CHAPTER-2

BUSINESS RISK AND VALUE ADDED– A CONCEPTUAL CLARITY

We are all faced with risk in our everyday lives. And although risk is an abstract term, our natural human understanding of the tradeoffs. For example-in our personal lives, we intuitively understand the difference between a cost that’s already been budgeted for (in risk parlance, a predictable or expected loss) and an unexpected cost (at its worst, a catastrophic loss of a magnitude well beyond losses seen in the course of normal daily life).

In particular, we understand that risk, is not synonymous with the size of a cost or of a loss. After all, some of the costs we expect in daily life are very large indeed if we think in terms of our annual budgets: food, fixed mortgage payment, college fees and so on. These costs are big, but they are not a threat to our ambitions because they are reasonably predictable and are already for in our plans.

In celebrated book of; “Against the Gods-the Remarkable Story of Risk” Peter L Bernstein opines that risk was always associated with God. As the business and markets grew, understanding about risk has grown from primitive stages to highly complex modern methods. Risk is accepted in business as a tradeoff between benefit as well. Time is a dominant factor in risk. Risk is invariably associated with cement industries.
If a Robertson says, “I am uncertain about tomorrow’s weather”, this would be a value free statement implying imperfect knowledge about the future. If he says, “I am planning a picnic for tomorrow and there is risk of rain”, this would mean that now be explained as exposing one’s self to a significant likelihood of injury or loss.

The purpose of this chapter is to provide you with an understanding of various types of risks faced by companies and ways to mitigate such risks. This chapter is designed in such a way as to provide all the required inputs for a sound understanding of the Business Risk and Economic Value Added Framework. Therefore, the following pages have been used to bring a conceptual clarity as regard to business risk and Economic Value Added and related aspects.

Business is mainly run to earn profit. However, there is always a change of suffering loss it. This danger of loss from unforeseenable events in future in business is named as business risk. Business risk is an essential element of business. It cannot be avoided but it can be minimized by taking timely suitable measures by the businessman.

Risk means that there is a chance that you won’t receive a return on your investment. It is an exposure to danger to your bottom line. When you are in business, you need to consider the kinds of events that could pose a risk to your business and take steps to mitigate them.
Every business organization involves some element of risk. Risk implies uncertainty of profits or danger of loss due to some unforeseen events in the future. An entrepreneur may encounter risks in every area or function of a business. For example- in production, risks may arise due to irregular supply of raw materials, break down of machinery, labor unrest, etc. in marketing, risks may occur an account of price fluctuations, change in tastes and fashion, errors in sale forecasting, trade cycle, etc. In addition, there may be loss of assets of a firm due to fire, flood, earthquake, riots, war or political unrests which may cause unwanted interruptions in business operations. Thus, business risks may take place in a variety of forms. Though risks are universal, but all business enterprises do not face same type and degree of risks. They may vary according to the nature and size of a business.

The term business risk refers to the possibility of inadequate profits or even losses due to uncertainties. Every business organization contains various risk elements while going the business. Business risks implies uncertainty in profits or danger of loss and the events that could pose the risk due to some unforeseen events in future, which causes business to fail.

These risk are inevitable in a business and cannot be eliminated completely but they can be controlled through proper preventive and corrective measures of risk management of risk involves-

1. Identification of the risks
2. Evaluation of the risks
3. Choice of the right method for handling of risks

4. Evaluating the aftermath of the chosen method

Hence, an entrepreneur can face the risks effectively by anticipating their nature and causes and adopting appropriate techniques in order to minimize their negative consequences.

Also, gains in a business are inseparably linked to these inherent risks. In other words, “no risks, no gains” is a fundamental principle of a business. Hence, high profits of the big business houses are the rewards for successful management of the business risks by their entrepreneurs.

And finally, to understand the business risk of the firm, we used the degree of combined leverage (DCL).

**TYPES OF BUSINESS RISK**

1. Operational Risk

2. Financial Risk

3. Systematic Risk

4. Unsystematic Risk

1) **OPERATIONAL RISK**

Operational risks result from internal failures. That is your business internal processes, people or product systems fail unexpectedly. Therefore, unlike a strategic risk or a financial risk, there is no return on operational risks. Operational risks can also result from unforeseen external events such as transportation system breaking down, or a supplier failing to deliver goods.
These are the risks associated with the operational and administration producers of the particular industry which are very common in today’s generation. In addition, we also can define the operational risk of a firm is the capacity of using fixed operating costs to magnify the effect of change in sales an operating earnings of the firm. This can be understood is mathematical relationship that finding of contribution by operating earnings. In order to infer that there is an operating risk only when proportionate change in operating earnings is more than the proportionate change in sales. If there is equal change in operating earnings and sales, then it implies that there is no operating risk.

2) FINANCIAL RISK

Financial risk is associated with the way in which a company finances its activities. Financial risk in company is associated with the capital structure of the company. The presence of borrowed money or debt in the capital structure creates fixed payments in the form of interest that must be sustained by the company. The presence of the debt and preference capital result is a commitment of paying interest is a commitment of dividend, which causes the amount of residual earnings available for equity shareholders to be more variable than if no interest payments were required. Financial risk is avoidable risk to the extent that management has the freedom to decide to borrow or not to borrow funds. A company with no debt financing has no financial risk.
Financial risks are the risks associated with the financial structure and transactions of the particular industry. Financial risk is the risks borne by equity holders (refers share section) due to a firm’s use of debt. If the company raises capital by borrowing money, it must pay back this money at some future date plus the financing charges (interest etc. charged for borrowing the money). This increases the degree of uncertainty about the company because it must have enough income to pay back this amount at some time in the future.

Direct financial risks have to do with how your business handles money. That is, which customers do you extend credit to and for how long? What is your debt load? Does most of your income from one or two clients who might not be able to pay? Financial risks also take into account interest rates and if you do international business, foreign exchange rates. More to it financial risk is the capacity of using fixed financial costs such as interest on debt, preference dividend. On preference shares to magnify the effect of change in operating earnings on net earnings. Mathematically it can be explained that the proportionate change in net earnings is more than proportionate change in operating earnings. If there is equal is nature, then no financial risk exists. For examples, A 50% change in operating earnings lead to 50% change in net earnings, then we imply that no financial risk exists. On the other hand, a 50% change in operating earnings lead to more than 50% change in net earnings, then we say that financial risk exists.
3) SYSTEMATIC RISK

Systematic risk is the risk that cannot be reduced or predicted in any manner and it is almost impossible to product yourself against this type of risk. Examples of this type of risk include interest rate increases of government legislation changes. The smartest way to account for this risk is to simply acknowledge that this type of risk will occur and plan for your investment to be affected by it.

Systematic risk refers to that portion of total variability in return caused by factors affecting the prices of all securities. Economic, political and social changes are sources of systematic risk. Their effect is to cause prices of nearly all individual common stocks and/or all individual bonds to move together in the same manner and therefore, no investor can avoid or eliminate this risk, whatsoever precautions or diversification may be resorted to. So, it is called the non-diversifiable risk, or the market risk.

4) UNSYSTEMATIC RISK

Unsystematic risk is the portion of total risk that is unique to a firm or industry, factors such as management capability, change in market demand, consumer preferences, change in competitive environment and labor strikes cause systematic variability of returns in a firm. Unsystematic factors are largely independent of factors affecting securities markets in general. Because these factors affect one firm, they must be examined for each firm.
Unsystematic risk is risk that is specific to an asset’s features and can usually be eliminated through a process called diversification. An example of this type of risk includes employee strikes or management decision changes.

