one of the primary responsibilities of senior executive management as it relates to post merger integration is to:

    a. Facilitate functional integration

    b. Develop personnel retention programs

    c. Lead change through communication

    d. Manage all of the integration projects

8. One of the challenges within post merger integration is to retain key (essential) personnel. Which of the following might help retain key personnel?

    a. Assign personnel to new locations

    b. Invite personnel to management meetings

    c. Offer personnel severance packages

    d. Recruit personnel differently than normal

9. Which of the following can be used as a poison pill for preventing a merger and acquisition?

    a. Issuing special rights to shareholders

    b. Offering golden parachutes to executives

    c. Buying back all of the outstanding stock

    d. Adopting a super-majority for mergers

10. Which of the following represents a change to the corporate charter, designed to discourage a change in management?

    a. Offering greenmail to selected shareholders

    b. Entering into a standstill agreement

    c. Going private through a leveraged buyout

    d. Staggering the terms of board members