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An In-depth Analysis of Investor Behavior in the Amman Stock Exchange: Exploring the Impact of Stock Price Volatility

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Abstract

This study analyzes investor behavior in the Amman Stock Exchange during periods of significant stock price volatility. Data was collected quarterly from 2021 to 2022, and various statistical and technical models were utilized, including linear regression and time-series analysis, with the aid of Smart PLS4 and Eviews software.

The study reveals that price volatility in the Amman Stock Exchange vary across different periods and influence investor behavior differently. In efficient markets, investors' reactions are rational, whereas in inefficient markets, herding behavior is observed. The impact also differs depending on investors' strategies. Short-term investors demonstrate high risk tolerance and speculation in the markets, showing little sensitivity to volatility. Conversely, long-term investors are affected by these volatilities, causing hesitation in their investment decisions, leading them to prefer more stable and secure assets.

Keywords: investor behavior, value of executed contracts, price volatilities, Amman Stock Exchange.

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1. INTRODUCTION

Stock exchanges worldwide experience sharp volatilities in stock prices that significantly impact investor behavior and movements in the financial market. These volatilities are a common and influential phenomenon in the stock market, characterized by rapid and unexpected movements in stock prices, creating an unstable and risky trading environment. Therefore, understanding investor behavior in these markets is crucial for analyzing and interpreting such sharp volatilities in stock prices. Investor behavior reflects their psychological reactions and responses to market changes, affecting trading activity and stock prices.

Investor behavior in financial markets includes a wide range of possible actions and responses to sharp volatilities in stock prices. Some investors may make quick decisions to buy or sell based on sudden price changes, while others may hold onto their positions and continue their long-term investments based on their expectations. Additionally, investor behavior is influenced by external factors, such as general economic trends, government policy developments, and market confidence levels. News and media information can also play a significant role in shaping investor behavior and influencing their decision-making process.

Some studies have provided evidence of the relationship between investor behavior and price volatility, which varies widely across different industries and markets (Duan & Yue, 2019; Kamuti, 2013; D. Li & Dong, 2008; W. Li & Jia, 2011; Ren-cai, 2008). Trading volume plays a critical role as an indicator of supply and demand in the stock market, encompassing the overall value of securities traded at various prices during a specific period (W. Li & Jia, 2011).

This study aims to analyze investor behavior in the Amman Stock Exchange (ASE), which is categorized as an emerging market. The ASE, like other emerging

stock exchanges, is characterized by volatility, which is often more severe than in advanced ones. Investor behavior in the ASE during these volatilities is an important topic that requires comprehensive scientific research. It is of utmost importance to examine investor behavior and the factors that influence their investment decisions during these critical periods. By gaining a comprehensive understanding of investor behavior amidst sharp volatilities in stock prices on the ASE, valuable insights can be provided for both investors and listed companies in the market. These insights have the potential to enhance investment strategies and foster a deeper understanding of the market dynamics.

The Amman Stock Exchange (ASE) is one of the emerging financial markets that experience sharp volatilities in stock prices over time. The behavior of investors amid these sharp volatilities is an important subject worthy of study and analysis. Therefore, understanding and analyzing investor behavior can help identify market trends and make sound investment decisions that protect investors from risks and increase profit opportunities in the Jordanian financial market. Hence, the problem of the study is as follows:

To what extent do sharp stock price volatility affect investor behavior in the Amman Stock Exchange?

In this perspective, we delve into the concept of volatility in the stock market, exploring its potential causes and strategies to cope with it. Additionally, we emphasize the behaviors that investors may adopt amidst these sharp volatilities.

2. LITERATURE REVIEW

2.1- Price volatility in stock market

Price volatility refers to sudden and rapid changes in stock prices over a period of time. These volatilities arise due to economic, political, and social factors that affect the economy and the financial market. Volatility can be positive or negative,

where positive volatilities are referred to as bull markets, while negative volatilities are referred to as bear markets (Wu et al., 2022).

