THE IMPACT OF EXCHANGE RATE ON THE STOCK MARKET

MBOUALA ANDZELET MONICIA POST GRADUATE STUDENT (M.COM), JAIN DEEMED-TO-BE UNIVERSITY, BANGALORE DR.CK SURESH PROFESSOR & FACILITATOR, JAIN DEEMED-TO-BE UNIVERSITY, BANGALORE DR.PATCHA BHUJANGARAO PROFESSOR & FACILITATOR, JAIN DEEMED-TO-BE UNIVERSITY, BANGALORE

ABSTRACT

Exchange rates and the stock market are fundamental pillars of the global financial markets. These entities play a crucial role in facilitating international trade on a global scale. Understanding the dynamics between these markets is essential for investors, as it not only allows them to minimize risks while investing but also anticipate lucrative opportunities. By exploring this complex relationship, investors can optimize their strategies, leveraging currency fluctuations and stock market movements for informed investment decisions. Our study focuses on how variations in exchange rates influence stock returns on the NYSE stock market and the extent of this impact on market volatility?

INTRODUCTION

The 1987 stock market crash triggered a global shockwave, leading to substantial declines in international financial markets, notably in New York, Chicago, London, Tokyo, and Frankfurt. This tumultuous period marked the beginning of an era where global financial markets became increasingly interconnected and sensitive to economic fluctuations. Among the many factors contributing to this volatility, exchange rate fluctuations emerged as a key element, directly influencing stock returns on the NYSE stock market.

Our research delves into this specific aspect, closely exploring how exchange rate fluctuations impact the performance of NYSE stocks. Building upon this historical backdrop, our study focuses on the precise magnitude of this impact, thoroughly examining how currency movements can amplify market volatility. By analyzing these intricate relationships between exchange rates, stock returns, and market stability, our research aims to provide crucial insights in an ever-evolving financial world over a 30-year period to be defined. The methodologies and empirical results will shed light on this intricate interplay.

OBJECTIVES OF THE STUDY

- 1. Examine how exchange rates influence stock returns.
- 2. Analyze different perspectives of investors and businesses regarding fluctuations in exchange rates
- 3. Examine how new technologies and business practices impact the interaction between exchange rates and the stock market
- 4. Evaluate the effectiveness of investment strategies in response to exchange rate fluctuations.
- 5. Identify gaps in existing research on the impact of exchange rates on the stock market.

REVIEW OF LITERATURE

S. Suriani, and *al* (2015) : The article titled « Impact of Exchange Rate on Stock Market » published in 2015, explores the relationship between the stock market and the foreign exchange market in Pakistan from January 2004 to December 2009. The study investigates the influence of exchange rate fluctuations on stock prices. Various theoretical approaches, including the Portfolio Balance approach and the Traditional approach, are discussed to comprehend this intricate relationship. The study employs rigorous methodologies, including the Augmented Dickey Fuller (ADF) test for data stationarity, Granger Causality test, and regression analysis.

Surprisingly, the results reveal no significant link between exchange rates and stock prices in Pakistan during the specified period. These findings underscore the importance of a thorough and contextual analysis of factors influencing international financial markets.

Mishra A.K. (2004) : The article titled **« Stock Market and Foreign Exchange Market in India: Are they Related? »** by Alok Kumar Mishra explores the relationship between stock market and foreign exchange markets in India. The study analyzes data from April 1992 to March 2002 using Granger's Causality test and Vector Auto Regression technique. The findings indicate a unidirectional causality between exchange rate and interest rate, as well as between exchange rate return and demand for money. However, there is no Granger's causality between exchange rate return and stock return. The study suggests that while these factors are related, there is no consistent relationship between them. The research has implications for investors, policy makers, and researchers, highlighting the complexity of the interactions between stock and foreign exchange markets in India.

Courage Mlambo and *al* (2013): This study, titled « Effects of Exchange Rate Volatility on the Stock Market: A Case Study of South Africa » examines the impact of currency volatility on the South African stock market. Published in the Mediterranean Journal of Social Sciences, Volume 4, Number 14, in November 2013, the authors, Courage Mlambo, Andrew Maredza, and Kin Sibanda, investigated the relationship between exchange rate volatility and the stock market. The analysis revealed a weak correlation between these factors. Additionally, the study identified other macroeconomic variables, including interest rates, total mining production, money supply, and United States interest rates, as influencers of the stock market. The findings emphasize the importance of efficient hedging instruments to mitigate the negative effects of rand volatility. Policymakers are encouraged to utilize exchange rates to attract foreign portfolio investment. Furthermore, maintaining cooperation with world-class stock markets is crucial for resilience against macroeconomic spillovers.

