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Drivers of Value Creation in Indian Corporate - An empirical Evidence

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ABSTRACT

Value creation is a broadly acknowledged target for the firm. Sornette This examination endeavors to find the effect of firm-particular attributes i.e. productivity, use, size and profit on the value creation of the listed companies in India. The information for this examination comprises of board information of 102 companies in India covering a very long time from 1998–1999 to 2015–2016.The essential constraints of this investigation are avoidance of different factors (for instance natural, administrative, and so forth.) which may affect the Value creation.

JEL Code: G32, L1.

Keywords: Value Creation, Firm-specific Attributes, Neural Network.

1. INTRODUCTION

Good, Beauty and Benefit aim to serve the ultimate goal of happiness-'Soka' (value creating) which is an educational thought process that comes out of this philosophy. In principle, it is one's capacity to find meaning to accentuate one's own existence and contribute to be well-being of others under varied conditions. While values are the fulcrum of motivation in action, it is important to view the implication of applying or creating value in reality. The way value creation is important in understanding human mankind, it finds similar need in the business world. The success in a business module is often judged by the value of a particular firm. A firm's mission, strategy and targets are expressed in a quantitative way under the term "Financial Goal". Financial goal is very commonly used as a yardstick to measure performance. This fact makes this subject a field of interest for those involved in economic events. They will include individuals like shareholders, employees, managers, creditors, banks etc. The health of firm is evaluated by its performance.

What should be the yardstick of measurement of performance is a subject of debate and discussion among the decision makers of the firm. Net profit, Return on Investment, Return on equity, Earning per share etc. are the old age traditional accounting measures which were extensively abundantly practiced. We can infer that the choice of measurement tool/method may influence the measurement of quantitative performance when done through these traditional methods. It is worthwhile to put that the same financial statements will provide varied understanding depending on the measurement scale taken into practice. Past activities have been the area of focus for majority of traditional accounting profit measurement tools. Alongside they are also transaction oriented which are based on most common practiced rules of accounting. In short individual subject thoughts of accountant will have huge impetus on financial performance like method of depreciation. The fact that managers can effortlessly influence accounting performance measures have been proved by several studies in the past (Dyl, E.A. (1989), Gomez-Mejia, L.R., & Balkin, D.B. (1992) Collingwood, H. 2001.). The limitations thrown by accounting profit has shifted focus towards economic profit as the same aims to create real value maximization. Research spread over a period of time has inferred that culture of high performance is engraved in a firm if the culture of creating value is given supreme importance. It is worthwhile to hence state that the central theme of any firm should be Value Creation. This thought has found its mention as the world of Strategic Management under the nomenclature of Value based planning (Hax, A.C., & Majluf, N.S. (1984).

Hence value creation for its stakeholders is a sustainable model for a firm. Due to interest among all the stakeholders in value creation. A sustainable value cannot be created for one unless for all of them. With the passage of time importance and depth of value creation has increased. Value creation has been related to varied aspects of a firm by various academicians. Different topics related to value creation has been studied by a varied set of researchers. Merger and acquisitions has been studied by (Rappaport, 1981), where in divestiture decisions was studied by Alberts and al., in 1984. Arzac, (1986) on the other hand gave contribution towards business unit evaluation while marketing strategy and company sales was evaluated by Kerin et. al., (1985). Fruhan, (1984) and Higgins et. al., (1983) studied asset growth. Value related decisions taken impetus in academic literature and has become the core fundamental concept that need to be understood by any firm if they intend to sustain for longer term in industry. For centuries economists have reasoned that a firm to create value it must earn more than its cost incurred. Fernandez(2001) has believed that firm creates value when return exceeds share cost. Thus it could be inferred that a firm needs to utilize its resources effectively and efficiently to outperform its own expectation. Hence creating value not only maximizes shareholders wealth but also considers stakeholders wealth as being pointed out by Black, A., & Wright, P.D. (2001). In search of shareholder value: managing the drivers of performance. The present effort put by any firm and its future prospects are taken into consideration for evaluating value creation. It is to be borne in mind that value creation benefits from the fact that the measures to create are independent of accounting rules. The range of firms for which value creation process can be used varies from geographical location to the time period for which firm has come into existence. The presences of these variables make value creation as essential requirement. Thus value creation set a common platform for making decisions when comparing different firms. A recent study on Dhaka Stock Exchange (Nisha, N., & Ghosh, B., 2018) indicates that there is no significant change in the financial performance between highly levered and un-levered firms (neither in terms of their size nor their growth rates). Under such a circumstances value creation does hold the key.

