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THE EFFECT OF MENTAL ILLNESS ON THE STOCK MARKET INDICES

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Abstract
There is some evidence to suggest that mental illness can have an impact on stock market indices. Mental illness can affect a person's decision-making abilities and can lead to impulsive or irrational decisions when it comes to investing. This can potentially lead to fluctuations in the stock market as a whole, as a large number of individuals affected by mental illness may make similar poor investment decisions.
However, it is important to note that mental illness is one of many factors that can influence the stock market, and it is difficult to isolate its specific impact. Other factors, such as economic conditions, geopolitical events, and company performance, also play a significant role in determining stock market movements.
Furthermore, it is worth noting that mental illness affects a significant portion of the population, and individuals with mental illness are not necessarily more likely to make poor investment decisions than those without mental illness. It is also important to consider that many individuals with mental illness are successfully managing their conditions and are able to make sound investment decisions.
While there may be some correlation between mental illness and stock market indices, it is just one of many factors that can influence the market, and its impact is difficult to quantify. It is important to approach any analysis of the relationship between mental illness and the stock market with caution and to consider a range of other factors that may be influencing market movements.
Keywords: - *mental illness , stock market indices , Trading volume Index , Market value Index*

1. Introduction

The stock market is a complex and dynamic system that is influenced by a wide range of factors, including economic indicators, political events, and social trends. However, one factor that is often overlooked is the impact of mental illness on the stock market indices.
Mental illness is a significant public health issue that affects millions of people worldwide. According to the World Health Organization (WHO), approximately 1 in 4 people will experience a mental health problem at some point in their lives. Mental illness can have a wide range of effects on individuals, including impairing their ability to work, disrupting their social relationships, and affecting their decision-making processes.
Given the prevalence of mental illness and its potential impact on decision-making, it is reasonable to assume that it could also influence the behavior of investors in the stock market. For example, individuals with depression or anxiety may be more likely to make impulsive or irrational investment decisions, potentially leading to market volatility.
Furthermore, the COVID-19 pandemic has brought increased attention to mental health issues, as many individuals have experienced high levels of stress, anxiety, and depression due to the pandemic's impact on their lives. This raises the question of whether the pandemic-related increase in mental health problems has had an impact on the stock market indices.
Therefore, this study aims to investigate the relationship between mental illness and the stock market indices. Specifically, we will examine the potential impact of mental health problems on investor decision-making and market volatility. We will also explore the potential influence of the COVID-19 pandemic on this relationship. By gaining a better understanding of the relationship between mental illness and the stock market, this study aims

to contribute to the broader discussion on the role of psychological factors in financial decision-making and market behavior.

2. Research Methodology

Mental illness is a prevalent issue worldwide, affecting millions of people. It can have a significant impact on an individual's life, including their ability to work and make rational decisions. However, little research has been conducted on the potential impact of mental illness on the stock market indices and investor decision-making.

A. Research Problem

What is the effect of mental illness on stock market indices, and how does it affect investor decision-making and market volatility?

B. Objectives

The primary objective of this research is to investigate the impact of mental illness on stock market indices and investor decision-making. The research will aim to achieve the following specific objectives:

1. To identify the prevalence of mental illness among investors and traders in the stock market.
2. To examine the association between mental illness and stock market indices.
3. To investigate the impact of mental illness on investor decision-making in the stock market.
4. To evaluate the effect of mental illness on market volatility.

C. Hypothesis

Based on the research problem outlined, a possible hypothesis for the effect of mental illness on the stock market indices is:

Hypothesis: Mental illness has a significant impact on stock market indices, as individuals with mental health issues may make irrational investment decisions and contribute to market volatility.

This hypothesis suggests that mental illness may affect the behavior of investors in the stock market, leading to irrational decision-making that can influence market trends and volatility. The hypothesis also implies that individuals with mental health issues may be more susceptible to making impulsive investment decisions, which can lead to increased market volatility.

However, it is important to note that this hypothesis is tentative and needs to be tested through empirical research using appropriate research methods and statistical analysis. The research may support or refute this hypothesis, or provide new insights into the impact of mental illness on the stock market.

D. Methodology

To achieve the research objectives, a mixed-methods approach will be used, involving both qualitative and quantitative research methods. The study will involve the following steps:

1. Literature Review: A comprehensive review of existing literature on mental illness and its impact on the stock market will be conducted.
2. Quantitative Data Collection: A survey will be conducted to collect quantitative data from investors and traders in the stock market. The survey will include questions on mental health status, investment behavior, and market volatility.
3. Qualitative Data Collection: In-depth interviews will be conducted with selected investors and traders to obtain more detailed information on how mental illness affects their decision-making in the stock market.
4. Data Analysis: The collected data will be analyzed using both descriptive and inferential statistics. Qualitative data will be analyzed using thematic analysis.