Rabia Najaf, and Khakan Najaf (2016): This literature review discusses a study conducted by Rabia Najaf and Khakan Najaf, published in the International Journal of Research – Granthaalayah (Vol. 4, No. 1, January 2016, pp. 70-79). The study focuses on the relationship between Indian rupees-US dollar exchange rate and Nifty returns. The authors used various statistical tests, including unit root tests and Granger causality tests, to analyze the data from October 2008 to March 2010.

The research found that there is a negative relationship between exchange rate and Nifty returns. The study emphasizes the importance of stock markets for the economy and highlights the impact of exchange rate volatility on business profitability. The results suggest that maintaining a stable exchange rate is crucial for attracting foreign investors and making informed management decisions about risk and investment.

The literature review also includes references to related studies on the relationship between stock prices, exchange rates, and other macroeconomic factors. The paper concludes with policy recommendations for policymakers to consider the effect of stock market movements on the overall economy and to maintain stable foreign exchange rates to encourage foreign investments.

Kiru Sichoongwe, (2016) : This study investigates the effects of exchange rate volatility on the Zambian stock market using data from 2000 to 2015. The results indicate a negative relationship between exchange rate volatility and stock market returns. Specifically, a unit increase in exchange rate volatility leads to a decrease in stock market capitalization. The findings highlight the importance of stabilizing exchange rates and using them as a policy tool to attract foreign investment. Additionally, the study suggests the need for efficient hedging instruments and interventions by policymakers during periods of abnormal exchange rate volatility to boost investor confidence. Continuous research on exchange rate volatility and its impact on various macroeconomic variables is recommended for a deeper understanding of the dynamics involved.

Adarmola Anthony Olugbenga, (2012): This literature review discusses a study conducted on the relationship between exchange rate volatility and stock market performance in Nigeria from 1985 to 2009. The study used the Johansen cointegration tests and Granger causality test to analyze the data. The results indicated a significant positive impact of exchange rate on stock market performance in the short run, but a significant negative impact in the long run. The study also found a unidirectional causation from exchange rate to stock market returns, suggesting that variations in the Nigerian stock market are explained by exchange rate volatility. The findings highlight the importance of monitoring exchange rate fluctuations for investors and policymakers in Nigeria.

Michael B Devereux and Philip R Lane (2002) : The paper titled « Understanding Bilateral Exchange Rate Volatility » by Michael B. Devereux and Philip R. Lane, published as CEPR Discussion Paper No. 3518 in August 2002, develops an empirical model of bilateral exchange rate volatility. The authors investigate the determinants of bilateral exchange rate volatility across countries, focusing on both developing and developed economies. They propose that external financial liabilities play a crucial role in determining desired bilateral exchange rate volatility, especially for developing economies. The study incorporates standard Optimal Currency Area (OCA) factors along with financial variables to analyze exchange rate volatility. The authors find that bilateral exchange rate volatility is significantly affected by the stock of external debt for developing economies, while OCA variables are more important for industrial countries. The paper provides a theoretical model and empirical evidence supporting the influence of financial linkages on exchange rate volatility, particularly in emerging market economies.

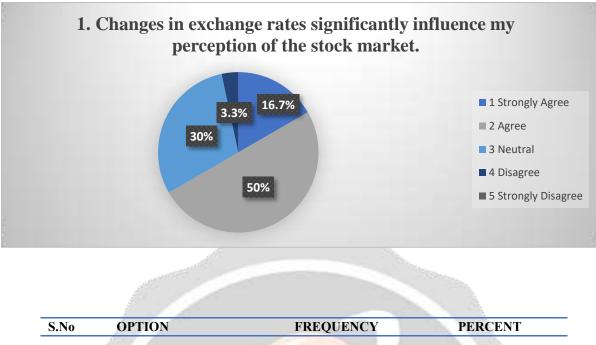
ANALYSIS

Our study focused on a survey where participants were queried about their perceptions and strategies regarding the interaction between exchange rates and the stock market. Subsequently, a demographic overview will be presented, followed by an analysis of responses to the ten statements. This analysis will illuminate diverse viewpoints and considerations related to the impact of exchange rates on stock market dynamics, risk management, and investment strategies.

