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# VALUE ADDED STATEMENT (VAS) IN THE CONTEXT OF BANGLADESH: A STUDY ON PROBLEMS EXPERIENCED BY MANAGEMENT USING THE VAS

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## Abstract

Value added is the value or wealth created by the collective effort of capital, management and employees. The excess of market value over cost of material bought in is value added. The value added statement (VAS) reports on the calculation of value added and distribution of value among the stakeholders in the company. This paper identifies the problems experienced by management who use the VAS and after the investigation, 18 key factors have been noted. By applying factor analysis using SPSS, 5 of these are identified as the main factors namely (1) VAS makes confusion in cases wealth (value added) is increasing while earnings are decreasing; (2) The VAS can create five fallacies such as (a) increasing value added must increase profit; (b) increasing value added per unit of labor must benefit shareholders; (c) it is possible to identify in advance an equitable distribution of changes in the value added; (d) a relatively high value added per unit of labor represents superior economic performances; and (e) a labor force taking a high proportion of value added does not deserve even high wages; (3) The stakeholders do not use the value added statement because they suspect that the statement is being used to reduce political costs and legitimacy threats, and is therefore not reliable. This is a major shortcoming of voluntary disclosures; (4) The inclusion of VAS in annual report may wrongly lead management to pursue maximization of firm's value; (5) Many inconsistencies are found in practice in both the calculation of value added and presentation of the VAS that make the statement confusing, non-comparable and unverifiable.

**Keywords:** Value added, value added statement, annual report, voluntary disclosure, Stakeholders.

## 1. Introduction

Financial statement which shows how much value (wealth) has been created by an enterprise through utilization of its capacity, capital, manpower, and other resources, and how it is allocated among different stakeholders (employees, lenders, shareholders, government, etc.) in an period. A value added statement (VAS) is a statement showing the net added value of a business firm during a certain period on its total transaction. The main purpose of VAS is to ascertain how much of the total net value was added and how it was distributed to the contributors of the value. Therefore, a VAS is regarded as a part of social responsibility accounting. The disclosure of VAS in annual report is not compulsory. Voluntary disclosures will be designed to achieve managerial goals. The disclosure practice of information in the annual report is of two types such as compulsory or mandatory disclosure and voluntary disclosure. Mandatory disclosure means the disclosure of information within the identified minimum limits. Voluntary disclosure means any disclosure of information which exceeds these limits in terms of content or amount as decided by

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the management of the firm. Voluntary disclosure of information to the public differs from mandatory disclosure within the scope of accounting. Simply, mandatory disclosure is the rules which allow equal access to basic information. In mandatory disclosure, the information which firms must necessarily disclose, in which form, to whom and when they should be disclosed is defined by regulations (Durukan, 2003, 137). Voluntary disclosure has been defined as "disclosures in excess of requirements representing free choices on the part of company management to provide accounting and other information deemed relevant to decision needs of users of their annual reports" (Meek, 1995, 555). Disclosures such as these represent the free choice of the management of the firm. The management decides which information needs to be disclosed and also determines on how relevant is the information to the person who will use it to make decisions. Voluntary disclosure is an issue which has come into the forefront and attracted much interest in accounting literature in recent times. What lies behind this interest is the aim to identify the factors which underpin the factors affecting voluntary disclosure of information by the firms to inform the decision makers about financial information and those who prepare and use this information. In this paper, an attempt is made to identify why some listed companies in Bangladesh are not interested in publishing the VAS.

