

Study the Influence of Different Levels of Life Cycle on Asymmetric Timeliness of Profit in the Accepted Corporations in Tehran Price Stock Exchange

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Abstract: The aim of this research is investigating the compound effect characteristics of corporation life cycle levels on asymmetric timeliness of profit. At first the review of literature of corporation life cycle should be presented, then the variables such as measure, age, asset expenditure, sale growth and divided profit ratio of each corporation share as qualified characteristics of corporation life cycle have been clarified. These variables have been measured based on current procedure measurement in corporation life cycle literature. Then the mentioned variables have been measured, categorized, mixed based on their effects on asymmetric timeliness of profit and investigated the research aim. The dependent variable of the research is profit before extraordinary item and its independent variables are life cycle different levels such as growth level, puberty level and wane level. The statistic sample of the research include 96 corporations which have been chosen by systematic deletion method. This research is an applicable one based on its aim. The research design is an eventual one based on its historical information and research deduction method is analytical and correlative. In research, Penelope data and linear regression have been used to investigate research hypotheses. The received conclusions of investigating 460 corporation year from 1389-1393 in accepted corporations in Tehran price stock exchange indicate that there are positive meaningful relationships between growth, puberty and wane levels of life cycle levels and asymmetric timeliness of profit. The total conclusions express the influences of life cycle on asymmetric timeliness of profit in accepted corporations in price stock exchange in Tehran. All research findings and conclusions defend research main hypothesis, these findings indicate that in growth, puberty and wane levels investments pay more attention to former profit of conservatism corporations' extraordinary item (in relation to corporations that use audacious accounting procedures).

Key words: Life cycle, asymmetric timeliness of profit, growth level, puberty level, wane level

INTRODUCTION

Conservatism has been interpreted as an accountant's inclination in commitment upon higher degree of attendance capability for recognition of good news in relation to bad news in financial statements. In this interpretation of conservatism accounting profit reflects bad news faster than good news. The use of stock output to measure news can test the amount of asymmetric timeliness in recognition bad news and good news as a standard on conservatism behavior and can declare the main research question in Iran asset market. However, assurable accounting awards considerable choice rights for the managers in different time durations (Moghadam and Kavooosi, 1972).

Basu has defined conservatism in the following way: conservatism is a necessary different validation to

recognize costs and incomes that leads profit short views of assets. This definition is declared conditional conservatism. In recent studies conservatism has been divided into two groups: the first one is pre-eventual which is independent from news and is called unconditional. Pre-eventual conservatism expresses the use of accounting standards which decrease profit from current economic news as an independent variable. For example, the expenditure of advertisement, research and development as costs can be pre-eventual conservatism, even their expected future current circuits have been positive. The other kind of conservatism is forth-eventual, which is called conservatism dependent on news, conditional conservatism and asymmetric timeliness of profit (Collins *et al.*, 2015).

Asymmetric timeliness of profit include asymmetric of assurable items. Asymmetric timeliness of profit and loss

mean that corporations haven't increased their assets when they received good news of absolute booking price.

Asymmetric timeliness of economic profit and loss would cause ratio of assurable item to be realized earlier, so a kind of asymmetry would be created between assurable item and cash flow (Collins *et al.*, 2015).

One corporation during its life passes different levels such as: appearance, growth, puberty and wane. Among these levels growth and puberty are considerable levels, during the growth level the corporation concentrates on investments, its development and expansion. The corporation uses its cash flow to buy productive stock assets and consumes investments in circuit invests. However, the corporation will encounter high investment output. The corporations, which are in puberty level, use their available assets as cash flow and have balanced output. So, the relationship between asymmetric timeliness of operational cash flow is different during different life cycle levels (Collins *et al.*, 2015).

Totally, this research tries to describe the relationship between asymmetric timeliness of profit with life cycle levels based on the researches done by Collins *et al.* (2015). Then, the research wants to investigate the reasons and conclusions based on Conditional Conservatism, investigate the affected variables and describe the methodology to clarify the variables. Finally, the researcher will introduce some suggestions based on the research statistic sample, however; the research statistic sample include the accepted corporations in Tehran price stock exchange.