The process of value creation along with the content of the value plays a pivotal role in value creation. Concept of value creation has been pointed out by Miller, M.H., & Modigliani, F. (1961).Inspite of long history of research by academician's one still not been able to infer strongly on what really is meant by value creation and how to achieve it. Though the term value creation does not have any fixed definition the EVA model is regarded as the best method to quantify value creation for the shareholders. EVA is a yardstick to quantify both the wealth created by shareholders or destroyed by them due to operational and other failures from its management. It leaves very little room for *creative accounting* if EVA model is followed.

EVA has also been questioned due to the complex calculation involved in its evaluation process. It has its limitation in the form that it is unable to infer qualitative aspect of value creation. The implication of butterfly effect is also not captured in totality. Financial value in isolation is not sufficient for evaluating value creation.

The proposed study attempts to identify the significant factors that differentiate the best and worst performing companies which eventually derive the long term sustainable shareholder wealth. Hence providing an "availability heuristics" is not our lookout. Our lookout is to produce a tangible measure that can provide answer to many queries about a corporation but certainly not all. Our research will focus on the internal factors of firm as these factors are in control of the firm to a considerable extent. With passage of time and depending on firm's size and structure the need to know what influence drivers' value has been gaining importance in decision making process.

2. REVIEW OF LITERATURE

The purpose of this paper is to point out the most significant parameters determining the value creation ability of a firm. Literature specific to value creation is studied in isolation to understand the overall concept of value creation. Further there are different catalyst/drivers that have a bearing on the value creation and its quantification. In total eight variables were used to study the same. These variables have been studied in various combinations starting from a maximum of five variables to a minimum of a single variable.

2.1. Value Creation

Heinemann and Augat (2006) recommend that investors value creation comprises of two key components. Executives ought to be influenced mindful that to esteem introduction is about long haul crucial value creation as opposed to stock value expansion. Besides to deal with the ramifications of capital market deviation for long haul value creation a more modern approach is required. Just a year later Bowman and Ambrosini(2007) examinaes five value making exercises inside a firm. It recommends that of the five, three are engaged with the procedure of current value creation, one is coordinated at the maintenance of the firm and the last action is connected with the making of future value. On the other hand Lepak et. al., (2007) recommends that inspite of the fact that the meaning of significant worth creation is normal crosswise over various level of investigation, its procedure will contrast on whether value is made by an individual, an association or a general public. The idea of rivalry and disconnecting instrument is utilized to clarify how value can be caught at various level of examination. Further to that Boubaker et. al., (2008) looked at

an another angle wherein he inspected non-banking firm recorded on Tunisa Stock Exchange for the time of 1997-2005 for the effect of corporate diversification and firm size on the value creation. He infers that size is decidedly corresponded with value creation though corporate diversification diminishes the value creation. Couple of years later O'Cass and Ngo (2011) researches and finishes up the conceptualization of the company's value offer's and recommends that making predominant value turns into a device for the firm to accomplish prevalence in client driven execution. Xin'e et. al., (2012) further investigates and uses financial engineering method to fabricate the performance evaluation framework fixating on the value creation capacity of commercial banks, the usage of center value creation capacity for the new performance evaluation strategy adjust to the money related building administration thought, and close by likewise logically inspects the execution of commercial banks, qualities the center focused capacity and furthermore addresses the issue of economical improvement.

