

Preparing a Security Analysis Report

A. General Format for a Fundamental Analysis

A security analysis can be prepared for a number of reasons. For example, an individual investor may do a security analysis to determine whether to purchase a particular common stock. In such cases, there is usually no need to do an extensive writeup of the analysis. The producer of the analysis is the same as the consumer. In other cases, the security analysis is produced for a wider audience. For example, a security analyst at an investment bank may produce a security analysis for distribution to clients. Similarly, the security analyst may work for a mutual fund company and be responsible for identifying potential security investment opportunities. In such cases, there is a need to produce a structured report on the security analysis that will be digested by others. This type of exercise is common enough that some attention needs to be given to the process of producing a security analysis report. Whether it be clients, fellow analysts or fund managers, there are certain elements that require adequate attention in such a report. As a consequence, some guidance on this issue is indicated.

Depending on the source, a number of somewhat different formats can be used to present a security analysis of a particular company. A 'model analytical structure' suggested for an academic fundamental analysis report is described by Penman (2001, p.11). A five step process is proposed. The general outline of this process can be described as:

How to prepare a fundamental analysis

Step 1: Economic and Market Analysis

- Structure of the industry: competition and market dynamics
- Products being produced: what the products do, technology, substitute products
- Firm cost structure and revenue composition
- Firm Strategy: what are the firm's stated objectives for future
- Regulatory Environment

Step 2: Analysis of Financial Statements

- Balance sheet: Price to book value of equity; net market value of assets
- Income statement: free cash flow, revenues, EVA
- Cash flow statement: Operating, financing and investing
- Other factors not included in the financial statements: industry and government publications

Step 3: Forecasting relevant payoffs

- What are the 'value drivers'?
- What are 'best guess' forecasts of the value drivers?
- What factors could act to undermine the forecasts?

Step 4: Formulating a security value

Specifying the approach to valuation

Applying the valuation model to the available data from steps 1-4

Step 5: Making a recommendation

For an outside investor, recommend buy, sell or hold.

Stating qualifications to the forecast

While this general model is useful for the analytical purposes of academics, it differs from the form that is common in ‘professional’ security analysis reports. On the issue of form, English (2001, p.393) recommends: “Financial analytic reports need five sections: recommendation and summary, earnings forecast, valuation, elaboration, and detail. This is the law of nature. The order is important. You can reverse the earnings and valuation, but the recommendation always comes first, and the detail last.” English reiterates the point: “Financial writing has far more in common with journalism than with scientific writing. Conclusions always come first.” The aim of the professional security analysis report is to persuade, to convince the reader that the investment argument being made is sound.

B. The Wall Street Approach

Penman is approaching the problem of preparing a security analysis from the perspective of an academic researcher. Careful and systematic analysis of the information at hand is required, proceeding systematically to determine whether specific points are relevant. Discussion of the basis for accepting a given interpretation or rejecting the importance of a particular aspect of the available information is relevant. Once all the available data has been analyzed and processed, the final conclusion is reached and a recommendation is made. This is in contrast to the ‘Wall Street’ approach to preparing a security analysis where the report is an exercise in persuasion. Details are only important insofar as the argument supporting the recommendation is aided. Keep the logical development as straightforward as possible. “Logical traps can sink an otherwise strong investment argument. Avoid chained logic, in which a number of conditions must be met for the argument to succeed. If one condition is successfully challenged, the entire argument is lost.” In general, the analytical style needs to contain “mostly positive, concrete statements; and, most importantly, be brief” English (2001, p.393).

English honed his skill in writing security analysis reports through 25 years of experience, most of which were spent at JP Morgan. The recommended approach to preparing a ‘professional’ security report is reflected in various other sources. For example, Hooke (1998, p.70) provides the following model for a security analysis research report:

Table of Contents

Section	Topic
1	Introduction
2.	Macroeconomic Review
3.	Relevant Stock Market Prospects
4.	Review of the Company and Its Business <ul style="list-style-type: none"> Industry analysis Company specific analysis Future prospects Financial summary
5.	Financial Analysis <ul style="list-style-type: none"> Historical evaluation Current earnings power estimate Review of accounting methods Adjustments to historical financial data
6.	Financial Projections <ul style="list-style-type: none"> Listing of principal assumptions Projected data
7.	Application of Valuation Methodologies
8.	Recommendation <ul style="list-style-type: none"> Comparison of analyst's valuation to market price of the stock Recommended investment decision

Similar to English, Hooke (1998, p.69) states explicitly: “The model research report begins with a short description of the company that has issued the common stock under evaluation, and a summary recommendation for investment action.” Hooke goes beyond English to recommend: “Included in the introductory paragraph are the company’s product lines, its areas of operation, and its annual sales and profits.” The first paragraph in the introductory section is followed by three additional paragraphs, the second dealing with the company characteristics in more depth, including longer term trends in key variables such as sales and earnings. The third paragraph deals with significant developments in the company’s business with the final paragraph detailing the general rationale for the recommendation.

