

The Moderating Role of Financial Shocks in the Impact of Agency Cost and Managerial Ability on Stock Performance: The Case of Listed Real Estate Companies at the Egyptian Exchange

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Abstract. The purpose of this study is to examine the effect of agency costs and managerial ability on stock performance associated with financial shocks. To realize the study objective, the researchers measured the agency cost by two variables, whereas managerial ability was measured by adopting the Demerjian model. At the same time, the stock performance was calculated by difference between closing stock and current stock prices. The data required was collected from 24 real estate companies listed on the Egyptian Exchange Market over the 2002–2020 period. The proposed methodology is tested for the influences of agency cost and managerial ability on stock performance, with financial shocks as a moderating factor. The results indicated that there is a significant impact of agency cost and managerial ability on stock performance in a bivariate setting; the impact continued to be significant with the inclusion of the inflation rate and exchange rate as moderator variables. Besides, the inflation rates didn't significantly affect agency costs, managerial ability, and stock performance. This research provides an overview to the academic and practical implications of agency costs, managerial ability, and stock performance for academic researchers. For future researches it is necessary to focus on the relationship between agency cost and managerial ability on stock mispricing associated with financial shocks (discount rates, GDP, inflation rates).

Keywords: Agency Theory, Agency Costs, Managerial Ability, Stock Performance, Financial Shocks.

1. Introduction

In the classical organization structure, whereas the company is managed by the owner, but in the contemporary corporate structure, proprietorship and control are separated from each other and the firm is managed by directors. For the firm's continuity and development, it is required to provide an optimal balance structure that envisages a fair share of interests by minimizing problems. Accomplishing the balance involves various costs and reducing of these costs is the subject of agency theory (Baykara, 2021).

Agency cost is a kind of internal cost which rises due to acting of an agent on behalf of a principal, and it supposed to be paid to agent. Conflicts of interest between management (agent) and stockholder (major) are the basic causes behind agency costs. Interest of stockholder is to run a company in a way to maximize the value for stockholder. However, interest of management to rise the value and growth of company in that way which leads to rise their incentive and powers Muneer et al. (2013). Rise in wealth and power of management isn't included in the interests of stockholders, so agency cost rises (Jensen & Meckling, 1976; Jensen & Zorn, 1992).

According to Demerjian et al. (2012), the managerial ability means the directors with higher capabilities have better information, understand business and technology trends, and have better capabilities to choose and implement the appropriate strategies for their companies, so the managerial ability is mention to the effectiveness of directors in transforming available resources into revenues relative to other companies in the same industry.

Agency cost and managerial ability have an effect on stock performance according to how increases and decreases in stock prices impact a firm's market capitalization and therefore its market price. The higher stocks are priced, the more a firm is worth in market price, and the opposite is true.

Today's business environment is facing greater challenges, such as fluctuating currency exchange rates, affecting investment performance, interest rates, and inflation, and ultimately affecting the job market and real estate segment. Agency cost and managerial ability issues affect stock prices. Hence, referring to (Anom, 2018; Tuan, 2019; KHUYKEN, 2021; Inam, 2021; and Sdiq, 2022) that focused on the relationship between agency cost and managerial ability on business and financial performance, this study used the moderating role of financial shocks in determining the impact of agency cost and managerial ability on stock performance.. Agency cost was measured by asset turnover and operating expenses to sales, while managerial ability was measured using the Demerjian model et al. (2012). Stock performance was determined by comparing the closing stock prices with the current stock prices. Table 1 shows the lowest four share performances on the Egyptian Exchange from 2016 to 2020:

Table 1. Agency Cost and Managerial Ability, Stocks Performance in the Egyptian Exchange from 2016 to 2020.

