

# Sample Business Valuation Report

The sample business valuation report below is just one of the many ways that we can help business buyers and selling reach a mutually-beneficial agreement.

## The Approach

The income approach is one of three basic valuation approaches used to value a business. The other two approaches are the **asset-based** and the **market approach**.

**The asset-based approach** is more appropriate in a business liquidation or if there are little or no current earnings in the business. This approach would also be applicable if the assets were worth a great deal more individually than the value implied by the income they generate.

**The market approach** uses publicly traded companies and/or company acquisitions data. The publicly traded company data trades on a minority basis while the acquisition data is on a majority basis. While both these sources of data are more detailed and generally accessible the comparisons to privately held companies are seldom appropriate due to the extreme size difference both in revenues and assets of publicly traded companies to the privately held company being valued. Additionally in regards to acquisition data is not uniform or consistent in the information provided from one deal to the next. There is little publicly available information on private transactions that is consistent, accurate, and detailed enough to provide materially useful financial information compared to the publicly traded companies in the stock market. Hence, the market approach is not considered an appropriate method for determining the value for this Business.

## Current Economic Environment

At the time of the valuation date the chart below shows some of the key economic indicators during December 2007 compared to June 2011. While the deep declines of the 2009 recession are smoothed over by the chart below the declines from peaks in 2007 are very apparent revealing a fragile recovery.

	12-2007	12-2008	12-2009	12-2010	6-2011
Gross Domestic Product	4.90%	1.90%	-2.50%	4.20%	3.70%
Prime Rate	8.05%	3.25%	3.25%	3.25%	3.25%
Fed Funds	4.25%	0.15%	0.12%	0.20%	0.09%
2 Year U.S. Treasury Yield	3.05%	0.71%	0.95%	0.64%	0.40%
30 Year U.S. Treasury Yield	4.84%	4.28%	4.08%	4.44%	4.23%
LIBOR 3 month	4.70%	1.47%	0.25%	0.30%	0.25%
30 Year Mortgage Rate	6.10%	4.53%	4.90%	4.53%	4.36%
Municipal GO Bond Yield	4.42%	5.32%	4.25%	4.95%	4.59%
Dollar Index	76.70	80.95	77.86	79.52	74.30
S&P 500	1468	873	1115	1258	1340

NASDAQ Composite	2652	1530	2269	2663	2816
Inflation Rate	2.80%	3.80%	-0.40	1.60%	3.60%
Gold Price per oz.	\$838	\$870	\$1,098	\$1,406	\$1,482
Oil Price per barrel	\$96	\$38	\$80	\$90	\$95

## Step 1 – Income Statement

A standard format is recommended for the presentation of the income statement. Many organizations adopt a modified format for their operating statement- specific to their industry – but deviates from the standard accounting method. For consistency the format as portrayed below is used. This is the standard presentation of the income statement used in all business valuations.

	<b>Gross Revenues</b>
minus	Cost of Goods Sold or Direct Expenses
equals	<b>Gross Profit</b>
minus	Operating Expenses
equals	<b>Net Operating Income</b>
plus/minus	Net Other Income or Expenses
minus/plus	Income Tax or Refund @ 35%
equals	<b>Net Income after tax</b>
plus	Depreciation Expense
plus/minus	Annual Capital Expenditures
plus/ minus	Annual Working Capital Changes
	<b>Cash Flow before Financing (debt free)</b>

For service companies the use of direct expenses would be substituted for the costs of goods sold or costs of revenues. So in essence, all firms have a gross profit. By showing a cost of goods or direct expense and then operating expenses – a company can better monitor its different levels of expenses rather than combining these two major cost components together into one lump sum of expenses.

Any return on a business investment should be considered separate from compensation to owners/officers. Business owners should view their income as coming from two primary sources: fair market salary and the return-on-investment to reward for the risk of ownership in business. The return on investment should represent the free cash flow or cash flow before financing a business produces above all costs that are required to operate the business. This return is ultimately determines the value of a business.

Erroneously, in some valuations, net income before taxes or some form of it like EBITDA (earnings before interest expense, taxes, depreciation expense, and amortization expense) is used to arrive at a value. This is serious mistake and produces many indefensible over-valuations. The entire U.S. stock market is valued with

after tax earnings where a P/E ratio (price earnings ratio) employs an after tax earnings for the earnings portion of the ratio. No one wants to pay to capitalize an expense and taxes are an expense of doing business. C corporation tax rates are used to determine the average at 35% on net income or net losses to calculate tax refunds, if applicable.

