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THE EFFECT OF AGENCY COSTS ON FINANCIAL FLEXIBILITY AND LABOR INVESTMENT INEFFICIENCY IN THE LIFE CYCLE STAGES

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ABSTRACT

One of the important hypotheses in the literature of positive theories is that managers seek to increase their interests. Based on this, it is likely that he used the agency fee to achieve this goal. Therefore, this research seeks to investigate the impact of agency costs on financial flexibility and the inefficiency of human capital investment in the life cycle stages of companies. In this research, the number of 148 companies from the Tehran Stock Exchange in the period of 2014-2021 has been examined. In order to test the hypotheses, panel, pooled and logistic regression models were used, the findings of the research show. Agency cost in the whole period (growth, maturity and decline) has a significant negative impact on financial flexibility and a significant positive impact on the inefficiency of human resources investment.

KEYWORDS: *Agency Costs, Financial Flexibility, Human Capital Investment Inefficiency, Life Cycle.*

1. INTRODUCTION

According to the equilibrium theory, companies determine the optimal amount of their cash by establishing a balance between the benefits and costs of maintaining cash. In fact, companies adjust their optimal level of cash by determining the importance of the final costs and the final benefits of holding cash. The important point of this theory is that there is an optimal level of cash for companies in which the management makes a decision based on a cost-benefit analysis to keep cash (Jani et al., 2004).According to the theory of financing hierarchy, companies prefer financing from internal sources to external financing that is sensitive to information. This theory is based on the assumption that people inside the company are more aware than the shareholders. If the resources inside the company are not enough to finance the optimal investment plans and information asymmetry is also hindered, managers may be forced to abandon profitable projects.

Since the initial research by Berle and Means (1932) who raised the issues arising from the separation of ownership from management and delegating the right of control to managers, most of the studies conducted in the field of separation of ownership from management have been based on agency theory and this The theory has been proposed as the dominant theory (Roberts et al., 2005).The formation of an agency relationship causes the owner to delegate a degree of authority and decision-making power to the agent so that the agent can use this authority to maximize the owner's wealth. But, due to the difference in the utility function of the owner and agent, each of them seeks to maximize their own utility. Therefore, managers probably have the motivation and ability to act in line with increasing their personal interests. As a result, the actions and decisions

of the managers do not necessarily maximize the wealth and welfare of the owners. In addition, it is assumed that there is an information asymmetry between the owner and the agent. Therefore, the agency relationship is accompanied by conflicting interests that occur as a result of different information goals between the owner and the agent, and the combination of these two characteristics probably prevents the increase of the owners' wealth (Day, 2008). Accordingly, according to the role of agency costs on financial flexibility and the inefficiency of human capital investment, in this research, in the following sections, theoretical foundations and study backgrounds, hypotheses, methodology, findings and results- The results of the research are presented.

2- Theoretical Framework and Research Background

2-1- The Theoretical Framework of the Research

Investing in various matters by companies has always been considered as one of the important ways to develop companies and prevent stagnation and backwardness. In the meantime, the limitation in resources has caused that in addition to the development of investment, increasing the efficiency of investment is of great importance (Thaqafi and MotamediFazel, 2019).Conceptually, investment efficiency is considered to identify, finance and implement projects with positive net present value, and investment inefficiency is ignoring investment opportunities with positive net present value (underinvestment) or choosing projects with net present value. Negative (overinvestment) is defined (Garcia Lara and Osma, 2010). In inefficient markets, investment and financing decisions are not separate (Myers and Majlov, 1984).In fact, the inefficiency of the capital market due to information asymmetry and agency costs can cause the rejection of projects with positive net present value and transitory capital in projects with negative present value. While the agency problem will cause managers to abuse free cash flows to increase their interests and invest in projects with negative net present value, which ultimately leads to overinvestment (Jensen, 1986).