No.	Stock	Year	Agency Cost		Managerial Ability	Stock Performance	Financial Shocks	
			Assets Turnover	Expense Ratio			Inflation Rate	Exchange Rate
1	AMER.CA	2017	38.06%	63.51%	-31.18%	0.09%	29.51%	17.69
		2018	29.11%	62.24%	-29.60%	-0.24%	14.40%	17.86
		2019	19.46%	59.45%	-42.30%	-0.12%	9.15%	16
		2020	16.67%	61.54%	-40.03%	0.33%	5.04%	15.69
2	TMGH.CA	2017	8.76%	63.48%	-31.00%	0.97%	29.51%	17.69
		2018	7.79%	62.19%	-41.14%	0.56%	14.40%	17.86
		2019	7.41%	61.37%	-40.36%	-1.21%	9.15%	16
		2020	6.99%	60.62%	-39.20%	-0.71%	5.04%	15.69
3	EMFD.CA	2017	15.55%	62.02%	-41.46%	2.16%	29.51%	17.69
		2018	17.51%	59.32%	-41.86%	-0.17%	14.40%	17.86
		2019	12.84%	59.25%	-41.59%	-0.86%	9.15%	16
		2020	9.56%	63.30%	-30.78%	-1.49%	5.04%	15.69
4	PHDC.CA	2017	13.16%	63.99%	-33.41%	2.39%	29.51%	17.69

2018	11.33%	75.81%	4.48%	-3.78%	14.40%	17.86
2019	17.16%	64.35%	-34.22%	-1.21%	9.15%	16
2020	16.10%	66.91%	-33.22%	-1.13%	5.04%	15.69

Source: Outputs of data processing.

In summarize, this article tries to answer these four main questions:

- What is the effect of agency cost on stock performance?
- What is the effect of managerial ability on stock performance?
- What is the effect of financial shocks on stock performance?
- What is the effect of agency cost and managerial ability on stock performance associated with financial shocks?

Based on the problem discussion, the researchers will investigate the moderating role of financial shocks in the impact of agency cost and managerial ability on stock performance. The Study is arranged as follows: after this introduction, In Section 2, a literature review is presented, followed by study research methods in Section 3, results and discussion in Section 4. Finally, in Section 5, the conclusion and implications are presented.

2. Literature Review

This section summarizes some prior studies on agency cost and managerial ability, stock performance, and financial shocks.

2.1. Agency Cost

In terms of agency cost and managerial capability, Tuan, Nha, and Phuong (2019) examined 736 Vietnamese firms over the 2010-2015 period to investigate the effect of agency costs on the corporate performance of listed Vietnamese enterprises. The results demonstrate that agency costs have a detrimental impact on business performance. The obligation instrument can be a valuable tool for lessening the said detrimental impact. Additionally, KHUYEN (2021) looked into how agency costs affect the financial performance of businesses in the food and beverage sector listed on the Vietnamese stock exchange in order to identify the contribution of the agency issue and subsequently offer some solutions and increase the effectiveness of the businesses. The results indicate that agency costs significantly affect the financial performance of businesses in the food and beverage sector. Sdiq and Abdullah (2022) attempted to determine whether agency costs in a developing industrial sector moderate the link between capital structure and financial performance. The study gathered data from a sample of industrial companies listed on the ISX between 2004 and 2020. The results offer proof in favor of the agency theory, which describes the link between capital structure and financial performance. Additionally, significant interactions were found suggesting that agency costs influence the relationship between capital structure and business performance. This implies that agency costs have a big impact on a firm's capital structure and performance. Purusotomo and Hadinugroho (2021) investigated the moderating role of agency costs on the relationship between capital structure and firm performance of SOEs by collected data from 2010 to 2014 and 2015 to 2019 with the Joke Widodo era. The findings that there is a positive impact of capital structure on ROE, besides the agency cost, show a moderate relationship between capital structure and company performance. This result indicates that the infrastructure development policy has led to changes in capital structure and company performance.

On the other hand, Nusaputra and Basana (2020) examined the impact of agency cost, owner of a corporation, signaling, opportunities for investment, size, financial leverage, and return on dividend policies on public companies listed on the Indonesian Stock Exchange (IDX) from 2014 to 2019. The data required was collected from a list of companies listed on the Indonesian Stock Exchange from 2014 to 2019. This study approach used is a bit regression. The findings of this paper indicated that

there is a significant impact of agency cost, owner of a corporation, investment opportunities, size, financial leverage, and return on dividend policy at listed companies during the period 2014–2019.