The main research question is: What is the effect of life cycle on asymmetric timeliness of profit in Tehran price stock exchange?

Literature review: Collins *et al.* (2015) believed that asymmetric timeliness of operational cash flow could be anticipated partially and it is different from corporation life cycle characteristics systematically, however; asymmetric timeliness of assurable items are different partially, too.

Hasan *et al.* (2015) in their researches investigated the effects of life cycle on shareholder's right cost and concluded that shareholder's right cost 11 would be higher in wane level and lower in puberty level.

Abdullah and Mohd (2014) showed that corporations in growth level are more conservatism than corporations in puberty level and corporations in wane level are less conservatism than corporations in puberty level.

Moradi *et al.* (1973) in their research, unobvious assets correlation in life cycle levels, concluded that there are positive meaningful relationships between shareholders' right price, remained profit and unobvious

assets booking price with high price market shares. Then, they found that life cycle different levels of corporation's puberty and wane levels had the strongest effects on unobvious assets correlation.

Noghabi (1973) based on corporation's life cycle theories showed that business units had different characteristics in life cycle different levels. The research hypotheses findings indicated that corporations followed different divided profit in each level of life cycle.

Kordestani (1967) indicated that the increase of conservatism in financial statements and increase in corporation overture quality would decrease informational asymmetry, ambiguity and usual share asset costs. It would be expected that the resistance of this relationship would decrease corporation's overture high quality.

Theoretical bases: In this research, based on the researches done by Collins *et al.* (2015) will describe the relationship between asymmetric timeliness of profit, their relations with life cycle levels and conditional conservatism findings. Then, the affected agents on them and related indicators with variables should be investigated.

- The main hypothesis: life cycle has an effect on asymmetric timeliness of profit

To answer the above hypothesis the following model tests should be considered:

- Growth level of life cycle level influences on asymmetric timeliness of profit:

$$NII_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 RET_{it} + \beta_3 DR_{it} * RET_{it} + \beta_4 LIFE_CYCLER_{it} + \beta_5 LIFE_CYCLER_{it} * DR_{it} + \beta_6 LIFE_CYCLER_{it} * RET_{it} + \beta_7 LIFE_CYCLER_{it} * DR_{it} * RET_{it} + \epsilon_{it}$$

- Puberty level of life cycle level influences on asymmetric timeliness of profit:

$$NI_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 RET_{it} + \beta_3 DR_{it} * RET_{it} + \beta_4 LIFE_CYCLEB_{it} + \beta_5 LIFE_CYCLEB_{it} * DR_{it} + \beta_6 LIFE_CYCLEB_{it} * RET_{it} + \beta_7 LIFE_CYCLEB_{it} * DR_{it} * RET_{it} + \epsilon_{it}$$

- Wane level of life cycle level influences on symmetric timeliness of profit:

$$NI_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 RET_{it} + \beta_3 DR_{it} * RET_{it} + \beta_4 LIFE_CYCLN_{it} + \beta_5 LIFE_CYCLN_{it} * DR_{it} + \beta_6 LIFE_CYCLN_{it} * RET_{it} + \beta_7 LIFE_CYCLN_{it} * DR_{it} * RET_{it} + \epsilon_{it}$$

Independent variable: All living beings such as vegetables, animals and human beings follow life cycle. They are born, grow up and will get old and die. This definition can be used to describe economic and management and divide corporation life into different levels (Anthony and Ramesh, 1992).

In this research, the present artificial variable for growth, puberty and wane will be equal 1 and in spite of that, it will be zero. The meaning of life cycle can be a metaphor for corporations, based on this definition, all the corporations run, grow up, mature and close. To divide corporations into different levels of life cycle following coordinated variables should be used:

- $Sg_{it} = [1 - (SALE_{it}/SALE_{it-1})] \times 100$
- $DPR_{it} = (DPS_{it}/EPS_{it}) \times 100$
- $Ce_{it} = [\text{Increase (decrease) of fixed asset in each duration / corporate market price}] \times 100$
- AGE = Different between t year and corporation foundation year
- SALE = Sale income
- DPS = Divided Profit Stock
- EPS = Each Profit Stock

