Economic and Industry Analysis

Fundamental Analysis

- Fundamental analysts look for companies whose financial health is good and getting better, and which are undervalued by the market.
- They scour financial reports, calculate ratios, compare to other similar companies, etc.
- Fundamental analysts believe that “earnings drive stock prices” at least in the long run.
- Fundamentalists tend to be buy and hold investors, as opposed to technicians who tend to be shorter-term traders.
Traditionally, fundamental analysts perform a “top down” analysis to determine which stocks to buy or sell.
The top down method consists of:
- A macro economic analysis
- An industry analysis
- A company analysis

There is a strong linkage between growth in the overall economy and growth in company earnings (which drive stock prices, at least in the long run).

The following graph shows that changes in nominal GDP explain about 37% of the changes in corporate profits on average.

Obviously, then, to know where earnings (and thus stock prices) are going, we need to know where GDP is going.

A GDP forecast is our starting point. This forecast can be had from a number of sources including brokerage firm analysts, bank economists, and the WSJ’s semi-annual survey.
Earnings & GDP

Corporate Earnings vs. Nominal GDP

\[ y = 3.9195x - 0.0501 \]
\[ R^2 = 0.3712 \]

Data Source: http://www.freelunch.com
Data are from Q1 1946 to Q2 2001

A Sri Lankan perspective

1. GDP by Industrial Origin At Constant (2002) Prices

<table>
<thead>
<tr>
<th>Sector</th>
<th>1st Quarter (Rs. Mn)</th>
<th>Growth rates (%)</th>
<th>Contribution to Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012 (a)</td>
<td>2013 (b)</td>
<td>12/11</td>
</tr>
<tr>
<td>Agriculture</td>
<td>95,517</td>
<td>97,442</td>
<td>12.0</td>
</tr>
<tr>
<td>Industry</td>
<td>228,057</td>
<td>249,167</td>
<td>10.8</td>
</tr>
<tr>
<td>Services</td>
<td>438,186</td>
<td>448,834</td>
<td>5.8</td>
</tr>
<tr>
<td>GDP</td>
<td>759,760</td>
<td>785,444</td>
<td>8.0</td>
</tr>
</tbody>
</table>

EXTERNAL SECTOR

EXCEPTS

Source: CBSL Stats, May 2013
What Your Forecast Should Include

- Any macro economic forecast should include estimates of all of the important economic numbers, including:
  - Real GDP growth
  - Inflation rates
  - Interest rates
  - Unemployment

- And probably others, depending on your needs.

Types of Forecasts

- There are two types of forecasts:
  - Quantitative – based on econometric models.
  - Qualitative – based on educated guesses.

- Qualitative forecasting is less difficult, and probably as good as quantitative forecasting.
Forecasting for the Layperson

- The most important thing to do is to watch for releases of various economic statistics by the government and private sources. These are widely reported by the financial media (Mirror FT, LBO, Derana etc).

- Especially, keep an eye out for the Index of Leading Economic Indicators, The CCPI (Inflation Index), comments by the Governor of the CBSL, Secretary to the Treasury, unemployment rates, interest rates, etc.

Defining Recession and Depression

- An old story is that a recession is when your neighbor loses his job, and a depression is when you lose yours.

- A better definition (but not exactly correct) is that a recession occurs when real GDP declines for two consecutive quarters.

- The NBER Business Cycling Dating Committee is the official arbiter of the timing of recessions. Its definition (from http://www.nber.org/cycles.html) is:
  - “The NBER does not define a recession in terms of two consecutive quarters of decline in real GNP. Rather, a recession is a period of significant decline in total output, income, employment, and trade, usually lasting from six months to a year, and marked by widespread contractions in many sectors of the economy.”
  - “A growth recession is a recurring period of slow growth in total output, income, employment, and trade, usually lasting a year or more. A growth recession may encompass a recession, in which case the slowdown usually begins before the recession starts, but ends at about the same time. Slowdowns also may occur without recession, in which case the economy continues to grow, but at a pace significantly below its long-run growth.”
  - A depression is a recession that is major in both scale and duration.
Review of Key Stats – CBSL Data

Unemployment

- The unemployment rate is determined by a survey of individuals who are then placed into one of three categories:
  - Employed
  - Unemployed and seeking work
  - Unemployed and not seeking work (“discouraged” workers)
- The unemployment rate is the ratio of unemployed to the total number in the workforce (discouraged workers are not counted).
- Note that the “labor force” is actually the civilian labor force, it does not include those in the military.
Forecasting Is Hard

- “Forecasting is difficult, especially if it concerns the future.”
- That phrase has apparently been uttered by many famous people, and I can’t track down the original. However, truer words have never been spoken.
- Economic forecasting is especially difficult, and the forecasts are wrong almost by definition.
- There are many reasons why this is the case:
  - Old or bad data
  - Unexpected shocks (the Sept 11 tragedy is a perfect example)
  - Using historical data which gives no clues about major structural changes about to occur
  - Blindly following trends

Why Forecast Economic Aggregates?