2.2. Five Variables

Winarto (2015) studied 32 public listed manufacturing companies of Indonesia Stock Exchange during a period of 2005-2010. It suggests that liquidity has negative and significant influence to manufacturing firms value. There is a positive influence on firm value because of financing, dividend policy, investment and profitability. Firm value is independent of activity and size of the company.

2.3. Four Variables

Hall (2002) analyzes that most critical factor in the profitability making process is the underlying profitability. Once the organizations end up noticeably settled wealth makers, profitability ratio turn out to be less basic. A productive financing of balance sheet, fixed asset and working capital turns into a need in making investor value. Along the same time Naceur and Goaied (2002) considered over 90% of the recorded organizations in the Tunisia stock exchange to explore the value creation process. Profitability and time trend factor assumes a key part in deciding the likelihood of the making future values. Industry designs like size and nature of the property impact value creation. Debt obligation and dividend are immaterial. A year later Tortella and Brusco (2003) examined test of firms receiving EVA amid the period 1983-1998 and concurs that EVA does not prompt abnormal returns and when utilized after a long stretch of awful execution, execution pointers enhance just in long haul, close by the utilization of EVA gives instruments to the managers to build firm investment activity which thus has all the earmarks of being connected with more elevated amount of debt obligations and furthermore cash flow margin. Post this and after a long gap of a decade Narang and Kumar (2014) broke down the effect of firm concentric trademark on the investor estimation of the rundown organizations in India. The information of 100 organizations covering the years from 1997-1998 to 2008-2009 investigations whether the noteworthy firm credits are regular to both accounting based value added (EVA) and also advertise based measurements. Organizations with higher gainfulness bring down market chance, higher leverage, efficient asset administration, greater liquidity and promoting consumptions tend to get compensated by the financial specialists. Alongside Kumar (2015) states the aggregate resources i.e fixed assets of a firm is gigantically identified with value creation and higher earning in respect to value prompts higher value creation. He finishes up by saying that leverage increment prompts expanded anticipated that profits would represent expanded risk for equity shareholders.

2.4. Three Variables

Ghosh (2008) examination of S&PCNX500 firms were done to consider the impact of past dividend strategy, leverage and profitability in future value estimation of the firm. The likelihood of making future value increments with increment in profit. Leverage then again has a negative impact under same parameters. He infers that dividend strategy does not have huge impact on future value creation. In parallel Iturriage and Crisostomo (2010)213 Brazilian firms were contemplated in the vicinity of 1995 and 2004 to look at the effect of growth opportunities on ensuing impact of leverage, dividend payout and ownership convergence of firm's value. It proposes that leverage in conversely identified with the estimation of the firm, negative for firms with growth opportunities and the other way around. Though, dividend is emphatically identified with firm's value when growth opportunities are missing. It likewise proposes that ownership structure has a non straight impact that is ownership focus at first enhances the value of the vast majority of the organizations. Much latter around 2016 Saha et. al., investigates the increasing importance of risk adjusted performance measurements of banks in view of critical limitation of the traditional ratio based measures of performance like ROE, ROA, P/E, P/B Ratio for a period of 2001-2013.Alongside Reddy and Narayan (2017) explores 50 companies recorded on the NSE of India for a time of 2012 to 2016. It expresses that connection between stock return with EVA and conventional measure, for example, ROA, EPS, DPS and ROE are critical positive.