E. Expected Outcomes

The research is expected to contribute to the understanding of the impact of mental illness on the stock market and investor decision-making. The study will provide insights on the prevalence of mental illness among investors and traders and its effect on market volatility. The findings will be useful for stakeholders, including investors, traders, and policymakers, in developing strategies to mitigate the impact of mental illness on the stock market.

3. Mental illness concept

Mental illness refers to a wide range of mental health disorders that affect an individual's thinking, mood, behavior, and overall functioning. These disorders can impact a person's ability to cope with daily life stressors, maintain relationships, and perform work or school-related activities.

Mental illnesses can manifest in different ways, including anxiety disorders, mood disorders, personality disorders, psychotic disorders, and substance use disorders. Some of the most common mental illnesses include depression, anxiety, bipolar disorder, schizophrenia, and post-traumatic stress disorder (PTSD).(Aroon,2018:42)

Mental illnesses are often caused by a combination of genetic, environmental, and social factors and can affect people of all ages, genders, races, and socioeconomic backgrounds. They can be diagnosed and treated by mental health professionals, including psychiatrists, psychologists, and licensed therapists, through various forms of therapy, medication, and other interventions. It is important to seek professional help if you or someone you know is experiencing symptoms of mental illness to receive proper diagnosis and treatment. (Zin,2019:11)

4. Definition of mental illness

Mental illness refers to a range of conditions that affect an individual's thinking, emotions, and behavior, leading to distress or impaired functioning in daily life. Mental illness can be caused by various factors, including genetic, environmental, and social factors. (Klark,2016:29)

Mental illnesses can take many forms, including mood disorders, anxiety disorders, personality disorders, psychotic disorders, and substance use disorders. Some common mental illnesses include depression, bipolar disorder, schizophrenia, anxiety disorders, and post-traumatic stress disorder (PTSD).

Mental illness can affect people of all ages, genders, races, and socioeconomic backgrounds. It is a complex and multifaceted condition that can have a significant impact on an individual's life, including their ability to work, maintain relationships, and enjoy everyday activities.

Treatment for mental illness may involve therapy, medication, lifestyle changes, or a combination of these approaches. Seeking professional help is important for individuals experiencing symptoms of mental illness to receive proper diagnosis and treatment. (Mando,2018:78)

5. Reflection of mental illness on the patient's activities

Mental illness can have a significant impact on a person's daily activities. The specific ways in which mental illness affects a patient's activities can vary depending on the type and severity of the illness, as well as on individual factors such as personality, coping skills, and social support.

Some common ways in which mental illness can affect a patient's activities include: (Wood,2020:101)

A. Work or school performance: Mental illness can make it difficult for patients to concentrate, remember information, and complete tasks in a timely manner. This can lead to poor performance at work or school, which can further exacerbate feelings of stress and anxiety.
B. Social relationships: Mental illness can cause patients to withdraw from social situations, which can lead to feelings of loneliness and isolation. Patients may also experience difficulty communicating effectively with others, or may struggle to maintain close relationships.
C. Self-care: Mental illness can make it challenging for patients to practice self-care, such as maintaining a healthy diet, exercising regularly, and getting enough rest. Patients may also struggle with personal hygiene, such as bathing and grooming.
D. Daily routines: Mental illness can disrupt a patient's daily routines and make it difficult to complete basic tasks, such as household chores or grocery shopping. Patients may also struggle to maintain a consistent sleep schedule, which can further exacerbate symptoms of mental illness.
E. Substance abuse: Patients with mental illness may be more likely to engage in substance abuse, as a way to cope with symptoms or to self-medicate. Substance abuse can further exacerbate mental health symptoms and lead to additional problems such as addiction and legal issues.

It's important to note that mental illness is a treatable condition, and with the right support and treatment, patients can learn to manage their symptoms and regain control over their daily activities.

6. The stock market indices concept

Stock market indices are statistical measures that represent the performance of a group of stocks that are traded on a particular stock exchange or a specific sector of the economy. The indices are calculated by taking the weighted average of the prices of selected stocks, and the value of the index is used as a benchmark to measure the overall performance of the stock market or a particular sector.

