

Studying The Rate OF Economic Value Added Conecction with Stock Return And Compaing It With Accounting's Net Profit In Accepted CompaniesAt Stock Exchang Of Tehran

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ABSTRACT

Operation measurement in decision making process with due attention to developing and importance of market role of capital is the most important topic at the area of financial and economic .criteria of operation measurement because of being quantitative, applicable and objective as compared with other criteria are in the most important position .one of the external financial criteria in active companies on stock Exchange is stock return and in vectors always searching a way in order to foress this criterion (standard).

Economic Value Added (EVA) also as financial indicator is one of the most important internal standard of operational measurement.

Describing the connection rate of Economic Value Added (EVA) with stock return is the base of current study.it also compares it with accounting net profit for purposes of its influence on stock return. This operation has been donning in capital market of Iran in direction of assessment rate of efficiency of EVA.

The area of current study includes 51 accepted companies of food, drink and sugar industries of Tehran stock Exchange .this study has been done for 220 years- from 1379 to 1388.

Coefficient Determination of EVA relation &stock return calculated %13 that is %5 more than net ptofit and describe the changes of stock return .so the results of study showed that Economic Value Added as compared with net profit has excess connection with stock return and in other words is the better criterion to assess stock return of mentioned companies.

KEYWORDS: Economic Value Added ,Stok return ,Accounting net Profit.

1.INTRODUCTION

For many years in the past economists thought that all of the groups related to stock exchange company such as managers and stockholders are working to obtain common goal ,but from1961 many contrasts observed among these groups. So they tried to solve these contrasts (Jensen,1976,305-360).

One of the ways to prevail (win) to contrasts among stock holders and managers is using of operation assessment systems (Horen geran&coworkers,2006,791).

Operation assessment is an action which managers perform in order to attain their goal and strategies.selecting an appropriate criterion of assessment of operation and to obtain company's goals with the use of this standared increases the importance of selecting an appropriate scale to evaluate operation (lohman ,2004,267-286).Most of companies in order to identify benefits and advantage are making useof Accountig traditional tools ,such as benefit of ever stock , return of investment ,free cash flow ,remaining profit and stock price (Baum&Cowonkers,2004,82).Traditional criteria of every operation assessment have some faults.If they being applied as measurement basis,in this case identifying the value of company will not according to existing realities(Worthington, 2004,201-242).In other words, while traditional criteria are the most important tools for Evaluating company's operations,but ever-changing environment of companies has created the use of new criteria of operation assessment(Hrisch,2000,587).

Economic Value Added(EVA) is a suitable and accurate measurement of EVA which acts as accomplished investment by stockholders(Brigham&Coworkers,1999,48).In confirmation of Beaignam and his coworkers statements, worthington and vest (2004) state that EVA is the only standard which don't have the faults of traditional ways and calculates value of company actually.In other words EVA is fundamental indicator for operation measurement & identifying the company value.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESIS

2.1 Conceptual Background

First time , Miler&Modliyani in October 1961 published "policy of profit dividing and development and Evaluation of stock" which pointed to EVA concept .after that was claimed that piter Draker discussed about it in his book on "management of results " in 1964 . But the main nature of EVA was established by jul Estern and Bent Estvart in

1970 ,and recorded at the book of searching value by the name of themselves.they recorded a well –researched institution by the name of Estern–Estvard, then introduced Brand of EVA for their discoveries(Stewart,1970).Estern –Estvard was the first institution that provided EVA procedure in order to present consulting services to companies that need to appropriate service to their managers.It was the time that analitic tools of EVA became common by this institution in 1982.Different applications of EVA have been studied by different theorists ,some of the most important of them included: managerial tools of operation assessment (Coe,1997),the criterion of comprehensive stock(Draker,1964),tools for assessment(Leftkowitz,1999) , value creation (Estern-Estvard,2001,15-26) ,Informational application of EVA in evaluating financial performance (Jalili,1380), a framework for financial management (Moris,2001), Evaluation technique and identifying company’s value(Soleimani,1381).