2.5. Two Variables

Biddle et. al., (1997) recommends that it doesn't bolster asserts that EVA commands earning in relative data setting, and proposes rather that earning by and large beats EVA. It additionally explores that EVA perhaps a successful instrument for inside basic leadership, execution estimation and impetus remuneration. Just a year later Fama and French (1998) examines how a firm's value is identified with dividends and debt. They found that dividends and debt convey information about profitability missed by a wide range of control variables. Taking it forward Ramezani et. al., (2002) recommend that corporate profitability measures for the most part ascend with income and sales growth, in any case, an ideal point exists after which encourage growth pulverizes shareholders value and unfavorably influences profitability. It isn't important that a growth boost prompts augmentation of corporate profitability. Laitinen(2004) further investigates (in view of an information separated from 1998-2001) and states that shareholder's value depends on three drivers : growth, risk and profitability. The present arrangement of monetary and non monetary factors can be utilized adequately anticipate value creation in technology firms. The best factor to recommend shareholder's value creation is past profitability. Non monetary related components are essential while foreseeing growth. Kyriazis and Anastassis (2007) on the other hand states that when found with regards to little Europian advertise like the Athens stock trade test result uncovered that net and operating income had all the earmarks of being more pertinent than EVA. However, Marchica and Mura (2010) finally infers that monetary adaptable firms has the ability to put more betterly. He recommends that money related adaptability as far as undiscovered reserve of borrowing power is a missing connection in a capital structure hypothesis. Nthoesane (2012) continues and recommends that distinguishing proof of traits and skills that are connected to EVA are fundamental to build up a competency measure that depends on EVA. A few key factors like past and foreseen growth, profitability and accounting conservatism shape the size and conduct of P/E and P/B. However, Bhasin and Shaikh (2013) explores that EVA is

a measure of both value and performance. An improvement in EVA is relative to the improvement in market value of firm. EVA sets the formation of share value an incentive as the main need, purchasing setting standards like stiff charges being expanded for the extreme utilization of capital. Under EVA it winds up noticeably important to check it if a firm is earning returns on cost and in this manner making wealth for their shareholders. The examination recommends that EVA alone isn't an performance pointer. Different variables that drive material value ought to be represented keeping in mind the end goal to build up shareholder's value creation. Taking it forward Putu et. al., (2014) determines studies the impact of social responsibility, corporate governance and firm size on corporate profit and corporate value. This is finished by contemplating manufacturing firm recorded at Indonesia Stock Exchange. The examination presumes that social responsibility, corporate governance, firm size and profits have constructive outcome on firm value. Fernandez (2015) on the other hand examines 582 firms to comprehend the connection between the expansion in the MVA every year and every year EVA, NOPAT and WACC was considered. The remedy with EVA was observed to be negative in the investigation of 210 firms. The normal relationship between's expansion in the MVA and EVA, NOPAT and WACC was 16%, 21% and - 21.4%. Alongside, Siboni and Pourali(2015) examines the connection between investment opportunity and dividend strategy and firm value. It recommends a positive connection between venture opportunities and firm value and profit approach. It recommends that expansion in investment opportunities and dividend strategy will expand firm value. In the same year Trifan and Suciu (2015) draws similarity between measuring monetary performance in two variations is done in the examination. Variation is utilized the information offered by accounting with accentuation on amplifying profit and other one planning to make value. Great learning of firm's accounting policy approach is the way to effectively judge an firm's performances. In continuation, Fayed and Dubey (2016) states correlation of three gatherings of performance measures for the most part accounting-traditional value based and market based by contemplating UAE stock trades from 2008-2013, and with unique concentrate on EVA momentum. The price to book value gave noteworthy data contrasted with the EAVM module.

2.6. One Variable

Stewart (1994) recommends that EVA framework gives an incorporated decision making structure that can refocus energies and divert assets to make sustainable incentive for firms, clients, workers, shareholders and for management. After a couple of years later, Collingwood (2001) coins the terms 'the earning game' and alludes to the want organizations have and the move they make to meet their quarterly earnings expectations. 'Earning management' and 'Creative accounting' are utilized as a part of depicting how organizations play the diversion. He infers that earning diversion accomplishes more damage than great. Alongside, Velez-Parejo (2001) assesses that EVA efficiently belittles an firm's value as contrasted with the NPV. Study proposes that improvement/decrease of EVA doesn't really mean value creation/value decimation. Alongside in Lemmon and Lins (2003) studies the effect of ownership structure on changes in share holder value during the East Asian financial crisis. Half a decade later Adam and Goyal (2008) studies the performance of several proxy variables for a firm's investment opportunity set one uses a real options approach. It suggest that on a relative scale the highest information with respect to investment opportunity is present in the market-to-book asset ratio. Earning price ratio and market-to-book equity however do contain information that is already contained in the market-to-book assets ratio. Along the same time Aleksanyan (2009) analyzed non-financial firms recorded on the London Stock Exchange.