The quality of reporting reduces the conflict of interests between managers and shareholders and thus agency costs and leads to the correct selection of projects. High-quality accounting information increases investment efficiency by eliminating information asymmetry between managers and foreign investors (Bidel and Hilary, 2006). Organizational agency costs from Jensen and McLing (1976) and Jensen (1986) show that managers have high investment incentives, so they are likely to keep some projects with negative net recoverable value hidden to maximize their personal benefits. If managers with high investment in unprofitable projects seek self-interest and want to terminate them, the increase in cash assets, due to savings from terminating unprofitable projects, from the decrease in cash assets, due to the lack of savings in profitable projects, even If a negative cash asset is imposed, it will be less. Due to binding project contracts, denial of bad news, and organization costs, a company facing negative cash flow may not immediately close all bad projects. Consequently, the negative cash flow sensitivity of cash can only be maintained when a firm has positive cash flow. As Riddick and Whited (2009) believe, cash flow sensitivity is negative when a company faces a positive cash flow, but positive when a company faces a negative cash flow. On the other hand, companies with financial constraints, compared to unlimited companies, are less likely to invest in new projects or finance existing unproductive projects because it is difficult to find external financial sources. Jensen (1986), believes that managers of companies that face significant agency costs act opportunistically and engage in non-value activities. For this reason, when excess cash is created as a result of the company's activities, managers tend to misuse said funds. This may be done through inappropriate investments and lead to inefficiency of the investment. Investing more than the limit has destructive consequences at the level of the company and at the level of the economy of a country, and the problem of investing more than the limit reduces the efficiency of investment at the level of the company and inflames

the economy and severely damages the interests of the shareholders and leads to the development Macroeconomic appearance is one of the main issues in large companies (Yang and Jiang, 2008).

The company life cycle theory assumes that companies and economic enterprises have a life cycle curve like all living things that are born, grow and die. On the one hand, in each stage of the life cycle, they face special problems of that stage, and on the other hand, they face special issues and problems during the transition from one stage to another. Basically, business units face many problems in their movement process, which are mainly not able to be solved by internal forces, and professional intervention from outside the company is inevitable to solve them (Sarmi, 2019).The life cycle of the company is one of the concepts that has entered various fields related to the company during the last few decades (Yan, 2010). Also, according to the life cycle theory, companies in different stages of the life cycle have certain indicators and behaviors in terms of finance and economy; This means that the financial and economic characteristics of a company are influenced by the stage of the life cycle in which the company is located. The results of previous research also indicate that the reaction and response of capital markets in different stages of the life cycle are significantly different (Karami and Omrani, 2019).The main content of these studies is based on the existence of various stages in the life cycle of the company and the unique characteristics of each stage from the other stage (Kalungi and Silola, 2008). Based on this, investigating the impact of agency costs on the financial flexibility and inefficiency of companies' investments is necessary and necessary considering the current conditions of the financial markets which are associated with high volatility and is a useful step towards completing the literature related to this issue in the economic environment related to Iran's capital market takes off. According to the research of Tanatawi (2011), companies in the growth stage have many investment opportunities, and companies in the maturity stage face a lack of profitable projects for investment, and as a result, in these companies, the agency influence is likely to be greater. In general, the main focus of this study is to examine the impact of agency costs on financial flexibility and the inefficiency of human capital investment in the stages of the company's life cycle.

2-2- Research Background

Carlos Lopez et al. (2016), in a research, analyzed the effect of financial helplessness on the investment behavior of companies. The results of the research show that the effect of financial helplessness on investment varies depending on the investment opportunities available to companies. Therefore, companies that have less flexibility for investment have a tendency to invest less. While the investment behavior of companies that have more opportunities in facing problems is not different from healthy companies. Penalova et al. (2018) in a research titled accounting conservatism and investment efficiency of companies found that the more conservative a company is, the more investment it makes and the more debt it incurs in investing less than it needs. These effects are more observed in companies that have more information asymmetry. Conservatism is also associated with reduced overinvestment, even for non-transparent investments such as research and development.

Essur and Enis (2019) investigated the relationship between the auditor's expertise and the quality of accounting information and investment efficiency. They found that the quality of accounting information helps to reduce overinvestment. Also, the auditor's expertise significantly helps to improve investment efficiency and reduces the problem of underinvestment. In addition to this, the quality of accounting information and audit expertise are two mechanisms that are effective in increasing investment efficiency. The quality of accounting information has a positive effect on investment efficiency for companies whose auditor is an expert in the industry.

Lai et al. (2020) investigated the effect of manager overconfidence and the effectiveness of investment in human resources. The findings indicate that companies with CEOs with high self-

confidence have lower investment efficiency in human resources.

Bae et al. (2020) investigated the relationship between capital expenditures and investment efficiency in different stages of the life cycle. The research findings showed that there is a negative and significant relationship between capital expenditures and investment efficiency. Also, in different stages of the life cycle, the relationship between capital expenditures and investment efficiency is negative, the highest amount is related to the growth stage and the lowest amount is related to the decline stage.