Corporate Taxable Income	Marginal Tax Rate	Average Tax Rate
Up to \$50,000	15%	15.0%
\$50,001 to \$100,000	25%	20.0%
\$100,001 to \$335,000	34%	29.8%
\$335,001 to \$10,000,000	39%	38.7%
\$10,000,001 to \$15,000,000	35%	37.5%
\$15,000,001 to \$18,333,333	38%	37.6%
\$18,333,334 plus	35%	35.0%

## Step 2 – Financial Analysis

It is prudent to begin a value assessment by analyzing the organization’s financial history and comparing the Business against historical trends and other performance metrics, which will provide insight as to the strengths and weaknesses of the Business. Refer to attached Business Ferret analysis on each company for this comprehensive analysis.

## Step 3 – Financial Adjustments or Recasting

Adjustments to the financial statements allow for a realistic financial picture of the company if compared to other competitors in the industry. Industry benchmark studies are typically employed to arrive at these adjustments. This company has performed very well over the last two years. There are no material adjustments that were made that would have any consequence.

The income approach uses the present value of future cash flows to calculate value. This method is based on the Capital Asset Pricing Model (CAPM). The simplest form of this approach is the Capitalization of Cash Flow before Financing (CFBF) Analysis. This analysis is insightful because it incorporates the fundamental principles employed in the valuation of privately held businesses and it is simple to use. The income approach will be further explained and then applied to the Business.

## Step 4 – Net Adjusted Free Cash Flow

The actual net return the business opportunity will afford a new buyer is referred to as net adjusted free cash flow after tax. This is the net return on the investment, over and above fair market salaries and after all adjusted operating expenses, income taxes, capital expenditures and working capital needs. Refer to Step One above for the method to arrive at this cash flow figure.

When referring to “net adjusted free cash flow”, “net” refers to cash flow after all expenses and taxes. The term “free” is defined as cash flow after the required annual reinvestment into working capital and fixed assets. Amounts must be allocated for annual reinvestment into working capital and fixed assets otherwise the

business would eventually fail at maintaining basic operations and services and would not be able to grow. These expenses increase in proportion to the rate of growth the company experiences.

To accurately define the net after tax free cash flow of the business, non-cash charges (such as depreciation) are added back and the required annual fixed asset reinvestment (equal on average to the annual depreciation expense) is subtracted from net after tax income. As the business grows, working capital needs also increase, requiring working capital investments in the business. Annual increases in working capital are subtracted as an adjustment to cash flow. The remaining figure after adjusting net income for depreciation, annual investment in fixed assets, and working capital is called net after tax free cash flow or cash flow before financing after tax. (CFBF)

The term “adjusted” refers to potential adjustments to net income, for unusual items of expense or costs that are below or above fair market value, such as compensation. A buyer would adjust the income statement as needed to show the effective market costs for all of the necessary company expenses and costs of doing business.

## Step 5 – Discount Rate

After calculating net adjusted free cash flow, a discount rate is determined in order to assess or compensate for the risk in the business or investment being considered. The higher the risk, the higher the expected return for taking that risk. A discount rate is equal to an investor’s required rate of return needed in order to make an investment. It is used to

calculate the price of an asset given the perceived risk or volatility of the investment offset by its expected potential rate of return or profit rewards. The discount rate is illustrated below using a “build-up” approach taken from the concept of the Capital Asset Pricing

Model. The current approximations for the components in the build-up approach of the discount rate for equity of publicly traded companies are shown in the chart immediately above.

5.00%	<b>Risk Free Rate (20 Year U.S. Treasury Bond Yield)</b>
6.40%	<b>Equity Risk Premium on large cap stocks</b>
6.80%	<b>Additional Equity Risk Premium on micro cap stocks</b>
0% to 10.00%+	<b>Risk Premium for subject company, industry, &amp; size</b>
<b>18.2% to 28.2%+</b>	<b>REQUIRED RATE OF RETURN or DISCOUNT RATE(for publicly traded companies only)</b>

The first row gives the current year and month June 2011 yield for the 20 year bond. Second row gives the additional return over and above the risk free return that one would expect from stocks similar to the S&P500 returns over an 84 year period.

The third row shows the long term expected return from the ninth and tenth smallest deciles category of stock returns.

Fourth row shows the excess premium range that would be added the additional risk factors where company revenue size is a major determinant of risk.

The fifth row gives the range of required rate of returns or discount rates that would apply to the smallest publicly traded companies only and this is applied to the equity return only not the total return to the over-all company. It also needs to be remembered that the returns calculated for equity returns are on a minority basis not majority basis. Hence they are pre majority basis premiums applied for majority control.