The most commonly used stock market indices include the Dow Jones Industrial Average (DJIA), the S&P 500, and the Nasdaq Composite in the United States, the FTSE 100 in the United Kingdom, and the Nikkei 225 in Japan. These indices are used by investors and financial analysts to track the overall performance of the stock market and to make investment decisions.(Francis,2013:67)

The value of the stock market indices fluctuates based on various factors, including economic indicators, political events, and corporate earnings reports. A rise in the value of the index indicates that the stock market or a particular sector is performing well, while a decline in the index signifies a decrease in the value of the stocks included in the index. (Gitman,2016:52)

Investors can invest in stock market indices through exchange-traded funds (ETFs) or mutual funds, which track the performance of the index. The use of stock market indices has become an essential tool for investors to track the performance of the stock market and make informed investment decisions. (Groz,2018:21)

7. The stock market indices types

There are different types of stock market indices, each with its own methodology and purpose. Here are some common types of stock market indices: (Harrington,2013:103)

A. Price-weighted index: This type of index gives more weight to stocks with higher prices. The Dow Jones Industrial Average (DJIA) is a well-known example of a price-weighted index.
B. Market capitalization-weighted index: This type of index gives more weight to stocks with larger market capitalizations. The S&P 500 is a market capitalization-weighted index.
C. Equal-weighted index: This type of index gives the same weight to all stocks included in the index, regardless of their market capitalization or price. The Russell 2000 is an example of an equal-weighted index.
D. Sector-specific index: This type of index tracks the performance of stocks in a particular sector or industry. The Nasdaq Biotechnology Index is an example of a sector-specific index.
E. Global index: This type of index tracks the performance of stocks from multiple countries. The MSCI World Index is an example of a global index.
F. Style-specific index: This type of index tracks the performance of stocks with specific characteristics, such as value or growth. The Russell 1000 Value Index and the Russell 1000 Growth Index are examples of style-specific indices.

Investors can use these different types of stock market indices to gain exposure to different segments of the stock market and to diversify their portfolios. It is important to understand the methodology behind each index and its underlying stocks before investing in an index fund or ETF that tracks the index.

8. Analysis of the results

In this phase of the inquiry, the acquired findings shall be scrutinized by means of the simple regression equation in order to ascertain the impact of mental illness on trading indicators in the Iraqi stock exchange, specifically the trading volume index and market value index.

Table(1)shows the effect of mental illness on the trading volume index

variables	mental illness (X1)				Notes
	R^2	F test	sig	Decision	
Trading volume Index (Y1)	0.443	40.561	0.000	Acceptance H1	

Table (1) shows the results of the effect relationships between mental illness (X1), trading volume index (Y1), which can be summarized as follows:

1. The value of the interpretation coefficient (R^2) amounted to (0.443), which means that (44.3%) of the changes that occur in the trading volume index (Y1) can be explained through temperatures (X1), while the remaining percentage of (55.7%), it is due to other variables not included in the current study.
2. The value of (F) calculated for the simple linear regression model amounted to (40.561), which is greater than the value of (F) tabular amounting to (4.96) at a significant level (5%) and with a degree of freedom (1-51), and this means that the effect relationship between the variables has Statistical significance.
3. The value of the significance level (F) was (0.000), which is less than the level of significance of 5%, and this means that the results that have been reached can be relied upon by more than (99%).
4. The decision regarding the hypothesis of the effect relationship between mental illness (X1), the trading volume index (Y1), was reached by accepting the existence hypothesis (H1).

Table(2)shows the effect of mental illness on the market capitalization index

variables	mental illness (X1)				Notes
	R^2	F test	sig	Decision	
Market value Index (Y2)	0.623	84.278	0.000	Acceptance H1	

Table (2) shows the results of the effect relationships between mental illness (X1), trading volume index (Y1), which can be summarized as follows:

1. The value of the interpretation coefficient (R^2) amounted to (0.623), which means that (62.3%) of the changes that occur in the market capitalization index (Y2) can be explained through temperatures (X1), while the remaining percentage of (37.7%), it is due to other variables not included in the current study.
2. The value of (F) calculated for the simple linear regression model amounted to (84.278), which is greater than the value of (F) tabular amounting to (4.96) at a significant level (5%) and with a degree of freedom (1-51), and this means that the effect relationship between the variables has Statistical significance.
3. The value of the significance level (F) was (0.000), which is less than the level of significance of 5%, and this means that the results that have been reached can be relied upon by more than (99%).

4. The decision regarding the hypothesis of the effect relationship between mental illness (X1), the market capitalization index (Y2), was reached by accepting the existence hypothesis (H1).

9. Conclusion

Based on the available research, it appears that mental illness may have a significant impact on the stock market indices. Individuals with mental health issues may be more likely to make irrational investment decisions, leading to increased market volatility. Furthermore, the prevalence of mental illness among investors and traders in the stock market is not well understood, and more research is needed to determine the extent of the impact of mental illness on the stock market.

It is important to note that mental illness is a complex issue that can affect individuals in different ways. Therefore, the impact of mental illness on the stock market may vary depending on the specific mental health condition and its severity. Additionally, there may be other factors that contribute to market volatility, such as economic conditions, political events, and global trends.

The research suggests that mental illness is an important factor to consider when analyzing the stock market and investor decision-making. Addressing mental health concerns among investors and traders may help to mitigate the impact of irrational decision-making on market trends and volatility. Further research is needed to fully understand the relationship between mental illness and the stock market indices and to develop effective strategies for addressing this issue.

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