1-18		Frequency	Percentage
	Female	17	56.7
Gender	Male	13	43.3
10 C A	Total	30	100
107.10	Below 20	2	6.7
	20-25	25	83.3
	25-30	1	3.3
Age	Above 30	2	6.7
	Total	30	100
	Undergraduate	8	26.7
EducationalLevel	Postgraduate	22	73.3
	Total	30	100
	Unmarried	26	86.7
	Married	4	13.3
Marital Status	Total	30	100
Designation	Student	26	86.7
	Employee	2	6.7
	Business	2	6.7
	Total	30	100

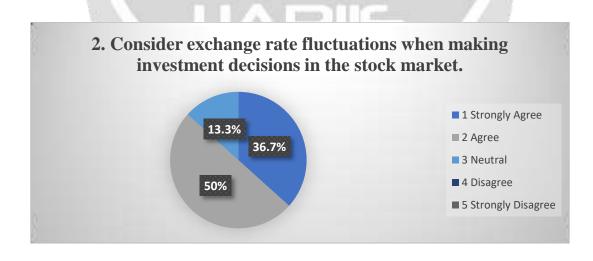
Frequency Table

18. S. L.



5.110	UTION	FREQUENCI	IERCENT
	19.1		
1	Strongly Agree	5	16.7
2	Agree	15	50
3	Neutral	9	30
4	Disagree	1	3
1.1	Total	30	100

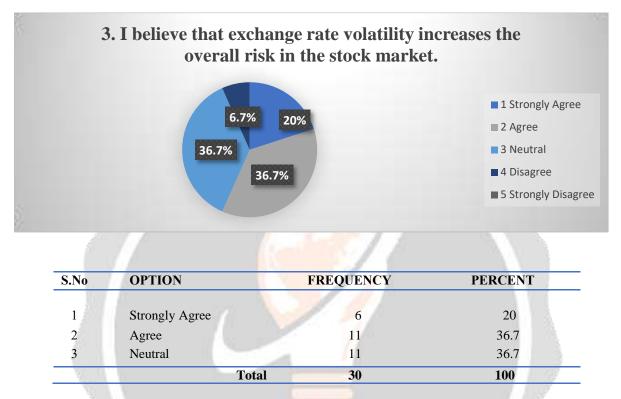
Interpretation: The first question reveals that 20 participants out of 30, or 66.7%, acknowledge the significant influence of exchange rate fluctuations on their perception of the stock market. Among them, 5 express a strong conviction toward this influence. However, 9 participants remain neutral, indicating a diversity of perspectives or a potential need for clarification. Only one participant expresses disagreement, underscoring the general recognition of the impact of exchange rates on market perception.



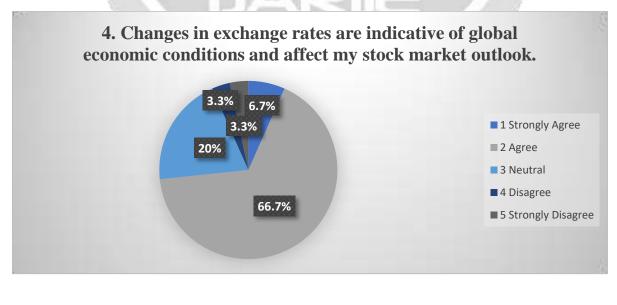
S.No	OPTION	FREQUENCY	PERCENT
1	Strongly Agree	11	36.7
2	Agree	15	50

3	Neutral		4	13.3
		Total	30	100

Interpretation: The second question reflects a strong consideration of exchange rate dynamics among participants. A substantial majority of participants, with 26 out of 30 (86.7%), express agreement or strong agreement, indicating a high level of attention to exchange rate fluctuations when formulating their investment decisions.