At the point when the data condition of the firm turns out to be more complex, there is abatement in the helpfulness of the key monetary articulation information in stock valuation. It likewise propose that earning and book value turn out to be more esteem important in less complex data condition for firms that exchange above book value. However for the individuals who exchange at a rebate to book value, they observed book an incentive to be most imperative value driver. Not stopping at that Sharma and Kumar (2010) examines a story writing audit of 112 papers and clarifies that EVA is presently perceived as a critical device of execution estimation and administration everywhere throughout the world especially ahead of time financial matters by embracing it as corporate strategy. Still these are blended confirmations about the predominance of EVA over conventional execution estimation instruments. At the same time Lin and Chang (2011) examinations 196 Taiwanese recorded firms from 1993-2005 to consider whether leverage influences company's value. It recommends that there must be a limit debt obligation proportion of less that 33.33% and soon thereafter firm value quits improvement. It additionally recommends that there is a twofold edge impact between debt obligation proportion and firm value. It reasons that when debt obligation proportion is under 9.86% tobin's Q increments by 0.0546%, with an expansion in 1% in the debt obligation proportion, when debt obligation proportion is in the vicinity of 9.86% and 33.33% tobin's Q increments by 0.0057% with an increment in 1% in the debt obligation proportion. In any case, when debt obligation proportion is more than 33.33%there is no connection between the debt obligation proportion and firm value. Different studies were carried in next three years. Atiyet (2012) Studied French firms having a place into SBF 250 index was done to a period from 1999-2005. By breaking down the effect of the capital structure of the shareholder value creation measured with the EVA. The sequencing of financing their venture was self financing, trailed by debt obligation and equity issue. Self financing impacted MVA, while the rest wrecked the shareholders' value measured by MVA. However. Michalski (2013) states the connection between firm operating cash balance and firms value. It likewise proposes suggestions, uses of whose will enable administrators to settle on better choices for boosting firms to value. It examinations balances of cash held out a firm and sets up the connection between various sort of cash balances and risk. In parallel, Jakub et. al., (2015) states that EVA sets the criteria of business performance, the proficiency of its financing structure, close by single reference rate for differed firm exercises. The advancing globalization supported with the advancement of universal monetary relations are continuously driving fit accounting alongside brought together hypothetical and methodological bases for the appraisal of individual parts of the firms and its operation.

3. METHODOLOGY AND OUTPUT

Eight control variables were used in this study for 18 years and for 102 selected BSE companies. Time horizon is from 1999 to 2016. The entire dataset comprises of 16524 data points. EVA have been predicted with the help of, Total Assets, Debt to Equity Ratio, Return on total Assets, Total Dividend as percentage of PAT, Price to Book Ratio, Book Value, Quick Ratio and Equity dividend as a percentage of PAT. GMDH Shell Neural Network has been implemented with a network structure of [8, 16, 32, 1] in a back-propagation feed forward error correction mode. Neural network functions as an unbiased human neuron system with automatic error correcting way as back-propagation. Error free (relatively) signal gets processed as feed-forward. This network has two middle layers with 16 and 32 neurons respectively. The initial layer has 8 neuron representing 8 control variables. The final layer has 1 neuron representing EVA.

Table 1.0
Depicting the robustness of measurement of Neural Network

Error measure: Range percentage	Target: EVA	
Postprocessed results	Model fit	Predictions
Number of observations	1469	367
Max. negative error	-7.47465 %	-4.74891 %
Max. positive error	10.0815 %	8.11397 %
Normalized mean absolute error (NMAE)	0.311544 %	0.376746 %
Normalized root mean square error (NRMSE)	0.809701 %	0.98033 %
Residual sum	-3.07244E-12 %	-4.89933 %
Standard deviation of residuals	0.809701 %	0.980239 %
Coefficient of determination (R^2)	0.980327	0.979589
Correlation	0.990115	0.989746

Normalized MAE and Normalized RMSE are both well below 1%. R^2 in model fit and model predictions are extremely high (99% and 98.9% respectively), depicting consistency and accuracy at the same time.

