An Investigation of the Effect of Firm's Life Cycle Stages on Earning Quality: Evidence from Iran

Fereshteh Moshtagh[a], Mohammad Reza Abbaszadeh[b], Mohammad Hossein Vadiei Nowghabi[c], Mehdi Jabbari Nowghabi[d]

[a]M.A Student, Department of Accounting, Ferdowsi University of Mashhad, Mashhad, Iran.
[b]Department of Accounting, Ferdowsi University of Mashhad, Mashhad, Iran.
[c]Department of Accounting, Ferdowsi University of Mashhad, Mashhad, Iran.
[d]Department of Statistics, Ferdowsi University of Mashhad, Mashhad, Iran.

Abstract

Based on life cycle theory, firms have various characteristics in various stages of their life cycle and Since earnings quality and the quality of financial reporting in general are subjects that have attracted much attention and are the center of debate for investors, regulators as well as scholars in the recent years, this heightened attention to the subject of earnings quality is, in part, due to the wave of accounting scandals of the early 2000s so this present essay is mainly aimed at analyzing the effects of company's life cycle on earning quality of companies listed on the Tehran Stock Exchange. To do this study, financial information of 105 companies listed on the Tehran Stock Exchange during 2006 - 2012 (735 firm-years) examined. Given a lack of consensus about the best way to measure earning quality, it measured by two models (the Modified Jones(1995)model and Leuz et al., (2003) model). To test the hypotheses we used panel data analysis and Generalized Least Square (GLS) method. The results of the study indicated that earning quality is not influenced by firm's life cycle stages. In other words, the earning quality at each stages of the life cycle is not significantly different from each other.

Keywords: Firm's Life Cycle, Earning Quality, Leuz Model, The Modified Jones Model, Tehran Stock Exchange.

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Abstract

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1. Introduction

Financial reports are the most important output of an accounting system. The purpose of financial reporting is to provide the information which can be useful for business decisions (Schipper and Vincent, 2003). Earning is one of the main indexes in accounting, which always has attracted particular attention for different purposes such as investments, financial analysis, evaluation of companies' performance, and so on. Although the reported accounting earnings is a good guideline for future predictions and assessments, some limitations, such as caution and importance, has caused that financial analysts consider earnings quality as a better index for predictions and decisions. Therefore, the concept of earning quality has been proposed and studied in order to correct the measurements, improve the company performance evaluation, and solve the problems and shortcomings which are caused by timing and matching. Earning quality is a concept which has attracted serious attention among most of companies, financial analysts, and users of accounting information. Two important features can be pointed in the definition of earnings quality. The first feature is its usefulness in decision making and the second feature is the relation between earning quality and financial earning. This means that earning quality criteria in comparison with traditional conventional criteria is a more direct and more related index for predictions, resource allocation, and companies' financial performance assessment, and it improves the quality of financial reporting (Chatresahar et al., 2013). It seems that a decline in earnings quality can be potentially informative about the disclosure trend, threatening future cash flows and performance. Stock market returns contribute to our understanding of how exchange rates influence on corporate performance, competitiveness, and economic activity (Bailey et al., 2003). Examination of the accounting scandal and bankruptcy of giants such as Enron, WorldCom, Xerox and Parmalat in the U.S. and Tell one in Australia has led to the conclusion that these events mainly stemmed from earnings manipulation and artificial, poor quality income statements (Ghosh et al., 2010; Shen et al., 2007). Majority of directors in the mentioned companies made use of fraudulent means such as structuring and artificial transactions with related parties with the intention of earnings management, which downgraded earnings quality to a record low. Consequently, many shareholders lost their confidence (Wats and Zimmerman, 1990).On the other hand the results of the previous researches show that the reaction of capital market to accounting information in different periods of life cycle has had meaningful differences (Aharony & Yehuda, 2006). Life cycle theory suggests that a firm possesses different risk characteristics and different economic attributes across life cycle stages (Bixia, 2007). Economic theory divides a corporate life cycle into four stages: start-up, growth, maturity and decline or stagnation stage. These stages are discerned by corporate-specific attributes such as the degree of uncertainty that faces the corporate, its assets in place and its investment opportunities (Mueller, 1972; 1975; Myers, 1977).The life cycle theory is based on this assumption that economic enterprises like all other living creatures have life cycle too. These living systems in each stage of their life cycle show specific behavioral patterns of themselves in order to