Hyunmin and Sambuk (2022) investigated the impact of economic uncertainty on the relationship between corporate governance and human capital investment efficiency. They found that the conflict of interests and information asymmetry between managers and owners increases the risk of ineffective decisions, especially in the field of investment in human resources, which is reduced by strengthening the supervisory levers. Also, economic uncertainty has a negative impact on this relationship and reduces the intensity of the relationship.

In a research, Elahai and Iskandar (2017) investigated the effect of financial reporting quality and debt maturity on types of investment inefficiencies. Their findings show that the quality of financial reporting of companies in a low investment position increases their willingness to invest and thus improves capital efficiency. These companies are established. Lower debt maturity also has a similar effect on the investment efficiency of these companies. In addition, the effect of financial reporting quality on the reduction of underinvestment is stronger for firms with shorter debt maturities.

Feizi and Hassanzadehbaradaran (2018) investigated the impact of financial flexibility and financing restrictions on profit management. The research results show that financial flexibility has a negative effect on real and artificial profit management. Also, the results showed that financing restrictions have a positive effect on artificial profit management, but it did not show a significant effect on real profit management (Mehrani and Sami, 2019).

Mehrani and Samii (2019) investigated the effect of conditional conservatism on the efficiency of investment in human resources. In this research, the statistical population was all companies admitted to the Tehran stock market, from which 1,449 companies were selected between 2008 and 2016. Based on the estimated results, a negative and significant relationship between conservatism and the efficiency of investment in human resources was obtained. The findings indicated that conservatism reduces inefficient decisions in the human resources market through the reduction of information asymmetry.

Zinali (2019) investigated the mediating role of investment efficiency on the relationship between conservatism and performance. The results of the research hypotheses test indicate that there is a direct and significant relationship between conservatism and the performance of companies listed on the Tehran Stock Exchange, and investment efficiency has a direct and significant effect on the relationship between conservatism and the performance of companies listed on the Tehran Stock Exchange (Platouni and Khazai, 2021).

Aflatoni and Khazaei (2021) studied the effect of the quality of accruals and the quality of disclosure on the inefficiency of investment in human resources. For this purpose, a sample consisting of 107 companies admitted to the Tehran Stock Exchange was examined between 2002 and 2013. The findings of the research show that by increasing the quality of accruals and the quality of disclosure, the amount of over-investment and under-investment in human resources will decrease and companies will hire a more optimal number of employees.

3- Research Hypotheses

According to the theoretical foundations presented and to answer the research questions, the

following hypotheses are proposed:

Hypothesis (1) Agency costs have an effect on the financial flexibility of companies during the company's life cycle.

1-1- In the growth period, agency costs have an effect on the financial flexibility of companies.

2-1- In the maturity period, agency costs have an effect on the financial flexibility of companies.

3-1- In the period of decline, agency costs affect the financial flexibility of companies.

Hypothesis (2) agency costs have an effect on the inefficiency of companies' human resources investment during the company's life cycle.

1-2- In the growth period, agency costs have an effect on the inefficiency of companies' human resources investment.

2-2- In the maturity period, agency costs have an effect on the inefficiency of companies' human resources investment.

2-3- In the period of decline, agency costs have an effect on the inefficiency of companies' human resources investment.

4- Research Method

In terms of its purpose, the present research is considered as applied research. The goal of applied research is to develop applied knowledge in a specific field. In other words, applied research is directed towards the practical application of knowledge. Also, in terms of data collection, this research is descriptive and correlational in terms of type. Because it examines the degree of dependence of the dependent variable and the independent variable on each other. The research method is inductive, in which the theoretical foundations and background of the research are collected through the library, articles and the Internet, and in order to reject or prove the research hypothesis by applying appropriate statistical methods, inductive reasoning is used to generalize the results. In this research, to test the hypothesis, the financial statements of the banks will be used every year. It should be noted that SPSS software (version 21) and Eviews (version 9) were used for statistical analysis.