## 2. Theoretical Concept of Value Added and Value Added Statement

Value added concept was initially used in 1790 in the first North American Census of Production (Gillchrist, 1970). Trenche Cox, a treasury official, whose techniques have since been adopted by most industrial nations in the calculation of Gross National Product (GNP), was responsible for realizing that value added would avoid double counting. Value added has also been defined in the economic literature by Ruggles and Ruggles (1965). The VAS therefore, has a macro-economic origin, in that the calculation of value added in the value added statement corresponds with the calculation of GNP, as well as economic significance. Value Added has been defined by Ruggles and Ruggles as the value created by the activities of the firm and its employees, can be measured by the difference between the market value of the goods that have been turned out by the firm and the cost of those goods and materials purchased from the producers. This measure will exclude the contribution made by other producers to the total value of the firm's production, so that it is essentially equal to the market value created by this firm.(1965, 50). The concept of value added in accounting is not much more different from that of in macroeconomics. The use of the term "value added" in accounting is recent and it is being widely used after publication of corporate report by ASSC in 1975. It defines value added as the wealth the reporting entity has been able to create on its own and its employees' efforts (Corporate Report: 1975). In general, value added is the wealth created (or contributed to) by the firm through the utilization of key productive resources (Suojanes: 1954, Van Staden: 1998).

Value Added Statement may be called the part of the development in the financial reporting but the concept of Value Added is considered old. VAS shows amount of value added during a period and its distribution to different parties who have given effort to create it. Corporate Report (ASSC: 1975) stated value added statement shows how the benefits of the efforts of an enterprise are shared between

employees, providers of capital, the state and reinvestment. Hence it shows both the calculation of value added and its distribution to stakeholders. In this regard, Value added statement reveals the value added by an enterprise which it has been able to generate and its distributions among those contributing to its generation known as stakeholders (ICAI: 1985).

## 3. Literature Review

Value added concept was initially used in 1790 in the first North American Census of Production (Gillchrist, 1970). A review of the literature on the subject has revealed that many articles, books and research reports published on the subject. But most of the research was conducted on the calculation of value added, presentation of the VAS, the inconsistencies found in this process and disclosure of the VAS in annual report voluntarily. Very few researches were conducted to identify the reasons why some listed companies are not publishing VAS in their annual report and argument against publishing VAS by the management of those companies. The debate on the role of value added among accounting measurements has received attention in the last fifty years, with a particular emphasis in the 1970's and 1980's (Staden 2003: 228–229).

Accountants in UK have periodically deliberated upon that the concept should be incorporated in Financial Accounting Practice. In 1975 the Accounting Standard Board (ASB) of UK advocated the publication of Value Added Statement along with the conventional annual corporate reports. Subsequently large British Companies included Value Added Statement in their annual reports. In the United Kingdom, the value added statement became popular in the 1970's following the publication of the Corporate Report (1975). The Corporate Report (1975) was a publication by the Accounting Standards Steering Committee (ASSC), which amongst other initiatives suggested that a value added statement should be published together with the income statement and balance sheet. But the value added statement has virtually disappeared from Annual Reports in the United Kingdom.

Gray, Kouchy and Laver (1995) reported a steady decline in the number of companies publishing value added statements from 40 percent of the companies in 1980 to around 6 percent of UK companies by 1991 because of the economic recession and the negotiating strength of trade unions. By 1991, the user rights' notion which had featured in the Corporate Report was abandoned. As a result, research on the topic declined significantly when UK companies stopped publishing the VAS. In South Africa the interest in VASs started with the publication of The Corporate Report in 1975. This led to 6 companies out of 100 top companies published VASs in 1977 (SAICA 1981). A review by Gray and Maunders (1980) of the publication of the statement around the world indicated that a number of companies in the Netherlands, France and Germany provided value added data. They also noted growing instances of VSAs being published in countries such as Denmark, Switzerland and Italy. American and Canadian companies have not published value added statements at all.

Morley (1979) explained the VAS as a modified form of the profit statement. He showed that income earned by the company not only for its shareholders, but also for

other income providers – namely governments, employees and providers of capital. Morley (1979) explained that the reason for the need of the statement was a result of a move away from the notion that the only objective of the company was shareholder maximization.

