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Investigating the impact of life cycle on operational cash flows of the listed companies in Tehran stock exchange

Farzaneh Heidarpoor*, Zahra Tavangar, Mojtaba Rezaei Roshan

Department of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran

Abstract: The main purpose of the study is to investigate the impact of life cycle on operational cash flows of the listed companies in Tehran stock exchange. In this research, 74 listed companies in Tehran stock exchange were selected as statistical population during 2008 to 2012 and were analyzed using multiple regression model. In 95% confidence level, the research's findings indicate that firm life impacts on operational cash flow, as there is a positive and significant association between life cycle and its properties with operational cash flow.

Key words: Life cycle; Operational cash flow; Tehran Stock Exchange

1. Introduction

As all living creatures have life cycle, born, grow and die, firms also have life cycle as legal personality which are differentiated based on time of each period and its performance. Corresponding to a firm growth and its maturity, cash flows and their risk amount may follow a predictable pattern (Vakili Fard, 2012). Cash flows patterns are systematically changed during firms' life cycles (Diksen, 2012). Cash is one of the essential resources of firms. Cash capacity and cash requirements are also vital factors in surviving the life of a firm. As FASB in its international standards notes that "related information to cash flows of a business unit is useful in providing a base for assessing the capacity of that unit to create cash and needs of that for applying them for financial statements users. Furthermore, economic decisions made by users are required to examine the business unit in order to create cash, timing and confidence. Inherent cash flow can be divided into 3 groups: operational cash flows; non-operational cash flows; financial cash flows. Operational cash flows are related to the operation of a firm and are important because showing cash amount which a firm gains during its activity (Kioso, 2007).

In his research, however, Tanatae (2011) examined free cash flow hypothesis and life cycle theory in Thailand. The results indicated that there is a significant association free cash flow, life cycle stages and dividend policy. In his research about dividend policy and life cycle theory, Wang (2009) examined dividend policy and life cycle. The results demonstrated that dividend payout in newer business units with high growth capacity but low profitability may lead to pay earning per share to cash dividend. Karami & Omrani (2009) investigated the relation between the impacts of firm life cycle and conservatism on firm value. Their results showed that investors have highlighted operational net assets and abnormal operational profit of conservative firms, the issue is right when the stages wane.

In this research, we try to answer the following questions:

- Is there any relationship between firm life cycle and operational cash flow?
- Is there any relationship between firm life cycle indices and operational cash flow?

2. Research methodology

2.1. Main hypothesis

Firm life cycle impacts on operational cash flow.

2.2. Secondary hypotheses

- Firm size impacts on operational cash flow.
- Firm age impacts on operational cash flow.
- Capital costs impact on operational cash flow.
- Firm sale growth impact on operational cash flow.

2.3. The research's statistical population and sample

The statistical population of the research includes all listed companies in Tehran stock exchange during a five period year from 2008 to 2012. Sample volume is consisted of financial statement of all listed companies in Tehran stock exchange in which:

- They should be listed in Tehran stock exchange until the year of 2008.
- Their stock should be continuously traded in stock exchange during 2008 to 2012.
- Their financial year ends in 19/3/…

* Corresponding Author.

- They should not be loss firms for two consecutive periods.
- They should not have been changed their activities or fiscal year during the studied years.
- Their financial information should be available.
- They should have not been a part of banks and financial institutions (investment companies, intermediary companies, holding companies, banks and leasing), because their financial disclosure and strategic basics structure are different. Additionally, they should be active in investment.

331 companies were selected among 421 cases based on omissive method and finally 74 firms were selected through sampling method as statistical samples.

2.4. Operational definition of the research's variables

Main hypothesis 1: firm life cycle impacts on operational cash flow.

$$CFO\text{-}CF_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} * R_{it} + \beta_4 LIFE\text{-}CYCLE_{it} + \beta_5 LIFE\text{-}CYCLE_{it} * D_{it} + \beta_6 LIFE\text{-}CYCLE_{it} * R_{it} + \beta_7 LIFE\text{-}CYCLE_{it} * D_{it} * R_{it} + \varepsilon_{it}$$

$CFO\text{-}CF_{it}$= Operational cash flow of firm i during t period which is extracted from operational activities of cash flows.