4-1- Hypothesis Testing Model

Considering that in this research, the impact of agency costs on financial flexibility and the inefficiency of human capital investment in the stages of the life cycle has been investigated, therefore, the method of measuring the variables and the research model is based on the research of Hyunmin and Sambuk (2022) and Marwa and Anis. (2017) is as follows:

First hypothesis test model:

$$FFP_{it}= \beta_0+\beta_1\ agency\ costs\ _{it} + \beta_2 Leverage\ _{i,t} +\beta_3 Size\ _{i,t} +\beta_4 ROA\ _{i,t-1}+\beta_5\ cash\ _{i,t}+\ \varepsilon_{i,t}$$

The second hypothesis test model:

$$IE_{it}= \beta_0+\beta_1\ agency\ costs\ _{it} + \beta_2 Leverage\ _{i,t} +\beta_3 Size_{i,t} +\beta_4 ROA_{i,t-1}+\beta_5 cash_{i,t}+\varepsilon_{i,t}$$

It should be noted that the above statistical model should be fit for the entire life cycle, maturity, growth and decline per year - research companies.

TABLE (1) NAMES AND SYMBOLS OF RESEARCH VARIABLES

Variable	symbol	Variable	symbol
Financial flexibility	*FFP*	company size	*Size*
Labor investment inefficiency	*IE*	assets return rate	*ROA*
agency costs	*agency costs*	cash flow	*Cash*
Financial Leverage	*Leverage*	error sentence	ε

4-1-1- Independent Variable

The independent variable in this research is agency cost. In this research, according to the research of Dukas et al. (2000) and McKnight and Weir (2008), which Noroosh et al. (2008) have used, we also use it. In this model, we first calculate Tobin's Q index for all sample companies and divide it into two groups above and below the median, then we assign zero to the companies whose Tobin's Q index is above the median and one to the companies in the second group. After that, by multiplying two factors of the absolute value of free cash flow and Tobin's Q index (zero and one), we get the agency cost of the company. As a result, a high product of this product indicates a high agency cost and a low one indicates a low agency cost. Below is how to calculate free cash flow based on Len and Poulsen (1989) model.

Free Cash Flow:

$FCF_{i,t} = (INC_{i,t} – TAX_{i,t} – INTEP_{i,t} – CSDIV_{i,t})$

$FCF_{i,t}$ = Free cash flow of company i in year t

$INC_{i,t}$ = Operating profit before depreciation of company i in year t

$TAX_{i,t}$ =Total tax paid by company i in year t

$INTEP_{i,t}$ =Interest paid by company i in year t

$CSDIV_{i,t}$ =Common stock dividends paid by company i in year t

4-1-2- Dependent Variables

The dependent variables in this research are financial flexibility and the inefficiency of human capital investment, which are measured as follows.

Financial Flexibility: To identify companies with financial flexibility, companies that have a leverage ratio lower than the average of the statistical population in three consecutive years are classified as companies with financial flexibility (Marchika and Mara, 2007). The amount of debt used to finance a company's assets is called the leverage ratio. It is obtained through the ratio of total debt to total assets of the company.

The Inefficiency of Human Capital Investment: in this research, the model of Jang et al. (2014) is used to calculate this variable as follows.

$$NET\_HIRE_{it} = \beta_0 + \beta_1 SALES\_GROWTH_{it-1} + \beta_2 SALES\_GROWTH_{it} + \beta_3 \Delta ROA_{it} + \beta_4 \Delta ROA_{it-1} + \beta_5 ROA_{it} + \beta_6 RETURN_{it} + \beta_7 SIZE_{it} + \beta_8 QUICK_{it-1} + \beta_9 \Delta QUICK_{it-1} + \beta_{10} \Delta QUICK_{it} + \beta_{11} LEV_{it-1} + \varepsilon_{it}$$

where NET_HIRE is the amount of investment in human resources (percentage of changes in the total number of human resources) SALES_GROWTH growth in sales revenue (changes in sales revenue) ROA return on assets (the ratio of net profit to total assets in the first period) ΔROA changes in return on assets RETURN on shares (Equivalent to the end price of the period minus the beginning price of the stock plus cash profit minus the shareholders' cash contribution divided

by the beginning price), SIZE, company size (the natural logarithm of the company's market value), QUICK ratio (the ratio of cash and short-term investments to liabilities Current) AQUICK Changes in instantaneous ratio, LEV financial leverage (ratio of long-term liabilities to total assets of the first period) is defined.
In the above model, it is assumed that the changes in human resources (investment in human resources) should be a function of the company's economic situation (explained by independent variables) and everything that is estimated by this model is the optimal amount. It is an investment in human power and its excess or less shows the inefficiency of investment in human power Therefore, the level of inefficiency of the model is determined by subtracting the values estimated by this model for each year of the company, and changes in excess of that indicate inefficiency. According to Jang et al. |) indicates the inefficiency of human capital investment. Disruption components have a positive sign, indicating over-investment in human resources, and a negative sign indicates under-investment in human resources (Hyunmin and Sambok, 2022).