2.2. Managerial Ability

Inam and Saif (2021) examined how managerial skills affect business performance, and show that highly capable directors significantly increase firm performance, whereas less capable directors significantly decrease company performance, based on 246 sampled firms taken from the Pakistan Stock Exchange listed over the 2009-2017 period. The study provided new evidence that highly capable directors bring intangible resources to companies, which in turn contribute positively to company performance even in an uncertain environment with weak legal systems. In addition, Anom (2018) analyzed the impact of managerial ability on company performance with profit management intervention. This study used 99 FMCG companies listed on the Indonesian Stock Exchange from 2014 to 2016. The findings indicate the significant impact of managerial ability on the companies' performance, and that profit management has a direct impact on the same. Meanwhile, Phan (2021) examined the effect of managerial ability and managerial incentives on company performance. In particular, it studied how the factor of managerial ability can exert a significant effect on company profitability and risk. The article provided several policy implications on how managerial ability affects corporate decisions and corresponding business policies. The findings indicate a significant and advantageous link between managerial ability and corporate leverage. This finding suggests that managerial ability is crucial when setting financial decisions. Besides, Tebourbi and Kweh (2021) investigated the influences of managerial capability on company performance and the mediating role of ownership structure. The data collected from the Taiwanese electronics industry from 2005 to 2018 used 6384 firm-year observations. The findings indicated that there is a significant impact of managerial capability on firm performance. In addition, there is a positive relationship between managerial capability and firm performance when a capital structure is used as a mediator.

2.3. Stock Performance

The study by Razak and Endri (2020), which focused on stock performance and financial shocks, investigated the effects of current ratio (CR), total asset turnover (TAT), return on assets (ROA), and debt-to-equity ratio (DER) on the stock performance of machinery and heavy equipment sub-sector firms listed on the Indonesian Stock Exchange (IDX) over the 2014-2018 period. According to the research, investors should not consider a company's financial performance when contemplating to purchase shares of a business in the machinery and heavy equipment sub-sector. Additionally, Prasetyo and Rochman (2021) examined the financial performance applications of the Indonesian Stock Exchange share prices in industrial companies using a quantitative descriptive method. Manufacturing firms listed on the Indonesian Stock Exchange over the 2016-2018 period were selected as the study population, determined using the purpose sampling technique. The research used secondary data from the 2016-2018 financial reports of the listed manufacturing firms. The findings showed that stock prices are influenced by book value and net profit margins. Chandra, and Mimelientesa (2019) investigated the influence of capital structure, profitability on stock performance. The findings appear that there is a significant impact of profitability variables on stock performance. El Ansary, and El-Azab, M. H. (2017) the article analyzed the impact of two types of corporate actions, "stock splits" and "stock dividends", on stock performance. The research provides the businessmen with a scientific tool to estimate and explain the difference between the closing and current price of stock, which helps them make appropriate investment decisions. The results show that there is a significant effect of stock splits and stock dividends on stock performance.

2.4. Financial Shocks

More recently, Thomas (2022) studied the inverse correlation between inflation and stock performance. Using data from 12 advanced nations to test the genuine stock return-inflation link, it was revealed that

stock performance has a negative correlation with stock market volatility, whereas inflation is favorably correlated with stock market volatility. These data show that stock performance and inflation are negatively correlated in the US and 11 other international markets. Lakshmanasamy (2021) examined the impact of exchange rate volatility on fluctuations in stock market performance from the perspective of India over the 2010-2015 period. The results showed that the volatility of the EUR/Rupiah exchange rate significantly and positively affects the BSE SENSEX volatile performance, whilst the impacts of the USD/Rupiah exchange rate and the British Pound/Rupiah volatility are negligible. Wong (2022) the research investigated the effect of real exchange rates and asymmetric real exchange rates on stock performance in Malaysia, the Philippines, Singapore, Korea, Japan, the United Kingdom (UK), Germany, Hong Kong and Indonesia. The results show there is a significant effect of real interest rates on stock performance.

As compared to the past works, this study examines the moderation effect of financial shocks in the link between agency cost and managerial ability with stock performance.

3. Research Methodology

3.1. Research Model

The article examine the moderating role of financial shocks in the effect of agency cost and managerial ability on stock performance.