R_{it}= Stock return of firm i in year t = price difference of each share at the end of each period and share price at the beginning of each period + adjustments of share incomes (includes profit, bonus share) ÷ share price at the beginning of the period.

$$r = \frac{P_t - P_{t-1} + D_1}{P_{t-1}}$$

r: Rate of return

P_{t-1}= Share price at the beginning of a period

P_t= Share price at the end of a period

D_1= Incomes and benefits of shares belong to a period.

D_{it}= It is a dummy variable which determine 0 and 1 based on the following conditions: when firm's return is negative (if bad news heard), it is determined 1, otherwise 0 (if good news heard). According Anthony & Ramesh (1992) model, size, age, capital costs and sale growth are considered as firm's life cycle indices that are obtained by firm's life cycle formula:

Firstly, Z_SCORE of firm's life cycle variables (size, age, growth and capital costs) using the below formula, then it is put into Anthony & Ramesh (mentioned in hypothesis 1) and its effects on operational cash flow are examined.

$$Z_X = (X - M)/\sigma x$$

X= The variables of firm's life cycle (firm size, capital costs, sale growth and age)

M= The average of each variables of firm's life cycle (firm size, capital costs, sale growth and age)

σx= Standard deviation of each variable of the firm's life cycle

$LIFE\text{-}CYCLE_{it}$= Firm's life cycle

$$Z\text{-}SCORE = (Z\text{-}SALE\text{-}GR) - (Z\text{-}AGE) + (Z\text{-}CAPEX) - (Z\text{-}SIZE) = LIFE\text{-}CYCLE_{it}$$

SALE-GROWTH=SALE_GR= sale growth= sale in t year divided into sale in year t-2

SIZE= firm size= Natural logarithm of assets at the end of the firm's period.

AGE= Firm age= The period in which a firm is active in stock exchange.

CAPEX= Capital costs= (Additives (decrease) fixed effects during a period/ firm's stock market value) ×100. Regarding Anthony & Ramesh (1992) and according to the firm's life cycle variables include size, age, capital costs and sale growth. It is possible to put the variables into the main model (mentioned in main hypothesis) in place of the firm's life cycle ($LIFE\text{-}CYCLE_{it}$) in order to obtain the following secondary hypotheses:

2.5. Secondary hypothesis

1. Firm size impact on operational cash flow.

This model is obtained through putting firm size in place of operational cash flow into the model 1:

$$CFO\text{-}CF_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} * R_{it} + \beta_4 SIZE_{it} + \beta_5 SIZE_{it} * D_{it} + \beta_6 SIZE_{it} * R_{it} + \beta_7 SIZE_{it} * D_{it} * R_{it} + \varepsilon_{it}$$

SIZE= firm size= natural logarithm of assets at the end of the period.

R_{it}= Stock return of firm i in year t = price difference of each share at the end of each period and share price at the beginning of each period + adjustments of share incomes (includes profit, bonus share) ÷ share price at the beginning of the period.

$$r = \frac{P_t - P_{t-1} + D_1}{P_{t-1}}$$

r: Rate of return

P_{t-1}= Share price at the beginning of a period

P_t= Share price at the end of a period

D_1= Incomes and benefits of shares belong to a period.

D_{it}= It is a dummy variable which determine 0 and 1 based on the following conditions: when firm's return is negative (if bad news heard), it is determined 1, otherwise 0 (if good news heard).

2. Firm age impact on operational cash flow.

This model is obtained through putting firm age in place of operational cash flow into the model 1:

$$CFO\text{-}CF_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} * R_{it} + \beta_4 AGE_{it} + \beta_5 AGE_{it} * D_{it} + \beta_6 AGE_{it} * R_{it} + \beta_7 AGE_{it} * D_{it} * R_{it} + \varepsilon_{it}$$

AGE= The period in which a firm is active in stock exchange.

R_{it}= Stock return of firm i in year t = price difference of each share at the end of each period and share price at the beginning of each period + adjustments of share incomes (includes profit, bonus share) ÷ share price at the beginning of the period.

$$r = \frac{P_t - P_{t-1} + D_1}{P_{t-1}}$$

r: Rate of return

P_{t-1}= Share price at the beginning of a period

P_t= Share price at the end of a period

D_1= Incomes and benefits of shares belong to a period.

D_{it}= It is a dummy variable which determine 0 and 1 based on the following conditions: when firm's return is negative (if bad news heard), it is determined 1, otherwise 0 (if good news heard).