**COMPONENTS OF BUSINESS RISK**

1. Purchasing power risk
2. Interest rate risk
3. Market risk
4. Country risk
5. Exchange rate risk
6. Credit risk
7. Political risk
8. Legal risk
9. Economic risk
10. Social risk

**PURCHASING POWER RISK**

Purchasing power risk is the uncertainty of the purchasing of the amount to be received. In simple words, purchasing power risks refer to the impact of inflation or deflation on an investment. Rising prices on goods and services are normally associated with what is referred to as inflation. Falling prices on goods and services are termed deflation and are covered in the encompassing term purchasing power risk. Generally, purchasing power risk has come to be identified with inflation, the incidence of declining prices in most countries has been slight.
INTEREST RATE RISK

Interest risk refers to the uncertainty of future market values and of the size of future income, caused by fluctuation in the general level of interest. The value of debt securities varies inversely with interest rates. When interest rates are higher, the value of debt will be lower, while lower interest rates will push up the value of debt securities. The value of other types of securities may also be affected due to the general rise or fall in interest rate.

MARKET RISK

The price fluctuations or volatility increases and decreases in the day-to-day market. The price of the stock to may fluctuate widely within short span of time even though earning remain unchanged. The causes of this phenomenon are varied, but it is mainly due to change in investor’s attitude towards certain type or group of securities in particular. Market risk is caused by investor reaction to tangible as well as intangible events. The basis for the reaction set of real, tangible events political, social or economic. Intangible events related to market psychological.

COUNTRY RISK

This is also termed political risk because it is risk of investing funds in another country whereby a major change in the political or economic environment could occur. This could devalue your investment and reduce its overall return. This type of risk is usually restricted to emerging or developing countries that do not have stable economic political areas.
EXCHANGE RATE RISK

The uncertainty of returns for investors that acquire foreign investment and wish to convert them back to their home currency. This is particularly important investment for investors that have a large amount of over-seas investment and wish to sell and convert their profit to their home currency. If exchange rate risk is high even though a substantial profit may have been made overseas, the value of the home currency may be less than the overseas currency and may erode a signified amount of the investment greater the risk of differing currency value eroding the investment value.

CREDIT RISK

Credit risk a major risk faced by banks, is inherent to any business of lending funds to individuals, corporate, trade, industry, agriculture, transport or banks/ financial institutions. It is defined as the possibility of losses associated with a diminution in the credit quality of the borrowers/ unwillingness of borrowers/ counterparties to meet commitments, as also due to risk inherent in the nature of business activity and environment in terms of technology/ product design, competition, inadequate supply of inputs, lack of infrastructure and so on.

POLITICAL RISK

The risk that an investment’s return could suffer as a result of political changes or instability affecting investment returns could stem from a change in government, legislative bodies, other foreign policy makers, or military control.
Political risk is also known as “geopolitical risk”, and becomes more of a factor as the time horizon of an investment gets long. Political risk occurs due to changes in government policies. Such changes may have an unfavorable impact on an investor.

LEGAL RISK

The risk associated with the impact of a defect in the documentation on cash flow or debt service. The potential loss that may occur to an investment as a result of insufficient, improperly applied, or simply unfavorable legal proceedings in the country in which the investment is made. Legal risk arises when parties are not lawfully competent to enter an agreement themselves. Further, this relates to the regulatory risk, where a transaction could conflict with a government policy or particular legislation might be amended in the future with retrospective effect.

ECONOMIC RISK

Economic risk is the chance that macroeconomic condition like exchange rates, government regulation, or political stability will affect an investment, usually one in a foreign country.

FACTORS INFLUENCING BUSINESS RISK

Business risks are of a diverse nature and arise due to innumerable factors. These risks may be broadly classified into two types, depending upon their place of origin.
1. Internal risk

2. External risk

INTERNAL RISK

Internal risks are those risks which arise from the events taking place within the business enterprise. Such risks arise during the ordinary course of a business. These risks can be forecasted and the probability of their occurrence can be determined. Hence, they can be controlled by the entrepreneur to an appreciable extent. The various internal factors giving rise to such risks are:

1. Human factors
2. Technological factors
3. Physical factors

1. HUMAN FACTORS

Human factors are an important cause of internal risks. They may result from strikes and lock-outs by trade unions, negligence and dishonesty of an employee; accidents or deaths in the industry; incompetence of the manager or other important people in the organization, etc. Also, failure of suppliers to supply the materials, or goods on time or default in payment by debtors may adversely affect the business enterprise.

2. TECHNOLOGICAL FACTORS

Technological Factors are the unforeseen changes in the techniques of production or distribution. They may result in technological obsolescence and other business risk. For example—if there is some technological advancement
which results in products of higher quality, then a firm which is using the
traditional technique of production might face the risk of losing the market for
its inferior for its quality product.

3. PHYSICAL FACTORS

Physical factors are the factors which result in loss damage to the
property of the firm. They include the failure of machinery and equipment used
in business; fire or theft in the industry; damages in transit of goods; etc. It also
includes losses to the firm arising from the compensation paid by the firm to
third parties on account of intentional or unintentional damages caused to them.

EXTERNAL RISKS FACTORS:

External risk those risks which arise due to the events occurring outside
the business organization. Such events are generally beyond the control of an
entrepreneur. Hence, the resulting risks cannot be forecasted and the
probability of their occurrence cannot be determined with accuracy. The
various external factors which may give rise to such risks are:

1. ECONOMIC FACTORS

2. NATURAL FACTORS

3. POLITICAL FACTORS

1. Economic factors

Economic factors are the most important causes of external risk. They
result from the changes in the prevailing market conditions. They may be in the
form of changes in tastes and preferences of the consumers and changes in
income, output or trade cycles. The condition like increased competition for the product, inflationary tendency in the economy, rising unemployment as well as the fluctuation in world economy may also adversely affect the business enterprises. Such risks which are caused by changes in the economy are known as ‘dynamic risks’. These risks are generally less predictable because they do not appear at regular intervals. Also, such risks may not necessarily result in losses to the firm because they may also contain an element of gain for the firm. For instance, due to market fluctuations, a well known product of a firm, may either lose its demand or may occupy a larger market share.

2. Natural factors

Natural factors are the unforeseen natural calamities over which an entrepreneur has very little or no control. They result from events like earthquake, flood, famine, cyclone, lightening etc. such events may cause loss of life and property to the firm or they may spoil its goods. For example- Gujarat earthquake caused irreparable damage not only to the business enterprises but also adversely affected the whole economy of the state.

3. Political natures

Political factors have an important influence on the functioning of a business, both in the long and short term. They result from political changes in a country like faller change in the government, communal violence or riots in the country, civil war as well as hostilities with the neighbouring countries. Besides, changes in government policies and regulations may also affect the
profitability and position of an enterprise. For instance, changes in industrial policy and trade policy, annual announcement of the budget amendments to various legislations, etc. may enhance or reduce the profits of a business enterprise.

Thus, business risk takes a variety of forms. In order to face such risk successfully, every businessman should understand the nature and causes of these risks as well as the various measures which must be taken in order to minimize them.

**PROCESS OF RISK MANAGEMENT**

1. Identification and measurement of risk
2. Strategies to manage business risk
3. Selection to management
4. Implementation of strategy
5. Review and maintaining of business risk

**1. Identification and measurement of risk**

Risks in any business are inevitable and they cannot be eliminated completely. But an entrepreneur can control and minimize their negative consequence by adopting a suitable risk management strategy. It is important for an organization to identify the business risks that exist in the environment in which it operates. To identify those risks, organization must review their external environment. External business risks.
Stem from economic, political, social, environmental, technological, and other external institutions face risks with respect to technological, and other external conditions. For example- many research institutions face risks with respect to technology and customers demand. The electronic media in which research materials can be made available are creating a demand for faster search tools and for remote access to research materials. A library’s ability to meet this demand and remain a well respected institution is a business risk.