Staden, (2000) In their research on" The value added statement: bastion of social reporting or dinosaur of financial reporting?" analyzed the worth of disclosure of value added statement by companies around the world. The social accounting theories of organizational legitimacy and political costs was used to explain the worth of value added statement. Surveys among the companies publishing the value added statement indicated that management had the employees in mind when they published this information and it highlights the need for unbiased and verified social disclosures that will be useful to all the stakeholders of the company. Staden (2000) showed that VAS was published voluntarily by more than 200 of the 400 companies listed in the industrial sector on the Johannesburg Stock Exchange, as part of their annual financial statements. Larrinaga, (2001) has conducted research on "Social and Political Aspects of the Value Added Statement (Aspectos sociales y políticos del estado de valor añadido." Through a historical and technical study of the value added statement, this article elucidates the social and institutional nature of accounting. The work analyzes extensively the technical aspects of the value added statement. Staden, (2003) has carried out "The Relevance of Theories of Political Economy to the Understanding of Financial Reporting in South Africa: The Case of Value Added Statements". The findings indicate that legitimacy theory and the political economy of accounting theory provide the best explanation for the continued publication of the statement in South Africa. This study adds to the literature on legitimacy theory to a social disclosure, the publication of the value added statement.

Pradeep, (2008) in his article on "Social Performance Through Value Added Reporting" — An Empirical study of Lupin Lab. Ltd. has analyzed that the management of Lupin Lab. Ltd. has served to the society very well as total value added has been distributed among the employees, government, financial Institutions, banker & shareholders, on the other hand it also contributed towards the growth and development of the company.

Niranjan and Suvarun, (2008) have worked on "Value Added Statement (VAS) – A Critical Analysis a case study of Bharat Heavy Electricals Limited" The paper analysis to what extent the value added statement can supplement additional financial information to satisfy all the stakeholder.

Malgwi and Purdy, (2009) wrote the article on "A Study of the Financial Reporting Dichotomy of Managers' Perceived Usefulness of the Value Added Statement." The article investigated whether the perceived usefulness of the Nigerian VAS conformed to what the managers, as preparers, had envisioned the VAS to accomplish. Using methods pioneered in the empirical literature about the effects of information provision on managers, senior managers in two companies were interviewed about their past, current, and future views concerning the VAS and findings had some strong support for shareholders as did the United Kingdom. The

article also provides suggestions for further research with both VAS and other financial representatives.

Júnior, Araújo and Pereira, (2009) have worked on "Operating Cash Flow and Added Value: A Study of the Correlation between Liquidity and Distribution of Added Value in the Brazilian Textile Sector." This study brings the discussion to the liquidity of companies, perceived from liquidity indicators calculated by the Operating Cash Flow, is related to the distribution of added value demonstrated by the DVA. After analyzing the results, they concluded that liquidity has no significant influence on the distribution of wealth.

Cahan and Staden, (2009) have conducted research on "Black Economic Empowerment, Legitimacy and the Value Added Statement: Evidence from Post-Apartheid South Africa." In this paper issues have been raised on why companies in South Africa voluntarily provide a value added statement (VAS) and they examine whether production of a VAS is associated with actual performance in labor-related areas and findings of this study is that performance is significantly and positively related to the voluntary publication of a VAS. The results suggest that performance and disclosure of a VAS are two elements of a strategy used by South African companies to establish their substantive legitimacy with labor.

Suleiman, (2009) has studied on "the worth of disclosures in the value added statement and pattern of value added distribution." The study focuses on to establish the significance of value added reports, pattern of value added distribution and to examine whether the value added statement disclosures are useful in social reporting.

Nandi, (2011) has conducted the research on "Performance Measures: An Application of Value Added Statement." with an objective to evaluate the performance of 20 selected PSEs in India, taking five each from four core public sectors for the period from 1999-2000 to 2008-09.

Aldama, Perera and Adrián., (2012) have worked on "Value-added reporting as a tool for sustainability: a Latin American experience" With an attempt to present a collection of ongoing experiences with a value-added reporting model in Latin America, positing its pertinence with regards to CSR accountability. The paper utilizes a qualitative methodology in which a series of semi-structured telephone interviews and/or e-mail questionnaires with managers from six reporting companies in Latin America (Chile, Colombia, Uruguay) was conducted.

Davada, (2012) has carried out research on "Social Responsibility of Tata Consultancy Services Ltd. through Value Added Reporting" which focuses that value added is meaningful measure of corporate performance rather than conventional measures based on traditional financial accounting and can be particularly useful for employees oriented approach, which will be more fruitful discussion with employees and can be especially useful in productivity arrangements.