Source: 2010 Ibbotson and Associates – Stocks, Bills, Bonds, and Inflation Returns

Since many companies use debt financing for their capital structure it is necessary to adjust the discount rate in order to reflect the different mix of debt and equity employed in a business. This is called the weighted cost of capital method. Assuming debt with an interest rate of 6% pre-tax and 4% after tax and an after tax equity discount rate of 28.2% one can see the different mix of debt and equity and the implied weighted cost of capital for that particular mix. For example, using the above cost or return assumptions and assuming a 50% debt and 50% equity financing would result in a weighted cost of capital of 16.1% The lower the implied cost of capital (as with the discount rate) the higher the resulting capitalization value of the adjusted net cash flows after tax. The higher the cost of capital (or discount rate) will result in a lower capitalized value.

One needs to keep in mind that the company's equity is not publicly traded and illiquid. Referring to the next following chart below it is important to compare the company's book equity of \$\_\_\_\_\_ to the lowest decile publicly traded companies in the bottom decile with average market capitalization of \$87 million or over \_\_\_\_ times larger than the company.

The average annual returns in the different deciles are equity returns only not weighted costs of capital. At the minimum one would use the smallest decile #10's average equity return and no less due to the size of the company being valued which also is not publicly traded.

**2009 Size-Decile Portfolios of the NYSE, AMEX, NASDAQ by size composition, and arithmetic mean annual returns 1926 to 2009 covering 84 years**

2009 Deciles	Average Return 1926 – 2009	Average company market cap	Largest market cap per decile	Number of companies per decile
1	10.9%	\$48 billion	\$330 billion	168
2	12.8%	\$9.6billion	\$14.7 billion	176
3	13.4%	\$4.6 billion	\$6 billion	174
4	13.8%	\$3 billion	\$3.4 billion	185
5	14.6%	\$2 billion	\$2.4 billion	215
6	14.8%	\$1.3 billion	\$1.6 billion	241
7	15.2%	\$924 million	\$1 billion	305
8	16.3%	\$473 million	\$685 million	417
9	17.0%	\$319 million	\$431 million	560
10	20.9%	\$87 million	\$214 million	1,361

Source: Morningstar and CRSP @2010

The next chart below is the final analysis for finding the applicable discount rate for this valuation. The individual and summarized totals for the four major publicly traded companies in the coffee processing, marketing, & distribution space are shown. Their individual required rate of return (RRR) arrived at by adding together their earnings yield and earnings growth rate which results in weighted average RRR of 33.7%. Taking Starbucks's annual 5 year earnings growth rate of 20% and subtracting it from the 33.7% produces a capitalization rate of 13.7%. This 13.7% is hence part of the discount rate to be used in the valuation. The implied discount determined here is low considering the size of the company and when compared to Starbucks's, for instance, it is lower than can be financially defended. By having a lower required return on the company as compared to Starbucks's one would be saying that the opportunity and risk involved in the company is higher opportunity and lower risk than Starbucks's.

	Price Earnings Ratio	Earnings Yield to Price	Earnings Growth Rate	Required Rate of Return (RRR)	Weighted RRR
<b>STARBUCKS (SBUX)</b>	25.92	3.86%	<b>20%</b>	23.86%	20.01%
<b>GREEN MOUNTAIN (GMCR)</b>	73.11	1.37%	<b>106%</b>	107.37%	11.41%
<b>PEET'S COFFEE (PEET)</b>	41.02	2.44%	<b>31%</b>	33.44%	0.87%
<b>CARIBOU COFFEE (CBOU)</b>	30.64	3.26%	<b>44%</b>	47.26%	1.05%
<b>COFFEE HOLDINGS (JVA)</b>	26.2	3.82%	<b>49%</b>	52.82%	0.35%
August 3, 2011	average	average	Average	average	Wghted. avg.
Summary	39.38	2.95%	50%	52.95%	<b>33.7%</b>

## Step 6 – Growth Rate

Subtracting a realistic annual growth rate from the selected discount rate yields the capitalization rate, the inverse of which is the price/cash flow ratio. This is similar to the familiar price/earnings ratio (P/E), which uses net after tax earnings rather than adjusted free cash flow.

The residual annual growth rate is assumed to go on into perpetuity, so it is a very long-term growth estimate for the industry and the company, in particular. The long-term growth rate has to be reasonably expected to occur into the unforeseeable future with consistency, and hence should not exceed the average annual long-term (from 1929 to 2010) nominal growth rate of U.S. gross domestic product (GDP) of 6.15%. For this report the average of the 30 and 40 year average nominal GDP growth of around 6.11% is used and rounded to 6.0%. Taking the above determined capitalization rate of 13.7% and adding the long term growth rate of 6% results in a discount rate or required rate of return of 19.7% used in this report and the discounted cash flow model attached.