



Certified Equity Research
Analyst
Sample Material

V-Skills Certifications

**A Government of India
&
Government of NCT Delhi Initiative**

V-Skills



1. INTRODUCTION

1.1 Goals of Equity Research

1.1.1 Holistic overview of Equity Research

As the financial markets have grown the demand for information in terms of research and analysis of companies has also accelerated. Investors rely on such information to determine what to put their money into, traders need information to know whether they should enter or exit a position, and corporate financiers (including bankers, private equity firms etc) need information to value companies and participate in transactions.

This information has to come from somewhere and as a result, there are entire divisions within financial institutions, brokerage firms as well as independent bodies who are dedicated on researching the key issues of companies and their shares - This function of research is called Equity Research, along with institutional research. The Equity research reports help in understanding market trends for better investment decisions.

1.1.2 Qualitative and Quantitative aspects of Equity Research

Qualitative Research

Qualitative research is by definition exploratory, and it is generally used when it is difficult to frame the problem or develop an approach to the problem. It is also used to go deeper into issues of interest and explore nuances related to the problem at hand. Qualitative equity research is a traditional approach largely driven by the analyst's experience and insights. It involves subjective judgment based on non quantifiable information, such as management expertise, industry cycles, strength of research and development, labor relations, supplier base, customer profiles, brand equity etc. Qualitative information involves gaining an insight on business and industry dynamics.

Quantitative Research

Quantitative equity research is a financial analysis technique that seeks to understand trends by using complex mathematical and statistical modeling, measurement and research. By assigning a numerical value to variables, quantitative analysts try to replicate reality mathematically. Quantitative analysis can be done for a number of reasons such as measurement, performance evaluation or valuation of a financial instrument. It can also be used to predict real world events such as changes in a share price etc.

In quantitative equity research, the sources of information are financial statements such as profit & loss statements, balance sheet, cash flow statements, schedules to accounts, etc.

Qualitative research and Quantitative analysis supplement each other for a proper in-depth research.

1.1.3 Equity Research in capital markets

Equity research is a discipline within the financial services industry. Equity research professionals are known as analysts; whose job is to discover, develop and communicate insights (coverage) of a particular company from a neutral position to enable the investment community to benefit by investing in it. The investment community consists of a broad spectrum of institutional professionals, asset managers, retail broker and individual investors. Typically, the research attempts to define at a particular moment the value, risk, and volatility of a (analyzed/covered) security or stock to assist investors in deciding to buy, hold, sell or monitor. Research analysts conduct due diligence, define technology platforms, measure comparables (similar or associated companies), define benchmarks and milestones for a target price as well as conduct quarterly reviews of financial disclosures, relevant industry news using trading, industry databases, management interviews and thereafter frame their observations and recommendations.

Equity research falls into two broad categories

- ✓ Provided by investment banks (I-Banks)
- ✓ Provided by independent equity research firms. I-Banks offer research multiple financial services including broking and corporate finance.

1.2 Fundamentals of Equity Research

1.2.1 Role of Equity Research

The role of Equity Research is to estimate the value of companies, provide analyzed information to the market in a structured form, and determine what drives share prices and then make investment recommendations. An efficient market relies on information, lack of information creates inefficiencies that result in stocks being over or undervalued. Equity research is valuable since it provides information analyzed by experts so that each individual investor does not need to analyze every stock.

1.2.2 Segments of Equity Research

Equity research can be differentiated into following segments

Equity Research by Investment banks and major brokerage firms

The investment banks and major brokerage firms generally focus on large-cap, very liquid stocks in their equity research. This is due to the fact that large-cap stocks generate very attractive and profitable investment banking deals. The companies which provide the opportunity for the equity research firms with bulk investment banking deals are the stocks are identified for tracking. Such analysis more often considers a stock's long-term investment potential as secondary.

Equity Research by independent equity research firms

For majority of stocks, the primary source of information is the Equity research by independent equity research firms. However the quality of such reports remains questionable since equity research reports purchased from reputable sources may be inaccurate and misleading. Consequently investors have lower confidence on these equity research reports and are reluctant to buy the same. While Institutional investors deploy their own analysts for research to gain better insight over other investors, they also appoint independent equity research firms for additional research. The amount institutional investors pay for these equity research reports may serve as indicator of the value such reports.

Fee-based Equity Research

In case of stocks where the Investment banks may not consider any research, Fee-based equity research provides market efficiency by covering the gap between companies and the investors who require equity research reports for free. As company has funded the Fee-based equity research, such reports provide information gets widely circulated free of cost to the reader. Fee-based equity research retains legitimacy with their professional and objective analysis of a company's investment potential - the mandate for them is to provide analytical report and not promotional services.