Lee, (2012) has studied on "Output and Productivity Comparisons of the Singapore and Hong Kong Wholesale and Retail Trade Sectors, 2001–2008." The paper employs the industry of origin approach to compare value‐added and labor

productivity of Singapore and Hong Kong's wholesale and retail sectors. Results from total factor productivity analysis of these two economies also suggest that Hong Kong's better performance was largely due to its ability to employ more educated and trained workers with limited use of capital.

A survey of 211 published financial statements for the fiscal period 2003 of Italian listed companies showed that 81 companies disclosed value added measurements and 130 companies not disclosed value added measurements (Ianniello, 2010). Another survey of 241 companies listed in Dhaka Stock Exchange was conducted and found that 109 companies published the value added statements representing about 45% of the total company analyzed and 132 companies not disclosed value added statements representing about 55% of the total company analyzed (Fakhrul, 2014).

## 4. Objectives of the study

Considering the current research interest, the key objectives for the study are as follows:

1. to identify the problems experienced by management using the VAS;
2. to know the argument against publishing VAS by management of those companies which do not publish VAS; and
3. to extract main reasons from the several reasons using factor analysis.

## 5. Methodology of the study

In order to achieving the above objectives, the following research methodology has been adopted. This study is based on primary and secondary information. Through questionnaire, primary data have been collected from the top management of companies which do not publish VAS. For this research, 100 respondents have been randomly selected from the management teams of those listed companies of Dhaka Stock Exchange. Secondary data have been collected from the annual reports of the listed companies. Information provided therein can be taken as reliable as annual reports of the listed companies are mandatorily audited by external independent auditors. The disclosure practices of the selected companies are then analyzed to investigate the reasons behind not publishing value added statement. For achieving the above mentioned objectives and for analyzing & presenting the information various financial and statistical tools will be used. Factor analysis has been conducted using SPSS to find out expected results.

## 6. Problems Experienced by Management Using the VAS

VAS is a voluntary disclosure practice and it is regarded as a social disclosure. Socially related arguments can be used to establish a theoretical case for publication. These theories include organizational legitimacy, social contract, stakeholder and political cost theory. Organizational legitimacy theory suggests that management can influence the perception that the stakeholders have of the organization, and in this

way obtain the support of those stakeholders without which it might be difficult for the organization to continue to operate. But only VAS does not change the perception of the stakeholders about the organization because VAS is not a neutral corporate social disclosure. It is marginal disclosure. The organizations are not legally bound to publish VAS in their annual report rather than it is related to the moral and ethical duty of the organizations. But most of the organizations are not concerned with the morality, ethics and norms of their respective societies.

The social contract of business with society is based on the premise that society provides corporations with their legal standing and attributes and the authority to own and use natural resources and to hire employees and that a social contract is therefore implied. The social theories therefore indicate that management has an obligation and an interest to report to the other stakeholders. Although most of the accounting frameworks suggest this (for example the International Framework IAS, 1988) they do not require any financial statement or disclosures that will meet the needs of stakeholders other than the financial participants and these disclosures have therefore remained voluntary.

Stakeholder theory suggests that all stakeholders have the right to be treated fairly by the organization and to provide with information on how the organization impacted on them. But most of the companies want to manage stakeholders' expectations without necessarily changing their actual behavior.

Political cost theory is based on the premise that companies do have political visibility and that companies have an incentive to use accounting methods and disclosures to influence their political visibility. But VAS loses its significance when the socio political landscape changed. Therefore, many companies remain away from the publication of VAS. Besides, the following are problems experienced by management using the VAS:

- VAS makes confusion in cases wealth (value added) is increasing while earnings are decreasing (Belkaoui, 1992)
- The VAS can create five fallacies such as (1) increasing value added must increase profit; (2) increasing value added per unit of labor must benefit shareholders; (3) it is possible to identify in advance an equitable distribution of changes in the value added; (4) a relatively high value added per unit of labor represents superior economic performances; and (5) a labour force taking a high proportion of value added does not deserve even high wages (Rutherford, 1980).
- The stakeholders do not use the value added statement because they suspect that the statement is being used to reduce political costs and legitimacy threats, and is therefore not reliable. This is a major shortcoming of voluntary disclosures.
- The inclusion of VAS in annual report may wrongly lead management to pursue maximization of firm's value.