3. Firm's capital costs impact on operational cash flow.

This model is obtained through putting firm's capital costs in place of operational cash flow into the model 1:

$$CFO\text{-}CF_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} * R_{it} + \beta_4 CAPEX_{it} + \beta_5 CAPEX_{it} * D_{it} + \beta_6 CAPEX_{it} * R_{it} + \beta_7 CAPEX_{it} * D_{it} * R_{it} + \varepsilon_{it}$$

CAPEX= Capital costs= (Additives (decrease) fixed effects during a period/ firm's stock market value) ×100.

R_{it}= Stock return of firm i in year t = price difference of each share at the end of each period and share price at the beginning of each period + adjustments of share incomes (includes profit, bonus share) ÷ share price at the beginning of the period.

$$r = \frac{P_t - P_{t-1} + D_1}{P_{t-1}}$$

r: Rate of return

P_{t-1}= Share price at the beginning of a period

P_t= Share price at the end of a period

D_1= Incomes and benefits of shares belong to a period.

4. Firm's sale growth impacts on operational cash flow.

This model is obtained through putting firm's sale growth in place of operational cash flow into the model 1:

$$CFO\text{-}CF_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 R_{it} + \beta_3 D_{it} * R_{it} + \beta_4 SALE\text{-}GR_{it} + \beta_5 SALE\text{-}GR_{it} * D_{it} + \beta_6 SALE\text{-}GR_{it} * R_{it} + \beta_7 SALE\text{-}GR_{it} * D_{it} * R_{it} + \varepsilon_{it}$$

SALE-GROWTH= sale in year t divided into sale in year t-2

R_{it}= Stock return of firm i in year t = price difference of each share at the end of each period and share price at the beginning of each period + adjustments of share incomes (includes profit, bonus share) ÷ share price at the beginning of the period.

$$r = \frac{P_t - P_{t-1} + D_1}{P_{t-1}}$$

r: Rate of return

P_{t-1}= Share price at the beginning of a period

P_t= Share price at the end of a period

D_1= Incomes and benefits of shares belong to a period.

D_{it}= It is a dummy variable which determine 0 and 1 based on the following conditions: when firm's return is negative (if bad news heard), it is determined 1, otherwise 0 (if good news heard).

2.6. Data analysis method

The first section of the current research examines descriptive statistics in the form of frequency tables (minimum, maximum, mean, standard deviation), and EVIEWS 7 is used to confirming or rejecting the research hypotheses due to data are panel, in the second section.

3. Research's results

Normality test (Jarque-Bera)

Table 1: Normality test of error terms

Pattern	Number	Jarque-Bera statistics	Probability
Error terms	74	0.254362	0.714

* 5% error level

Regarding the Table 1, due to Jarque-Bera statistics is equal with 0.254 and small, it is not in

critical area and the hypothesis is not rejected. As well, since probability amount is higher than 0.05 (i.e. 0.714), the normality of hypothesis is not rejected.

3.1. Durability test of the studied variables (augmented Dicky-fuller)

Table 2: Cumulative unit root test on variables by Dicky-Fuller

Variables	Probability	statistics
Operational cash flow	0.0012	-4.441758
Firm size	0.0015	-4.396158
Firm age	0.0002	-6.225415
Capital costs	0.0009	-5.269632
Sale growth	0.0015	-4.115489
Life cycle	0.0011	-4.271849

* 5% error level

Regarding to the Table 2, examining the obtained statistics amounts and their acceptance probability indicate that null hypothesis is rejected in terms of non-durability and all variables of the study are durable.

3.2. Examination of heteroskedasticity

Table 3: The results of heteroskedasticity using modified Wald statistics

Description	Chi-square	Probability
Modified Wald statistics	-8452.19	0.6627

* 5% error level

Regarding Table 3, due to Chi-square of conservative, aggressive and moderate strategy is not significant in 5% error level; homogeneity of variance assumption is accepted.

3.3. Significance test of fixed effects method

3.3.1. F statistics test

Table 4: Results of F statistics test

Description	Statistics amount	Freedom degree	Probability
Cross-section F	1.906325	73	*0.004
Cross-section Chi-square	139.002745	73	*0.000

* 5% error level

3.3.2. Hausman test

Table 5: Results of Hausman test

Description	Statistics amount	Freedom degree	Probability
Cross-section F	7.488745	11	*0.009

* 5% error level

Regarding Table 5, the results of the two tests (Hausman and F) were less than 5%, so fixed effects method should be used in the related regression model.