dominate periodical problems confronting with or to transfer them into the next cycles. Some researchers have studied the effect of accounting information on a company's life cycle (Black, 1998; Jenkins, 2004). So in the following research, the effects of the company's life cycle on earning quality in accepted corporations in Tehran Stock Exchange is being tested.

2. Literature review

2.1. Theoretical bases of firm's life cycle

The concept of life cycle in recent decades is a term known in the accounting literature. All living organisms, including plants, animals and humans may follow all the curves life or the life cycle. These beings are born, grow, to reach old age and eventually die. The life cycle theory assumes that firms and enterprises, like all living creatures that are born, grow and die. In youth period (growth period) organizations are more flexible, but are often uncontrollable. With the increase of life, relationships may vary: controls increased and flexibility decreases. Finally, by aging (during Decline) control capability will be reduced. When an entity is able to control and flexible, it is stated that both the young and old can benefit. The condition known as developmental stage (Maturity Stage) is known (Adizes, 1989). A review of recent literature on the economic and management shows corporate life cycle disclosed four common stages: birth, growth, maturity, and decline and for it some models are presented. In the framework of these models, institutions and companies pursue specific policy at every stage of their economic life. This policy is reflected in corporate accounting information (Ghorbani, 2006).

2.1.1.   Start-Up Stage:

Usually at this stage the amount of assets (firm size) is at the low level, Cash flow from operating activities and profitability was low and Companies need to high liquidity for finance and realize growth opportunities. Rate on dividends in these companies is usually zero or the maximum rate 10%. The return on investment or return on adjusted investment relative to the weighted rate financing is often poor (Adizes, 1989).

2.1.2. Growth Stage:

At this stage, the size of the companies is more than emergence stage companies and growth in sales and earnings is higher than the emergence stage. Financial resources are more invested in productive assets, and the company has more flexibility in liquidity index. Companies' dividend ratio often fluctuates in the range of 10 % to 50 %. Return on investment or return on adjusted investment is often higher than funding costs weighted rate (Adizes, 1989).

2.1.3. Maturity Stage:

At this stage, corporate experience has stability in sales and the need for cash in most cases is supplied from domestic sources. The size of the company's assets is greater than the size of the assets of the company in growth stage. Dividend ratio of the companies often fluctuates in the range 50 % to 100%. Due to excess liquidity and reduce dependence on outside funding policy, return on investment or return on adjusted investment are often equal or more than funding costs weighted rate (Adizes, 1989).

2.1.4. Decline Stage:

At this stage, there is very little opportunity for growth, Indicators of profitability, liquidity and obligations have decreasing trend. The company has been very intensive and competitive conditions. Moreover, costs of financing from external sources are high, So that in most cases the adjusted investment returns and investment returns are lower than the rate financing.

2.2. Theoretical bases of earnings quality

The issue of earnings usefulness is of major importance to the financial information users since earnings are widely believed to be the premier information items provided in financial statements (Lev, 1989). Earnings quality and the quality of financial reporting in general are subjects that have attracted much attention and are the center of debate for investors, regulators as well as scholars in the recent years. This heightened attention to the subject of earnings quality is, in part, due to the wave of accounting scandals of the early 2000s (Hermanns, 2006). However, earnings quality has been a topic of increasing importance and interest especially after the colossal corporate collapses of Enron, WorldCom amongst others, which has put a big question mark on the financial reporting quality of the publicly listed companies in stock market (Giroux, 2004).