- Many inconsistencies are found in practice in both the calculation of value added and presentation of the VAS that make the statement confusing, non-comparable and unverifiable.
- The value added information does not have predictive power with regards to share price and price earnings ratio (Boshoff, 1996).
- There is no standard format for the disclosure of the VAS - no statement of GAAP.
- The inclusion and omission of depreciation may lead to the statement gross or net value added.
- It gives the wrong message to the workers that they get most of the VA from the organization.
- It does not measure wealth created (e.g. excludes capital gains/losses of shareholders) which mislead the users of the statement.
- There is an expectation gap between the reasons for publication VAS and the actual use of the information.
- The preparation and presentation of the VAS involves extra cost and work.
- It suffers from all the problems of accrual based accounting.
- Although the social responsibility of a business increases the positive perception of the stakeholders to the business but social expenditure that reduces profits could have a negative impact on investors.
- Inflation is not adjusted for the calculation and presentation of VAS.
- The total salaries and wages cost of a company is the only new information disclosed in the VAS which is contained in the income statement.
- One of the main reasons for the lack of use appears to be the major shortcomings experienced by the users when using the VAS.
- Others.

## 7. Result and Discussion

To conduct this research, 100 respondents have been randomly selected from the management teams of those listed companies of Dhaka Stock Exchange. Information has been collected from those management teams through questionnaire which contained 18 questions. Each question was a statement followed by a five-point Likert scale ranging from ‘strongly agree’ through ‘neither agree or disagree’ to ‘strongly disagree’. Factor analysis has been conducted using SPSS to find out expected results.

### *7.1 Correlation Matrix*

Table 1 shows an abridged version of the *R*-matrix.

The top half of this table contains the Pearson correlation coefficient between all pairs of questions where as the bottom half contains the one-tailed significance of these coefficients. Correlation matrix has been used to check the pattern of relationships. First, the significance values have been scanned and look for any variable for which the majority of values are greater than 0.05. Then the correlation coefficients them selves have been scanned and look for any greater than 0.9. If any are found, then it indicates that a problem could arise because of singularity in the data. From the table, It is seen that there are no correlation coefficients which is greater than 0.9. So, there is no possibility that a problem could arise because of singularity in the data. The determinant is listed at the bottom of the matrix. For these data its value is 7.77E-005 (which is 0.0000777) which is greater than the necessary value of 0.00001. Therefore, multi-collinearity is not a problem for these data. To sum up, all questions in the questionnaire correlate fairly well and none of the correlation coefficients are particularly large; therefore, there is no need to consider eliminating any questions at this stage.

*7.2 KMO and Bartlett's Test*

Table 2 shows several very important parts of the output: The Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity. The KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, factor analysis is likely to be inappropriate). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors. Kaiser (1974) recommends accepting values greater than 0.5 as acceptable. Furthermore, values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb. For these data the value is 0.736, which falls into the range of being good: so, we should be confident that factor analysis is appropriate for these data.

**Table 2: KMO and Bartlett's Test**

| **KMO and Bartlett's Test** | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .736 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 872.116 |
| | df | 153 |
| | Sig. | .000 |

Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix. For factor analysis to work we need some relationships between variables and if the R-matrix were an identity matrix then all correlation coefficients would be zero. Therefore, we want this test to be significant (i.e. have a significance valueless than 0.05). A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis. For these data, Bartlett's test is highly significant ($p < 0.001$), and therefore factor analysis is appropriate.

### *7.3 Factor Extraction*

Table3 lists the Eigen values associated with each linear component (factor) before extraction, after extraction and after rotation. Before extraction, SPSS has identified 18 linear components within the data set (we know that there should be as many eigenvectors as there are variables and so there will be as many factors as variables).