Promotional equity research

As in the case of Fee-based equity research, the Promotional equity research is also funded by the subject company. However Promotional equity research is not un-biased and lacks dependability and neutrality. It is an analysis aimed at making an investment attractive to investors.

1.2.3 Purpose of Equity Research

The purpose of equity research is to identify the intrinsic value of an asset or security.

Equity markets are in general volatile due its direct relation with many other local and global dynamics involved. This volatility associated with the stocks make investing in equity shares or in equity markets a risky business. Equity research involves carrying out critical analysis to evaluate the fair value of stocks owned by a particular company. On a broader role it is also used to signify the possibility of growth or decline in share price of the company. The main objective of the analysis here is to find out trends by which decisions can be made to maximize returns from proposed investments.

Equity researchers with their competence and sophisticated mathematical modeling provide a better insight over the fluctuations of the equity market and aid in the investors in the process of achieving desired financial objectives. Hence using the tools of premium equity research reports and skills of a competent research analyst the investor is much better armed to make more prudent and informed investment decisions in the equity market. So equity research bears paramount importance and its findings by equity research analysts is carefully followed up by all stake holders right from large companies to individual investors who invest a part of their capital in the equity market.

1.3 Process of Equity Research

1.3.1 Understanding equity markets and its functioning

The 'Equity Market' can be generally described as a market in which shares and other financial instruments are issued and traded, either through exchanges or over-the-counter. The 'Equity Market' is also known as the stock market and serves a significant area of a market economy by providing the companies access to capital, and investors an opportunity of ownership in a company with the potential of returns based on its future performance.

This market can be classified into two main sectors - the primary and secondary market. The primary market is where new issues are first offered and all subsequent trading take place in the secondary market. The 'Equity Market' is actually a virtual place and the only physical form these products can display is the share certificate either in paper form (in earlier days) or the

dematerialized form as seen today popularly known as “demat” form held in the investors trading account. An important feature of the stock market is that it is a place where one would find all kinds of investors ranging from small investors trying to speculate on stock prices for profitability to institutional investors as specially floated finance companies and mutual funds managers deploying large investments for making money.

Public issues of “shares” are floated by public limited companies or limited companies for raising capital for the company’s expansions and other internal needs. After the initial public offering of shares for raising the share capital and completion of the issuance formalities, the companies approach the stock market for listing their share in the stock exchange so that it can be traded in the stock market. The share price of the stock gets fixed initially based on the company’s fundamentals and thereafter its share price movement depends on the demand and the supply or the buying and selling pressures by the investors.

The determination of the share price of a company can be summarized as an outcome from the amalgamation of various aspects about the company, industry, market and trends of the investors. The “National Stock Exchange or NSE” and “Bombay Stock Exchange (BSE)” are the two major stock exchanges in India for transacting shares, securities and exchange traded financial derivatives.

Historically the trading used to be conducted in the exchange on open shouting or outcry basis through which the assembled brokers at the stock exchange used to transact with each other. However the system has been replaced through computerized networking with secured online transactions. Presently three-in-one trading accounts are available to the small investors which connect the investors trading and demat accounts with their bank account for online stock trading. All the major nationalized banks offer demat accounts and trading facilities.

Stock trading is always associated with risks and there has been instances in the past where stock markets were rigged leading to heavy losses across the breadth of investors. Government of India and finance ministry has evolved several guidelines and controls in the form of statutory bodies like Securities Exchange Board of India.

1.3.2 Process flow of Equity Research

Equity research process comprises of multiple steps.

- ✓ Economic Analysis
- ✓ Industry Analysis
- ✓ Company Analysis
- ✓ Financial Statement Analysis
- ✓ Financial and Valuation Modeling
- ✓ Report writing
- ✓ Presentation or recommendation

1.4 Types of Research

1.4.1 Private Equity Research

Private equity is a broad term which commonly refers to any type of non-public ownership equity securities that are not listed on a public exchange. Since they are not listed on any public exchange, any investor wishing to sell private equity securities must find a buyer in the absence of a public marketplace. There are many transfer restrictions on private securities. Investors in private securities generally receive their return through one of three ways - an initial public offering, a sale or merger, or a recapitalization. Private equity research hence is research done on private companies with the objective of investing in them.

1.4.2 Institutional Equity Research

Equity research done for other investment professionals and organizations instead of for internal use, or for individuals comes under the category of institutional equity research.