By now different experimental(empirical) researches have been done on EVA by External and internal researchers and capital market dictators.some of the researches are follows:

In 1996 operation of 773 American company by Bidel,Boen and Valas was considered (from 1984 to1993) .Results showed that Accounting profit with stock return and values of company is more that EVA ,remaining profit and cash flows are created from connected operation and parts of EVA only increase in formational contents of profit(Biddle,1997 ,301-336).In 1997 Chen and Dad compared correlation among stock return and different measurment scales ,such as :EVA,remaining profit ,returns of assets ,return of stockholder’s salary and profit of every stock connection to 556 American firms from 1983 to 1992 with accounting profit and remaining profit .coefficient determination was %20.2 showed output (return) variations(Chen and Dodd J.L, 1997,318-333).In 2004 Anderson expressed this result that one of the accounting operation scale is remaining profit and after capital expense fraction it is defined as operational benefit(Anderson,2004). Andreas E. Wibenberger (2003) Claims that EVA indicator is the best operation criterion ,because consideres opportunity expense of stockholders and temporal value of money, and removes the alteration caused by using accounting principles (Andreas E.Wibenberger,2003) .Jalili (1380) in his thesis studied EVA capability in presenting right and appropriate information about stock return from 1376 to 1377,then compared it with operational profit .He showed although operational profit is an identifying factor in Iran’s market ,but it doesn’t mean weakness of EVA rather shows unefficiency of market ,so there not a meaningful connection between return and Economic Value Added.

Norawesh and Mashagekhi(1383) studied the connection among changes of accounting profit and data related to EVA and cash value Added of productive companies in Tehran’s Stock Exchange ,and concluded that there is a positive meaningful connection between accounting profit changes and EVA.Fathollahi(1383) at his thesis described the rate of connection between EVA and stock return and compared it with operation net profit .their statistical population was transport means of companies from 76 to 81.It was shown that in any case there is not a meaningful relation at mentioned period and operation net profit in connection with company’s market value is a better indicator to EVA.Also Athari in 1387 accomplished his thesis on companing of explanation power of EVA and operation net profit at the changes of stock return of accepted companies in stock exchange of Tehran and concluded different results of other Iranian researchers.He showed that EVA explains %67 of ordinary stock return changes.

2.2 Research Model

There is a meaningful connection between Economic Value Added and stock return. It is the used model to first Hyphothesis

$$Ret_{jt} = m_0 + m_1 [\Delta EVA_{jt} / P_{jt-1}] + m_2 [EVA_{jt} / P_{jt-1}] + \varepsilon_{jt} \quad \text{model:(1)}$$

There is a meaningful connection between accounting net profit and stock return.It is used model to second Hyphothesis

$$Ret_{jt} = n_0 + n_1 [\Delta NI_{jt} / P_{jt-1}] + n_2 [NI_{jt} / P_{jt-1}] + \varepsilon_{jt} \quad \text{model:(2)}$$

2.3 Research Hypotheses

- There is a meaningful connection between EVA and stock return.
- There is a meaningful connection between accounting net profit and stock return.
- As compared with net profit EVA has higher connection with stock return.

3.METHODOLOGY

3.1Research question

The question of this study include the research problem&it,s goals.

- Between EVA &Accounting net profit which one is the best for evaluating financial operation of accepted alimentary industries of Iran’s stock?
- Which criterion should be selected by investors,managers and stock holders in order to evaluate mentioned company or organization?

3.2 Research Methodology

Used procedure in this study is measured. It means that at first stage it is analogical at the base of data.In the next stagewith statistical considering panel of financial information deductively ,the integrity&permanancy of discovered relations is evaluated at business envirnment .

The type research is applicable also it makes a benefit of other researchers results. At information analysing on the basis of formal model, evaluation of stock return capacity of Economic Value Added information and Accounting net profit on explaining the changes of stock return are evaluated. We compare (R²) coefficient determination of these two independent variables for purposes of their connection to stock return and the result of main question is produced. Two variable liner regression is used for hypotheses experiment and statistical analysing. Formulating is done by Excel and analysing is done by soft ware spss. To analyse better chronological value we will benefit of Eviews software. Statistical population organizes this study in financial information of accepted companies of alimentary industries at stock Exchange of Tehran from 1379 to 1388.

3.3 Statistical Population

Statistical population organizes this study in financial information of accepted companies of alimentary industries at stock Exchange of Tehran from 1379 to 1388. These industries include: 34 foods and drink manufacturers in addition to 17 companies of sugar which are active at stock Exchange. Object of selecting this group of stock companies are as follow:

1. Existing appropriate number of approved stock firms in this industry.
2. Activity and presence of companies of this group at chronological output of 79 to 88 and the Exit or efficient changes in stock activities of these companies are low.
3. Existence of the more complete financial information to other groups.
4. Non-existence of similar accomplished study in this group and making differentiation on selecting statistical population.
5. Reason of selecting this statistical population is the use of studied results at industrial and demonstrated group that is one of the biggest foods manufacturers of country and intend to inter stock Exchange .
6. To be inserted company's name before the year of 79 at the list of accepted company at stock exchange.
7. To be transact the company's stock at minimum %50 of work days.
8. possibility of acquiring company's needed information in order to calculate evaluation criterions from 79 to 88.
9. this lower time of period takes effect on results and returns after studying information with regard to scales lower than 220 years company was studied as available capacity of statistical population.