The following diagram presents the research model:

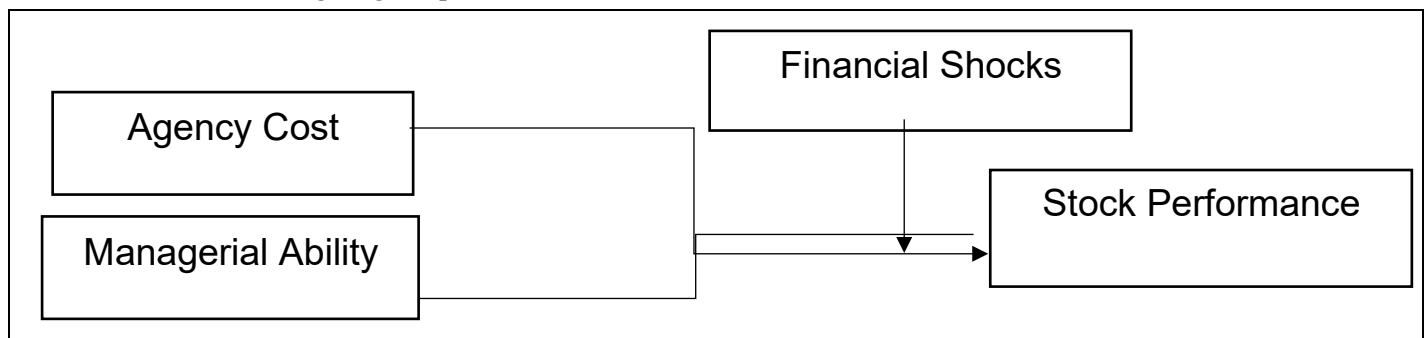


Fig 1: Research model of the impact of agency cost and managerial ability on stock performance associated with financial shocks.

3.2. Data Collections

Required data regarding “real estate” the researchers collected 24 companies listed on the Egyptian Exchange Market over the 2002–2020 period.

3.3. Measuring Variables and Testing Hypothesis

3.3.1. Agency Costs

We estimate the firm's agency cost using two distinct efficiency ratios that have been extensively used in accounting and financial economics literature.

The first ratio assessed how well the company management manages operational costs, such as excessive perquisite usage and other agency costs.

$$\text{Expense Ratio} = \frac{\text{Operating Expenses}}{\text{Sales}}$$

The effectiveness of the company's management in using its resources was gauged by the second ratio. Cost of agency is inversely connected to revenue divided by asset, in contrast to expense ratio.

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

A company with lower sales divided by-asset ratio compared to the base case is said to have a positive agency cost. These expenses are brought on by the director's actions, which may include any or all of these: poor investment choices and inadequate effort leading to decreased revenues, and amortization of executive franchises whereby the business buys non-generating assets including extremely lavish office space, office furniture, cars, and resort properties (Ang & Lin, 2000; Nobanee & Abraham, 2017).

3.3.2. Managerial Ability

The firm's managerial ability, according to Demerjian et al. (2012), can be determined via these steps:

Step 1: By using DEA, which is an ordinal of relative efficiency compared to the Pareto-Effective Frontier, i.e., the most feasible performance. Regression analysis and baseline ratio comparisons are two examples of parametric methods that measure efficiency relative to average performance, which is unduly undervalued by unsuccessful industry peers. Our efficiency measure was re-estimated using ordinary least squares (OLS) regression, with revenue as the dependent variable, and inputs (resources) measured by the initial total assets adjusted for size effects as the independent variables, to demonstrate the economic significance of this difference. The following are ways that the firm's efficiency might be expressed:

$$\text{Max}v_0 = \text{Sales} / (v_1\text{CoGS} + v_2\text{SG\&A} + v_3\text{PPE} + v_4\text{OpsLease} + v_5\text{R\&D} + v_6\text{Goodwill} + v_7\text{OtherIntan}) - 1$$

Net PP&E, Net Operating Leases, Net Research and Development, Purchased Goodwill, and Other Intangible Assets which make up the stock variables were measured at the start of year t, whilst Cost of Goods Sold and SG&A which make up the flow variables were measured over year t. To a substantial extent, all the aforementioned inputs capture the managers' choices in terms of revenue generation.