Table 1.1
Depicting the Final Equation

Y1 = 28477.4 + N517*0.0635479 - N517*N5*1.19178e-07 + N5*0.93324

As we notice the final equation for prediction, it is evident that only Neural variables are there represented as "N". No trace of any control variable has been found. This clearly indicates and confirms the presence of behavioral bias in these decisions. A total of 523 neural (N523) were generated during this back-propagation process. This means hidden biases are far too many and complex in nature also. Table 1.2 proves that complex cognitive factors (unidentified though) are mixed in various combinations and finally emerges out as a unique neural variable.

Book value and total assets are emerging out as important variables; however they can't predict EVA directly as per Table 1. Return on total assets does not find any impact whatsoever.

4. CONCLUSION

It can be concluded that EVA for this entire block (102 BSE listed companies for a period of 18 years) can be predicted with a lot of behavioral biases. The final equation shows a hint of timid choice and bold forecast (By Kahneman and Lovallo, 1993), as no control variable is clearly visible there. Control variables are wrapped up completely by the huge number of neural variable (more than 500).Moreover, Book value and total assets having the lower entropy measurements emerge as the most stable variables (control) to indicate EVA. However these variables too couldn't detect or predict the EVA clearly due to the unprecedented presence of the behavioral bias. Hence further probe on behavioral biases could lead to new and interesting discoveries. The current study echoes another Malaysian study (Ismail, I., 2011) that depicts neither value creator nor value destroyer has a relationship with stock returns.