**Table 3: Extraction Method: Principal Component Analysis.**

| Total Variance Explained | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Compo-nent | Initial Eigen values | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.391 | 29.948 | 29.948 | 5.391 | 29.948 | 29.948 | 2.799 | 15.548 | 15.548 |
| 2 | 2.962 | 16.457 | 46.405 | 2.962 | 16.457 | 46.405 | 2.702 | 15.012 | 30.560 |
| 3 | 1.674 | 9.303 | 55.708 | 1.674 | 9.303 | 55.708 | 2.467 | 13.704 | 44.264 |
| 4 | 1.208 | 6.710 | 62.418 | 1.208 | 6.710 | 62.418 | 2.389 | 13.273 | 57.537 |
| 5 | 1.149 | 6.383 | 68.801 | 1.149 | 6.383 | 68.801 | 2.028 | 11.264 | 68.801 |
| 6 | .845 | 4.692 | 73.493 | | | | | | |
| 7 | .759 | 4.218 | 77.711 | | | | | | |
| 8 | .677 | 3.762 | 81.474 | | | | | | |
| 9 | .635 | 3.525 | 84.999 | | | | | | |
| 10 | .577 | 3.205 | 88.204 | | | | | | |
| 11 | .447 | 2.482 | 90.686 | | | | | | |
| 12 | .363 | 2.016 | 92.701 | | | | | | |
| 13 | .325 | 1.808 | 94.509 | | | | | | |
| 14 | .266 | 1.477 | 95.986 | | | | | | |
| 15 | .235 | 1.305 | 97.291 | | | | | | |
| 16 | .210 | 1.165 | 98.456 | | | | | | |
| 17 | .154 | .856 | 99.312 | | | | | | |
| 18 | .124 | .688 | 100.000 | | | | | | |

The Eigen values associated with each factor represent the variance explained by that particular linear component and SPSS also displays the Eigen value in terms of the percentage of variance explained (so, factor 1 explains 29.948% of total variance). It should be clear that the first few factors explain relatively large amounts of variance (especially factor 1) where as subsequent factors explain only small amounts of variance. SPSS then extracts all factors with Eigen values greater than 1, which leaves

us with five factors. The Eigen values associated with these factors are again displayed (and the percentage of variance explained) in the columns labelled *Extraction Sums of Squared Loadings*. The values in this part of the table are the same as the values before extraction, except that the values for the discarded factors are ignored (hence, the table is blank after the fifth factor). In the final part of the table (labeled *Rotation Sums of Squared Loadings*), the Eigen values of the factors after rotation are displayed. Rotation has the effect of optimizing the fact or structure and one consequence for these data is that the relative importance of the four factors is equalized. Before rotation, factor 1 accounted for considerably more variance than the remaining three (29.948% compared to 16.457, 9.303, 6.710 and 6.383%), however after extraction it accounts for only 15.548% of variance (Compared to 15.012, 13.704, 13.273 and 11.264% respectively).

### *7.4 Component matrix*

Table 4 shows the component matrix before rotation. This matrix contains the loadings of each variable onto each factor. By default, SPSS displays all loadings; however, we requested that all loadings less than 0.4 be suppressed in the output and so there are blank spaces for many of the loadings.

**Table 4: Extraction Method: Principal Component Analysis. 5 components extracted.**

| **Component Matrix** | | | | | |
|---|---|---|---|---|---|
| | Component | | | | |
| | 1 | 2 | 3 | 4 | 5 |
| Q 10 | .725 | | -.491 | | |
| Q 6 | .683 | | | | |
| Q 7 | .673 | | | -.467 | |
| Q 5 | .671 | | | | |
| Q 9 | .661 | | -.499 | | |
| Q 4 | .659 | | .457 | | |
| Q 11 | .652 | | | | |
| Q 2 | .640 | | | | |
| Q 3 | .630 | | | | |
| Q 8 | .593 | | -.472 | | |
| Q 13 | .494 | .454 | | | -.443 |
| Q 12 | .482 | .445 | | | -.451 |
| O 1 | .452 | | | .444 | |
| Q 15 | | .740 | | | |
| Q 14 | | .695 | | | |
| Q 16 | | .541 | | | |
| Q 17 | | .527 | | | |
| Q 18 | | | | | -.413 |

### *7.5 Rotated component matrix*

Table 5 shows the rotated component matrix (also called the rotated factor matrix in factor analysis) which is a matrix of the factor loadings for each variable onto each factor. This matrix contains the same information as the component matrix in table 5 except that it is calculated *after* rotation. There are several things to consider about the format of this matrix. First, factor loadings less than 0.4 have not been displayed because we asked for these loadings to be suppressed.