- We don’t have a choice. We are making decisions whose outcomes depend on the future, and we must make these decisions using the best available information that we have.
- Otherwise, all decisions may as well be made by a coin toss (and even bad forecasts are usually better than that).
- It is probably best not to pay too much attention to the point estimates of the forecast, instead look for trends (is GDP expected to grow slower, faster, or about the same?).
- It is also important to constantly be on the lookout for solid reasons to revise your forecast, and change your decision.
- It’s no sin to be wrong, but failing to admit it and adjust is.
Industry Analysis

- Once we have done a thorough economic analysis, we ask the question “which industries will benefit most from the upcoming economic environment?”

- This will lead to several industries, and our analysis will lead us to choose the one that we find to be best positioned.

What is an Industry?

- An industry is a group of companies which produce similar goods and/or services.

- An industry will include ALL parties who are RELATED to the design, manufacture, distribution and servicing of a particular product and/or service

- Eg:
  - All apparel manufacturers and their suppliers
  - Banks and financial service institutions
  - Power generators and transmission service providers
  - Car manufacturers and component manufacturers
Components of Industry Analysis

- The purpose of industry analysis is to identify which industries will be good for investors in the upcoming environment.
- These are some areas that need consideration:
  - Competitive Structure
  - Permanence
  - Phase of Life Cycle
  - Vulnerability to External Shocks
  - Regulatory and Tax Conditions
  - Labor Conditions
  - Historical Financial Performance
  - Financial and Financing Issues
  - Industry Stock Price Valuation

Competitive Structure

- Some of the questions to be answered are:
  - What companies are in the industry?
  - What are their market shares?
  - Which are publicly traded?
  - Has the number of competitors been rising, fallen, or remained stable?
Permanence

- Some of the questions to be answered are:
  - Is the industry likely to survive in the long-run?
  - Are there any major technological threats (such as laser printer was to the dot matrix printer)?
  - Are there regulatory threats?

Phase of Life Cycle

- Some of the questions to be answered are:
  - Where is the industry in its life cycle? The best returns and most risk tend to occur early in the cycle.
  - The possible phases are:
    - Birth Phase
    - Growth Phase
    - Mature Growth Phase
    - Stabilization or Decline Phase
Some of the questions to be answered are:
- Could major portions of the industry be nationalized by foreign governments?
- Are they dependent on supplies of key commodities (such as oil)?
- Are they subject to external political whims?
- Are they subject to fashion trends that may soon change?
Regulatory and Tax Conditions

- Some of the questions to be answered are:
  - What are the current regulations that the industry faces?
  - Are there likely to be new regulations?
  - Are the industry’s products subject to special taxes
  - Are there special tax breaks offered to the industry?

Labor Conditions

- Some of the questions to be answered are:
  - What percentage of the industry’s workers are unionized?
  - Are the unions generally hostile or complacent?
  - Is unionization increasing or decreasing?
  - Are qualified workers easily obtainable, or are they difficult to find? This has been a particular problem for the high-tech industries.
Historical Financial Performance

- Some of the questions to be answered are:
  - What is the historical record of industry revenue, earnings and dividends?
  - Are these financial variables cyclical, counter-cyclical?
  - Have they been growing slowly, rapidly, or about average?
  - What is the average cost structure in the industry? Heavy on fixed costs? Or, are variable costs the lion’s share?

Financial and Financing Issues

- Some of the questions to be answered are:
  - How much debt does the average firm have?
  - What is the mix between fixed assets and current assets? Is it labor intensive or capital intensive?
  - What is the average age of the fixed assets? Will they have to be replaced soon?
Industry Stock Price Valuation

- Some of the questions to be answered are:
  - What is the historical average P/E for the industry?
  - How high has it been? What were the economic conditions when the highs were hit?
  - How low has it been? What were the economic conditions when the lows were hit?
  - Where is it now? Where should it be, based on historical economic comparisons?
  - What kinds of capital gains and dividend yields have historically been generated?

Porter’s Five Forces Analysis

- Threat of New Entrants
- Intensity of Rivalry
- Buyer Power
- Supplier Power
- Threat of Substitutes