Anthony and Ramesh (1992) used four variable: sale growth, capital expenditure, divided profit ratio and age to divide corporations into life cycle levels. In this research corporations will be divided into growth, puberty and wane levels with the use of four variables and based on Park Chen following ways:

- At first the amount of variables; sale growth, capital, expenditure, divided profit ratio and age of each corporation should be calculated for each year
- The corporation year based on the foresaid variables and the statistical categories in each industry can be divided into five categories
- The slightly category should receive a score from 1-5 as Table 1 shows
- Then, for each year of corporation composite scores would be received that are categorized based on the following situations in the growth, puberty and wane level
- If scores are from 16-20, corporation will be in growth level
- If scores are from 9-15, corporation will be in puberty level
- If scores are from 4-8, corporation will be in wane level

Dependent variable: Asymmetric timeliness of profit in the research asymmetric timeliness of profit would be practicable in the following way:

Table 1: Determination of life cycle different levels

| Categories | Sale growth | Capital expenditure | Age | Divided profit ratio |
|-----------------|-------------|---------------------|-----|----------------------|
| First category | 1 | 1 | 5 | 5 |
| Second category | 2 | 2 | 4 | 4 |
| Third category | 3 | 3 | 3 | 3 |
| Fourth category | 4 | 4 | 2 | 2 |
| Fifth category | 5 | 5 | 1 | 1 |

$$Y_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} * R_{it} + \epsilon_{it}$$

Where:

Y_{it} = Income before extraordinary item

R = Stock output

D = A variable which will be equal 1 if R is smaller than zero in spite of that is zero

β_3 = Asymmetric timeliness of operational cash flow
Collins *et al.* (2014)

MATERIALS AND METHODS

Research population include all the accepted corporations in price stock exchange in organization. Time durations of research would be annually and include one quinquennial duration from 1389-1393. Research sampling is systematic deletion sampling. SO, statistic sample of research consists of the accepted corporations in price stock exchange:

- The corporations which existed in stock exchange in financial years from 1389-1393
- The corporations which didn't enter stock exchange in financial years from 1389-1393
- The corporations which didn't exit from stock exchange in financial years from 1389-1393
- The corporations which weren't among corporations and bankrolls investments
- The corporations which their financial years had finished in Esfand
- The corporations which their symbol transaction hadn't dawn >4 months. So, the research sample include 96 corporations which have the above mentioned characteristics. Research structure data is Penally, so the number of observation is 480

Research methodology is squaring, so corporations' real data have been gathered based on Novin Rahavard software and stock exchange site. Excel and Eviews 7 have been used to analyze, interpret and calculate data.

In this research, the relationships between variables have been investigated, so it can be called demonstrative research. Then, regressive model has been used to check the influences of the variables on each other as the research is a correlative one.

The definite sample based on influencing factors on conservatism in a distinct duration has been designed. Reasons and symbols in the following definite sample have been specified. In this model the dependent variable is asymmetric timeliness of profit and the independent variable is life cycle. Usual Regressive Model has been used to evaluate research hypotheses. Hasman test and other tests for classic model data and Post test have been used, too.

Main hypothesis: Corporation life cycle has a positive meaningful relationship on profit:

- Growth level can influence on asymmetric timeliness of profit
- Puberty level can influence on asymmetric timeliness of profit
- Wane level can influence on asymmetric timeliness of profit

RESULTS AND DISCUSSION

Data structure has been combined, so constant, coincident affect test and Limer Test have been used to calculate data. In Limer test zero hypothesis means that

Table 2: Descriptive statistics of research variables

| Variables | Profit | Growth level | Puberty level | Wane level |
|--------------------|--------|--------------|---------------|------------|
| Average | -0/193 | 0/10 | 0/77 | 0/122 |
| Mode | 0/065 | 0 | 1 | 0 |
| The most | 1/140 | 1 | 1 | 1 |
| The least | -1/200 | 0 | 0 | 0 |
| Standard deviation | 0/462 | 0/300 | 0/416 | 0/328 |
| Chaology | -0/051 | 2/66 | -1/33 | 2/30 |
| Elongation | 2/42 | 8/11 | 2/77 | 6/30 |

there aren't any individual or mass affects. After the test conclusions have been shown the amount of test statistic clarifies the models. If amount of test statistics is $< 0/05$, the model will be accepted. Based on Limer test, statistic meaningful of F level in all models is $< 0/05$, so one hypothesis will be rejected ex parte zero hypothesis. Finally, in all models synthetic regression should be used (Table 2).