Sharp volatilities in stock prices significantly impact investor behavior and movements in the market, increasing investment risks and requiring specific skills in dealing with them and making sound investment decisions. Stock market volatility is considered a fundamental factor that affects the performance of institutions and companies listed in the stock exchange, reflecting the overall state of the economy and the effects of global and local events on it. Therefore, it is crucial for investors to monitor the stock market and understand the factors that can cause volatility (Di Mauro et al., 2011).

Sharp volatilities in stock prices can be attributed to various factors, as highlighted by several studies (Al-Mogren, 2020; Di Mauro et al., 2011; Wu et al., 2022). Economic events, currency market volatility, political events, natural events, industry-specific events, supply and demand for stocks, and oil price volatility all play a role. Moreover, stock prices can be influenced by psychological factors such as anxiety, expectations, and fear, as well as negative news about a company or industry, such as data breaches or product recalls. These factors can impact investor decisions and result in sharp price volatility.

Investors can adopt several strategies to cope with sharp volatility in stock prices (Goetzmann & Massa, 2003; Oprea & Brad, 2014; Zhou, 2020). Firstly, long-term investing involves focusing on the steady growth of stocks over time and disregarding short-term volatility. Secondly, portfolio diversification mitigates risks by investing in stocks from different sectors and companies. Thirdly, maintaining adequate liquidity enables investors to buy or sell during volatile periods. Fourthly, technical and fundamental analysis helps in making informed investment decisions. Fifthly, identifying support and resistance levels aids in determining optimal buying or selling points. Sixthly, setting stop-loss orders limits potential losses during sharp

declines in stock prices. Seventhly, seeking professional advice from financial advisors provides valuable guidance based on individual financial goals and risk tolerance. Lastly, monitoring market news and movements keeps investors informed about potential influencing factors. However, it's essential to recognize that the stock market is unpredictable, and strategies may not guarantee profits or protect against losses. Therefore, investors should assess their risk tolerance and objectives before implementing any strategy.

2.2- Behavior Investors amid Sharp volatilities

Investors may exhibit various types of behavior during periods of sharp volatility in stock prices, depending on their investment strategies, risk tolerance, and market expectations. Below are some possible patterns of behavior that investors may follow (He et al., 2022; Oprea & Brad, 2014; Winsen, 1976):

- **Calm Behavior:** This behavior is characterized by investors who act wisely, rely on thorough research, technical and fundamental analysis, and make investment decisions without being swayed by sudden changes in stock prices.
- **Holding Stability:** Some investors may choose to hold onto their stocks during periods of sharp volatility, believing that the market will eventually recover. This behavior may be suitable for long-term investors with diversified portfolios and high risk tolerance.
- **Nervous Behavior:** This behavior is demonstrated by investors who are psychologically affected by sharp volatility in stock prices and make quick and impulsive decisions without conducting necessary research and technical or fundamental analysis of the markets.
- **Panic Selling:** Some investors may succumb to panic and sell their stocks during severe declines in stock prices, fearing larger losses. This behavior can exacerbate stock price declines and lead to further losses.

- **Professional Behavior:** This behavior is characterized by investors who deal in a professional manner and possess sufficient experience in the stock market. They have the ability to handle sharp volatility in stock prices and effectively manage risks.
- **Seeking Bargain Opportunities:** Other investors may view sharp declines in stock prices as an opportunity to buy stocks at a discount. This behavior can contribute to supporting stock prices and lead to their increase.
- **Market Timing:** Some investors may attempt market timing by buying and selling stocks based on short-term market trends. This behavior can be risky and challenging to execute successfully.
- **Collective Behavior:** This behavior is demonstrated by a group of investors who collaborate to make investment decisions. They rely on collective opinions in technical and fundamental analysis of markets and seek to reduce risks through coordination.
- **Seeking Expert Consultation:** Some investors may resort to consulting financial advisors or market analysts to assist them in dealing with sharp volatility in stock prices. This behavior can be beneficial for investors lacking experience or knowledge in the field of investment.