2. **Strategies to manage business risk**

An organization cannot fully understand its business risk unless it also understands its business strategies and process. The business objectives of an organization are continually threatened by risk. To respond to these risks, management develops strategies that enable the organization to meet its objectives. Strategies determine which business processes are necessary to meet management’s objectives and which processes require controls to mitigate business risk.

3. **Selection of strategies**

No organization is immune to risk. Moreover, each organization’s business risks change constantly. The nature and consequences of business risks facing organizations are becoming more complex and substantial. Management has to decide how much risk is acceptable and to create a control structure to keep those risks within appropriate limits. After identifying and analyzing business risks, management decides how these risks should be managed. This requires comparing the cost of reducing business risks against
the cost of potential loss from risks. For selection of strategies there are four categories:

1. ACCEPT

Accepting business risk means nothing to avoid it. This response is based on a conscious decision that the costs of other responses outweigh the potential benefits or that the risk is acceptable.

2. TRANSFER

Transferring the business risk to another party alleviates management’s responsibility for managing it. Examples of this response are buying insurance and outsourcing.

3. AVOID

Avoiding the business risk is a decision to change a business objective because no other responses can reduce the business risks to an acceptable level in a cost-effective manner.

4. REDUCE

Reducing the business risk means reducing either the likelihood of its occurrence or the magnitude of its impact. Management to usually establish earn effective control environment to reduce business risks.
5. Implementation of strategies

After identifying and analyzing business risks, management should implement the strategies to manage the risks. Implemented strategies should well selected and useful for the business which is a give good results to the business.

6. Monitor and Review:

The monitoring of all risks and regular review of the unit's risk profile is an essential element for a successful risk management program.

IMPORTANCE OF BUSINESS RISK

The uncertainties economic times of the past few years have had a major effect on how companies operate these days. Companies that used to operate smoothly with the help of forecasts and projection now refrain from making business judgments that are set in stone. Now, companies have a renewed focus to manage risk.

Risk management is important in an organization because without it, a firm cannot possibly define its objectives for the future. Every business is subject to risks that affect cash flows and profitability. Some come from internal weaknesses, some arise from positive sources, such as expansion and growth opportunities. Although, risks change over time and industries, the factors that affect business risks generally remain the same.

Business risks to considers for each business functions
**SAFETY**

1. Potential for human loss of life or injury
2. Potential for major incident such as fire, explosions, release, spill
3. Environmental damages
4. Office or facilities security

**REVENUES**

1. Recoverable monetary loss
2. Loss of customer base
3. Lost opportunity in time to market
4. Unrecoverable monetary loss

**COSTS**

1. Cost incurred due to problems that could have been prevented
2. Cost due to lost discount, increased warehousing space, vendor changes
3. Legal defense costs

**LEGAL**

1. Regulatory compliance failures
2. Results or actions which could justify legal actions against the company

**RELATED EXPOSURE**

1. Loss of customers
2. Loss of goodwill
3. Loss of shareholder confidence
4. Loss of image or reputation investor confidence
ECONOMIC VALUE ADDED

The performance measurement criteria of corporate entities are many. Common bases used are Net Profit Margin (NPM), Operating Profit Margin (OPM), Return On Investment (ROI), Return on Net Worth (RONW) etc. ROI is still recognized as the most popular yardstick of profitability measurement. A company having a ROI higher than its cost of capital is traditionally considered as a well managed one. The basic objective of any corporate management is to maximize shareholders wealth. Lately corporate pundits have re-christened the objective as maximization of “value of the business”. It is argued that if value of the business increases, shareholders wealth would automatically increase.

It is now increasingly felt in western countries that ROI falls short of achieving the refined object. In other words, maximization of ROI may not necessarily indicate maximizations of the value of the business. In fact, some problem with ROI is people get the ‘R’ by starving the “I” side of the equation. As a result, scores of companies in the United States have turned to a new concept, called Economic Value Added (EVA). Over the few years as a new way to gauge financial performance, highly regarded corporations lie Coca-Cola, AT & T, Quaker Oats and Briggs and Stratton have set up EVA measurement systems throughout their organization. EVA has provided financial discipline, encouraged managers to act like owners and boosted shareholders fortune. It is experienced in the United States that managers who run their business according to the precepts of EVA have significantly increased the value of their companies.
**Method of calculation:**

EVA = Net operating profits after taxes (NOPAT) - Capital Charge

\[
\text{EVA} = \text{NOPAT} - \text{Capital Charge} \\
= \text{NOPAT} - (\text{WACC} \times \text{CE})
\]

Where,

\[
\begin{align*}
\text{WACC} &= \text{Weighted average cost of capital} \\
\text{CE} &= \text{Capital Employed} \\
\text{NOPAT} &= \text{Profits after depreciation and taxes but before interest cost.}
\end{align*}
\]

Or

\[
\text{EVA} = \text{Capital Employed (CE)} \times [\text{Return on capital employed (ROCE)}] - \text{Cost of Capital Employed (COCE)}
\]

1. **NOPAT:** Refers to quantum of net operating profit remained in the business after the payment of taxes but before interest. Addition and subtraction on non operating income and expenses to the net profit figure and making certain other adjustments for turning accounting profits into economic profits is also advocate. To convert the GAAP earning into EVA, Stern Stewart has identified about 164 potential adjustments to GAAP. But due to diverse accounting disclosure practices adopted in India and abroad following are the adjustments being felt quite sufficient in Indian context to convert the accounting profit, also known as GAAP earnings, into economic profit or EVA eg.

   - Research and development
   - Accounting for acquisitions
   - Depreciations
- Goodwill
- Non-interest bearing current liabilities (NIBCLS)
- Revaluation Reserve etc.

Any charge in the accounting adjustments will yield a different EVA number.

2. **WACC**: is the weighted average of the cost of debt ($k_i$), cost of equity ($k_e$) and cost of preference capital ($k_p$), if any, with weights equivalent to the proportion of each in the total capital i.e.,

$$\text{WACC} = \frac{Ke \times s + k_i \times b \times k_p \times p}{V}$$

Where,

- $Ke$ = Cost of equity
- $Ki$ = Effective cost of debt i.e., $kd \times (1-t)$
- $Kd$ = Unadjusted cost of debt
- $Kp$ = Cost of preference capital
- $s$ = Total value of business
- $s$ = Value of equity capital
- $b$ = Value of debts
- $p$ = Value of preference capital
- $k_i$ = refers to the average rate of interest the company pays for its debt obligation total borrowings and then adjusting it for taxes.
- $Kp$ = is the discount rate that equates the present value of after tax interest payment each outflows to current market value of the preference share capital.
Ke = cost of equity can be calculated opting for a number of theories eg.

- Capital Asset Pricing Model (CAPM)
- Bonding Yield plus Risk Premium Approach.
- Earnings Price (E/P) Approach
- Realized Yield Approach.
- Dividend Capitalization Approach

Under CAPM cost of equity capital is expressed as:

$$Ke = R_f + \beta (R_m - R_f)$$

$R_f$ represents the most secure return that can be achieved and in Indian context, it represents current yields available in long-term government bonds.

$R_m$ Market rate of return.

$\beta$ refers to the sensitivity of the security returns to changes in the market returns.

The stability of a particular approach to calculation of cost of equity capital differs from country to country depending on their distinct disclosure and reporting practices and other environmental conditions.

3) Capital Employed (CE): is the next element required for calculating EVA and can be calculated through the assets side or the liabilities side of a balance sheet.
From the assets side of The Balance Sheet:

CE = Current Assets – Non-interest bearing current liabilities
(i.e, Net Working Capital + Net Fixed Assets)

From the liabilities side of the Balance Sheet:

CE = Interest bearing debt (short term as well as long term) + Net Worth less an non-operating assets.