Step 2: Here, a regression is developed for the extent to which efficiency was extracted in the first stage involving a set of elements attributable to the firm's characteristics rather than the managers' characteristics. Below is the regression model employed:

$$\text{Firm Efficiency} = \alpha_0 + \alpha_1 \text{Ln (Total Assets)} + \alpha_2 \text{Market Share} + \alpha_3 \text{Positive Free Cash Flow} + \alpha_4 \text{Ln (Age)} + \alpha_5 \text{BusinessSegmentConcentration} + \alpha_6 \text{Foreign Currency Indicator} + \text{Year Indicators} + \varepsilon$$

3.3.3. Stock Performance

The dependent variable is each company's share price. Share prices are investments of which value will change over time, the stock performance was calculated according to changes in the closing stock and current stock prices of each year. The dependent variable in this method is the evaluation of stock performance. The equation reads as follows (Razak & Nurfitriana, 2020):

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$$

For Information:

$R_{i,t}$ = Current Return, $P_{i,t}$ = Closing price of stock, $P_{i,t-1}$ = Current price of stock

Capital gains occur if the closing price of stock $P_{i,t}$ is greater than the current price of stock $P_{i,t-1}$ capital-gain. Conversely, if the closing price of stock $P_{i,t}$ is lower than the current price of stock, it is called capital-loss. Table 2 shows the research variables and type of a variable.

Table2. The research variables

Variable	Calculation	Sign
Agency Cost		
Total Assets Turnover	Sales divided by Total Assets	TAT
Expense Ratio	Operating expenses divided by Sales	ER
Managerial Ability	by Demerjian model	MA
Financial Shocks		
Inflation Rate	The annual inflation rate in Egypt.	Inf
Exchange Rate	The annual exchange rate in Egypt.	Exc
Stock Performance	Distinguishing between the closing and current stock prices.	SP

This research aims to test the following four hypotheses:

H1: There is no significant effect of agency cost on stock performance.

H2: There is no significant effect of managerial ability stock performance.

H3: There is no significant effect of financial shocks on stock performance.

Regarding the above-shown hypotheses, the null hypothesis H_0 states that, $\beta = 0$, while the alternative hypothesis H_1 states that, $\beta \neq 0$

$$SP = \alpha + \beta_1 TAT + \beta_2 ER + \beta_3 Inf * TAT + \beta_4 Inf * MA * ER + \beta_5 Inf * MA * ER * TAT + \beta_6 Exc * TAT + \beta_7 Exc * ER + \beta_8 Exc * ER * TAT + \varepsilon$$

In the first hypothesis, the null hypothesis H_0 states that $\beta_1 = 0$, while the alternative hypothesis H_1 states that $\beta_1 \neq 0$.

$$SP = \alpha + \beta_1 TAT + \beta_2 ER + \varepsilon$$

In the second hypothesis, the null hypothesis H_0 states that $\beta_2 = 0$, while the alternative hypothesis H_1 states that $\beta_2 \neq 0$.

$$SP = \alpha + \beta_1 MA + \varepsilon$$

In the third hypothesis, the null hypothesis H_0 states that $\beta_3 = 0$, while the alternative hypothesis H_1 states that $\beta_3 \neq 0$.

$$SP = \alpha + \beta_1 Inf + \beta_2 Exc + \varepsilon$$

4. Results and Discussion

From a sample of 24 firms listed on the Egyptian Exchange over the 2002-2020 period, data on agency costs, managerial capability, stock performance, and financial shocks were acquired. The descriptive data are illustrated in Table 3 below:

Table 3. Descriptive Statistics of the Research Variables

Variables	Stock Performance	Total Assets Turnover	Expense Ratio	Managerial Ability	Inflation Rate	Exchange Rate
Median	6.2	23.35	57.53	0.034	10.06	6.17
Maximum	46.47	45.53	70.79	0.819	29.51	18
Minimum	-22.8	14.86	48	-1.106	2.74	4.63
Std. Dev	16.884	6.709	6.951	0.412	8.214	5.079
Skewness	0.227	1.523	0.367	-0.543	-0.696	1.037

Kurtosis	3.041	6.193	2.179	4.155	6.942	2.23
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Source: Outputs of data processing using E-views 10.