First sub hypothesis conclusions

First model: Growth level of life cycle levels has a positive meaningful effect on asymmetric timeliness of profit.

Based on Table 3 growth level coefficient variable of life cycle levels is 0/197 and its meaningful number (Prob.) is 0/030. Based on statistic amount of t and p-value of this variable, coefficient meaning of 0/05 error level of growth

Table 3: Best approximation of first model sample

| Signs | Variables | Coefficients | Standard deviation | The amount of t-statistic | Expectancy |
|-----------------|---|--------------|--------------------|---------------------------|------------|
| C | Fixed coefficient | -0/280 | 0/023 | -12/01 | 0/000 |
| DR | Damian variable | 0/684 | 0/227 | 3/011 | 0/002 |
| RET | Output | -0/328 | 0/154 | -2/12 | 0/033 |
| DERET | the difference between output and Damian variable | -0/222 | 0/015 | 1/47 | 0/142 |
| LIFECYCLE R | Growth level | 0/196 | 0/013 | 2/49 | 0/030 |
| LIFECYCLE DR | The difference between growth level and damian variable | 0/292 | 0/104 | 2/79 | 0/005 |
| LIFECYCLE RRET | The difference between growth level and output | 0/130 | 0/010 | 1/22 | 0/220 |
| LIFECYCLE DRRET | The relationship among growth level, output and damian variable | 0/381 | 0/055 | 6/99 | 0/000 |

Specification coefficient = 0/45; Adjusted specification coefficient = 0/44; F-statistic = 22/28; The meaningful level of F = 0/000; Watson camera statistics = 1/99

Table 4: Best approximation of second model sample

| Coefficients | Variable | Coefficients | Standard deviation | The amount of t statistic | Expectancy |
|-----------------|---|--------------|--------------------|---------------------------|------------|
| C | Fixed coefficient | -0/237 | 0/023 | -10/24 | 0/000 |
| DR | Damian variable | 0/707 | 0/234 | 3/02 | 0/002 |
| RET | Output | -0/361 | 0/157 | -2/49 | 0/013 |
| DRRET | The difference between output and Damian variable | -0/199 | 0/015 | -12/25 | 0/000 |
| LIFECYCLE B | Puberty level | 0/100 | 0/012 | 8/22 | 0/000 |
| LIFECYCLE DR | The difference between puberty level and damian variable | 0/011 | 0/003 | 3/055 | 0/000 |
| LIFECYCLE BRET | The difference between puberty level and output | -9/13 | 0/212 | -4/29 | 0/000 |
| LIFECYCLE BRRET | The difference of puberty level, output and damian variable | 0/381 | 0/055 | 6/91 | 0/000 |

Specification coefficient = 0/86; Adjusted specification coefficient = 0/85; F-statistic = 88/74; The meaningful level of F statistic = 0/000; Watson camera coefficient statistic = 2/11

Table 5: Best approximation of third model sample

| Coefficients | Variables | Coefficient | Standard deviation | t-statistic | Expectancy |
|-----------------|---|-------------|--------------------|-------------|------------|
| C | Fixed coefficient | -0/484 | 0/033 | -14/27 | 0/000 |
| DR | Damian variable | 0/261 | 0/0180 | 1/417 | 0/156 |
| RET | Output | -0/146 | 0/012 | -1/184 | 0/23 |
| DERET | The difference between output and damian variable | -0/093 | 0/012 | -0/769 | 0/44 |
| LIFECYCLE E | Wane level | 0/612 | 0/164 | 3/72 | 0/000 |
| LIFECYCLE DR | Difference between wane level and damian output | -0/500 | 0/261 | -1/913 | 0/056 |
| LIFECYCLE RET | Difference between wane level and output | -0/598 | 0/041 | 14/56 | 0/000 |
| LIFECYCLE DERET | Differences of wane level, output and damian variable | 0/121 | 0/009 | 1/27 | 0/203 |