By comparing this matrix with the un-rotated solution, we see that before rotation, most variables loaded highly onto the first factor and the remaining factors didn't really get a look in. However, the rotation of the factor structure has clarified things considerably: there are five factors and variables load very highly onto only one factor. The suppression of loadings less than 0.4 and ordering variables by loading size also makes interpretation considerably easier.

**Table 5: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 7 iterations.**

**Rotated Component Matrix[a]**

| | Component | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Q 9 | .832 | | | | |
| Q 10 | .809 | | | | |
| Q 8 | .734 | | | | |
| Q 11 | .621 | | | | .481 |
| Q 6 | | .855 | | | |
| Q 5 | | .799 | | | |
| Q 7 | | .785 | | | |
| Q 4 | | .618 | | .569 | |
| Q 17 | | | .795 | | |
| Q 15 | | | .781 | | |
| Q 16 | | | .721 | | |
| Q 14 | | | .665 | | |
| Q 2 | | | | .736 | |
| Q 3 | | | | .683 | |
| Q 1 | | | | .653 | |
| Q 12 | | | | | .759 |
| Q 13 | | | | | .751 |
| Q 18 | | | | | .546 |

### *7.6 Suggestions*

From the above criteria and explanation our suggestions for the names of the factors are:

1. VAS makes confusion in cases wealth (value added) is increasing while earnings are decreasing (Riahi Belkaoui, 1992)
2. The VAS can create five fallacies such as (1) increasing value added must increase profit; (2) increasing value added per unit of labor must benefit shareholders; (3) it is possible to identify in advance an equitable distribution of changes in the value added; (4) a relatively high value added per unit of labor represents superior economic performances; and (5) a labour force taking a high proportion of value added does not deserve even high wages (Rutherford, 1980).
3. The stakeholders do not use the value added statement because they suspect that the statement is being used to reduce political costs and legitimacy threats, and is therefore not reliable. This is a major shortcoming of voluntary disclosures.
4. The inclusion of VAS in annual report may wrongly lead management to pursue maximization of firm's value.
5. Many inconsistencies are found in practice in both the calculation of value added and presentation of the VAS that make the statement confusing, non-comparable and unverifiable.

## 8. Conclusion

Most of the companies do not want to give the information to all the stakeholders. Management of those companies provides information which is required by applicable section of Companies Act and accounting standards. They are unlikely to provide voluntary information. VAS may wrongly lead management to pursue maximization of firm's value. The calculation of value added and presentation of the VAS are inconsistent that make the statement confusing, non-comparable, unverifiable, and unreliable. The only new information that the VAS provides is total employment cost, but this is a disclosure requirement of the Accounting Standards on the presentation of financial statements, (IAS1 1997). That's why VAS does not introduce new information apart from the value added figure and it can be regarded as a marginal disclosure (Staden, 2000). Although the social responsibility of a business increases the positive perception of the stakeholders to the business but social expenditure that reduces profits could have a negative impact on investors. Most of investors don't like to reduce their profit by publishing VAS. The legitimacy theory and the political economy of accounting theory emerge as the most likely motivation for the publication of VAS but decision usefulness is unconvincing as motivation (Staden, 1998).VAS is simply a passing fashion. The management is using the value added statement to signal that the company is socially responsible in order to promote interest in the company as an investment or in its products, which is in accordance with the legitimacy theory. That's why VAS still now voluntary disclosure. For the future, it might be interesting to carry out a study to test scientifically the validity of sleeted factors using hypothesis.

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