3.4 Research Variables

Independent Variables:

- Economic Value Added

Economic Value Added is an applicable measurement scale which calculates correctly the ways to increase or removing company's Value. This standards (criterion) represent remaining profit after capital expenses deduction. Advocates of Economic Value Added concept claim that this indicator of Economic Value Added concept claim that this indicator is the best scale of operational measurement (Anderyas Vitenberg, 2003), because it considers the expense of stockholders and chronological Value of money. It removes the alternation arisen of accounting principles. Economic Value Added is a criterion which is applied in company to supervise totally in the case of value creation. Economic Value Added isn't a direction but is away that measure returns.

$$\text{EVA} = (\text{rate of return} - \text{cost of capital}) * \text{capital}$$

$$\text{EVA} = (\text{NOPAT} - \text{C}) * \text{Capital}$$

or

$$\text{EVA} = (\text{ROIC} - \text{WACC}) * \text{IC}$$

$$\text{EVA} = (r - c) * \text{capital}$$

$$r = \text{NOPAT} / \text{Capital}$$

$$\text{EVA} = (\text{NOPAT} / \text{Capital} - \text{C}) * \text{Capital}$$

r = amount of investment return
 c = rhythmic average of capital expense
 Capital = paid-in capital (applied capital)
 NOPAT = operational net profit after tax
 EVA = Economic value added

NOPAT is equal to: [Accounting net profit after tax deduction + outstanding expenses + interest cost + tax economy of interest expense - reduced expense of inventory value + benefits expense of staff's discharge certificate + demands which are doubtful to recovery + cost of investments value + operational net profit after tax deduction × (1 - tax rate)] - [investment average expense × capital]

$$\text{EVA} = [\text{operational net profit} (1 - \text{relation of financial power}) \times (1 - \text{tax rate})]$$

$$\text{capital expense} = [\text{debt expense} \times \text{expense of stockholders salary} \times \text{relation of financial power}]$$

- Accounting Net Profit

Most of financial account users believe that accounting net profit is a tool for evaluating company's operation .Evaluation of company's operation is assessment of financial position and operation results in order to making logical decisions.In general accounting net profit is a difference between income and clear expense of doing works(Aldon Es Handrikson, 1385).

Accounting Net profit = sale income- exponses-accounting amortization.

Sale in come is unclear increasing in asset and unclear decreasing in debts.It is measured on the basis of accepted accounting principles and is result of institute's profiting return.

Dependent Variable:

- Stock return

For now the most important operational assessment criterion is stock return amount .this criterion has information for investors and is used to assess applied operation assessment .when it decreases it is an alarm to company so company's operation isn't shown suitable .

This scale has a lot of information ,because operation assessment on the basis of market value,reflects investors information well.return in process of investors is a motivated force that creates motivation and regard as reward to investors.

$$R_j = \frac{(p_t - p_{t-1}) + D}{P_{t-1}}$$

R_j= stock returns

p_t= price per share end of period

p_{t-1}= price per share at period

D=Dividends per share

3.5 Data Analysis

Results of the First Hypothesis Test

Table(1) represents a meaningful connection between EVA and stock return yearly.In this case sig is zero to EVA/Pt-1 and coefficient determination is 0.130 .It means that EVA change explain %13 of stock return changes.so with rejecting H0 hypothesis other hypothesis of H1 is confirmed .It means that there is a meaningful connection between Eva and stock return, but the sig of ΔEVA/Pt-1 is

0.069 ,and because of being large from %5 erroe level is not confirmed.therefore Hypothesis of zero is not denied to this variable.so it sould come out from equation,because it is not an efficient variable to stock return.first equation that extracts by the use of column B and Enter method is as follows:

$$Ret_{jt} = 27405/13 + 0/777 [\Delta EVA_{jt} / P_{jt-1}] + 2/108 [EVA_{jt} / P_{jt-1}] + \epsilon_{jt}$$

$$Ret_{jt} = 27405/13 + 2/108 [EVA_{jt} / P_{jt-1}] + \epsilon_{jt}$$

So with due attention to obtained model, it is worthy of mention that in lieu of one unit change in EVA/Pt-1 ,3.925 units of changes are created in return.