**Economic Value Added – Drivers Framework:**

EVA Drivers – What Drives EVA Up?

The EVA driver framework is a set of diagnostic tool to analyse operational decisions in terms of tradeoffs between income statement and balance sheet effects, evaluate and identify areas that can be improved a critical self-examination to drive operating efficiencies on the one hand and maximize asset utilization on the other.

The EVA – Drivers Framework de-segregates NOPAT and the capital charge into a set of performance measures, which can be tailored for different businesses and managed within a business unit. By questioning each step of a process or business approach to the lowest level of detail, the EVE-Drivers Framework allows a manager to focus on those elements of operation profit and/or capital usage which he or she directly manages-elements which directly impact the creation or erosion of EVA.

There are two set of EVA Driver trees under the EVA – Driver Framework;
1. Financial Driver Tree: Financial Driver Tree displays all the essential financial information.

2. Operating Driver Tree: Operating driver tree displays essential operating information in order to demonstrate how key measures of operation performance impact the overall business performance. Such detailed analysis assists managers to focus on key operating drivers and key performance. Indicators and operations that management can influence.

Figure-2.1
EVA Drivers Frame Work

<table>
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<tr>
<th>Revenue</th>
<th>Operating Expenses</th>
<th>Capital Charge</th>
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*Price  
*Product Mix  
*Volume  
*Marketing  
*Quality  
*Innovation  
On-Time Delivery  
*Customer Retention  

*Productivity  
*Procurement  
*Efficiency  
*Headcount  
*Overheads  
*Cost of Requiring Customers  

*AP & AR Management  
*Inventory Management  

*AP & AR Management  
*Inventory Management  

*Capital structure (Debt to Equity Mix)  

*Obsolescence  
*Down Time

EVA As a Tool of Financial Performance Measurement:

Putting simply, EVA is net operating after tax (NOPAT) minus an appropriate charge for the opportunity cost of all capital invested (WACC) in an organization. EVA is an estimate of “economic profit” or the amount by which earnings exceed or fall short of the required minimum rate of return that shareholders and lenders could get by investing capital in other securities of analogous risk.¹

According to accounting concept, business profit is measured by deducting expenses from income earned during the period. On the other hand, according to economic concept, business profit is considered to be the maximum amount that the business is capable of distributing to its shareholders while still remaining in the same position at the end of the period as it was at the beginning. Notably, the accounting concept does not take into account opportunity cost and risk adjusted return on capital employed in the business. In order to overcome limitations of accounting-based measures of financial performance, Stern Stewart and company adopted modified concept of economic profit in 1990 named Economic Value Added (EVA).

EVA as a tool of financial measurement enlightens us whether the operating profit is enough to cover the cost of capital. Shareholders must earn sufficient return for the risk they have taken in investing their funds in company’s capital. The return generated by the company for shareholders has to be more than overall cost of capital to justify risk taken by shareholders, says
Naveen Khandelwal, a Mumbai-based leading Chartered Accountant. According to Business Standard – KPMG, if a company’s EVA is negative the firm is destroying shareholders’ wealth even though it may be reporting a positive and growing earning per share and return on capital employed. The EVA framework which is becoming more and more admired tool from measuring the financial performance of corporate, offers as consistent approach to set goals and measure performance, communicate with investors, evaluate strategies, allocate capital valuing acquisitions and determine incentive bonuses. However, the EVA implementing and improvement process is one of the several ongoing initiatives for a new corporate.

**Economic Value Added: Evaluation and Growth:**

As examined by Peter F. Drucker, a Contemporary management intellectual, “EVA is based on something we have known for a long time: what we call profits, the money left to service equity, is usually not profit at all. Until a business returns a profit that is greater than its cost of capital, it operator at a loss. Never mind it pays taxes as if it had a genuine profit. The organization returns less to the economy that it devours resources… Until then it dose not create wealth it destroys it.

In fact, EVA is not a newer innovation. An accounting performance measure call residual income is defined as operating profit subtracted with capital charge. EVA is thus, on variation of residual income with adjustments to how one works out income and capital. According to Wallace, one of the
earliest to point out the residual income concept was Alfred Marshall in 1890. Marshall described economic profit as total net gain less the interest on invested capital at the current rate. According to Dodd and Chen, the idea of residual income appeared first in accounting theory literature early in this century. It was initiated by Church in 1917 and further defined by Scovell in 1924. Later in concept appeared in management accounting literature in the 1960s.

Knowing this backdrop, several researchers have been wondering about the big media hype and praise that has encircled EVA in the recent days. The EVA as concept is recurrently called Economic Profit (EP) in order to stay away from problem caused by the trade marking. One the other hand, the name “EVA” is so popular and well known that often all residual income concepts are called EVA although they do not take account of even the main elements defined by Stern Steward and Company for the purpose. For instance, hardly any of those Finish Company that have adopted EVA calculate rate of return based on the beginning capital as Stewart has defined it, because average capital is in practice a better estimate of the capital employed. So they do not actually use EVA but other residual income measures. This immaterial detail is overlooked later on in order to avoid more severe misapprehensions and is found justified to say that the EVA concept, the Finish Companies are using corresponds approximately the EVA defined by Stern Stewart and company.
During 1970s, the residual income concept did not get ample publicity and it did not finish up to the prime performance measure of companies. However EVA, practically, the same concept with a different name has come to fore in the recent years. Moreover, propagation of EVA and other residual income measures does not seem to be on an abating trend. On the contrary, the number of companies adopting EVA is increasing rapidly. One can only guess why residual income did never gain recognition of this level. One of the possible reasons is that Economic Value Added was marketed with a concept Market Value Added (MVA) and is did offer a hypothetically significant connection to market valuations. In the recent times when investors insist on shareholder’s value, this was high time to sink your teeth into the concept. Perchance, the relevant promotion by Stern Stewart and Company made the concept known to corporate.

The clarity the EVA has brought to pursuit of shareholder value has led more than 400 companies to adopt the discipline since Stern Stewart introduced the new system back in 1982. The list of such companies include some of the most prominent U.S corporation – like Coca-Cola, Eli Lilly, Monsanto, Best foods, J.C. Penney, Bausch and Lomb, and Toys “R” U.S.

Companies from across the world have also joined the fray. EVA has long had a base in South Africa, owing primarily to the lectures that Joel Stern gave before academic and business groups. In the last couple of year, EVA has
fascinated an increasing number of corporate together in Europe, Asia, Australia and Latin America.

Companies went into EVA in a variety of ways. In the case of London based Tate and Lyle, a global giant in sweeteners and starches, the initial interest was sparked a few years ago by a magazine article about EVA. Two senior executives each came upon the article independently and sent it to each other. Simon Gifford, the Group Finance Director, soon joined the discussion. The attraction of EVA, Gifford recalls, was the capital discipline that it promised.” In the past”, says Gifford, “we had emphasized profitability, especially earnings per share, because of the demands of the city and the analysts”. Financial people like himself did focus on cash-the life blood of a company- but operation managers were incentives on earnings measures. The consequence, says Gifford, was that “as a company we were not paying enough attention to our capital base, particularly our working capital”.

In mid-1996, Joel Stern was invited to give a full-dress presentation on EVA to top management and, later that year the company signed up and formed an EVA Steering Group to implement EVA. As part of the initial phase of the EVA project, Tate and Lyle decided to pilot EVA in two businesses-UM, a UK-based molasses trading company, and Redpath, a Canadian sugar refiner. The objective was to determine whether the theory of EVA would be appropriate in practice and to test the EVA ground rules formulated by the Steering Group.
First, a retrospective study was conducted to provide a record of past EVA, against which future performance was to be measured. The key value drivers were identified, especially in the capital area, in addition to opportunities for increasing Net Operating Profit after Tax (NOPAT) through continuation of the existing cost management initiatives.