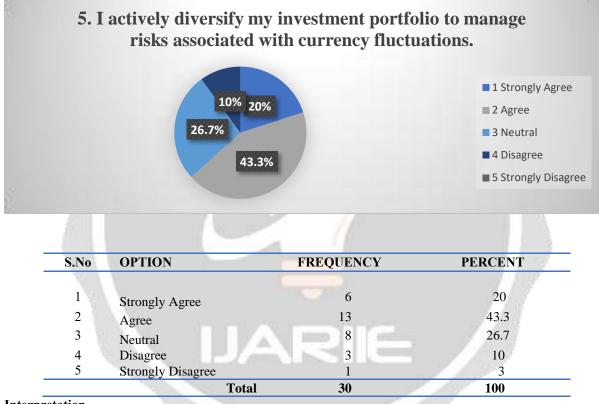
Interpretation: The third statement shows a balanced distribution of responses. Eleven participants express agreement, constituting 36.7% of the total, and six express strong agreement, indicating a more emphatic stance on the correlation between exchange rate volatility and increased overall risk in the stock market.



S.No	OPTION	FREQUENCY	PERCENT

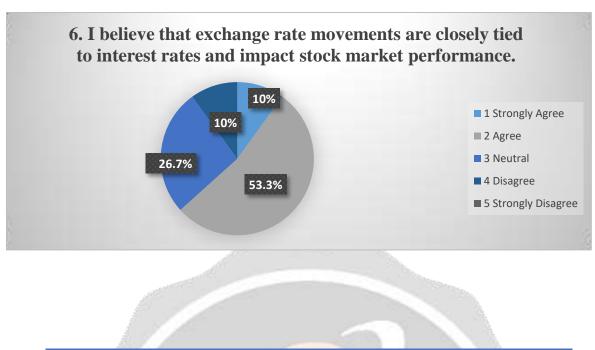
	Total	30	100
5	Strongly Disagree	1	3
4	Disagree	1	3.3
3	Neutral	9	30
2	Agree	15	50
1	Strongly Agree	5	16.7

The fourth statement demonstrates a strong consensus among participants. A substantial number of twenty participants, or 66.7% of the total, express agreement, indicating widespread recognition of the role of exchange rate fluctuations as indicators of global economic conditions and their impact on the stock market outlook.



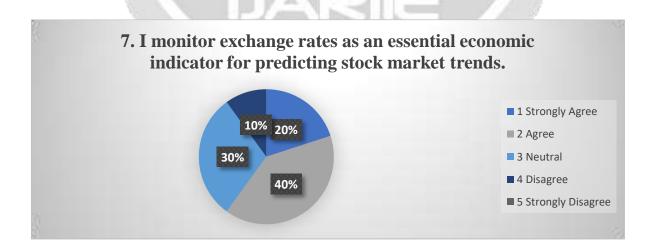
Interpretation

The fifth question shows that 19 participants out of 30, or 63.3%, adopt a proactive approach to diversifying their investment portfolio to manage risks associated with currency fluctuations. Among them, 6 express strong agreement, emphasizing a more pronounced commitment to this strategy.



S.No	OPTION	FREQUENCY	PERCENT
1	Strongly Agree	3	10
2	Agree	16	53.3
3	Neutral	8	26.7
4	Disagree	3	10
h.	Total	30	100
6 J.			

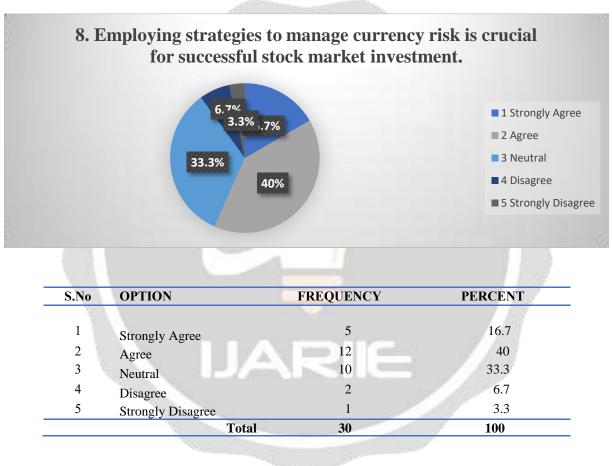
The sixth question reveals that 27 participants out of 30, or 90%, believe that exchange rate movements are closely tied to interest rates and impact the performance of the stock market. Among them, 3 express strong agreement, highlighting a strong consensus on this relationship.