Institutional investors and retail investors exhibit distinct behaviors in the financial market. Institutional investors typically engage in larger trade volumes due to their access to abundant resources and capital, enabling them to execute substantial trades (D'Hondt et al., 2021). Their investment horizon tends to be longer-term, driven by specific mandates or objectives that necessitate holding investments for a certain period. Moreover, institutional investors employ sophisticated risk management strategies, utilizing hedging techniques or diversification to mitigate risk in their portfolios (Jaiyeoba et al., 2020).

On the other hand, retail investors tend to trade more frequently compared to institutional investors. Their decision-making may be influenced by short-term market movements and news events, resulting in more frequent buying and selling of securities (D'Hondt et al., 2021). However, retail investors may be more susceptible to emotional biases when making investment decisions, affected by fear, greed, or other psychological factors that impact their trading behavior (Jaiyeoba et al., 2020).

The interaction between the behavior of institutional and retail investors in the market plays a significant role in shaping prices and trends in the financial market. Institutional investors, with their large trade volumes and market influence, may exert a greater impact on prices. Conversely, retail investors enjoy more flexibility in pursuing short-term profits or avoiding losses.

The value of executed contracts in the stock market refers to the total value of a contract that has been fully completed (Paringga & Kurniawati, 2022). This value is influenced by various factors, such as the level of demand for the stock, the company's performance, dividend distributions, economic conditions, industry trends, news, and events related to the company or the market, as well as investor sentiment and optimism about the stock's future prospects. These factors interact and can vary depending on specific circumstances, leading to volatility in the value of executed contracts (Burhanuddin, 2022; Nurhidayah & Maryanti, 2021).

The value of executed contracts for a specific stock affects the stock's liquidity by influencing the level of trading activity, execution speed, and price impact of transactions. An increase in the value of executed contracts may indicate higher trading activity and, consequently, increased liquidity, as there are more participants willing to buy or sell the stock. This, in turn, narrows the price spread between the bid and ask, leading to price stability (Burhanuddin, 2022; Kodres & O'Brien, 1994).

In general, investors' behavior during periods of sharp volatility in stock prices can have a significant impact on the market direction. It is important for investors to

remain calm, informed, and adheres to their investment strategies during these periods. In their study, Duan & Yue (2019) investigated the relationship between trading volume and the future stock price index CSI 300. The results demonstrated that the expected and unexpected trading volumes align with the impact of price volatility, showing a positive correlation with the price. This finding suggests that in futures markets, the relationship between trading volume and price volatility may be stronger. Additionally, Ren-cai's study (2008) focused on the relationship between stock price index volatility and trading volume in futures stock index contracts. The study revealed a unidirectional relationship between these variables, indicating that the volume of futures stock index contracts has a delayed effect on stock price volatility. This outcome highlights the primary use of futures stock index contracts as a tool for arbitrage.

To address the study's questions, the following hypotheses were formulated:

- The impact of price volatility on the trading behavior of both major and minor investors in the Amman Stock Exchange varies depending on market conditions.
- Investor decisions amid price volatility are influenced by technical and fundamental factors.
- There is a direct impact of price volatility on the activity of the Amman Stock Exchange.
- The impact of price volatility on the activity of the Amman Stock Exchange varies according to investor behaviors.

3. METHOD AND TOOLS

3.1- Sample and data collection

The research focuses on highly volatile financial markets, with a specific emphasis on emerging markets. For this study, the Amman Stock Exchange (ASE)

was selected as the sample. The ASE is a vibrant and dynamic market that began its operations on March 11, 1999, as an independent non-profit institution, licensed to function as an organized securities market in the Kingdom. On February 20, 2017, the ASE was registered as a public shareholding company fully owned by the government. The exchange is governed by a seven-member board appointed by the General Assembly, along with a full-time Executive Director responsible for overseeing and managing its daily operations (ASE, 2023).