The theory of earnings quality was first posed by financial analysts and Stock Exchange agents. They inferred that the reported profit does not show the firms' profitability as it is imagined. They found out that analyzing firms' financial statements is a difficult task due to the different weak points in assessing accounting information. We should not solely consider the amount reported to announce the profitability in determining the firms' value, but should also consider the quality of the reported profit. By earnings quality, we mean the potential profit growth and the probable amount of realization of future profits. In other words, the value of a share does not depend solely on the profit of each firm share's profit in the current year and it depends on our expectations of our firm's future and future years' profitability and assurance coefficients compared with the future profit gains (Jahankhani, 1995).

Financial analysts generally consider the reported profit different from that of real profit. One of the reasons for it is profit manipulation by managers. Financial analysts try to assess the firms' profit perspective. Profit perspective refers to the desired and undesired net profit features' composition. Firms with repeatable accounting profit have a higher earnings quality in income statement compared with other firms. Thus, analysts can foretell firm's future profitability with more assurance capability (Esmaeeli, 2007).

The concept of earnings quality considers two characteristics for quality determination: 1) Profitability in decision-makingand 2) The relationship between earnings quality and economical profit. In other words, earnings quality is honest expression of the reported profit. That is a high earnings quality shows the usefulness of profit information for decision-making by the users and also it is more adjusted with economic profit (Ahammadpoor & Ahmadi, 2008).

Revsine (1999) considers a profit to be more qualified which is more consistent.

"Earnings quality" has several definitions in the accounting literature and there is no unified definition about it. Richardson & et al., (2001) introduced earnings quality as the

consistency degree of profit gain in future periods. Benish & Wagus (2002) consider earnings quality as consistency probability of current profit gain in the future. Penman & Zhang (2002) identify earnings quality as the ability to show future profits. Hodge (2003) introduced earnings quality as the difference degree of the reported net profit of the real profit. Michael et al., (2003) consider earnings quality as a degree of relationship between firm's previous profits and its future cash flow. White (2003) states that earnings quality is the amount of conservancy employed in the reported profit. Schipper and Vincent (2003) view earnings quality in relation to Hicksian income. They define earnings quality as the extent to which reported earnings faithfully represent Hicksian income, including the change in net economic assets other than transactions with owners. Chan et al., (2004) view earnings quality as the degree to which reported earnings reflect operating fundamentals. Kirschenheiter and Melumad (2004) indicate that earnings are of higher quality when they are more informative and closer to the long run value of the firm. Schooler (2004) describes earnings quality in a form of a relationship between promissory items and cash flows.

One of the reasons of the diversity in the descriptions above is the fact that earnings quality can consist of different approaches by different researchers. Thus, earnings quality is a complicated issue and there has not any concise description presented for it.

Table1. Framework and criteria for the profit quality assessment

Assessment criteria	Relevant components
1. Time set of profit specifications	*1. Profit sustainability* *2. Predictability* *3. variability*
2. Relations between profit, accrual figures and cash flows	*1. Cash proportion produced by operational activities of profit* *2. Change of all accrual figures* *3.Prediction of unusual accrual figures by means of accounting variables*
3. Quality specifications of theoretical framework (FASB)	*Pertaining to, reliability*
4. Effectiveness in decision-making	*Reserved relations between the prediction and judgment about the statements reporting and profit quality Amount of benefit information suppliers will make of their prediction and judgment (reversed relations between profit quality and the change of accounting standards efficiency)*

2.3.   An overview of the previous studies

Blake (1998) investigated the incremental explanatory power of valuation models based on accruals compared to the valuation models based on cash flows. His findings show that the explanatory power of valuation models based on accruals and cash flows have significant

different with each other at different stages of the life cycle. Valuation models based on cash flows are more relevant in growth and decline stages and in maturation stage, the opposite is true.

Jenkins et al., (2004) investigated the relative impacts of key components of earnings change in explaining the value relevance of earnings across various life-cycle stages of the company. They investigated whether firms in various life-cycle stages take various strategic actions: change in sales was emphasized in the growth and mature stages, while in later stages, profitability was emphasized. They reported that when firms were in the growth stage, the value-relevance of change in sales is relatively greater than that of change in profitability.