1.4.3 Investment Research

Investment Research in a limited sense is strictly not equity research, as equities are commonly referred to stocks. Investment research is a broader term that includes research all types of asset class, including real estate, bonds, commodities, forex and even non-standard investments such as investments in works of art etc.

1.4.4 Sector Research

Sector Research refers to equity research done for specific sectors. A sector could refer to an industry sector (e.g. automobiles), or to the size of the companies being referred to (eg. small-cap) and so on. The following are the popular types of sector research,

- ✓ Mid cap research: Focuses on mid-cap stocks
- ✓ Small cap research: Focuses on small-cap stocks
- ✓ High growth companies research: Focuses on high growth companies
- ✓ Emerging markets research: Focuses on emerging markets

1.4.5 Long term value investing equity research

This refers to an investment approach or strategy rather to specific operational parameters (sector research, on the other hand is more specific and operational in nature). Well known investors are known for their value investing approach where they put in efforts to identify stocks that are currently undervalued but have strong fundamentals and consequently possess the potential for excellent long-term bets.

1.5 Classification of Stocks and Market Participants

1.5.1 Types of Stocks

The following are the various types of stocks traded on the stock exchanges.

Blue chips

These are issued by large, well established companies which are considered to be safe and in good financial shape. These companies are also considered leaders in their particular industries. In addition, they pay small but regular dividends to their shareholders in both good and bad times.

Growth Stocks

These are issued by young, entrepreneurial companies that are experiencing a relatively faster growth rate than the industry average. These stocks normally pay little or no dividend because the company needs all of its earnings to finance expansion. Since they are issued by companies with no proven track record, growth stocks are riskier than other types of stocks but also offer more appreciation potential.

Defensive Stocks

These are opposite of cyclical stocks. Defensive stocks are issued by companies producing staples such as food, beverages, drugs and insurance which typically maintain their value during recessionary periods.

Income Stocks

These stocks pay unusually large dividends that can be used as a means of generating income without selling the stock, but the price of the stock generally does not rise very quickly.

Cyclical Stocks

These are issued by companies that are sensitive to general economic trends. The prices of these stocks tend to go down during recessionary periods and increase during economic booms. Examples of cyclical stock companies include automobile, heavy machinery and home building.

Large Cap, Mid Cap, Small Cap

The classification of Large Cap, Mid Cap, and Small Cap are done on the basis of the market capitalization of the company. Market capital of a company is calculated by multiplying the current price of the stock of the company with the total outstanding shares of the company in the market.

BSE classifies companies according to their market capitalization by applying the 80-15-5 method which is as follows.

- ✓ Arrange all the companies in descending order of their Market Capitalization.
- ✓ The group of companies from the top, which together contribute 80% of the total Market Capitalization are Large-cap Companies,
- ✓ The next group of companies contributing 15% (80-95%) of Market capitalization are Mid-cap companies, and
- ✓ The remaining companies which contribute 5% of Market Capitalization are Small-cap companies.

1.5.2 Types of Market Participants

The stock market consists of the following participants.

- ✓ **Investors:** Innumerable, but not organized investors.
- ✓ **Companies:** Those seeking capital from the capital market like big corporations, small and medium sized business, etc.

- ✓ **Regulatory Body:** SEBI (the Securities & Exchange Board of India) an autonomous and statutory body acts as the market regulator and market developer. SEBI also looks into investor complaints against companies. It is quasi-judicial and can try cases and pass judgments against any market participant.
- ✓ **Stock Exchanges:** A stock exchange is the marketplace where companies are listed and where the trading happens. They provide a transparent and safe (risk-free) forum of a market for investors to transact and invest their funds. There are 23 Stock Exchanges registered with SEBI and under its regulation. National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE) are the pre-dominant ones.
- ✓ **Depositories and their Participants:** The depositories are institutions that have rendered the market paperless by holding stocks of investors in an electronic form through a registered depository participant (DP) and can be compared to a bank. Depositories hold securities in an account, transfer securities between accounts on the instruction of the account holder and facilitate the transfer of ownership without the account holder needing to handle securities. They provide ease and speed for those transacting in the market. There are two depositories in India--the National Securities Depository Ltd (NSDL) and the Central Depository Services Ltd (CDSL), while there are over a 100 DPs.
- ✓ **Registered Intermediaries:** They consist of brokers, sub-brokers, Trading and Clearing Members, portfolio managers, Bankers to Issue, merchant bankers, registrars, underwriters and credit rating agencies. They provide a range of services to the investors and are registered with SEBI and act under the regulation of SEBI abiding by the Code of Conduct prescribed for each of the roles.