Over the past years, the ASE has experienced numerous sharp price fluctuations. According to Al rgaibat & Alkhazali, (2020), these fluctuations were influenced by various factors, such as economic, political, natural, and industry-specific events, negative news, and investor sentiment. Studies conducted by Moh'd Mahmoud Ajlouni et al (2012) and Yaseen et al (2015) have revealed that the ASE encountered significant abnormal negative returns during the global financial crisis in 2008. However, it managed to overcome the negative consequences of the crisis.

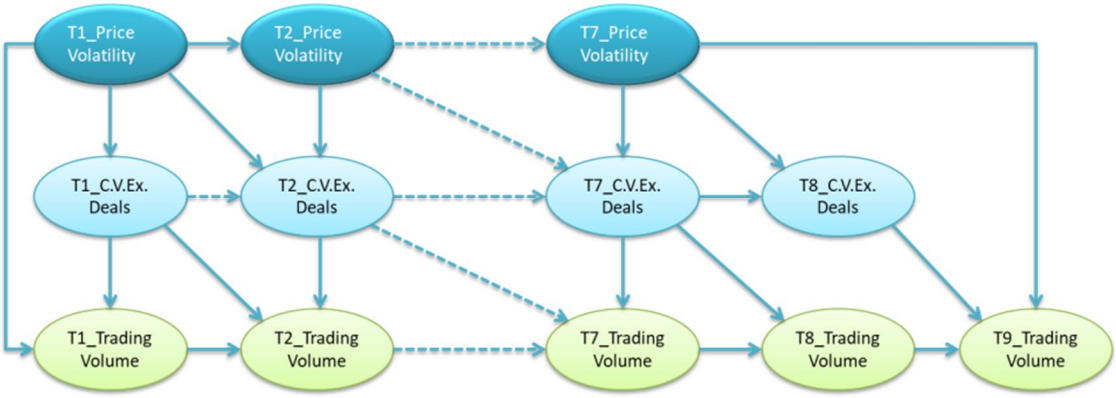
Furthermore, the annual report of the Amman Stock Exchange highlighted sharp price volatility during the year 2020 due to the repercussions of the COVID-19 pandemic on the global economy. During this period, the general index of the stock exchange declined by up to 22%. These volatilities underscore the importance of studying investor behavior in the Amman Stock Exchange and how to deal with sharp price volatility.

The data was collected from various sources, such as the annual reports of companies listed on the ASE, the website of the ASE, and news and reports issued by the Jordan Securities Commission and specialized financial websites. Due to the nature and sensitivity of the study in terms of its impact and dynamic correlation, the data was collected over four time intervals during the years 2021-2022. The first time interval covered covering January to March, the second time interval from April to

June, the third time interval from July to September, while the fourth time interval from October to December.

The data was processed for the purpose of studying investor behavior in the ASE amidst sharp volatility in stock prices and understanding the nature of this relationship, as shown in Fig.1. Various statistical analysis tools, such as linear regression and time-series analysis, were used to analyze the collected data. The software utilized for this analysis included Smart PLS4 and Eviews. The necessary results and statistical analyses were obtained.

Fig.1. Study Model.



Source: Author's own work

3.2- Measures

The study variables consist of price volatility as an independent variable, the value of executed contracts (investment amount) as a control variable, and investor behavior in the ASE (supply and demand) as a dependent variable, represented by the trading volume.

3.2.1- Trading Volume

The trading volume rate is measured by dividing the total traded shares on the stock exchange by the Gross Domestic Product (GDP), and this rate reflects liquidity in the economy. This indicator complements the market capitalization index (Levine

& Zervos, 1996). Understanding the nature of the relationship between trading volume and stock market variables is essential for making appropriate investment decisions (Zhussipova et al., 2023).