3.4. Test the main hypothesis

Table 7: Regression test of the main hypothesis

Variable	Impact factor	Estimation of deviation	t-statistics	Significance level
C	0.125	0.418	2.417	*0.000
D_{it}	-2.269	0.518	1.954	*0.012
R_{it}	0.147	0.334	1.336	0.073
$D_{it}*R_{it}$	-0.225	0.495	1.478	*0.035
LIFE-CYCLE	1.331	0.317	2.069	*0.011
LIFE-CYCLE*D_{it}	1.249	0.336	1.447	0.064
LIFE-CYCLE*R_{it}	0.047	0.521	2.336	*0.000
LIFE-CYCLE*$D_{it}*R_{it}$	2.166	0.569	2.158	*0.006

* 5% error level

Table 8: Explanation and significance ability of whole model

R			ANOVA	
Coefficient of determination	Adjusted coefficient of determination	DW	F	Sig.
0.347	0.338	1.556	14.025	**0.000

** 1% error level

Regarding the Table 7, since Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Due to F value test is significant (14.025) in error level less than 0.01, it can be concluded that panel research regression model which composed of independent, control and dependent variables is a suitable model and independent and control changes can describe operational cash flow changes. The adjusted coefficient of determination is equaled with 0.338 and indicating that 33.8% of all dependent variables changes are depended on independent and control variables of this model. The impact coefficient of B_7 model (LIFE-CYCLE*D_{it}*R_{it}) is 2.166; indicating firm's life cycle has positive and direct impact on operational cash flow. On the other hand, regarding significance level of t-statistics (B_7 model LIFE-CYCLE*D_{it}*R_{it}) , H_0 is rejected with 95% confidence due to error level is less than 5%, and it can be stated that there is significant relation between firm's life cycle and operational cash flow. The research's regression model is defined as follows:

$$CFO\text{-}CF_{it} = 0.125 - 0.269D_{it} + 0.147R_{it} - 0.225D_{it}*R_{it} + 0.331LIFE\text{-}CYCLE_{it} + 0.249\ LIFE\text{-}CYCLE_{it}*D_{it} + 0.047LIFE\text{-}CYCLE_{it}*R_{it} + 0.166LIFE\text{-}CYCLE_{it}*D_{it}*R_{it} + \varepsilon_i$$

3.5. Test of first secondary hypothesis

Table 9: Regression test of the first secondary hypothesis

Variable	Impact factor	Estimation of deviation	t-statistics	Significance level
C	0.271	0.418	1.746	*0.036
D_{it}	-2.169	0.362	-2.036	*0.007
R_{it}	0.351	0.384	1.518	0.053
$D_{it}*R_{it}$	-1.227	0.249	-1.004	0.092
$SIZE_{it}$	1.014	0.527	2.392	*0.000
LIFE-CYCLE$*D_{it}$	0.374	0.552	2.157	*0.003
LIFE-CYCLE$*R_{it}$	0.115	0.194	1.118	0.085
LIFE-CYCLE$*D_{it}*R_{it}$	3.362	0.349	2.347	*0.000

* 5% error level

Table 10: Explanation and significance ability of whole model

R			ANOVA	
Coefficient of determination	Adjusted coefficient of determination	DW	F	Sig.
0.487	0.479	1.932	14.178	**0.000

** 1% error level

Regarding the Table 9, since Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Due to F value test is significant (14.178) in error level less than 0.01, it can be concluded that panel research regression model which composed of independent, control and dependent variables is a suitable model and independent and control changes can describe operational cash flow changes. The adjusted coefficient of determination is equaled with 0.479 and indicating that 47.9% of all dependent variables changes are depended on independent and control variables of this model. The impact coefficient of B_7 model ($SIZE_{it}*D_{it}*R_{it}$) is 3.362; indicating firm's life cycle has positive and direct impact on operational cash flow. On the other hand, regarding significance level of t-statistics (B_7 model $SIZE_{it}*D_{it}*R_{it}$) , H_0 is rejected with 95% confidence due to error level is less than 5%, and it can be stated that there is significant relation between firm size and operational cash flow. The research's regression model is defined as follows:

$$CFOCF_{it}=0.2712.169D_{it}+0.351R_{it}+1.227D_{it}*R_{it}+1.014SIZE_{it}+0.374SIZE_{it}*D_{it}+0.115SIZE_{it}*R_{it}+3.362SIZE_{it}*D_{it}*R_{it}+\varepsilon_{it}$$