The pilot schemes were successful and demonstrated the merits of EVA, not just as a measure but also a valuable management tool. It was then decided to roll out EVA throughout Tate and Lyle beginning with the training of all the finance managers of the various subsidiaries, followed by the operating people. For fiscal year that began in October 1997 some 60 of the top managers had their cash bonus linked to EVA performance.

Nonetheless, EVA implementation proceeded rapidly. EVA is now used to analyse all proposed capital expenditures and divestitures. During the last financial year, proceeds from disposals increased significantly. “If it were not for EVA”, says Gifford, “some of these disposal decisions would not have been taken until later years”.

In order to understand financial management more comprehensively, there are number of folklore concerning the concept of EVA which can be distinguished in the EVA literature about which every financial analyst should
be aware of. Some of the more prevalent myths with regard to EVA have been described by Harihar (1999) as follows:

- The most popular myth about EVA is that it has been promulgated by Stern Steward and Company of USA. In realism, the concept was first used by General Motors, and the economic analysis based on it was presented in their annual report in 1920s. The concept has just been polished by Stern Stewart and Company.

- The second myth about EVA is that a company can easily implement an EVA-based financial system only by managing to calculate its cost of equity correctly. But in practice, there are hundreds of adjustments to be incorporated in the financial statements of a company if it has to implement such an EVA-based financial measurement system.

- The third and very dangerous myth is that the value generated by different companies as well as industries is comparable. But how can the EVA of a less capital incentives company be compared with another company which has invested huge amount of capital. Thus, EVA of fast moving consumer goods or pharmaceutical company can not be compared with the EVA of steel or a cement company. However, the only comparison that can be made is regarding whether the company has generated positive or negative EVA.

- Fourth myth about EVA is that it can be used as a technique of performance evaluation of various departments/ divisions in an organization. But there can be variety of product lines in various
departments/divisions with varying risk levels and cost of capital. Further, divisional managers may be reluctant to invest in fixed assets to improve their deviational performance by presenting positive EVAs.

- Fifth and widely prevalent myth about EVA is that a company with high EVA is cash rich. As Israel shaked has remarked that the cardinal sin in financial analysis is to construe EVA as an indicator of financial liquidity. For those companies which are cash sensitive, shaked recommends a measure called ‘Cash Value Added’ (CVA), which takes into consideration operating cash flows in place of net operating cash flows in place of ‘net operating profit after taxes.

Hence, the EVA is not a measure exclusive of any imperfection. It may provide best results in on applies this tool after evidently understanding the facets in which EVA cannot be of much use and by appreciating the nuts and bolts indispensable for the execution of EVA.

The foregoing discussion on the evolution and growth of the EVA, reveals that EVA is considered as contemporary tool in financial management that have been developed throughout the course of the 20th century by some distinguished economists and managers. Its straightforwardness is both its attraction and its limitation. While it fairly reflects the basic concept of single period residual income, it does not address the inter-temporal nature of the valuation problem. Without proper adjustments EVA may eve short-change future growth opportunities of the corporate sector.
It is now generally acceptable among the intellectual that the Stern Stewart and Company, an EVA company, had significantly contributed to the growth and development of this concept. Stern et al. (1995) argued that firms should base their financial management systems around EVA. So, this way, all the important dimensions of financial management (i.e., financial policies, procedures, methods and measures) are linked to a single measure, EVA. They further argued that an EVA financial management system was simpler and could unite all the varied interest and functions within a large corporation”. Their EVA model requires some adjustments to accounting income to better reproduce economic performance. In this connection, Stern and Stewart have identified 164 possible adjustments to accounting income. However, in practice, only most imperative adjustments are possible to make and these may be distinctive for each firm. O’Hanlen and Peasnell (1998) note that these adjustments serve three rationales: they reduce accounting conservatism, the discourage manipulation of earnings, and they correct for past accounting errors (e.g., adjusting for gains or losses for sales of fixed assets which are by products of historical cost accounting).

So, the above – mentioned parody discloses that the evaluation and growth of the concept EVA, which may be realistically in young age in the west, has been going through its babyhood in country like ours. It may be quite emerging concept in the mind of Indian Corporate Policy makers and managers.
Superiority of EVA over Traditional Performance Measures:

Performance measurement systems that were successful in the past are becoming obsolete and in some cases are dysfunctional and obstructive to improvements. A dynamic and more competitive environment requires dynamic benchmarks to get a clear picture of:

- What is really happening to the performance of a business firm?
- Whether the firm is a value generator or a value destroyer?

As compared to traditional profit based financial performance measures, EVA can be well explained as the true measure of corporate financial performance and the real key to create wealth on the following grounds:

a) EVA is most directly linked to the creation of shareholder’s wealth over time. The term “maximizing value” in the EVA context, means maximizing long term yield on shareholders’ investment and not just the absolute amount of earnings/profits.

b) The mechanism of EVA forces management to expressly recognize its cost of equity in all its decisions from the board room to the shop floor. The inclusion of this element in overall cost of capital results the goal congruence of the managers and owners.

c) An EVA financial management system removes all the inconsistencies resulting from the use of different financial measures for different corporate functions under the typical traditional financial management system as it ties all the functions for instances.
• Reviewing a capital budgeting process.
• Valuing an acquisition.
• Considering strategic plant alternatives
• Assessing performance.
• Communicating or
• Rewarding management.

To one single measure, the effect on shareholder value and thus provides a meaningful target to pursue for both internally and externally oriented decisions.

d) Further, it links the management compensation to the shareholder value in a much refined manner i.e., with EVA, the bonus targets are set each year as a percentage gain in EVA and there is also no cap on the maximum amount of bonus payment. A part of the bonus earned is banked and paid in later years. EVA results that are below target will shrink the banked bonus and vice versa. Thus, EVA compensation system ties management interest with those of shareholders and the value creation motion will permeate to the whole organization.

e) EVA captures the performance status of corporate system over a broader canvas i.e., to arrive at true profits. Cost of borrowed capital as well as cost of equity capital should be deducted from net operating profits. Further, to maximize earnings is not sufficient, at the same time
consumption of capital should be minimum/optimum under an EVA based system.

f) EVA framework provides a new lens through which managers view a firm, a lens that gives a clearer perception of the underlying economics of a business and enables any manager to make better decisions.

g) The utility of EVA simply does not end by indicating the degree of wealth creation. It goes beyond that, to pinpoint the lacunae in the business performance. A regular monitoring of EVA throws light on the problem areas of a company and thus helps managers to take corrective actions.

h) EVA does have an extremely important role in strategy formulation. It issued to assess the likely impact of competing strategies on shareholder wealth and thus helps the management to select the one that will best serve shareholders. It can particularly effective in this regard when it is augmented by new tools such as Real Option Analysis, Balance Score Card, Activity Based Costing etc.,

i) It also fits well with the concept of corporate governance and thus considered to bet the best corporate governance system. EVA bonus systems do this by giving employees an ownership stake in improvements in the EVA of their divisions or operations. This causes and reduces or eliminates the need for outside interference in decision making.
When applied to product brands, EVA also helps in brand valuation. The brand equity or value created by a particular business unit for its brand could be, in a logical sense, equated with the value of wealth that the brand has generated over a period of time.