3.2.2- Contract Value and Executed Deals (Investment Amount)

In this study, the value of executed contracts was used as a control variable due to its strong correlation with the behaviors of both small and large investors, and its interpretation of market depth and breadth, especially in its interaction with liquidity. Therefore, it is important to understand the relationship between the value of executed contracts and liquidity, which may vary depending on market conditions, share size, and the behaviors of other investors in the market.

The value of executed contract is calculated by multiplying the number of purchased or sold shares by the share price at the time of execution. This value is important for investors to track their profits or losses in a specific transaction and to calculate their tax liabilities (Paringga & Kurniawati, 2022). The calculation of the value of executed contracts may also include brokerage fees and other transaction costs. These costs should be taken into account to obtain a more accurate picture of the overall value of the contracts (Nurhidayah & Maryanti, 2021).

3.2.3- Price Volatility

Price volatility refers to changes in the prices of financial assets such as stocks, bonds, commodities, and currencies (Kotzé, 2005). These volatilities are considered indicators of market volatility and future price expectations, and they are used as a measure of investment risk (Duxbury & Summers, 2018). Among the most commonly used tools to measure price volatility in the financial market are standard deviation, daily change rate, relative strength index, relative momentum index, classic channel index, Bollinger Bands, and Donchian Channels (Mitra, 2011). This

study will rely on the Volatility Index, which is a common tool for measuring price volatility in the market. It is calculated by measuring the daily price volatility of stocks in the market over a specified period of time.

4. RESULTS AND DISCUSSION

After defining the study sample, and explaining the data collection method and variables used in the study, the main objectives of the study will be analyzed and discussed, which were presented in the form of hypotheses.

4.1- Analysis of the Impact of Price Volatility on the Responses of Small and Large Investors in the ASE:

Based on the findings presented in Table 1, the study reveals that there are no significant direct effects between price volatility and the value of executed contracts (P values: 0.593, 0.139, 0.129, 0.954, 0.587, 0.740). Thus, it can be inferred that price volatility does not have a direct impact on companies' decisions to list their shares. This explains the lack of influence of the financial structure due to these volatilities. Moreover, these price volatilities do not affect the behaviors of large investors, which is consistent with the findings of the study conducted by Al-zaidyeen & Al-rawash (2015) on the relationship between individual and institutional shareholders and stock price volatility in the ASE.

Table 1. Quality Measures of the Direct Relationship Path between Price Volatility and the Value of Executed Contracts

	Std. Coeff	Standard deviation	T statistics	P values
P. Volatility1 -> C.V.EX.Deals1	0.066	0.124	0.534	0.593
P.Volatility2 -> C.V.EX. Deals 2	0.334	0.127	2.633	0.008
P.Volatility3 -> C.V.EX. Deals 3	0.300	0.123	2.446	0.014
P.Volatility4 -> C.V.EX. Deals 4	-0.229	0.155	1.480	0.139
P.Volatility5 -> C.V.EX. Deals 5	0.236	0.155	1.518	0.129
P.Volatility6 -> C.V.EX. Deals 6	0.007	0.129	0.058	0.954
P.Volatility7 -> C.V.EX. Deals 7	-0.057	0.105	0.543	0.587
P.Volatility8 -> C.V.EX. Deals 8	0.049	0.148	0.331	0.740

Source: Author’s own work

However, it is noteworthy that there is a direct impact of price volatility on the value of executed contracts during the second and third quarters of 2021, as evidenced by the direct effects in the same period (P values: 0.008, 0.014). This finding aligns with the results of the study conducted by Gopal et al (2019) on the impact of the Volatility Index (VIX) on the cost of futures contracts.