S.No	OPTION	FREQUENCY	PERCENT
1	Strongly Agree	6	20

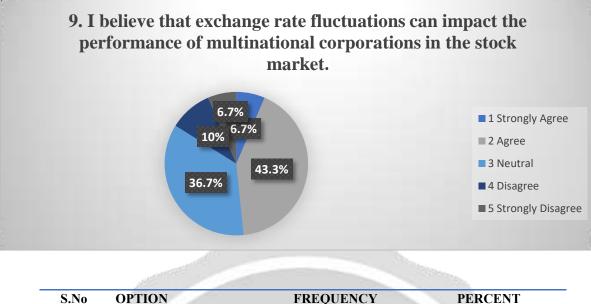
		Total	30	100
4	Disagree		3	10
3	Neutral		9	30
2	Agree		12	40

The seventh question shows that 24 participants out of 30, or 80%, consider monitoring exchange rates as an essential economic indicator for predicting stock market trends. Among them, 6 express strong agreement, highlighting significant recognition of the importance of exchange rates as an indicator.



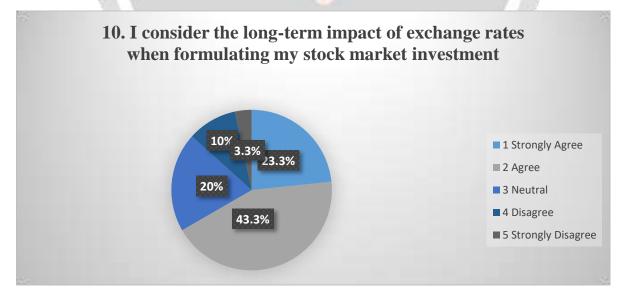
Interpretation

The eighth statement reveals that 23 participants out of 30, or 76.7%, consider employing strategies to manage currency risk crucial for successful investment in the stock market. Among them, 5 express strong agreement, underscoring the importance given to these strategies.



S.No	OPTION	FREQUENCY	PERCENT
1	Strongly Agree	2	6.7
2	Agree	13	43.3
3	Neutral	11	36.7
4	Disagree	3	10
5	Strongly Disagree	2	6.7
	Total	30	100
10.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

The ninth question shows that 15 participants out of 30, or 50%, acknowledge that exchange rate fluctuations can impact the performance of multinational corporations in the stock market. Among them, 2 express strong agreement, indicating moderate recognition of this influence.



S.No	OPTION	FREQUENCY	PERCENT
1	Strongly Agree	7	23.3

	Total	30	100
5	Disagree Strongly Disagree	1	3.3
4	Disagree	3	10.0
3	Neutral	6	20
2	Agree	13	43.3

The tenth question reveals that 20 participants out of 30, or 66.7%, consider the long-term impact of exchange rates when formulating their investments in the stock market. Among them, 7 express strong agreement, highlighting significant consideration of the long-term impact of exchange rates.

RESULTS OF SURVEY

1. Perception Influence:

Respondents generally acknowledge that changes in exchange rates significantly influence their perception of the stock market.

2. Consideration in Investµment Decisions:

Many participants actively consider exchange rate fluctuations when making investment decisions in the stock market.

3. Risk Perception:

There is a belief among respondents that exchange rate volatility increases the overall risk in the stock market.

4. Global Economic Indicators:

A significant majority recognizes that changes in exchange rates are indicative of global economic conditions and affect their stock market outlook.

5. Risk Management through Diversification:

Respondents tend to actively diversify their investment portfolios to manage risks associated with currency fluctuations.

6. Connection with Interest Rates:

Many participants believe in a close connection between exchange rate movements, interest rates, and stock market performance.

7. Monitoring for Predictions:

A substantial number of respondents monitor exchange rates as an essential economic indicator for predicting stock market trends.

8. Crucial Role of Currency Risk Management:

The importance of employing strategies to manage currency risk is acknowledged for successful stock market investment.

9. Impact on Multinational Corporations:

Opinions vary on the extent to which exchange rate fluctuations can impact the performance of multinational corporations in the stock market.

10. Long-Term Consideration:

Participants generally consider the long-term impact of exchange rates when formulating their stock market investments.

SUGGESTIONS

1. Educational Awareness: Launch comprehensive educational initiatives to enhance investors' understanding of how exchange rates influence the stock market. This could be done through workshops, seminars, and accessible resources to improve financial literacy.