4-1-3- Control Variables

The control variables in this research are as follows:

Financial leverage: the ratio of total debt to total assets of company i in year t

Firm size: natural logarithm of total assets of firm i in year t

Return on assets: The ratio of net profit of company i in year t to total assets in year t.

Net cash flow: The ratios of operating cash flow of company i in year t to total assets in year t.

4-1-4- Modifier Variable

The modulating variable is the life cycle of the company. In this research, Antony and Ramesh (1992) used four variables in their research to separate companies into life cycle stages: sales growth, capital expenditures, dividend ratio and age (life) of the company. Have done In this research, in order to separate the companies into life cycle stages (growth, maturity and decline), using the four mentioned variables and according to the methodology of Park and Chen (2006), it is done as follows (Karami and Omrani, 2019).

First, the value of each of the variables of sales growth, capital expenditures, dividend ratio and age (life) of the company is calculated for each company-year. Year- companies are divided into five classes based on each of the four mentioned variables and using statistical quintiles, which according to table (3-3) score between 1 and They get 5.Then, for each company-year, a composite score is obtained, which is classified in one of the stages of growth, maturity and decline according to the following conditions: A- If the total scores are between 16 and 20, in the stage of growth B- If the total scores are between 9 and 15, he is in the maturity stage. C- If the total scores are between 4 and 8, it is in the decline stage.

$SG_t = [(SALE_t - SALE_{t-1}) / (SALE_{t-1})]\times 100$

$CEV_t = (CE_t / VALUE_t)\times 100$

$DPR_t = (DPS_t / EPS_t)\times 100$

AGE = CYEAR – FYEAR

SGt = sales growth

CEVt = change in capital expenditures that is obtained from changes in fixed assets of the current year compared to the previous year.

DPRt = dividend yield ratio

AGet= company age

SALESt = sales in year t

CEt = capital expenditure in year t

VALUEt = market value of equity plus book value of liabilities

long term in year t

DPSt = dividend per share

EPSt = earnings per share

CYEAR= current year in calculations

FYEAR = year of establishment of the company

It should be mentioned that in this research, due to the inactivity of the transaction (buying and selling) or the non-stock exchange of emerging companies, the life cycle is defined as three stages of growth, maturity and decline, and the stage of emergence is omitted. In addition, in order to determine the lifespan of the companies in this research, it is assumed that the companies were not acquired or merged during the study period. This is important because of preventing the removal of the company's age variable due to the creation of a new accounting and reporting personality after graduation.

TABLE (2) COMPANY DIVISION QUINTILES

Pentacles	company Life (AGE)	Sales growth (SG)	Dividend earnings Ratio (DPR)	Capital Expenditure (CEV)
first five	5	1	5	1
second fifth	4	2	4	2
third fifth	3	3	3	3
fourth fifth	2	4	2	4
fifth quintet	1	5	1	5

5- Society and Statistical Sample

The statistical population of this research includes the companies accepted in the Tehran Stock Exchange; these companies are tested in the period of 2014 to 2021. Has been:

1. To comply with their comparability, the financial year of the companies should end at the end of March every year.

2. During the time period of the research, they have not stopped their activities and have not changed their financial period.

3. All the information needed by companies for research should be available.

4. Do not belong to banks and financial institutions (investment companies, financial intermediation, holding and leasing companies).

6- Research Findings

6-1- Descriptive Statistics of Research Variables

The results of the descriptive analysis of research variables are presented in table (3).

TABLE (3) DESCRIPTIVE STATISTICS RESULTS OF RESEARCH VARIABLES

Variable	Mean	Median	Max.	Min.	STD	Skewness	Kurtosis
IE	0.075	0.064	0.877	0.000	0.125	0.611	2.027
agency costs	0.027	0.000	0.591	0.000	0.048	1.579	5.750
Leverage	0.622	0.615	4.002	0.046	0.279	1.530	3.423
SIZE	14.912	14.041	19.492	10.166	1.445	0.723	2.242
ROA_T_1	0.096	0.088	0.631	-1.063	0.140	-0.567	2.458
CASH	0.114	0.100	0.642	-0.460	0.128	0.408	2.354
LC	Year - companies in decline: 131 Year - companies in maturity: 911 Year- companies in growth period: 142						
FFP	Year - companies with financial flexibility: 443 Year - companies without financial flexibility: 741						