Figure-2.2
Conventional and Modern Financial Management

Sources: Stern Stewart and Company (1996)

Companies Using EVA:

Bennett Stewart, who along with Joel Stern founded the New York based global financial consultancy firm under the name "Stern Stewart and company", an EVA company in 1990 has believed the EVA is such financial performance tool that comes closer than any other tools to capture the true economic profit of an organisation. EVA, according to him, works on the principle that when managers make the best use of capital they must be paid for it just as if it were a wage.
One corollary of the world becoming a global economy is that the size of business entities has been increasing. This has been happening because, in order to compete in the world market, an organisation needs to have substantial resources and the ability to be the best player of these resources. An issue that arises, as organisations grow in size, get decentralised and are put into units, is that of financial performance evaluation. The financial performance evaluation measure used needs to be accurate, consistent, and globally comparable and should lead to goal resemblance between the owners and corporate managers. Altogether more than 400 companies, world-wide have already adopted EVA-based system of financial management which put the system of financial management which put the system ahead of its rivals. Business majors like Coca-Cola, AT & T, IBM, Quaker Oats, Briggs and Stratten CSX, General Elect, Procter and Gamble, Johnson and Johnson, Microsoft, Phillip Morris and many other globally reputed corporate giants have already become the ardent follower of the EVA concept. In such circumstances, the Indian corporates simply may not say behind for understanding and implementing the concept. The corporates in India need to be fully equipped with the its along with buts of EVA just not for the reason of global competition but for their long-standing continued existence.

The EVA analysis, undoubtedly, has attracted much attention in the Western countries both as a management innovation as well as store market analysis. The acceptance of such technique in Indian context, however, shows somewhat diverse trends. Some corporate houses like Infosys, BPL, HLL,
Balarpur Chinni Mills, NIIT, Tata Consultancy Services, Godrej Soaps have started publishing EVA in their financial statements. Majorities of companies are still not willing to install the EVA technique for evaluating their financial performances because of certain inherent difficulties associated with the computation. Again, it is observed by some scholars that in Indian context it may be very difficult exercise, to establish the existence of any relationship between stock price and EVA.

Calculation of perfect relationship between different variables is near to infeasible, as one would not get adequate data points across a uniform period to do so. Secondly, the applicability of something like capital Asset Pricing Model (CAPM) has been debated in the Indian Scenario. Thirdly, computation suffers from some of the problems inherent in EVA itself as well as the quality of underlying data given the poor disclosure standard and the differences in accounting policies of a number of corporate in India.

It is emerging out from the discussion made above that the global market place is changing the role of policy-makers and managers in corporate sector. There may be more pressure on them to play a proactive role within an organisation. As information systems get more sophisticated, managers will have the task of providing top management with information that is internationally competitive for corporate decision-making. EVA is a measure that should be used by top management to evaluate investment centre
managers because it considers goal resemblance between shareholders and managers.

Though the EVA technique is very simple to understand but it is tricky to implement especially in a country where economic environment is in the process of alteration. Companies trying to implement EVA are asked to incorporate many more changes to their present state of financial books of accounts in India. However, despite the computational difficulties, it emphasizes the intrinsic truth that the equity capital of an organisation does not belong to saints rathy it is experience and risky and an organisation capable of monitoring the net profit position with the cost of capital would generate value for its owners in the long-run. It is pertinent to mention here that though only handful Indian companies have adopted EVA as a tool of financial performance but "Business Today" a leading magazines in the country has ranking of top 500 companies in the country in its April 2003 issue. Such publicity, perhaps, put more pressure on remaining Indian corporate for early adoption of the concept.

EVA Model By Stern Stewart and Company:

Stern Stewart and Company, the management consultancy accredited with its popularization, describes EVATM as "a simple financial measure of performance". Perhaps more accurately, EVATM is a performance measure which is easily conceptualized, but often more difficult to apply successfully in practice. In its basic forms, EVA can be calculated after making over 160
adjustments in the GAAP-based financial statements of a company. These adjustments have, conceivably, made the corporate reliant over Stern Stewart and Company for EVA implementation.

In USA, Stern Stewart and Company clients have been significantly outperforming their peers on an average; investments in the shares of these clients companies produced 49% more wealth after five years than equal investments in share of competitors with similar market capitalization. Companies that used the full Stern Stewart compensation architecture did even better. Investment in their shares produced 84 percent more wealth over five years than equal investments in their competitors. Later some other corporates from different countries around the globe approached the company for EVA implementation in their organizations.

In India, companies like TCS, Godrej, NIIT, HLL, etc., are approaching Stern Stewart and Company for EVA implementation. Some other companies have attempted to implement EVA with in-house expertise. There is one big difference between the implementation of EVA through consultant firm like Stern Stewart and Company and in-house expertise. In case of former the EVA is linked to compensation whereas in case of later it is not linked which may become major flow if put under financial management testing tools. Stern Stewart and Company has partnered with Hyper Solutions Corporation, the leader in analytical and performance management applications, to develop an organization reporting infrastructure that measures and reports EVA by
product/service, customer, process, unit, region, and project. EVA reporting solution is powered by Hyperion Essbase, the industry leading OLAP technology and includes reporting templates that can be deployed via the WEB. The EVA Reporting Solution is platform independent and can integrate with any existing ERP and legacy software solution.

Implementation can normally be achieved in a rapid timeframe at a fraction of the cost of many other solutions. The overall results create a sustainable environment that minimizes on-going support and development. Stern Stewart and Company claims that your organization would rapidly achieve scalability to all levels of your organization and near real-time performance reporting is delivered to all levels of management.

The complete EVA Software Solution can also help the company to:

- Develop action plans that create the most shareholder value.
- Upgrade and standardize the quality to business analysis.
- Assess the value of your business model.
- Example outsourcing and partnering opportunities.
- Identify key value drivers for your business.
- Model the value added throughout your supply chain.
- Establish platform for internal communication.

The corporate approaching Stern Stewart and Company may contact Bennett Stewart a +212-261-0747 to discuss the multiple solutions tailored to
you critical business issues, and the associated typical investment, timeframe and expected ROI’s. Their focus and experience may help the corporate to achieve more from your EVA Software solution provided by the company.

**Scope of EVA in Indian Context:**

The scope of EVA have been concisely described by the Stern Stewart 13 with the help of four words beginning with the letter is measurement, management, motivation and mind. These concepts have been briefly described in the ensuing paragraphs.

EVA has been considered as the most accurate measure of corporate performance over a period of time. Peter Drucker 14 has maintained in the Harward Business Review that EVA is a measure of ‘total factor productivity’ whose growing popularity reflects that new demands of the information age. While calculating EVA, a number of adjustments of conventional earning are made with a view to overcome the accounting anomalies and bring them closer to the true economic results. For example, GAAP requires companies to consider R&D outlays as expenses, even though these expenditures are investments in future products or processes.

On the other hand, EVA capitalise R & D spending and amortizes it over an appropriate period of time. Similar adjustments are made in the balance sheet in order to get a more accurate accounting of the total capital invested in an/ organization in order to assess the proper capital charge. Stern Stewart has
identified more than 160 potential adjustments in GAAP–based financial statements in areas such as inventory costing, depreciation, bad debts reserves, restructuring charges, amortization of goodwill, etc. However, in most of the cases only 10 to 15 adjustments may be required in order to strike a balance between simplicity and precision.

EVA is an accurate measure that enables the companies to evaluate their financial performance, but the true value this measure comes in when it is used as the basis of a comprehensive financial management system. EVA system covers the full range of managerial decisions including strategic planning, allocating capital, pricing acquisitions, setting annual goals, etc. The use of EVA by the managers of the organization involves abandoning all other financial matrices, each of which can frequently mislead the managers to wrong decisions. The uniform focus on continuously improving EVA provides the best assurance that the financial managers are making the right decisions for the benefit of the shareholders. The managers taking recourse to the measure of EVA learn that there are the basic ways to increase value:

- Increase the return from the assets already in business by running the income statement more efficiently without investing new capital;
- Invest additional capital and aggressively build the business so long as expected returns on new investments exceed the cost of capital; and
- Release capital from existing operations, both by selling assets that are worth more to others and by increasing the efficiency of capital
by such things as turning working capital faster and speeding up cycle times.