Saghafi and Kordestani (2004) concluded that investors in Tehran Stock Exchange do not pay attention to earning quality of companies in reacting to dividend changes and unexpected earning.

Khajavi & Nazemi (2005)review relationship between earnings quality and stock returns, with an emphasis on the role of accruals in 96 companies belongs to Tehran Stock Exchange during the years 1998 to 2003 results shows that the average return on stocks and companies are not affected by the accruals and related components. In other word it's not acceptable that there is meaningful relationship between reported average efficiency of firms with the lowest and highest accrual.

Aharony et al., (2006) reported that stage the explanatory power of factors based on cash flows was greater in growth and in maturity and decline stages the explanatory power of accruals-based factors is higher.

Ghorbani (2006) investigated the relationship between earnings and cash flows with firm value in the context of the life cycle. His findings indicate that in the stages of growth and decline, relationship between cash flows with firm value is stronger than the relationship between profits with firm value and at maturation stage, the opposite is true.

Dehdar (2007) investigated the effect of the life cycle on the incremental explanatory power of earnings components and cash flows. His findings show that in the growth and maturation stages, valuation patterns based on earnings and accruals have more incremental explanatory power compared to the patterns based on operating

Osta and Qytasy (2012) were examined the effect of business life cycle on discretionary accruals. They finally concluded that the use of discretionary accruals is different at different stages of the life cycle; this means that use of discretionary accruals in the growth stage is more than maturity and decline stage and the use of this item in growth stage is less than decline stage.

3. Purpose and hypotheses of the study

A review of literature related to financial accounting shows that the life cycle of the company, an important determinant for a large number of decisions of the company including accounting method, politics, profits, contracts, compensation and capital structure and financial decisions. In addition, it has been found that the life cycle of a company on the impact of accounting information (Black, 1998). Therefore, in this study it

is argued that the connections between the life cycle of the company and earning quality. Thus, in this study, the following hypotheses proposed.

The below hypotheses have suggested achieving to the purpose of the study:
H_1: Earning quality is significantly different throughout the firm's life cycle.
H_2: Earning quality of the growth firms is significantly different from mature firms.
H_3: Earning quality of the growth firms is significantly different from decline firms.
H_4: Earning quality of the mature firms is significantly different from decline firms.

4.   Research methodology and variable measurement

4.1. Corporate Life Cycle (independent variable):

Previous experimental studies concerning accounting have shown that the firm's financial qualities are not the same in different terms of their life cycle and have relation with each term. Anthony's and Ramesh's findings (1992) show that there is a significant relation between the shares price and accounting data (Such as profit growth percent, cost of capital percent and cash profit division percent) during the life cycle. Here the firms are divided into growth, maturing and decline terms by the four variables; according to Park and Chen's (2006) methodology as follows:
1. Primarily the sale growth, cost of capital, divisible profit proportion and age of the firms are calculated for each company.
2. Firm years are divided into five categories on the basis of each variable of the four ones and according to the statistical category from one to five by virtue of the following table.
3. Then a composite score is gained for each company year and classified by virtue of following conditions in one of the terms (Growth, maturing or decline):
a. If total score is between 16–20; it is in growth term.
b. If total score is between 9–15; it is in mature term.
c. If total score is between 4–8; it is in decline term.

Table2. Life cycle model (Score Assignment)

Categories	AGE	Sale growth(SG)	Cost of capital(CE)	Divisible profit(DPR)
First	5	1	1	5
Second	4	2	2	4
Third	3	3	3	3
Fourth	2	4	4	2
Fifth	1	5	5	1

Where:
$SGit = [1 - (Saleit / Saleit-1)] \times 100$
$DPRit = (DPSit / EPS it) \times 100$
$CEit = (increase (decrease) in fixed assets during the period/ firm market value) \times 100$
AGE = the difference of 't' year and the year when the firm was established.