According to table (3), the number of company-year observations based on balanced composite data is 1184 observations (148 companies and 8 years). According to the descriptive statistics, the above indices can be divided into central indices, dispersion and other indices, where the central indices are mean and median indices, dispersion indices are standard deviation indices and other indices are The index is maximum, minimum, skewness and elongation. In short, the average financial leverage shows that the statistical sample companies have provided 62.2% of the debt part and the rest from the equity part for their capital structure. This case can be due to two reasons. The first reason: statistical sample companies have a high credit rating in terms of financing. The second reason is that probably providing capital through equity is more binding. Regarding the negative skewness coefficient of some variables, it can be said that this indicates the existence of skewness to the right and the tendency of these variables to have smaller values. Also, the positiveness of the coefficients of elongation indicates that it is higher than the normal distribution and the data are around the mean is centered.

6-2- Normality Test of Dependent Variables of The Research

Since in conducting this research in order to estimate the parameters of the model, the ordinary least squares method is used and this method is based on the assumption that the dependent variables of the research have a normal distribution and its non-normal distribution leads to exceeding the assumptions of this method to estimate the parameters. Can be done, in this study, this issue is investigated through the Kolmogorov-Smirnov (K-S) test.

TABLE (4) THE RESULTS OF EXAMINING THE NORMALITY OF THE DISTRIBUTION OF DEPENDENT VARIABLE

Variable	K-Stest results				
	Negative	Positive	Std.	Mean	k-z statistic
IE	0.075	0.125	0.877	0.000	1.147
Sig					0.117

According to the table above, after the normality test, the significance level of the Z statistic of the KS test for the dependent variable of the inefficiency of human resources investment has increased to above 0.05, so the H0 hypothesis that the distribution of this variable is normal is accepted and it is telling. That the variable of inefficiency of human resources investment has a normal distribution, therefore parametric statistical methods are used to test the hypotheses related to the

said variable. It should also be mentioned that the normality test was not taken for the dependent variable of financial flexibility, because considering that this variable is qualitative, it is obvious that it is not normal, therefore, non-parametric statistical methods are used to test the hypotheses related to the dependent variable of financial flexibility.

6-3- Unit Root Test (Manai) Of Research Variables

In this research, the generalized Dickey-Fuller (ADF) test was used for the Manney test. The results of this test are presented in table (5).

TABLE (5) RESULTS OF THE UNIT ROOT TEST

Sig	t statistic	Interrupt count	Variable
IE	0	-32.306	0.000
agency costs	0	-33.598	0.000
Leverage	0	-21.895	0.000
SIZE	0	-12.567	0.000
ROA_T_1	0	-19.974	0.000
CASH	0	-30.896	0.000

According to the results presented in the table above, all research variables have a confidence level of 95%.

6-4- The Results of the Research Hypothesis Test

The results of the default test and the regression test are as follows.

6-4-1- The Results of White's Statistics for Research Hypotheses

One of the important issues that we deal with in econometrics is the issue of heterogeneity of variance. Variance heterogeneity means that in estimating the regression model, the values of the error sentences have unequal variances. If the significance level of the White statistic is higher than the accepted error level, we are not faced with variance heterogeneity, but if the significance level of the White statistic is lower than the accepted error level, we are facing the problem of variance heterogeneity. The method of least squares is adjusted.

TABLE (6) THE RESULTS OF F-WHITE STATISTICS FOR RESEARCH HYPOTHESES

Hypotheses	The value of the statistic	Significance level
Hypotheses (2)	7.234	Prob. 0.000
Hypotheses (2-1)	2.625	Prob. 0.000
Hypotheses (2-2)	7.731	Prob. 0.000
Hypotheses (2-3)	0.263	Prob. 0.000

6-4-2- Godfrey Statistic Results For Research Hypotheses

One of the important issues we deal with in econometrics is serial autocorrelation. In statistics, the autocorrelation of a random process describes the correlation between the values of the process at different points in time as a function of two times or time differences. Considering that the significance level of Godfrey's statistic is higher than the acceptable error level, the regression does not have the problem of serial autocorrelation.

TABLE (7) THE RESULTS OF GODFREY'S STATISTIC FOR RESEARCH HYPOTHESES

Hypotheses	The value of the statistic	Significance level
Hypotheses (2)	2.106	Prob. 0.122
Hypotheses (2-1)	3.506	Prob. 0.052
Hypotheses (2-2)	1.112	Prob. 0.893
Hypotheses (2-3)	1.314	Prob. 0.731

6-4-3- The Results of Estimating the VIF Statistic for Research Hypotheses

In order to check that there is no strong collinearity problem between the research variables, the VIF statistic is used. According to the table below, the value of the VIF statistic (variance inflation factor) for all variables is smaller than 5, indicating that there is no strong collinearity problem between the research variables.