Table 1: The results of the first hypothesis

model	Standadided coeffice		Standardized	t	Collineary Statistics		
	B	Std.error	coefficients		sig	Tolerance	VIF
Constant	27405.130	4465.056		6.138	.000		
EVA/Pt-1	2.108	0.537	.131	3.925	.000	.783	1.278
ΔEVA/Pt-1	0.777	0.425	.281	1.829	.069	.783	1.278

Table 2: The results of the first hypothesis

R	Rsquare	Adjusted Rsquare	Std.Error of the Estimate	Rsquare change	Fchange	Sigf chang
.361	.130	.122	65850.82	.130	16.254	0.000

With due attention to the results of table (2), it was observed that coefficient determination to the relations of Economic value Added and return were 0.13 respectively.

Results of the Second Hypothesis Test

Table (3) represents a meaningful connection between net profit and stock return yearly. In this case sig is 0.001 to ΔNI/Pt-1 and coefficient determination is 0.069 .It means that net profit changes explain %7 of stock return changes, so with rejecting H0 hypothesis other hypothesis of H1 is confirmed. It means that there is a meaningful connection between net profit and stock return, but variable of NI/Pt-1 is not confirmed, so it should be exited from equation .the suggested model was used in food industry as follows:

$$Ret_{jt} = 28651/281 + 2/11 [\Delta NI_{jt} / P_{jt-1}] + 0/057 [NI_{jt} / P_{jt-1}] + \epsilon_{jt}$$

$$Ret_{jt} = 28651/281 + 2/11 [\Delta NI_{jt} / P_{jt-1}] + \epsilon_{jt}$$

Table 3: The results of the second hypothesis

model	Standardized coefficient		Standardized coefficients Beta	t	Collinearity Statistics		
	B	Std.error			sig	Tolerance	VIF
Constant	28651.281	10265.05		5.436	.000		
NI/Pt-1	0.057	.021	.281	2.014	.072	.642	1.241
ΔNI/Pt-1	2.11	.121	0.069	0.137	.001	.642	1.241

Table 4 : The results of the second hypothesis

R	Rsquare	Adjusted Rsquare	Std.Error of the Estimate	Rsquare change	Fchange
.280	.0784	.065	62149.23	.078	.000

With due attention to the results of table (4), it was observed that coefficient determination to the relations of net profit and return 0.078 respectively.

Results of the Third Hypothesis Test

With due attention to the results of table (1) and (3) ,it was observed that coefficient determination to the relations of Economic value Added and return And net profit and return were 0.13 and 0.078 respectively.It means that > .Then H0 hypothesis is not confirmed and other hypothesis H1 is confirmed. In other words it was cleared that in comparison with net profit Economic value added has a lot of connection with stock return therefor changes of stock return are explained by economic value added with better quality.

4.RESULTS AND DISCUSSION

Coefficient determination of EVA and stock return was %13 It explained the changes of stock return %5 more than net profit so we can conclude that EVA in comparison with net profit has a lot of connection with stock return in other words it is better criterion to evaluate stock return of mentioned companies.

4.1 Recommendations Regarding the Research

In as much as influence of different political and Economical factors in different industries are varied so it is suggested that current study is performed in other industries in order to consider the influence of these factors completely and separately.In inefficient markets such our country stock Exchange accurate information are presented to users with chronological space. So it is suggested that with due attention to chronological pause in transferring information relation between different variables is considered.

Because of the importance of clerical and market value to calculate Economic Value Added it is suggested that in explanation of stock return indicators of REVA and EVA being compared with each other.

Because of complexity of EVA calculations it is suggested that it's components are studied a lot in order to increase the accuracy of calculations.

4.2 Future Research Recommendations

Because of ever-increasing proving of efficiency of EVA assessment criterion it is suggested that this indicator should be used for sales and purchases of stocks.

Make mention of importance of accounting net profit indicator it is suggested that evaluate of operation and rewarding system in Iranian companies are performed together with EVA indicator in order to propagate the concept of value Added in business and capital market rapidly and change it as general scale.

This is an economic indicator there for it is useful to published it's digits at reports and resources information of stock exchange organization.

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