Based on Table 2, it is evident that the period from March to May 2021 was characterized by random movement of the ASE index, which explains the efficiency of the stock market during this period. This made the reactions of investors rational during the second and third quarters of 2021, unlike the rest of the times, which witnessed herd behavior. According to the report of the first half of the year (ASE, 2021), it was revealed that during this period, many companies were transferred between markets and the trading of shares of several companies (such as Arab Development Company, Jawico Company, Tarafco Company, Petrochemicals Company, Southern Electronics Company, etc.) was allowed in the over-the-counter market, which was also confirmed by the study conducted by Pursiainen (1998) on the Finnish stock market. The study found that trading in multiple markets can lead to a slight decrease in the volatility of stock prices for both listed and unlisted stocks. Therefore, the first hypothesis, which relates to the differential impact of price volatility on large and small investors in the ASE, is accepted, depending on the market conditions.

Table 2. Stability Tests for the Amman Stock Exchange Index during March, April, and May 2021.

	At Level	**UNIT ROOT TEST TABLE (PP)**	**UNIT ROOT TEST TABLE (ADF)**
With Constant	t-Statistic	-5.3141	-5.5213
	Prob.	***0.0000***	***0.0000***
		***	***
With Constant & Trend	t-Statistic	-3.6577	-3.5344
	Prob.	***0.0332***	***0.0447***
		**	**
Without Constant & Trend	t-Statistic	-1.8138	-2.6966
	Prob.	***0.0666***	***0.0078***
		*	***

Notes: (*)Significant at the 10%; (**)Significant at the 5%; (***) Significant at the 1%. and (no) Not Significant
*MacKinnon (1996) one-sided p-values.

Source: Author's own work

4.2- Analysis of the Factors Influencing Investors' Behavior in the ASE Amid Price Volatility:

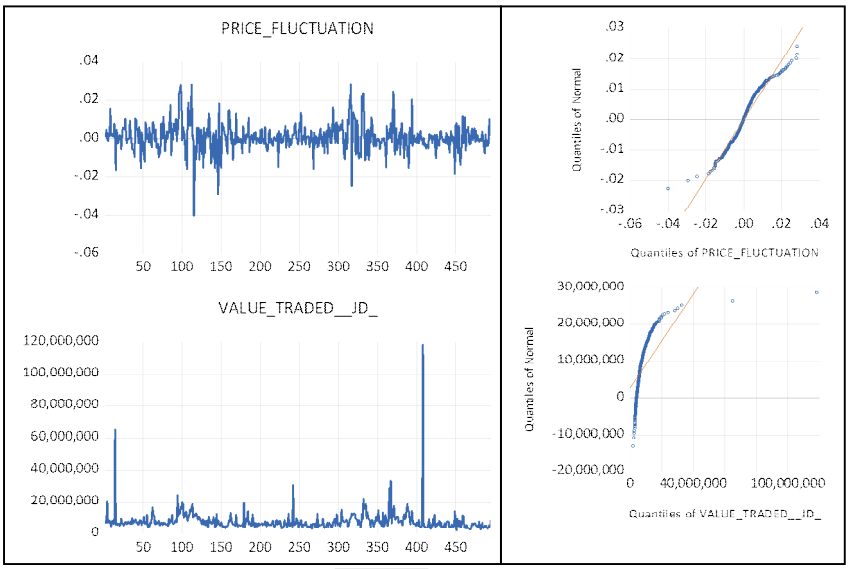
Based on the results presented in Table 3, it can be observed that price volatility does not show significant correlation over time in most study periods (P values: 0.995, 0.721, 0.547, 0.423), except for two periods characterized by stock market efficiency (P values: 0.002, 0.009). The price volatility is also evident in Fig. 2, where it varies notably from one period to another, displaying diverse patterns.

Table 3. Quality Measures of the Direct Relationship Path between Price Volatility

	Std. Coeff	Standard deviation	T statistics	P values
P.Volatility1 -> P.Volatility2	-0.341	0.109	3.120	0.002
P.Volatility2 -> P.Volatility3	-0.001	0.149	0.006	0.995
P.Volatility3 -> P.Volatility4	0.068	0.190	0.357	0.721
P.Volatility5 -> P.Volatility6	0.066	0.109	0.602	0.547
P.Volatility6 -> P.Volatility7	0.349	0.133	2.615	0.009
P.Volatility7 -> P.Volatility8	-0.085	0.106	0.801	0.423

Source: Author's own work

Fig. 2. Evolution of Study Variables.