TABLE (8) RESULTS OF ESTIMATION OF VIF STATISTIC FOR INDEPENDENT AND CONTROL VARIABLES

Variable	whole era	Growth period	Puberty period	decline period
agency costs	1.034	1.032	1.046	1.037
Leverage	1.470	1.299	1.563	1.384
SIZE	1.027	1.011	1.033	1.074
ROA_T_1	1.670	1.319	1.824	1.402
CASH	1.188	1.064	1.234	1.176

6-4-4- The Results of the First Hypothesis Test

Hypothesis (1) Agency costs have an effect on the financial flexibility of companies during the company's life cycle.

1-1- In the growth period, agency costs have an effect on the financial flexibility of companies.

2-1- In the maturity period, agency costs have an effect on the financial flexibility of companies.

3-1- In the period of decline, agency costs affect the financial flexibility of companies.

TABLE (9) MODEL ESTIMATION RESULTS FOR THE FIRST RESEARCH HYPOTHESIS

Variable	whole era		Growth period		Puberty period		decline period	
	Regression coefficient	Sig	Regression coefficient	Sig	Regression coefficient	Sig	Regression coefficient	Sig
agency costs	-2.409	0.009	-8.551	0.001	-3.937	0.008	-2.851	0.028
Leverage	-15.452	0.000	-11.255	0.000	-15.981	0.000	-19.801	0.000
SIZE	-0.223	0.003	-0.406	0.034	-0.179	0.043	-0.138	0.615
ROA_T_1	5.553	0.000	7.742	0.013	5.386	0.000	0.981	0.809
CASH	0.520	0.559	-2.731	0.303	0.744	0.459	1.763	0.612
C	10.759	0.000	10.716	0.001	10.512	0.000	11.973	0.003

LR Test Prob.	879.007 (0.000)	118.746 (0.000)	683.675 (0.000)	115.264 (0.000)
HL Prob.	10.426 (0.205)	4.407 (0.818)	10.528 (0.198)	2.617 (0.956)
Andrews Statistic Prob.	11.383 (0.202)	6.712 (0.795)	11.255 (0.191)	5.178 (0.885)
McFadden R-SQ	0.561	0.668	0.565	0.646

Based on the results of the models test for the first hypothesis presented in table (9), the significance level of the LR statistic (0.000) is lower than the accepted error level (5%) and the whole regression model is significant. The results of the goodness of fit test (HL and Andrews tests) also show that the mentioned regression model does not have a good fit. But due to the low probability level (Prob.) of the Z statistic from the accepted error level, for the β_1 coefficient, the test results show that in the period of growth, maturity and decline agency costs have a negative and significant impact on the financial flexibility of companies because The significance level of the independent variable (agency costs) is below 5%.Among the control variables, financial leverage in the whole period, growth, maturity and decline has a significant negative effect on the financial flexibility of companies. In addition, the size of the company in the whole period, growth and maturity has a significant negative effect on the financial flexibility of the companies, and finally, the rate of return on assets in The whole period, growth and maturity have a significant positive effect on the financial flexibility of companies, but the cash flow has not had a significant effect on the financial flexibility in any of the periods. McFadden's coefficient of determination shows that the variables included in the regression have been able to account for 1.56%, 66.8%, 56.5% and 64.6% of the changes in the flexibility variable of companies in the entire period, growth, maturity and explain the decline.

6-4-5- The Results of the Second Hypothesis Test

Hypothesis (2) agency costs have an effect on the inefficiency of companies' human resources investment during the company's life cycle.

1-2- In the growth period, agency costs have an effect on the inefficiency of companies' human resources investment.

2-2- In the maturity period, agency costs have an effect on the inefficiency of companies' human resources investment.

2-3- In the period of decline, agency costs have an effect on the inefficiency of companies' human resources investment.