Here the life cycle was defined in three forms of growth, maturing and decline (The appearance term was ignored) because the transaction (Purchase and sale) was inactive or the new firms did not participated in the Tehran stock exchange.

4.2. Earnings quality (dependent variable)

It is important to measure the quality of earnings reported by businesses (Dechow, 1994; Dechow et al., 1998). Since earnings consist of two different parts, i.e. cash flow and accruals, the cash part is objective and cannot be manipulated by the managers, while the accrual part is very discretionary and manageable. The management can easily manipulate accrual items for its own interests, thus reducing the quality of earnings. Moreover, it can confuse other stakeholders, for they will not be able to evaluate the firm's performance (Dechow and Dichev, 2002). Since there are different definitions of earnings quality, there are also different measures of earnings quality (Bradshaw et al., 1999). In this study, the earnings quality was calculated using the modified Jones model and Leuz model.

4.2.1. The modified Jones model suggested by Jones (1991) and modified by Dechow et al. (1995). For this, first, total accruals calculated as follows:

TA= OI – CFO   (1)

Where:

TA = Total Accrual, CFO = Cash Flow from Operation, OI = Operating Income

In continue, we fitted a regression model between "total accruals" and "change in sales" and "net assets" in the period 2006-2012 (Jones coefficients event period).

$$\frac{TA_{j,t}}{A_{j,t-1}} = k_1 \frac{1}{A_{j,t-1}} + k_2 \frac{\Delta REV_{j,t}}{A_{j,t-1}} + k_3 \frac{PPE_{j,t}}{A_{j,t-1}} + \varepsilon_{j,t} \quad (2)$$

$TA_{j,t}$ = Total Accrual for firm j in year t

$\Delta REV_{j,t}$ = changes in revenue of firm j in year t and t-1

$PPE_{j,t}$ = Property, Plant and Equipment of firm j in year t

$A_{j,t-1}$ = Asset for firm j in year t-1

K1, K2 and K3 = Jones model coefficients and $\varepsilon_{j,t}$ = disturbance or error term.

Normal accruals (NA) are obtained from the equation (3) as follows:

$$NA_{j,t} = k_1 \frac{1}{A_{j,t-1}} + k_2 \frac{(\Delta REV_{j,t} - \Delta AR_{j,t})}{A_{j,t-1}} + k_3 \frac{PPE_{j,t}}{A_{j,t-1}} \quad (3)$$

In this function, K1, K2 and K3 are the estimated coefficients obtained from model (2). Then abnormal accruals (AA) are calculated as this way:

$$AA_{j,t} = \frac{TA_{j,t}}{A_{j,t-1}} - NA_{j,t} \quad (4)$$

Absolute value of abnormal accruals (calculated in the function (4)) represents earnings quality.

$$EQJ_{j,t} = \left| AA_{j,t} \right| \quad (5)$$

Larger values of $\left| AA_{j,t} \right|$ represents lower earnings quality and vice versa.

4.2.2. Earnings quality of view Leuz et al., (2003)

The second perspective focuses on the variability of earnings. The central core of this measure is formed from this idea that: because managers believe that investors prefer growth in earnings, so they are interested in smoothing earnings flow. In other words, they try to manage earnings in the form of smoothing its flow. In this point of view, if earnings

of company fluctuate continuously, then it is obvious to conclude that obtained earnings of that company has not required quality. Leuz et al. (2003) formulated variability of earnings through dividing the standard deviation of operating income on standard deviation of operating cash flow. In this model, the less proportion indicates the lower quality of earnings. This view model is as follows:

$$EQL_{i,t} = \frac{Sd.\,OI_{i,t}}{Sd.\,CFO_{i,t}}$$

EQL=in terms of earnings quality of view Leuzet al.,
SDOI = standard deviation of operating profit for 5 periods.
SDCFO = standard deviation of operating cash flow for 5 periods.