Specification coefficient = 0/45; Adjusted specification coefficient = 0/44; F-statistic = 55/28; The meaningful level of F statistic = 0/000; Watson camera coefficient statistic = 2/34

level with suitable variables and 0/029 of adjusted specification coefficient show the influence of this model on asymmetric timeliness of profit. And this influence is confirmed based on above table coefficient and credibility.

$$N_{it} = -0/280 + 0/68DR_{it} - 0/33RET_{it} + 0/197LIFE_CYCLE_{it} + 0/292LIFE_CYCLE_{it} * DR_{it} + 0/38LIFE_CYCLER_{it} * DR_{it} * RET_{it}$$

Second sub hypothesis conclusions

Second model: Puberty level of life cycle levels has a positive meaningful effect on asymmetric timeliness of profit.

Based on Table 4 puberty level of life cycle level is 0/100 and its meaningful number (Prob.) is 0/000. Based on meaningful amount of t and p-value of this variable, coefficient meaning of 0/05 of error level of puberty level with suitable variables and 0/24 of adjusted specification coefficient accept the influence of puberty level of life cycle levels on asymmetric timeliness of profit. So, the influence is confirmed based on above table coefficient and credibility.

$$N_{it} = -0/24 + 0/71DR_{it} - 0/39RET_{it} - 0/2DR_{it} * RET_{it} + 0/1LIFE_CYCLEB_{it} + 0/015LIFE_CYCLEB_{it} * DR_{it} - 0/91LIFE_CYCLEB_{it} * RET_{it} + 0/38LIFE_CYCLEB_{it} * DR_{it} * RET_{it}$$

Third sub hypothesis conclusions

Third model: Wane level of life cycle level has a positive meaningful effect on asymmetric timeliness of profit. Based on Table 5 wane level of life cycle level is 0/612 and its meaningful number (Prob.) is 0/000. Based on meaningful amount of t and p-value of this variable, coefficient meaning of 0/05 of error level of wane level with suitable variable and 0/20 of adjusted specification coefficient accept the influence of wane level of life cycle

level on asymmetric timeliness of profit. So, the influence is confirmed based on above table coefficient and credibility.

$$N_{it} = -0/48 + 0/61LIFECYCLE_{it} + 0/598LIFECYCLE * RET_{it}$$

As said, all sub hypotheses of main research hypothesis are accepted, so, the main research hypothesis should be accepted, too.

CONCLUSION

This research has been done to investigate the effect of life cycle on asymmetric timeliness of profit, based on the Regression conclusion, following findings have been resulted:

- Growth level of life cycle level has a positive meaningful effect on asymmetric timeliness of profit
- Puberty level of life cycle level has a positive meaningful effect on asymmetric timeliness of profit
- Wane level of life cycle level has a positive meaningful effect on asymmetric timeliness of profit

Research bases are extremely correlated with theoretical bases. In the first level of life cycle operational cash flows are negative because corporations spend their cash flows to increase their incomes, development and research activities and buy their goods. So, negative operational cash flows for young and growing corporations aren't unnatural and having negative cash flows for growing corporations in good news situation (for example, positive output) aren't unusual. Moreover, change in corporation cost, is the result of change expectation from growth situation in which future cash flows will be recognized, in spite of that, in bad situation (for example negative output) operational cash flow is more important. In this situation, operational cash flows

are standards to clarify corporation durability chance in a situation that external financial security possibility is limited, so this subject is declared the positive relationship between operational cash flows and output in bad news situation Collins *et al.* (2015).

Based on research conclusions different levels of life cycle levels will increase asymmetric timeliness of profit. So, this research will be suggested to financial analyst, students and educational institutes to use the research findings in accommodating studies and other financial researches. Investors, investment managers and financial suppliers can use research findings to anticipate better operational cash flows of their intended corporations. Moreover, research conclusions assert that life cycle is an effective variable on asymmetric timeliness of profit and it is very effective to keep shareholders' public rights.

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