Table 3 shows the mean values for asset turnover, expense ratio, and managerial ability, which are 24.66, 57.45, and -0.011, respectively, with a standard deviation of (6.709, 6.951, and 0.412), while stock performance has a mean of 8.585 and a standard deviation of 16.89. The inflation rate recorded a 10.56 mean and 8.214 standard deviation, while the exchange rate recorded a 8.911 mean and 5.079 standard deviation.

Table 4. Correlation coefficients of the research variables

	Stock Performance	Total Assets Turnover	Expense Ratio	Managerial Ability	Inflation Rate	Exchange Rate
Stock Performance	1.000					
Assets Turnover	0.861	1.000				
Expense Ratio	0.842	0.814	1.000			
Managerial Ability	0.807	0.771	0.756	1.000		
Inflation Rate	0.748-	0.878-	0.686-	0.796-	1.000	
Exchange Rate	0.814	0.820	0.742	0.581	0.688-	1.000

Source: Outputs of data processing using- E-views 10.

Table 4 shows the correlation between stock performance, asset turnover, and expense ratio with coefficient values of 0.861 and 0.842, respectively, and a p value of 0.05. while stock performance in relation to managerial ability, inflation rate, and exchange rate demonstrate correlation coefficients of 0.807, -0.748, and 0.814, respectively.

The research hypotheses are about investigating the effects of "agency cost," "managerial ability," and "financial shocks" on "stock performance."

Table 5. Model 1 – The Effect of “Agency Cost”

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-81.854	18.568	-4.408	0
Assets Turnover	1.312	0.483	2.718	0.015
Expense Ratio	1.016	0.466	2.18	0.045
R ²	0.801142			
Adjusted R ²	0.776284			
F-statistic	32.23			
Prob (F-statistic)	0			
Durbin-Watson	2.363			

Where ** represents the levels of significance at 5% and 1%

Table 5 demonstrates that agency cost (assets turnover & expense ratio) has a statistically significant effect on stocks performance by 80.1%, whereby the f test and t test are significant with a p value lower than 0.05. Meanwhile, stock performance change per unit caused by assets turnover change is 1.311,

while expense ratio is 1.016.

Table 6. Model 2 – The Effect of “Managerial Ability”

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.944445	2.354429	3.798987	0.0014
Managerial Ability	33.07985	5.870061	5.63535	0
R ²	0.651333			
Adjusted R ²	0.630823			
F-statistic	31.75717			
Prob (F-statistic)	0.00003			
Durbin-Watson stat	1.208202			

Where ** represent levels of significance at 5% and 1%

Table 6 demonstrates that managerial ability has a statistically significant effect on stock performance at 65.1%, whereby the f test and t test are significant at a p value lower than 0.05. Meanwhile, stock performance change per unit caused by managerial ability change is 33.08.

Table 7. Model 3 – The Effect of “Financial Shocks”

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-15.51687	4.776297	-3.2487	0.0047
Exchange Rate	2.704805	0.468699	5.770884	0
R ²	0.662049			
Adjusted R ²	0.642169			
F-statistic	33.30311			
Prob (F-statistic)	0.000023			
Durbin-Watson stat	2.095556			

Where ** represents levels of significance at 5% and 1%

Table 7 demonstrates that exchange rate has a statistically significant effect on stock performance at 66.2%, whereby the f test and t test are significant at a p value lower than 0.05. Whereas, stock performance change per unit caused by exchange rate change is 2.70. The inflation rate was excluded from the model because of its weak effect on the presence of the exchange rate.