5. Methods of data analysis and hypothesis testing
5.1. Sample selection

The sample is drawn from the population manufacturing companies listed on the Tehran Stock Exchange during 2006-2012. In this research census method has been used. In order to choose our statistical units, those firms having the following characteristics have been chosen as our statistical units:

1-These companies are listed in Tehran Stock Exchange before the year 2006.
2-Their financial period has not changed during the studied period.
3-Their information such as financial statements and notes are available.
4-The companies should be profitable.

According to the above conditions, 105 company (735 years - companies) during 2006and 2012 were selected and in those 82, 577 and 76 years - companies were in growing, mature and decline stages respectively. The data needed for analysis are gathered from audited financial statements and decisions taken in annual general meetings. Necessary information was extracted by referring to financial reports, general meeting reports, and the stock exchange database.Independent and dependent variables and primary processing of data were carried out by Excel.Finally, SPSS and R software are used to perform statistical analysis and panel data analysis are used to investigate the objectives also the significance level for testing the hypothesis is 95 percent.

5.2. Descriptive statistics
The descriptive statistics of variables for105 firms in during7 years are presented in Table 3.

Table 3. Summary of descriptive statistics

decline stage				growth stage				
Std.	*Median*	*Mean*	*N*	*Std.*	*Median*	*Mean*	*N*	*Variables*
35.52	*95.85*	*98.19*	*76*	*26.84*	*54.08*	*53.40*	*82*	*dpr*
15.77	*-0.31*	*-1.99*	*76*	*115.68*	*35.06*	*48.93*	*82*	*SG*
14.45	*-1.86*	*-4.92*	*76*	*33.31*	*7.80*	*16.36*	*82*	*CEV*
10.07	*47*	*43.97*	*76*	*11.14*	*22*	*25.22*	*82*	*AGE*
409180	*2363/5*	*25854*	*76*	*217951*	*13898*	*52123*	*82*	*TA*

0.42	0.40	0.47	76	0.39	0.57	0.64	82	NA
0.44	-0.42	-0.45	76	0.46	-0.47	-0.55	82	AA
1541000	113000	417000	76	731500	90800	334000	82	OI
1399000	82800	391000	76	689300	45300	282000	82	CFO
Total				**mature stage**				
45.53	79.88	75.24	735	47.32	80.25	75.32	577	dpr
50.73	15.49	20.51	735	34.38	15.37	19.43	577	SG
19.42	1.10	3.73	735	16.26	1.04	3.08	577	CEV
12.7814	35	33.90	735	12.38	35	33.80	577	AGE
567197	7801	53051	735	617550	8136	56765	577	TA
0.57	0.40	0.49	735	0.60	0.38	0.48	577	NA
0.94	-0.36	-0.38	735	1.03	-0.35	-0.35	577	AA
1250000	99300	396000	735	1267000	98700	402000	577	OI
1112000	69400	343000	735	1119000	76400	346000	577	CFO

As it shown, the results of descriptive statistics for each variable have been given separately for each of life cycle stages. The main central indicator is mean, which shows the balance point and gravity center of distribution and it is a good indicator for showing the centrality of data. For example, the mean of dpr, SG, CEV, AGE, TA, NA, AA, OI, CFO in growth stage are 53.4, 48.93, 16.36, 25.22, 52123, 0.64, -0.55, 334000, 282000. The mean of dpr, SG, CEV, AGE, TA, NA, AA, OI, CFO in maturity stage are 75.32, 19.43, 3.08, 33.8, 56765, 0.48, -0.35, 402000, 346000 and The mean of dpr, SG, CEV, AGE,TA, NA, AA, OI, CFO in decline phase are 98.19, -1.99, -4.92, 43.97, 25854, 0.47, -0.45, 417000, 391000. Companies in growth stage have the highest sales growth and CEV and companies in the decline stage have the lowest sales growth and CEV. Companies in growth stage have the lowest AGE and companies in the decline stage have the highest AGE. Median is another central indicator which shows social condition. As is evident in Table 3 median of AGE variable in growth stageis 22 which show that half of data is less than quantity and other half of data is more than this quantity. Dispersion parameters is a criterion for determining the dispersion of each other or their dispersion proportion to mean standard deviance is one of the most important dispersion parameters the quantity of this parameter for SG variable in maturity stage equals 34.38.