Source: Author's own work

Additionally, price volatility varies significantly from one period to another and does not exhibit the same nature of volatility as shown in Fig. 2. These findings elucidate the association between the Amman financial market and a multitude of factors, including technical, psychological, economic, political, natural, and environmental influences that impact price volatility, as confirmed by Enow (2023) and Mitra (2011) studies. The findings presented in Table 4 and Fig. 2 also indicate that investors' behavior in the Amman Stock Exchange is not correlated over time in most study periods (P values: 0.886, 0.652, 0.467, 0.183, 0.412, 0.804, 0.363). This can be attributed to behavioral and technical factors on one hand, and economic, political, and social factors that influence the Jordanian market on the other hand. These results confirm the findings of Ghazo et al (2021) studies. Therefore, the second hypothesis is accepted, and thus, investors' decisions in the Amman Stock Exchange amid price volatility are influenced by both technical and fundamental factors.

Table 4. Quality Measures of the Direct Relationship Path between Trading Volumes

	Std. Coeff	Standard deviation	T statistics	P values
V.tr1 -> V.tr2	0.008	0.056	0.143	0.886
V.tr2 -> V.tr3	-0.113	0.251	0.452	0.652
V.tr3 -> V.tr4	0.741	0.334	2.218	0.027
V.tr4 -> V.tr5	0.056	0.077	0.728	0.467
V.tr5 -> V.tr6	0.163	0.123	1.331	0.183
V.tr6 -> V.tr7	0.054	0.066	0.821	0.412
V.tr7 -> V.tr8	-0.216	0.871	0.248	0.804
V.tr8 -> V.tr9	-0.105	0.115	0.910	0.363

Source: Author's own work

4.3- Analysis of the Impact of Price Volatility on the Activity of the Amman Stock Exchange:

As shown in Table 5, all direct effects (P values: 0.622, 0.541, 0.375, 0.464, 0.425, 0.938, 0.432) are not significant. Therefore, price volatility does not have a

direct impact on the activity of the Amman Stock Exchange and investors' behavior during the same period. This contradicts the results of studies conducted by Hong-xia (2008); Jin & An (2016); Kamuti (2013); and Talwar et al (2021) Thus, the third hypothesis is rejected. These results explain the excessive confidence of investors who follow short-term investment strategies in the Amman Stock Exchange. This category exhibits higher levels of confidence in their ability to withstand risks and engage in speculation in the stock markets despite sharp volatility. Price volatility does not affect their behavior or opinions, and market movements do not lead to an increase or decrease in demand for securities. Investors in the Amman Stock Exchange perceive these volatilities with minimal concern and do not consider them as factors in making their investment decisions. This finding is consistent with the study conducted by Horobeț & Vrinceanu (2020) on financial services companies in Central and Eastern Europe.

Table 5. Quality Measures of the Direct Relationship Path between Price Volatility and Trading Volume

	Std. Coeff	Standard deviation	T statistics	P values
P.Volatility1 -> V.tr1	-0.044	0.089	0.492	0.622
P.Volatility2 -> V.tr2	-0.032	0.052	0.611	0.541
P.Volatility3 -> V.tr3	0.087	0.098	0.888	0.375
P.Volatility4 -> V.tr4	-0.061	0.084	0.733	0.464
P.Volatility5 -> V.tr5	0.084	0.105	0.798	0.425
P.Volatility6 -> V.tr6	0.159	0.075	2.129	0.033
P.Volatility6 -> V.tr6	0.163	0.110	1.483	0.138
P.Volatility7 -> V.tr7	0.005	0.059	0.078	0.938
P.Volatility8 -> V.tr8	-0.157	0.199	0.787	0.432