Table 8. Model 4 – Regression Weights & Standardized Regression Weights

			Unstandardized Estimate	Standard Error	Standardized Estimate	Critical Value	Prob.
TAT	<---	Inf	-0.415	0.099	-0.508	-4.199	0.028
TAT	<---	Exc	0.370	0.165	0.280	2.239	0.025
TAT	<---	ER	0.248	0.125	0.255	1.980	0.048
ER	<---	Exc	0.625	0.208	0.460	3.011	0.003

			Unstandardized Estimate	Standard Error	Standardized Estimate	Critical Value	Prob.
ER	<---	MA	8.281	2.561	0.494	3.234	0.001
MA	<---	Inf	-0.040	0.007	-0.796	5.585	0.000
SP	<---	TAT	1.312	0.462	0.522	2.839	0.005
SP	<---	ER	1.05	0.450	0.415	2.256	0.025

Source: Outputs of data processing using E-views 10.

Table 8 demonstrates the statistically significant effect of agency cost (assets turnover & operating expenses/revenues) on stock performance at 0.522 and 0.415 respectively. Meanwhile, the effect of financial shocks (inflation rate & exchange rate) on assets turnover is -0.508 and 0.280, whilst effect on (managerial ability & operating expenses) is -0.796 and 0.460. Finally, there is a significant effect of managerial ability on expense ratio by 0.494.

Table 9. Standardized Indirect Effects of Financial Shocks

Path					Indirect Effect	Total Indirect Effect
SP	<---	TAT	<---	Inf	-0.265	-0.481
SP	<---	ER	<---	MA <-- Inf	-0.163	
SP	<---	TAT	<---	ER <-- MA <---	-0.053	
SP	<---	TAT	<---	Exc	0.146	0.398
SP	<---	ER	<---	Exc	0.191	
SP	<---	TAT	<---	ER <-- Exc	0.061	
SP	<---	TAT	<---	ER	0.133	0.133
SP	<---	ER	<---	MA	0.205	0.271
SP	<---	TAT	<---	ER <-- MA	0.066	

Source: Outputs of data processing using E-views 10.

Table 9 indicates the statistically significant effect of financial shocks (inflation rate & exchange rate) on stock performance at 0.481 and 0.398, respectively. There is a statistically significant indirect effect of operating expenses of revenues and managerial ability on stock performance at 0.133 and 0.271, respectively.

5. Discussions and Conclusion

The research investigated the influence of agency costs and managerial ability on stock performance associated with financial shocks. The researchers measured the agency cost by expenses ratio and asset turnover, while managerial ability was measured by adopting the Demerjian model, and stock performance was calculated by distinguishing between the closing and current stock prices.

The findings indicated that there is a significant effect of agency cost and managerial ability on stock performance in a bivariate setting; the impact continued to be significant with the inclusion of the

inflation rate and exchange rate as moderator variables. Besides, the inflation rates didn't significantly affect agency costs, managerial ability, and stock performance.

In conclusion, this study provides useful insights into various factors affecting on stock performance and the researchers recommends the executive managers should increase shareholder wealth by determining investment opportunities and making the appropriate investment decisions in a method that helps to utilize the company's resources in an appropriate way.

This study contributes positively to the academic and practical implications of agency costs, managerial ability, and stock performance for academic researchers. For future researches it is necessary to focus on the relationship between agency cost and managerial ability on stock mispricing associated with financial shocks (discount rates, GDP, inflation rates).