2. Strategic Risk Management: Emphasize the development and implementation of effective strategies to manage currency risk in investment portfolios. Educate investors on diversification practices and other risk mitigation techniques, helping them create and use good plans to handle currency value changes during investments, thus managing the impact of exchange rate fluctuations.

3. Ethical Guidelines and Awareness: Establish clear rules for using information related to exchange rates in stock market decisions. Promote awareness of potential ethical concerns and encourage investors to make informed and ethical choices when leveraging data related to global economic conditions.

CONCLUSION

In conclusion, the survey findings reflect a diverse awareness among participants regarding the impact of exchange rates on the financial market. The suggested strategies highlight the need for comprehensive education, strategic risk management, and ethical guidelines for investors. A holistic approach, integrating understanding, strategic preparedness, and clear ethical standards, is crucial to guide informed decisions in this complex domain. By combining these elements, financial market participants can better navigate exchange rate fluctuations, thereby reinforcing stability and responsibility in their investment activities.

REFERENCES

1. S. Suriani, and *al* (2015) : « Impact of exchange rate on stock market », *International Journal of Economics and Financial issues*, Vol.5, No.1, p.385-388,

https://dergipark.org.tr/en/pub/ijefi/issue/31972/352308?publisher=http-www-cag-edu-tr-ilhan-ozturk

- Mishra A.K. (2004) : « Stock market and foreign exchange market in India : are they related? » South Asia Economic Journal, Vol.5, No.2, p. 209-232, https://journals.sagepub.com/doi/abs/10.1177/139156140400500202
- 3. Courage Mlambo and *al* (2013) : « Effects of Exchange Rate Volatility on the Stock Market: A Case Study of South Africa », *Mediterranean Journal of Social Sciences MCSER Publishing Rome-italy*, Vol. 4, No.14, p.561-570,

https://core.ac.uk/download/pdf/145050842.pdf

- 4. Rabia Najaf, and Khakan Najaf (2016): « A study of exchange rates movement and stock market volatility » *International Journal of Research Granthaalayah*, Vol. 4, No. 1, 70-79, https://www.academia.edu/download/42367594/09_IJRG16_A01_13.pdf
- 5. Kiru Sichoongwe, (2016): «Effects of Exchange Rate Volatility on the Stock Market: The Zambian Experience », *Journal of Economics and Sustainable Development*, Vol.7, No.4, https://core.ac.uk/download/pdf/234647415.pdf
- 6. Kennedy, K. and Nourzad, Farrokh, (2016). : « Exchange Rate Volatility and its Effect on Stock Market Volatility » *Economics Faculty Research and Publications*, vol.1, No.1, 37-46, https://epublications.marquette.edu/econ_fac/582/
- 7. Maysami. R and Koh. T (2000) : « A Vector Error Correction Model of the Singapore Stock Market. » *International Review of Economics and Finance*, Vol. 9, No.1, 79-96, https://www.sciencedirect.com/science/article/pii/S1059056099000428
- 8. FOO Z.T (2009) : « Impact of interest rate and exchange rate on the stock market index in malaysia : a cointegration analysis », *Universiti Sains Malaysia*, p.1-24 http://eprints.usm.my/25494/1/IMPACT_OF_INTEREST_RATE_AND_EXCHANGE_RATE_ON.pdf
- **9.** Walid Chkili and Duc Khuong Nguyen (2014) : « Exchange rate movements and stock market returns in a regimeswitching environment: Evidence for BRICS countries », *International Finance Group*, https://www.sciencedirect.com/science/article/pii/S0275531913000792
- **10.** Gaurav Agrawal and *al* (2010) : « A Study of Exchange Rates Movement and Stock Market Volatility », *International Journal of Business and Management*, Vol. 5, No. 12, https://www.academia.edu/download/35203386/Agraval_Srivastav.pdf

- 11. AdarmolaAnthony Olugbenga, (2012) : «Exchange Rate Volatility and Stock Market Behaviour: The Nigerian Experience », *Research Journal of Finance and Accounting*, Vol.3, No.3, https://core.ac.uk/download/pdf/234629265.pdf
- 12. Michael B Devereux and Philip R Lane (2002) : « Understanding bilateral exchange rate volatility », *University* of british INTERNATIONAL MACROECONOMICS, No.3518,https://www.sciencedirect.com/science/article/pii/S0022199602000612