5.2.   Testing the hypotheses

5.3.1. Hypothesis testing using The Modified Jones modelto assessing the quality of earnings
5.3.1.1. Identify the appropriate models for hypotheses testing

As can be seen from the results of Table 4, To determine the appropriate method for estimating the model, first F-Limer test is performed to select one of the common effects and fixed effects methods and, if necessary Hausman test (to select one of the fixed effects and random effects methods) and other methods are performed to select the appropriate method. According to the results presented, appropriate method for testing hypotheses (using The Modified Jones model) is GLS method.

Table4. Determine an appropriate model for hypotheses testing

F Limer test for individual effects	df$_1$ = 104 df$_2$ = 628	**F = 14.2421**	**p-value < 2.2e-16**
F test for individual effects(With year factor)	df$_1$ = 98 df$_2$ = 628	**F = 15.0753**	**p-value = < 2.2e-16**
Hausman Test	df = 2	**chisq = 0.0086**	**p-value = 0.9957**
Lagrange Multiplier Test - (Breusch-Pagan)	df = 1	**chisq=939.0512**	**p-value = < 2.2e-16**
Lagrange Multiplier Test - time effects (Breusch-Pagan)	df = 1	**chisq = 2.3267**	**p-value = 0.1272**
Lagrange Multiplier Test - two-ways effects (Breusch-Pagan)	df = 2	**chisq=941.3779**	**p-value < 2.2e-16**
studentizedBreusch-Pagan test	df = 8	**BP = 3.7821**	**p-value = 0.8762**
Durbin-Watson test		**DW = 0.8034**	**p-value < 2.2e-16**

5.3.1.2. The results of hypothesis testing (using the modified Jones model)
The results of hypothesis testing using the modified Jones model, as follows:

Table5. The results of hypothesis testing using the modified Jones model

Generalized least squares fit by REML				
Model: eq(J)~ factor(life.code) + factor(year)				
Coefficients:				
	Value	*Std.Error*	*t-value*	*p-value*
Intercept	*0.5766232*	*0.1197715*	*4.814360*	*0.0000*
Factor(maturity phase)	*-0.0887556*	*0.1055309*	*-0.841039*	*0.4006*
Factor(decline phase)	*-0.1009233*	*0.1433185*	*-0.704189*	*0.4815*
factor(year)85	*-0.0504485*	*0.1224359*	*-0.412041*	*0.6804*
factor(year)86	*0.0421702*	*0.1226881*	*0.343719*	*0.7312*
factor(year)87	*0.0403543*	*0.1225101*	*0.329396*	*0.7420*
factor(year)88	*-0.0147521*	*0.1234019*	*-0.119545*	*0.9049*
factor(year)89	*-0.0269159*	*0.1235966*	*-0.217772*	*0.8277*
factor(year)90	*0.0567448*	*0.1228940*	*0.461738*	*0.6444*

According to the test results, p-value for maturity stage relative to growth stage and decline stage relative to growth stage is more than 0.05. Therefore, the first, second and third sub-hypothesis are not approved at the error level of 5%. This means that earning quality (With the modified Jones model) isn't significantly different throughout the firm's life cycle.
5.3.2. Hypothesis testing (using Leuzmodel to assessing the quality of earnings)
5.3.2.1. Identify appropriate models for hypotheses testing
As can be seen from the results of Table 6, To determine the appropriate method for estimating the model, first F-Limer test is performed to select one of the common effects

and fixed effects methods and, if necessary Hausman test (to select one of the fixed effects and random effects methods) and other methods are performed to select the appropriate method. According to the results presented, appropriate method for testing hypotheses (using the Leuz model) is GLS method.