3.6. Test of the second secondary hypothesis

Table 11: Regression test of the second secondary hypothesis

Variable	Impact factor	Estimation of deviation	t-statistics	Significance level
C	0.175	0.518	2.014	*0.011
D_{it}	-0.336	0.362	-1.702	*0.035
R_{it}	2.251	0.241	1.469	0.066
$D_{it}*R_{it}$	-0.198	0.544	-2.154	*0.007
AGE_{it}	1.362	0.492	2.362	*0.000
$AGE_{it}*D_{it}$	1.117	0.488	1.532	0.057
$AGE_{it}*R_{it}$	0.205	0.357	1.748	*0.036
$AGE_{it}*D_{it}*R_{it}$	2.391	0.501	2.115	*0.002

* 5% error level

Regarding the table 11, since Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Due to F value test is significant (13.574) in error level less than 0.01, it can be concluded that panel research regression model which composed of independent, control and dependent variables is a suitable model and independent and control changes can describe operational cash flow changes.

The adjusted coefficient of determination is equaled with 0.296 and indicating that 29.6% of all dependent variables changes are depended on independent and control variables of this model. The

impact coefficient of B_7 model ($AGE_{it}*D_{it}*R_{it}$) is 2.391; indicating firm age has positive and direct impact on operational cash flow.

On the other hand, regarding significance level of t-statistics (B_7 model $AGE_{it}*D_{it}*R_{it}$), H_0 is rejected with 95% confidence due to error level is less than 5%, and it can be stated that there is significant relation between firm age and operational cash flow.

Table 12: Explanation and significance ability of whole model

R		ANOVA		
Coefficient of determination	Adjusted coefficient of determination	DW	F	Sig.
0.302	0.296	1.748	13.547	**0.000

** 1% error level

The research's regression model is defined as follows:

$$CFO\text{-}CF_{it}=0.175-0.336D_{it}+2.251R_{it}$$
$$0.198D_{it}*R_{it}+1.362AGE_{it}+1.117AGE_{it}*D_{it}+0.205AGE_{it}*R_{it}+2.391AGE_{it}*D_{it}*R_{it}+\varepsilon_{it}$$

3.7. Test of the third secondary hypothesis

Table 12: Regression test of the third secondary hypothesis

Variable	Impact factor	Estimation of deviation	t-statistics	Significance level
C	0.185	0.514	2.036	*0.009
D_{it}	-1.316	0.362	-1.748	*0.035
R_{it}	0.224	0.336	1.992	*0.011
$D_{it}*R_{it}$	-2.047	0.254	-1.326	0.073
$CAPEX_{it}$	1.258	0.437	2.147	*0.007
$CAPEX*D_{it}$	0.316	0.502	1.551	0.053
$CAPEX_{it}*R_{it}$	0.111	0.291	1.926	*0.012
$AGE_{it}*D_{it}*R_{it}$	3.281	0.461	2.371	*0.000

* 5% error level

Table 13: Explanation and significance ability of whole model

R		ANOVA		
Coefficient of determination	Adjusted coefficient of determination	DW	F	Sig.
0.365	0.351	1.646	14.628	**0.000

** 1% error level

Regarding the table 12, since Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Due to F value test is significant (14.628) in error level less than 0.01, it can be concluded that panel research regression model which composed of independent, control and dependent variables is a suitable model and independent and control changes can describe operational cash flow changes. The adjusted coefficient of determination is equaled with 0.351 and indicating that 35.1% of all dependent variables changes are depended on independent and control variables of this model. The impact coefficient of B_7 model ($CAPEX_{it}*D_{it}*R_{it}$) is 3.281; indicating capital costs has positive and direct impact on operational cash flow. On the other hand, regarding significance level of t-statistics (B_7 model $CAPEX_{it}*D_{it}*R_{it}$) , H_0 is rejected with 95% confidence due to error level is less than 5%, and it can be stated that there is a relation between capital costs and operational cash flow. The research's regression model is defined as follows:

$$CFO\text{-}CF_{it}=0.185-1.316D_{it}+0.224R_{it}-2.047D_{it}*R_{it}$$
$$+1.258CAPEX_{it}+0.316CAPEX_{it}*D_{it}+0.111CAPEX_{it}*R_{it}+3.281CAPEX_{it}*D_{it}*R_{it}+\varepsilon_{it}$$