Table 1.2
Depiction of detailed neural variables

N5 = -1323.07 - N232*0.273458 + N13*1.26995
N13 = 950.15 + N23*0.538661 + N25*0.463861
N25 = -1245.87 - N128*0.495453 + N47*1.49215
N47 = -6305.24 - N355*0.376703 + N73*1.35997
N73 = 2522.18 + N124*0.652887 + N172*0.353807
N172 = 13248.4 + N266*1.57442 + N266*N369*6.59778e-09 - N369*0.452468
N369 = -35317.4 + N379*1.28848 - N468*0.38221
N468 = 24916 + N470*0.661508 + N470*N472*4.51929e-09 + N472*0.442098
N124 = -8494.76 - N344*1.16758 + N244*2.14504
N244 = 19258.5 + N298*0.849876 + N431*0.201233
N298 = -59275.4 + BV*37.4086 + N350*1.31029
N355 = 76612.1 - N402*N481*1.53371e-06 + N481*0.345037
N402 = 144967 - "Total assets"*8.11111 + "Total assets"*"Total dividend as % of PAT"*0.0512758
N128 = -8031.54 - N344*1.09015 + N245*2.06884
N245 = 19068.2 + N300*0.851073 + N431*0.199531
N431 = 154750 - N447*N513*1.85837e-06 + N513*0.482638
N513 = -698301 + "Total dividend as % of PAT"*2497.7 + "P/B "*68955.1
N447 = 95481.5 - BV*195.66 + BV*"EQUITY DIVIDEND AS % PAT"*4.35897 - "EQUITY DIVIDEND AS % PAT"*3726.08
N300 = -51010.4 + N350*1.31342 - N477*0.448795
N477 = -53811.7 - BV*83.7212 + "QUICK RATIO "*62789.9
N344 = 11455.6 - "Debt to equity ratio (times)"*52048.7 - "Debt to equity ratio (times)"*N350*0.220287 + N350*1.15736
N23 = -3780.79 - N279*0.548477 + N53*1.53844
N53 = 1545.93 + N67*0.502297 + N112*0.501806
N112 = -11526.2 - N374*0.768233 + N201*1.73764
N201 = 17468 + N279*0.856381 + N423*0.189977
N423 = -24797.6 + N439*0.42527 - N439*N450*1.32171e-08 + N450*0.381016
N450 = -121389 - N472*1.64193 - N472*N514*5.03188e-06
N514 = -704061 + "P/B "*68575.8 + "EQUITY DIVIDEND AS % PAT"*2786.03
N439 = 222462 + N448*0.992972 + N515*0.597409
N515 = -482476 - "Debt to equity ratio (times)"*238324 + "Debt to equity ratio (times)"*"P/B "*30736.4 + "P/B "*57334.9
N448 = 76311.7 - "Total dividend as % of PAT"*3053.04 + "Total dividend as % of PAT"*BV*4.3373 - BV*195.101
N374 = 153144 + N400*0.173498 - N400*N478*1.18054e-06 + N478*0.461932
N67 = 70910.7 + N526*0.148605 - N526*N138*8.23427e-07 + N138*0.639298
N138 = 11561.4 - N387*0.599335 + N387*N266*8.49235e-09 + N266*1.73958
N387 = 199054 + N400*0.272191 - N400*N481*1.07646e-06 + N481*0.531893
N481 = -1.11815e+06 + "Return on total assets"*65526.9 + "QUICK RATIO "*72636.8
N279 = -29680.5 + N343*1.36283 + N343*N463*4.1094e-09 - N463*0.400494
N463 = 108652 - N472*N508*1.76201e-06 + N508*0.413203
N508 = -752551 + "P/B "*70256.1 + "QUICK RATIO "*113430
N472 = 156685 - "Debt to equity ratio (times)"*201228 + "Debt to equity ratio (times)"*BV*33.731 - BV*113.782
N343 = 102438 + "Total assets"*N478*1.04183e-05 + N478*0.158102
N478 = -1.24023e+06 + "Return on total assets"*72268.2 - "Return on total assets"*"P/B "*3076.54 + "P/B "*83793.1
N232 = 13072.9 - N379*0.581439 + N379*N266*8.427e-09 + N266*1.72554
N266 = 10360.7 + N332*0.689694 + N384*0.337802
N384 = -158103 + "P/B "*21929.6 - "P/B "*N399*0.367075 + N399*1.58778
N399 = 61377.4 - "Total assets"*6.22937 - "Total assets"*BV*1.84698e-05 + BV*30.3284
N332 = -17989.2 + N350*1.29887 + N350*N470*6.70781e-09 - N470*0.282187
N470 = -99181.6 + "P/B "*BV*21.946 - BV*117.118
N350 = -49956.4 - "Total assets"*11.7556 + "Total assets"*"Return on total assets"*0.73028 + "Return on total assets"*11431.6
N379 = -345043 + "Return on total assets"*33060.1 - "Return on total assets"*N400*0.086691 + N400*1.52728
N400 = 138318 - "Total assets"*8.04391 + "Total assets"*"QUICK RATIO "*1.33328
N517 = 271189 + N523*0.863187 - N523*N526*6.1048e-07 + N526*0.583319
N526 = -466455 - "Debt to equity ratio (times)"*"Total dividend as % of PAT"*6908.38 + "Total dividend as % of PAT"*6481.91
N523 = -580970 - "Total dividend as % of PAT"*1913.52 + "Total dividend as % of PAT"*"QUICK RATIO "*6286.14 + "QUICK RATIO "*56557.8

Table 1.3
Importance of variables

Rank	Variable	Entropy
1	BV	-2.97335
2	Total assets	-2.9016
3	EVA	-2.7371
4	QUICK RATIO	-2.29722
5	Debt to equity ratio (times)	-2.18863
6	EQUITY DIVIDEND AS % PAT	-1.90877
7	Total dividend as % of PAT	-1.86419
8	P/B	-1.66945
9	Return on total assets	-0.956393
10	year	0
11	Company Name	0

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