English (2001, p.394) provides a telling description of the basis for the model security analysis research report:

Don't bury the lead! I repeat this before, during, and after every writing assignment in my equity analysis courses, but breaking the "scientific" writing style is very difficult for most of us. The measured and logical scientific progression, from methodology to data to discussion to conclusion, is exactly wrong for financial analytic reports. Unlike finance professors, investors don't read a financial analysis because they have to, and they don't read it as they would a scientific paper. They read it as they would read a newspaper. Investors scan the headlines. If they are intrigued, they may read a little deeper, always searching for critical information up front. If they have to dig or wait to see the point, they likely will stop reading, and the report will fail.

The practical basis for the format of the security analysis research report extends well beyond the requirements of the “sell side” of the market. Hooke (1998, p.19) estimates that only about 30% of full time professional security analysts work for the sell side, composed of the investment banks and

brokerage houses involved in the business of bringing to market, trading and marketing common stocks, bonds and other securities. About 60% work for the “buy side” of the market, composed of the institutional money managers such as pension funds, insurance companies, and the closed and open ended mutual fund companies. The remaining 10% work for a range of other organizations such as the regulators, the exchanges, the credit rating agencies and independent research firms.

The need for ‘sell side’ analysts to prepare a hard hitting, easy-to-understand, persuasive and informative research report is not difficult to see. Brokerage house reports receive a wide circulation to an audience that varies considerably in the degree of expertise. The reports play a key role in the marketing efforts of all brokerage firms. Many buy side firms award brokerage and other business based on the quality of the research reports received from sell side firms. Though less obvious, most buy side analysts also need a writing style similar to sell-side analysts. Instead of targeting reports at client accounts, buy side analysts are writing for in-house consumption. Depending on the type of buy side firm, this will usually include portfolio managers, other analysts and traders. Though the report can take on a more sophisticated level of discussion because the audience is other investment professionals, this does not reduce the need to have a report that is concise, interesting to read and informative.

English is less precise about the structure for the research report than Hooke and is more concerned with the style:

A financial analysis should contain five sections: summary and conclusion, earnings forecast, valuation, elaboration, and detail. Every securities house has its own style, and analysts can fool with the order a bit, but conclusions are always first and detail is always last. The report becomes more detailed from front to back. Wading through elaboration on the way to a conclusion will discourage most readers instantly. This order applies not only to the report as a whole but to each subsection. The conclusions of the valuation section come first, for example, and the elaboration next.

In preparing the analysis, there will be a range inputs that are required to make forecasts of the key value drivers. For example, an earnings forecast for a firm in the housing sector would depend on an interest rate forecast. The valuation of most stocks will depend on an estimate of aggregate stock market trends. The security analyst will not usually be responsible for generating forecasts of macroeconomic variables or aggregate stock market trends. Rather, both sell side and buy side firms will have a macroeconomic specialist and a market strategist that will provide estimates of these values. The security analyst is responsible for evaluating the industry and company aspects of the research.

INSERT Fig 8-b Brokerage House Recommendations from .zip file

Having recognized the appropriate format and style required for a security analysis research report, that format will not be followed in the case analyses examined in chapter 9. The reason for this is that the objective of the analysis is primarily academic. The securities being examined are selected to illustrate certain principals not to decide whether the security is a ‘strong buy’, ‘buy’, ‘hold’, ‘sell’ or ‘strong sell’. The format and substance of the brokerage house reports is designed to facilitate the purchase of stocks. The relative absence of sell and strong sell recommendations in brokerage house reports is well known. The unethical aspect of this practice has been made apparent by the legal settlement that New York Attorney General Eliot Spitzer was able to obtain from the largest Wall Street sell side securities firms. In addition to sizable fines, this settlement also requires these

firms to supply clients with stock reports from three independent research firms to supplement the research reports that the securities firms prepare in-house for distribution to clients. This settlement was obtained to mitigate the conflict-of-interest that the sell side firms have between investment banking activities and the marketing of securities to clients.

C. Sources of Information on the Internet

The information revolution that has emerged since the early 1980's has had a profound impact on security analysis. The tedious process of assembling and, to some extent, analyzing various types of fundamental information needed to determine the value of a security has been dramatically simplified. A lack of information problem has been transformed into a classification of information problem. There are so many sources that criteria are required to identify, say, primary from secondary sources or to determine authoritative from unreliable sources. In general, authoritative sources will identify where the data being used was obtained and define any relevant computations that are being done. This general rule is usually satisfied for widely used financial information sources on the internet, such as www.msn.com. While there is often a fee-for-service component to obtaining certain types of information, such as more complicated calculations or difficult to obtain data sources, the individual is able to a remarkable amount of reliable information about a large percentage of publicly traded companies.

In conjunction with the role that the internet has played in this information revolution, there has also been a dramatic increase in the number of media outlets dedicated either largely or exclusively to various aspects of security analysis. The success of cable television stations such as CNBC, which is available 24 hours a day in major centers around the world, has been another factor increasing access and exposure to various types of information about securities. These developments have been accompanied by an increase in the number and sophistication of the traditional hardcopy print media. The impact of the information revolution has been felt at both the individual and institutional level. Computerized and on-line trading systems, video conferencing with companies and other analysts, the emergence of sophisticated information platforms such as Bloomberg screens, together with an increase in the breadth and depth of information have all contributed to the information revolution at the institutional level.