3.8. Test of third secondary hypothesis

Regarding the table 14, since Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Due to F value test is significant (14.114) in error level less than 0.01, it can be concluded that panel research regression model which composed of independent, control and dependent variables is a suitable model and independent and control changes can describe operational cash flow changes. The adjusted coefficient of determination is equaled with 0.402 and indicating that 40.2% of all dependent variables changes are depended on independent and control variables of this model. The impact coefficient of B_7 model ($SALE\text{-}GR_{it}*D_{it}*R_{it}$) is 1.362; indicating sale growth has positive and direct impact on operational cash flow.

Table 14: Regression test of the fourth secondary hypothesis

Variable	Impact factor	Estimation of deviation	t-statistics	Significance level
C	2.165	0.514	0.219	*0.000
D_{it}	-0.251	0.291	1.654	*0.042
R_{it}	1.336	0.345	1.274	0.087
$D_{it}*R_{it}$	-2.014	0.269	2.516	*0.000
SALE-GR_{it}	0.157	0.641	2.015	*0.012
SALE-$GR_{it}*D_{it}$	1.292	0.335	1.547	0.055
SALE-$GR_{it}*R_{it}$	0.145	0.281	1.965	*0.012
SALE-$GR_{it}*D_{it}*R_{it}$	1.362	0.546	2.114	*0.008

* 5% error level

Table 15: Explanation and significance ability of whole model

R			ANOVA	
Coefficient of determination	Adjusted coefficient of determination	DW	F	Sig.
0.418	0.402	1.784	14.114	**0.000

** 1% error level

On the other hand, regarding significance level of t-statistics (B_7 model SALE-GR_{it} *D_{it}*R_{it}) , H_0 is rejected with 95% confidence due to error level is less than 5%, and it can be stated that there is a relation between sale growth and operational cash flow. The research's regression model is defined as follows:

$$CFO\text{-}CF_{it}=0.219-0.251D_{it}+1.336R_{it}-2.014D_{it}*R_{it}+0.157SALE\text{-}GR_{it}+1.292SALE\text{-}GR_{it}*D_{it}+0.145\ SALE\text{-}GR_{it}*R_{it}+1.362SALE\text{-}GR_{it}*D_{it}*R_{it}+\varepsilon_{it}$$

4. Conclusions and recommendations

The purpose of the study is to investigate the impact of life cycle on operational cash flow of the listed companies in Tehran stock exchange. The results of main hypothesis indicated that there is a positive and significant relation between firm's life cycle and operational cash flow. Since firms enter into growth and development phases, demand rate is increased for products and services and they are encountered with rapid growth in sale field. Therefore, this causes increased firms' sales and finally leads to entering into operational cash flow, indicating the positive association between firm's life cycle and operational cash flow. As well, the results of secondary hypotheses demonstrated that there is a positive and significant relation between firm size, firm age, capital costs and sale growth with operational cash flow. This result are consistent with researches of Watz (2003), Sad Mohammadi (1998), Feltham & Olsson (1995), Bolo et al, (2012), Sharifi Ghotb Abadi (2007), Richardharrey & Wats (2007), but they are inconsistent with the results of Tanataei (201), Bleak (1998), Anthony & Ramesh (2001), Ball & Kotawry (2007).

Based on the research's results:

1-It is recommended to potential and actual investors and other stakeholders to invest in firms with higher life cycle because whatever the firm's life cycle is higher (size, age, capital costs and sale growth), operational cash flow is higher too and investors may face with lower risk opportunities.

2-It is recommended to banks, financial and credit institutions and other related organizations to provide financing resources for companies which have higher operational cash flows than other companies, because these firms have higher operational cash flow than others and their default risk is lower in these firms.

3-It is recommended to firms' managers to pay attention to firm's life cycle as they want to make a decision, because it is the effective factor in firm's operational cash flow, and managers can plan working capital policy, financing resources policy and etc. based on firm's life cycle.

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