- For the purpose motivation, Stern Stewart\textsuperscript{15} has designed cash bonus plans that enable managers to think like and act like owners because they are paid like owners. Under an EVA bonus plan, the only way managers can make more money for themselves is by creating even greater value for the shareholders. This makes it possible to have bonus plans with no upper limits. In fact, under EVA the greater the bonus for manager, the happier shareholders will be. Many managers have incentive compensation plans that put too much emphasis on compensation and too little on incentive. Bonuses, whether meager or lavish, are earned by beating annually negotiated budgets. The managers are generally cautious to ensure that bonuses do not exceed a particular limit for fear of raising expectations or damaging his or her credibility. On the other hand, EVA bonus targets are automatically reset each year by a formula. For example, if EVA shoots up, next year's bonus will be based upon improvement above the new, higher level of EVA.

When implemented in its totality the EVA financial management and incentive compensation system transforms a corporate culture. By putting all Analytical and operating functions on the same basis the EVA system effectively provides a common language for employees all corporate functions. Thus, EVA facilitates communication and cooperation among
various divisions and departments. It links strategic planning with operating divisions and eliminates much of the mistrust that typically exists between operations and finance.

As a result of the above mentioned positive feature of EVA, it is a system of internal corporate governance that automatically guides all managers and employees and inspires them to work for the best interest of the owners. The EVA system also facilitates decentralized decision making because it holds managers responsible for and rewards them for delivering value.

Most of the companies in India today are venturing to devise ways and means for enhancing shareholders value. One of the appropriate indicators of shareholder's value is to take into account the responses of the shareholders to various management decisions. Accordingly, a business concern has to make consistent efforts to improve market capitalization. It is only through such improvements that a company can maintain its supremacy in a particular industry.

A company operates in three types of market viz., product market, supplier's market and capital market. The success of a company can be gauged with reference to its performance in all the three markets and especially its performance in the capital market. The Indian companies have come to realize that the most significant component in their business is the shareholders.
Shareholders activism' is a new concept in Indian industry. This concept assumes that the shareholders are the ultimate masters and should be taken care of. The success of the company can be gauged by the extent of value which it generates for its shareholders. This has greatly enhanced the significance of EVA concept. Consequently, many Indian companies along with multinational companies have started publishing EVA results in their annual reports, for instance, Infosys Technologies is pioneer in this respect. Many other companies like Hindustan Lever Ltd., BPL, NIIT, TCS and Godrej Soaps have gone after the same dress. The scopes of EVA in India seem to be bright and in the times to come more and more Indian companies are likely to follow the suit.

**Advantages of EVA:**

1. EVA is closely related to NPV. It is closest in spirit to corporate finance theory that argues that the value of the firm will increase if you take positive NPV projects.

2. It avoids the problems associates with approaches that focus on percentage spread between Return On Equity (ROE), Cost of Equity (COE), Return On Capital (ROC) and Cost of Capital (Ko). These approaches may leads firms with high ROE and ROC to turn away good projects to avoid lowering their percentage spreads.

3. It makes to managers responsible for a measure that they have more control over the return on capital and the cost of capital are affected by their
decisions — rather than one that they feel they cannot control as well the market price per share.

4. It is influenced by all of the decisions that managers have to make within a firm. The investment decisions and dividend decisions affect the return on capital. The dividend decision affects it indirectly through the cash balance and the financing decision affects the cost of capital.

5. EVA explains stock returns and firm values better than traditional accounting earnings.

6. It will motivate managers to create shareholder wealth.

7. EVA evaluates the true performance of business units and the overall organization.

8. EVA determines how the stock will perform in the future.

9. EVA trace inconsistencies between the economic and the accounting earning that cannot be unveiled by the traditional EPS comparisons between companies.

**Limitation of EVA:**

Many western companies have now stared realizing that financial tools like ROI, ROLE, EPS, NPV, etc., fall short of achieving the corporate objective of maximizing shareholder's wealth. For example, in simple words, it can be understood that an increase in ROI does not mean a corresponding increase in the shareholder's wealth. In fact, companies have now stored considering ROI as a short-term indicator. They argue that the problem with ROI is that companies get more of `R' by starving the 'I' side of the equation.
Recently a lot of emphasis is being positioned on EVA rather than ROI, as a measure of corporate performance in the Indian financial literatures. However, using the concept with a blind faith may not be suitable since it is not without deficiencies and pitfalls. Certain disputes regarding EVA calculations and implementations have been highlighted by Arjun Lahiri (1988)\(^{16}\) and Sateesh Kumar (2000)\(^{17}\). Some of the important pitfalls in the use of EVA revealed by them are as under:

- Most of the Indian companies are plagued with over-capacity situations, which distort the EVA results.
- EVA models does not incorporate items like brand equity, human resources, etc.
- EVA analysis does not give any idea about the financial performance of companies that are affected by business cycle variations.
- Possibility of error in estimating WACC is another gray area.
- All the individual projects are selected or rejected on the basis of NPV over their economic life. A project with positive NPV is selected. But, when all the projects are taken together or in other words, when the company as a whole is taken, the present value may be negative in some initial years for the simple reason that some companies that grow rapidly on a large scale, need a huge investment in fixed assets. Such a phenomenon may pull in the EVA figure on a negative scale for some initial years. Even if NPV is positive for a company in a particular
financial year, the acquisition of assets can result in a decrease in the value of EVA. 

- When EVA is used as a measure to evaluate the performance of managers and their units, they feel reluctant to acquire new fixed assets even if the circumstances demand so. Further, even if managers acquire new fixed assets they are tempted to use annuity method for depreciation in order to report positive EVAs. The managers of various divisions also try to take assets on lease rather than acquiring them in order to report positive EVAs. Taking assets on lease increases the risk involved which pushes the cost of capital on the higher side. But EVA usually does not take into account such factors while calculating the cost of capital.

- Generally, the cost of equity is considered to be more than that of cost of debt. But as the company raises equity to pay-off debt, the company becomes less risk prone thus reducing the total cost. Such factors are not taken into account in EVA calculations.

But in spite all these arguable issues, EVA has made a position for itself not only in the Western business community but also in the Indian corporate sector. However, the recognition of this concept in India is gradually picking up and it is expected that in the coming years, more and more Indian companies will start relying upon this new measure of financial performance. This would possibly, catch the attention of policy-makers at Government level, corporate level and NGO's engaged in investor's protection to press the corporate managers to come up to the expectation of shareholders in the
country. With the advent of EVA, the corporate managers may be quite clear in their thinking that shareholders are not saints and the return expected by then are invariably higher than return expected by the debt holders. That is why, now a days, the corporate managers are being required to work on the model of trading on equity that would design some surplus for equity shareholders. This surplus, if placed under technical terminology, may lead to positive EVA for the organization.

After the theoretical presentation, an effort is also made to present the profile of the selected consumer product sector companies in subsequent pages to help the understanding of the readers in a brief manner.

**MARKET VALUE ADDED**

Market value added represents the wealth generated by a company for its shareholders since inception. It equals the amount by which the market value of the company's stock exceeds the total capital invested in a company (including capital retained in the form of undistributed earnings).

Since the main goal of a for-profit organization is to maximize shareholders' wealth, market value added is an important measure to analyze how much value a company has added to the wealth of its shareholders. Higher market value added is better.