<div align="center">

Table 6.Determine an appropriate model for hypotheses testing

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F Limer test for individual effects	$df_1 = 104$ $df_2 = 628$	**F = 3.5504**	**p-value < 2.2e-16**
F test for individual effects(With year factor)	$df_1 = 98$ $df_2 = 628$	**F = 3.6848**	**p-value < 2.2e-16**
Hausman Test	$df = 2$	**chisq = 0.0812**	**p-value = 0.9602**
Lagrange Multiplier Test - (Breusch-Pagan)	$df = 1$	**chisq=155.0254**	**p-value < 2.2e-16**
Lagrange Multiplier Test - time effects (Breusch-Pagan)	$df = 1$	**chisq = 0.0933**	**p-value = 0.76**
Lagrange Multiplier Test - two-ways effects (Breusch-Pagan)	$df = 2$	**chisq=155.1188**	**p-value < 2.2e-16**
studentizedBreusch-Pagan test	$df = 8$	**BP = 8.8375**	**p-value = 0.3562**
Durbin-Watson test		**DW = 0.9454**	**p-value < 2.2e-16**

5.3.2.2. The results of hypothesis testing (using the Leuz model)
The results of hypothesis testing using the Leuz model, as follows:

<div align="center">

Table7. The results of hypothesis testing using the Leuz model

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Generalized least squares fit by REML Model: eq(L) ~ factor(life.code) + factor(year)			
Coefficients:			
	Value	**Std.Error**	**t-value**	**p-value**
Intercept	0.8178353	0.08488546	9.634574	0.0000
factor(maturity phase)	0.0728358	0.07479276	0.973834	0.3305
factor(decline phase)	-0.0293804	0.10157385	-0.289251	0.7725
factor(year)85	0.0420346	0.08677376	0.484416	0.6282
factor(year)86	-0.0533897	0.08695249	-0.614010	0.5394
factor(year)87	-0.0295929	0.08682633	-0.340829	0.7333
factor(year)88	-0.0975878	0.08745838	-1.115820	0.2649
factor(year)89	-0.1256664	0.08759642	-1.434606	0.1518
factor(year)90	-0.1098001	0.08709843	-1.260644	0.2078

According to the test results, p-value for maturity stage relative to growth stage and decline stage relative to growth stage is more than 0.05. Therefore, the first, second and third sub-

hypothesis are not approved at the error level of 5%. This means that earning quality (With the Leuz model) is not significantly different throughout the firm's life cycle.

5. Discussion and Conclusion

Today, with limitations that exist in the reported accounting profits, investors still know earnings quality a better indicator of how they allocate their resources. When accounting profit has quality that it has continuity and predictability. If profit has high quality, shareholders can select stocks for investment with confidence (Shorvarzy, 2008). According to the theory of life cycle, financial characteristics of a company affected by the stage of the life cycle that company is located in it. In fact, companies are following specific policy by considering each stage of its economic life cycle. These policies are reflected in the company's accounting information. Therefore, the main objective of this study is to investigate the effect of company's life cycle on earnings quality in accepted corporations in Tehran Stock Exchange (TSE). For this purpose, a sample of 105 companies during the years 2006-2012 is used. Also the Modified Jones' model (1995) and Luez et al., model's (2003) have been used to calculate earnings quality. The results show that earning quality in Tehran Stock Exchange is not significantly different throughout the firm's life cycle. With a confidence of 95%, we can draw this conclusion that the firm's life cycle cannot have any influence on earning quality. The obtained results of the study are in accordance with Monem (2007) and Harasani (2010). They concluded that the quality of corporate profits will follow a random step model and Process for earnings quality over time does not exist. It seems in Iran, manager's compensation is based on some measures of performance, so managers manipulated the profit also we can say this could be due to a lack of investors' ability to analyze financial statements, including profit and quality of the items and have not sufficient knowledge of the earnings quality in companies on the Tehran Stock Exchange.

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