1.6 Roles and Responsibilities of an Equity Research Analyst

The equity research analyst is responsible for analyzing the market ups and downs and prepares investment plans accordingly. Along with this, the equity research associate is also responsible for following other important duties,

- ✓ Researching market financial conditions
- ✓ Preparing the financial models and statistics
- ✓ Updating the statistical data and financial models
- ✓ Performing security analysis using financial models and statistics
- ✓ Interact with organizations, companies, and clients and solve problems if any

- ✓ Documenting internal and external reports
- ✓ Communicate with counterparts regarding investment ideas, opinions, security analysis, etc.
- ✓ Develop and maintain information to assist in analysis activities
- ✓ Undertaking researches by conducting field trips and meeting company executives
- ✓ Formulate investment ideas and recommendations to the clients
- ✓ Industry analysis to evaluate relevant industry trends
- ✓ Develop market study materials for clients

1.7 Different approaches of Equity Research

Equity Research is aimed at identifying the opportunities for wealth creation and an equity analyst tries to identify undervalued or overvalued stocks through both his expertise and by use of available research tools. An appropriate valuation of securities is imperative for arriving at the right investment decisions.

1.7.1 Top-down Approach

In top-down forecasting, analysts use macroeconomic projections to produce return expectations for large stock market composites, such as SENSEX, NIFTY, and S&P 500. These can then be further refined into return expectations for various market sectors and industry groups within the composites. At the final stage, such information can, if desired, be distilled into projected returns for individual securities. The top-down approach seeks to understand the big picture, i.e. the most significant trends. Analysts then draw up their forecasts on the basis of these insights. This enables them to determine the "right" asset allocation (bonds, real estate, equities, etc.) as well as market, sector and company selection and weighting.

When taking a top-down approach, analysts draw on economic information on sector-specific and technical aspects of stock market developments. This information includes e.g. the growth prospects of individual economies (GDP growth), inflation and deflation, unemployment, developments in foreign trade, consumer sentiment, oil price movements, stock market volatility, leading indices or sub-indices (such as small and mid cap or sector indices), etc.

1.7.2 Bottom-up Approach

The bottom-up forecasting begins with the microeconomic outlook for the fundamentals of individual companies. If desired, the forecasts for individual security returns can be aggregated into

expected returns for industry groupings, market sectors, and for equity markets as a whole. The purely bottom-up approach does not consider analyzing and forecasting "macro-events" and constructing logical chains of argument. Systematic bottom-up investors concentrate on individual investment objects and not their "macro-environment".

The focus is on analyzing individual companies using concrete, and as rule pre-defined criteria. The portfolio consists of shares that have individually met all of these criteria. These criteria may include e.g. key financial figures, growth forecasts, dividend payments, qualitative aspects, international focus, size, management stability, ownership structure, etc.

1.7.3 Discounted Cash Flow Models

The assumption underlying Discounted Cash Flow Model is that a business is worth the present value of the cash flows that it will generate into the future. It is the after tax cash flows available to shareholders till perpetuity. To calculate the after tax cash flows available to shareholders the analyst would need to calculate the revenues a business generates and deduct all the cash-based expenses that are incurred in obtaining those revenues (including taxes and capital expenditures). The DCF analysis takes two pieces of information to determine the present value of the cash flows.

- ✓ An estimate of the cash flows into the future.
- ✓ An assessment of the potential variability of those cash flows, called the discount rate.

The DCF analysis assumes that cash flows today and in the near-future are worth more than cash flows further into the future. How much more depends on the discount rate. The higher the discount rate (the more variable the cash flows) the less they are worth in the future. The total present value of the future cash flows of a business is called the Enterprise Value which is the total value of the business, including both debt and equity.

To calculate the value of shareholder equity Net Debt has to be subtracted from the Enterprise Value. Net Debt is the long-term borrowings (i.e. bank debt) less cash or equivalents. If the company has more cash than long-term borrowings that is fine - Net Debt is negative and so adds to Enterprise Value. Finally, to determine a value per share divide the value of shareholders equity by the number of shares outstanding.

1.7.4 Free Cash Flow Models

Free cash flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base. It is a measure of financial performance calculated as operating cash flow minus capital expenditures.

Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value. Without cash, it is difficult to develop new products, make acquisitions, pay dividends and reduce debt.

FCF is calculated as follows,

$$\text{FCF} = \text{EBIT} (1 - \text{Tax Rate}) + \text{Depreciation \& Amortization} - \text{Change in Net Working Capital} - \text{Capital Expenditure}$$

It can also be calculated by taking operating cash flow and subtracting capital expenditures.