INSERT Links page menu from www.sfu.ca/~poitras

INSERT Table General Web Sites page from www.sfu.ca/~poitras/links.htm

For an individual investor the problem of assembling and analyzing information has been transformed from a problem of access and cost to one of near-information-overload. There are now so many sources of information that it is difficult to filter and process what is available. The links page on the author's website www.sfu.ca/~poitras/links.htm collects and organizes information sites that are available on the internet into various categories (see Table 8-z). As the preamble to the links page indicates, the selection of sites for inclusion is guided by 'ease of access'. Pay-sites and sites with elaborate subscriber formats have been avoided. This is not because such sites are usually inadequate, quite the contrary. There are numerous pay sites that provide services such as superior security analysis and access to specialized data sources. Rather, because the links page is aimed primarily at being an aid to students doing securities research, ease of navigation has been a guide.

Suggestions for improving the links page, such as sites that are not posted or links that are down, is always welcome. As illustrated in Table 8-z, available sites fall into a range of possible categories. In most cases, the first place to start an investigation of a security, especially a common stock, is the General Web Sites (see Table 8-w).

Being a collection of sites that are of general interest, the links page on the author's website only provides a first cut for the information required to effectively execute an insightful security analysis. Each individual stock will require a range of additional sites to be examined that provide information about the specific industry and company of interest. For example, consider the companies that are being examined in chapter 9: Anheuser-Busch; Canadian Oil Sands Trust; and, Delta Airlines. Once the basic information from the general websites such as www.msn.com, www.bloomberg.com or www.globeinvestor.com has been obtained, it is usually advisable to proceed to the website for the company of interest. In the case the Anheuser-Busch, the website is www.anheuser-busch.com which contains links to both the annual report and the SEC filings. Virtually all publicly traded US companies today have the annual report and SEC filing information easily accessible on the company website, usually accessible from the main web page under an 'investor relations' link. In addition, there is usually other types of useful information to examine about, say, the products and 'links to other sites'

Having obtained the information from the company website, the security analysis for Anheuser-Busch will also benefit from examining information from websites dedicated to the beverage industry. A number of possible sites that could be searched are: www.nbwa.org (National Beer Wholesalers Association) that provides institutional information about the wholesaling step in the beer distribution system. There are also industry related sites such as <http://www.beerinstitute.org>, the Beer Institute, and a range of more general beverage related websites, e.g., <http://www.beveragenet.net/> which is mostly concerned with wines and <http://www.bevindustry.com>. Recognizing that beer has a significant taxation component, http://www.itds.treas.gov/Food_Beverage.htm is a links site maintained by US Customs and Revenue. Finally, an assessment of the competition for A-B can be obtained from the sites of Anheuser-Busch competitors such as <http://www.sab.co.za/>, the website for SABMiller.

A similar information search process applies to searching for information that can be used in a security analysis of Canadian Oil Sands Trust. The company website can be accessed at www.cos-trust.com. In addition to the annual report (no SEC filings as this security is traded in Canada), this site also has a considerable information about the Syncrude project. Even more information about the Syncrude project can be obtained from the Syncrude website at www.syncrude.com. There are other related sites such as the oil sands website at Ft. McMurray, <http://oilsandsdiscovery.com>. The valuation of a crude oil producer requires information about the oil industry and markets for petroleum products. There are a range of industry sites concerned with these issues such as <http://api-ec.api.org/> for the American Petroleum Institute and www.ipaa.org for the Independent Petroleum Association of America, which have a considerable amount of data on US markets. The numerous media sites include www.oilandgasinvestor.com, Oil and Gas Investor, and www.oil.com, part of the WorldNews network. If information about international petroleum markets is desired there are sites such as www.iea.org for the International Energy Agency. Finally, the various major oil companies often have oil markets analysis and information on the company websites. An example of one such website is the British Petroleum site that has an excellent report on oil markets that can be accessed at: <http://www.bp.com/centres/energy2002/>.

The final company considered in chapter 9 is Delta Airlines. The annual reports and SEC filings

can be accessed at the company website for Delta, www.delta.com. This website is an access point for online ticketing. Those unfamiliar with this method of ticket purchasing, in general, or Delta's ticketing, in particular, can examine the mechanics of this process firsthand. Given the national and global importance of the airline industry, there are a significant number of government and industry websites that provide an overwhelming amount of relevant information. A number of such sites include: www.airlines.org, the Air Transport Association; www.iata.org, the International Air Transport Association; www.nata-online.org, the National Air Transport Association (an industry group); and, www.icao.int, the International Civil Aviation Organization. In addition to these industry focused groups, there are US government agency websites such as the US Dept. of Transportation site, www.dot.gov, the related site www.bts.gov, for the Bureau of Transportation Statistics, and www.faa.gov, the Federal Aviation Administration website (information on regulations). Similar to the useful information provided by BP on the oil industry, the Boeing website, www.boeing.com, has a report on developments in the airline industry that has a wealth of material that is useful for doing a security analysis for an airline.