Market value added (MVA) is the difference between the current market value of a firm and the capital contributed by investors. If MVA is positive, the
firm has added value. If it is negative, the firm has destroyed value. The amount of value added needs to be greater than the firm's investors could have achieved investing in the market portfolio, adjusted for the leverage (beta coefficient) of the firm relative to the market.

Market value added (MVA) is a formula showing the relationship between a company's fair market value and invested capital. When the market value added is positive, it means the company is making money for shareholders and is in a strong financial position. If it is negative, the company has destroyed value and is losing money for shareholders. This calculation is one among numerous tools used by investors and others to explore investments and track the markets.

Market Value Added (also known as MVA in the business world) constitutes the difference between the market value of a company or concern and the capital that is contributed to that company or concern by its investors. The greater the MVA, the greater the value of the company---this proves that the company has worth, aside from the capital contributed by its investors. There are many benefits for a company to have a healthy added market value, including increased attractiveness to possible investors; the likelihood of high returns for investors; the probability that the company will survive for years (and perhaps even decades) to come, even if some investors cash out and move on to new projects; and that the company has solid, perhaps even great, management in place, leading it toward a profitable future.
Increased Attractiveness to Prospective Investors

With a higher market value added, a company is more likely to catch the eye of investors looking for attractive options in which to invest their capital—it is clear that the company is healthy and thriving, signaling the likelihood of good returns for investors later down the line. For investors who aren't looking for a long-shot, big-pay-off gamble, investing in a company with a high market value added appears to be a safe and more secure investment route.

High Returns for Investors

Obviously, if a high MVA is attractive to prospective investors, there are benefits for those who have already invested their capital. A company with a high MVA has created significant returns and has proven to be profitable for current investors. With such a reputation among investors in the business world, a company can expect good press and great interest from investors in the future, guaranteeing a certain amount of life and prosperity. High returns for investors also can lead to even more capital from these investors, as they seek to continue reaping the rewards from their beneficial investment and it will mean that their original investments and shares will increase in value.

Survival of the Company

In the business world, nothing is guaranteed. However, for a company that is healthy enough to have decent—or even high–added market value, the future is bright. This is an indication that the company is earning for its investors, will continue to attract investors and will continue to survive and
thrive. Weathered investors have experienced their fair share of failed businesses, and having one that makes it and returns to them a healthy profit is one that will continue to grow.

**Good Management in Place**

In order for a company to experience the kind of success that brings positive market value added, there needs to be good leadership within the firm. This kind of leadership encourages confidence among investors and adds to the positive reputation that such a successful firm is likely already building. With good management that has already found formulas to produce success and profitable returns to investors, prospective investors will take notice, enabling the company to continue and to grow.

**SHAREHOLDER VALUE ADDED**

SVA represents the economic profits generated by a business above and beyond the minimum return required by all providers of capital. “Value” is added when the overall net economic cash flow of the business exceeds the economic cost of all the capital employed to produce the operating profit. Therefore, SVA integrates financial statements of the business (profit and loss, balance sheet and cash flow) into one meaningful measure. The SVA approach is a methodology which recognises that equity holders as well as debt financiers need to be compensated for the bearing of investment risk in Government businesses. Historically, it has been apparent that debt financiers have been explicitly compensated; however, this has not been the norm for
providers of equity capital. Such inequalities can lead to inefficiencies in the allocation and use of capital. The SVA methodology is a highly flexible approach to assist management in the decision making process. Its applications include performance monitoring, capital budgeting, output pricing and market valuation of the entity.

SVA is a useful concept as it enables both actual results and forecasts to be used to assess whether value has been added in the past and/or whether the financial forecasts and investment decisions will lead to value being added in the future. If forecasted balance sheet and income statements indicate that value will be diminished, the strategic decisions which underpin the forecasts will of course need to be reviewed. As such, SVA provides a further basis for evaluating the potential ‘investor value impact’ of forecasts and capital projects contained in Corporate Plans.

Shareholder value added is a measure of the incremental value of a business to those who have invested in it. In essence, the calculation is designed to show the amount of additional earnings that a company is generating for its investors that is in excess of its cost of funds. It provides more relevant information than the net profit figure normally reported by a business, since net profit alone does not take into account the cost of funds.

Symbolically, shareholder Value Added (SVA) can be shown in the following manner:

\[ SVA = \text{Market Value of Equity} - \text{Fair Value of Equity} \]
Shareholder value is a business term, sometimes phrased as shareholder value maximization or as the shareholder value model, which implies that the ultimate measure of a company's success is the extent to which it enriches shareholders. It became popular during the 1980s, and is particularly associated with former CEO of Electric, Jack. The term used in several ways:

- To refer to the market capitalization of a company (rarely used)
- To refer to the concept that the primary goal for a company is to increase the wealth of its shareholders (owners) by paying dividends and/or causing the stock price to increase
- To refer to the more specific concept that planned actions by management and the returns to shareholders should outperform certain bench-marks such as the cost of capital concept. In essence, the idea that shareholders' money should be used to earn a higher return than they could earn themselves by investing in other assets having the same amount of risk. The term in this sense was introduced by Alfred Rappaport in 1986.

The comparison with the traditional accounting formats are broadly summarized in the following tables. Finally, a view can be had from the about traditional method of reporting assets and liabilities with that of value based method of reporting income, assets and liabilities.
Table-2.1: Traditional Operating Statement

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<th>Traditional Operating Statement</th>
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<td>Revenues less: Cost of Goods Sold equals: Gross Profit</td>
<td>Revenues less: Cost of Goods Sold equals: Gross Profit</td>
</tr>
<tr>
<td>less: Depreciation, Sales, Admin. &amp; Other Expenses equals: Net Operating Profit Before Interest &amp; Tax Equivalents</td>
<td>less: Depreciation, Sales, Admin. &amp; Other Expenses equals: Net Operating Profit Before Interest &amp; Tax Equivalents</td>
</tr>
<tr>
<td>less: Interest Expense equals: Profit Before Taxes</td>
<td>less: Adjusted Tax Equivalents</td>
</tr>
<tr>
<td>less: Income Tax Equivalents</td>
<td>equals: Net Operating Profit After Taxes (NOPAT)</td>
</tr>
<tr>
<td>equals: Net Profit After Taxes</td>
<td>less: Capital Charge</td>
</tr>
</tbody>
</table>

Table-2.2: Traditional Balance Sheet

<table>
<thead>
<tr>
<th>Traditional Balance Sheet</th>
<th>Value-Based Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets = Total Liabilities + S/holder Funds</td>
<td>Net Operating Assets = Total Capital Employed</td>
</tr>
</tbody>
</table>

The value-based view explicitly recognizes the capital charge associated with the use of capital. The bottom line under this format is, therefore, quite different from that under the traditional view. A positive bottom line (shareholder value added) signifies a superior performance because it accounts for all costs associated with the enterprise, including that associated with capital. It is important to recognize that SVA is not meant to be used in a vacuum as the sole measure of value, rather it is an additional measure which can be used in the decision making process.
DRIVERS OF SVA

As detailed in Figure No. 3 there are three ways that the shareholder value can be improved.

These are by:

- improving revenue and decreasing costs;
- ensuring that new capital investment returns at least the opportunity cost for the capital; and
- reducing non-productive assets.

The drivers which distinguish the value approach from the traditional (the use of accounting measures such as return on assets) are as follows:

- Revenue Growth – can improve NOPAT and thus SVA
- Operating Margin - revenue and cost efficiencies to maximize shareholder value
• **Working Capital** - Management of inventory, debtors and creditors to optimize revenue growth and decrease costs.

• **Fixed Assets** - Disposal of surplus/non-performing assets and investment in assets which will create returns in excess of WACC.

• **WACC** – Optimization of the debt/equity mix to reduce overall costs of capital.