Source: Author's own work

Shuang-cheng (2006) study indicated the possibility of analyzing price volatility into long-term and transient components, dividing it into long-term volatility and a transient component. This can help examine the basic Mixed Data Sampling (MDH) theory regarding the relationship between price volatility and

investor behavior in the stock market. The results shown in Table 6 concerning the direct effects of concurrent periods (P values: 0.044, 0.025, 0.092) demonstrate that price volatility has an impact on investor behavior during upcoming waves (periods). This explains the aversion to losses, as this sharp price volatility make long-term investors change their investment strategies and shift towards more stable and secure assets. It also makes them cautious and hesitant in making investment decisions, significantly affecting future investments in the market and leading to a slowdown in market growth. Therefore, the impact of price volatility on the activity of the ASE differs based on the behavior of investors, supporting the acceptance of the fourth hypothesis.

Table 6. Quality Measures of the Synchronous Relationship Path between Price Volatility and Trading Volume

	Std. Coeff	Standard deviation	T statistics	P values
P.Volatility1 -> V.tr3	0.212	0.105	2.011	0.044
P.Volatility3 -> V.tr5	0.323	0.144	2.248	0.025
P.Volatility5 -> V.tr6	-0.234	0.139	1.684	0.092

Source: Author's own work

5. CONCLUSION

The aim of this study was to analyze the behavior of investors in the Amman Stock Exchange amid sharp volatility in stock prices. This was achieved by exploring potential patterns of investor behavior and identifying the factors that influence investment decisions during these volatilities. To understand the nature of this relationship, the study relied on various previous research and studies in this field. Several statistical and technical models were employed, utilizing linear regression and time-series analysis to analyze the collected data. The study arrived at the following results:

- There is no direct impact of price volatility on companies' decision to list their shares on the stock exchange. This explains the lack of influence of the financial

structure due to these volatilities. Moreover, these price volatility do not affect the behaviors of large investors.

- There is a direct impact of price volatility during the second and third quarters of 2021 on the value of executed contracts. This period was characterized by the efficiency of the stock exchange, leading to rational reactions from investors during these quarters compared to other periods, which witnessed herd behavior.
- Price volatility is not correlated over time in most periods of the study and vary significantly from one period to another, showing different volatility patterns. Additionally, the behavior of investors in the Amman Stock Exchange is not consistently stable over time due to various factors such as behavioral, technical, economic, political, and social influences affecting the market.
- Price volatility in the Amman Stock Exchange does not directly impact the market's activity or investor behavior. Short-term investors exhibit high confidence in taking risks and speculating in the markets, even amidst sharp volatility. These price swings do not affect their behavior or investment decisions, nor do they influence the demand for securities. Investors in the Amman Stock Exchange perceive these volatilities with less concern, and they do not consider them as significant factors when making investment decisions.
- Price volatility does influence investors' behavior in the future, leading to risk aversion. The sharp price volatility prompts long-term investors to alter their investment strategies, favoring more stable and secure assets. It also causes them to hesitate when making investment decisions.

Recommendations for investors in the ASE to deal with sharp fluctuations in stock prices are as follows:

- Investors should diversify their investment portfolios and avoid relying on a single stock or a few stocks only. This can be achieved by investing in various companies and asset classes, such as stocks, bonds, and exchange-traded funds.

- Investors should prepare a clear and precise investment plan that defines investment objectives, different investment categories, and time limits for investments. This will help avoid making hasty and ill-considered decisions during periods of sharp volatility in the financial markets.
- Investors should avoid emotional investing and refrain from relying on personal feelings and speculations when making investment decisions. Instead, they should base their decisions on fundamental and technical analyses and financial data of companies.
- Investors should monitor the financial markets continuously, exercise patience and steadfastness, and refrain from reacting emotionally to sharp price volatility. Instead, they should conduct thorough market and company analyses.
- To discover the relationship between price volatility and investor behavior, investors should analyze price volatility into long-term and transient components.
- Investors should avoid investing in unstable companies that are influenced by mysterious or unknown factors .

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