TABLE (10) MODEL ESTIMATION RESULTS FOR THE SECOND RESEARCH HYPOTHESIS

Variable	whole era		Growth period		Puberty period		decline period	
	Regression coefficient	Sig	Regression coefficient	Sig	Regression coefficient	Sig	Regression coefficient	Sig
agency costs	0.156	0.012	0.573	0.000	0.229	0.011	0.152	0.038
Leverage	-0.105	0.000	-0.231	0.003	-0.039	0.124	-0.005	0.684
SIZE	0.037	0.000	0.012	0.323	0.004	0.028	0.006	0.000

ROA_T_1	-0.140	0.000	-0.576	0.000	-0.164	0.019	-0.027	0.382
CASH	-0.068	0.058	0.007	0.976	-0.037	0.161	-0.006	0.810
C	-0.374	0.003	0.112	0.547	0.148	0.000	0.128	0.000
LR Test Prob.	1.849 (0.000)		7.226 (0.000)		3.655 (0.000)		4.360 (0.000)	
HL Prob.	2.053		1.785		1.987		2.042	
Andrews Statistic Prob.	0.214		0.284		0.190		0.151	
Jarko statistics Sig	5.750 (0.205)							

Based on the results of the models test for the second hypothesis presented in table (10), the results of the Jarcobra test (classical regression assumptions) show that the residuals obtained from the estimation of the model at the 95% confidence level have a normal distribution, so that the level The significance of this test is greater than 0.05. In the next step, the F statistic (0.000) has a significance level below (5%), so the regression has explanatory power. In the following, the coefficient of determination of the model also shows that 21.4%, 28.4%, 19% and 15.1% of the changes in the variable of inefficiency of human resources investment in the entire period, growth, maturity and decline by the variables entered in The model is explained.Also, due to the fact that the value of Durbin Watson model is between 1.5 and 2.5 (2.053, 1.785, 1.987 and 2.042), so it can be said that there is a problem of self-correlation of residuals in the model. does not have. In the following, according to the significant level of agency costs in the entire period, growth, maturity and decline (0.012, 0.000, 0.011 and 0.038), therefore, it can be said that the agency costs affect the inefficiency of companies' human resources investment in the entire period, growth, maturity and decline have a positive and significant effect.Also, among the control variables, financial leverage has a negative and significant effect on the inefficiency of human capital investment in the entire period and growth. In addition, the size of the company has a positive and significant effect on the inefficiency of human resources investment in the entire period, maturity and decline. Finally, the rate of return on assets has a negative and significant effect on the inefficiency of human capital investment in the entire period, growth and maturity, but cash flow has not had a significant effect on the inefficiency of human capital investment in any of the periods.

7- CONCLUSIONS

One of the important hypotheses in the literature of positive theories is that managers seek to increase their interests. Based on this, it is likely that he used the agency fee to achieve this goal. In this research, the effect of agency costs on financial flexibility and the inefficiency of human resources investment in the life cycle stages of companies have been investigated. The findings of the research show that the agency cost in the entire period (growth, maturity and decline) has a significant positive effect on financial flexibility and a significant negative effect on the inefficiency of human capital investment. Regarding the analysis of the results, it can be said that financial flexibility is a degree of the company's capacity and speed, which can provide the resources needed for defensive (debt payment) and offensive (investment) reactions in order to increase the value of the company. Posia and Jones (2009) describe financial flexibility as "financial flexibility depends on the company's ability to take advantage of unexpected opportunities according to the financial policies and financial structure of the companies" accordingly, when the company with the cost Representation is losing its flexibility (as a mechanism to control the dynamics of investments) because from the investors' point of view, if

there is representation cost, the company's financial decisions face uncertainty and bring operational risk. On the other hand, some of the shortcomings of the capital markets, such as information asymmetry and agency costs, can lead to the ineffectiveness of the human capital investment process. Also, agency cost is a key factor in creating overinvestment because in companies with high free cash flow, managers have more opportunities to engage in activities related to overinvestment. Agency conflicts in companies with high free cash flow And low growth opportunities are more intense compared to other companies and managers have more motivation to use free cash flows to undertake more investment in order to achieve their personal interests. According to the results, it is suggested to the investors that according to the results of the research, the users of financial statements should always consider the variable of agency cost in their decision when analyzing to buy shares of companies, because this variable leads to the inefficiency of human resources investment and reducing financial flexibility of the company. It is suggested to the managers, considering that the goal of the managers is to provide the trust of the owners of the company, so they should always seek to reduce the cost of representation in the company because this variable affects the legitimacy of the manager in the economic unit. It is suggested to the stock exchange organization to determine the real value of companies, to clarify their information and to better understand their performance, to adopt rules and regulations that limit the use of agency cost tools as much as possible.

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