References

- Ang, J. S., Cole, R. A., & Lin, J. W. (2000). Agency costs and ownership structure. *The Journal of Finance*, 55(1), 81-106.
- Anom, A. N. M. (2018). The effect of managerial ability on firm performance with earning management as intervening variable. *Russian Journal of Agricultural and Socio-Economic Sciences*, 80(8), 149-155.
- Baykara, S., & Baykara, B. (2021). The Impact of Agency Costs on Firm Performance: An Analysis on BIST SME Firms. *PressAcademia Procedia*, 14(1), 28-32.
- Chandra, T., Junaedi, A. T., Wijaya, E., Suharti, S., Mimelientesa, I., & Ng, M. (2019). The effect of capital structure on profitability and stock returns: Empirical analysis of firms listed in Kompas 100. *Journal of Chinese Economic and Foreign Trade Studies*, 12(2), 74-89.
- Demerjian, Peter, Baruch Lev, and Sarah E. McVay. (2012). quantifying managerial ability: A new measure and validity tests. *Management Science* 58: 1229–48.
- El Ansary, O., & El-Azab, M. H. (2017). The impact of stock dividends and stock splits on shares' prices: Evidence from Egypt. *Accounting and Finance Research*, 6(4), 84-96.
- Henry, D. (2006). *Agency Costs, Corporate Governance and Ownership Structure: Evidence from Australia*. Research Gate Publications, 1-44.
- Inam Bhutta, A., Sheikh, M. F., Munir, A., Naz, A., & Saif, I. (2021). Managerial ability and firm performance: Evidence from an emerging market. *Cogent Business & Management*, 8(1), 1879449.
- Jensen, M. C., Meckling, H. W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Management*, 3(4): 305–360.
- Jensen, M., Solberg, D., Zorn, T. (1992). Simultaneous Determination of Insider Ownership, Debt and Dividend Policies. *Journal of Financial and Quantitative Analysis*, 27: 247–261.
- KHUYEN, N. T. V. (2021). Impact of Agency Costs on Business Performance of Vietnam Listed Food and Beverage Companies. In *International Conference on Emerging Challenges: Business Transformation and Circular Economy (ICECH 2021)* (pp. 89-94). Atlantis Press.
- Lakshmanasamy, T. (2021). The Relationship between Exchange Rate and Stock Market Volatilities in India: ARCH-GARCH Estimation of the Causal Effects. *International Journal of Finance Research*, 2(4), 244-259.

Muneer, S., Bajuri, N. H., & Saif-ur-Rehman, S. U. R. (2013). Moderating effect of agency cost on the relationship between capital structure, dividend policy and organization performance: a brief literature review. *Актуальні проблеми економіки*, (11), 434-442.

Nobanee, H., Ellili, N. O. D., & Abraham, J. (2017). Equity concentration, agency costs and performance of non-financial firms listed on the Saudi Stock Exchange (Tadawul). *Global Business Review*, 18(2), 379-387.

Nusaputra, F., & Basana, S. R. (2020). The effect of agency costs, ownership structure, signaling, investment opportunities, size, financial leverage, and profitability on dividend policy of companies listed in Indonesian stock exchange. *International Journal of Financial and Investment Studies (IJFIS)*, 1(2), 109-120.

PHAN, N. H. (2021). Managerial Ability, Managerial Incentives and Firm Performance: Empirical Evidence from Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(4), 193-200.

Prasetyo, I., Aliyyah, N., Rusdiyanto, R., Nartasari, D. R., Nugroho, S., Rahmawati, Y., & Rochman, A. S. U. (2021). Impact financial performance to stock prices: Evidence from Indonesia. *Journal of Legal, Ethical and Regulatory Issues*, 24, 1-11.

Purusotomo, B. A., & Hadinugroho, B. (2021). THE MODERATING ROLE OF AGENCY COST ON THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND FIRM PERFORMANCE: EMPIRICAL EVIDENCE FROM INDONESIA STATE-OWNED ENTERPRISES. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(3), 2346-2359.

Razak, A., Nurfitriana, F. V., Wana, D., Ramli, R., Umar, I., & Endri, E. (2020). The effects of financial performance on stock returns: Evidence of machine and heavy equipment companies in Indonesia. *Research in World Economy*, 11(6), 131-138.

Sdiq, S. R., & Abdullah, H. A. (2022). Examining the effect of agency cost on capital structure-financial performance nexus: empirical evidence for emerging market. *Cogent Economics & Finance*, 10(1), 2148364.

Thomas C. Chiang (2022). Real stock market returns and inflation: Evidence from uncertainty hypotheses. *Finance Research Letters*, 103606.

Ting, I. W. K., Tebourbi, I., Lu, W. M., & Kweh, Q. L. (2021). The effects of managerial ability on firm performance and the mediating role of capital structure: evidence from Taiwan. *Financial Innovation*, 7(1), 1-23.

Tuan, T. M., Nha, P. V. T., & Phuong, T. T. (2019). Impact of agency costs on firm performance: evidence from Vietnam. *Organizations and Markets in Emerging Economies*, 10(2), 294-309.

Wong, H. T. (2022). The impact of real exchange rates on real stock prices. *Journal of Economics, Finance and Administrative Science*, (ahead-of-print).