Assessing the Influence of Investor Confidence on Economic Growth in Nepal: A Comprehensive Non-Granger Analysis

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Abstract

Background: Nepal's economic growth is influenced by its capital market, with the Nepal Stock Exchange Index (NEPSE) and the ratio of market capitalization to paid-up capital (RMP) serving as indicators of investor confidence. Understanding how these indicators relate to GDP can clarify the stock market's role in shaping economic policies and investments.

Objectives: The study aims to assess causal relationships between GDP, NEPSE, and RMP in Nepal. It examines whether stock market performance predicts GDP changes and the extent of any feedback effect from GDP.

Method: Using annual data and the Toda-Yamamoto Granger non-causality test, the study examines interactions between GDP, NEPSE, and RMP without requiring adjustments for stationarity. The model tests for unidirectional or bidirectional causality among these variables.

Results: The results reveal a unidirectional causality from NEPSE to GDP, suggesting that stock market performance impacts economic growth in Nepal. Both NEPSE and RMP show predictive power over GDP, while GDP's feedback effect on these indicators is weak.
Conclusion
The study concludes that Nepal's stock market significantly influences economic growth, with NEPSE and RMP acting as leading indicators of GDP.

Implications: The findings suggest that the policymakers should prioritize market stability and accessibility to support economic growth. Enhanced regulation, transparency, and broader market participation could strengthen investor confidence and positively impact Nepal's economic trajectory.

Keywords: : GDP, NEPSE, RMP and Non-Granger Causality

1. Introduction

The relationship between capital market dynamics and economic growth has long been a subject of interest in economic research. In particular, investor confidence plays a critical role in shaping the behavior and performance of financial markets. One of the key indicators of investor confidence is the Ratio of Market Capitalization to Paid-up Capital (RMP), which measures the market's valuation relative to the capital invested by shareholders. A higher RMP suggests that investors are willing to pay a premium for shares, reflecting optimism and trust in the market's future performance. Stock market development significantly contributes to economic growth (Ranjit, 2021).

This study aims to examine the causality between investor confidence, as measured by RMC, and economic growth (GDP) in the Nepali context. By analyzing these variables this research seeks to provide a comprehensive understanding of how capital market dynamics influence and are influenced by economic growth. Such an analysis can offer valuable insights for policymakers and investors aiming to enhance market efficiency and stability in support of sustainable economic growth in Nepal. Paid-up capital, alongside factors like market capitalization and NEPSE index performance, contributes to capital mobilization, which in turn supports economic expansion through enhanced savings, productive investments, and income generation. Chalise (2020) is of view that the stock market in Nepal has been recognized for its potential to mobilize internal resources and improve savings efficiency, which ultimately aids in promoting GDP growth.

Economic growth, often measured by Gross Domestic Product (GDP), is fundamentally linked to capital market development. The capital market facilitates resource allocation, investment financing, and risk management, all of which contribute to economic growth. However, understanding the causal relationship between investor confidence and GDP is essential for determining the role of the capital market in driving economic development.

In the context of Nepal, the capital market is primarily represented by the Nepal Stock Exchange (NEPSE). Over the past few decades, the stock market in Nepal has seen considerable growth in terms of listed companies, market capitalization, and trading volume. However, it remains dominated by the banking and financial sector, which accounts for a large portion of the market capitalization. This sectoral concentration can make the stock market vulnerable to sector-specific risks and limit its broader impact on economic growth. It indicates a long-term relationship and a unidirectional causality from stock market development to economic growth, highlighting the role of regulatory policies for sustained market growth (Dhungana, 2023).

Moreover, investor confidence in Nepal's stock market has been influenced by several factors, including political stability, government policies, regulatory reforms, and the overall economic climate. For example, policy initiatives by regulatory bodies like the Securities Board of Nepal (SEBON) and the Nepal Rastra Bank (NRB), such as enhancing market transparency and enforcing compliance, have been pivotal in boosting market confidence. However, the absence of mechanisms like short-selling and the limited diversity of listed companies are key challenges affecting market efficiency and investor sentiment.

According to Pandey et al. (2020), the five key factors influencing investor confidence in the Nepalese stock market are current economic indicators, the company's past stock performance, the urgency to act, dividend policies, and statements from public figures.

The Role of Investor Confidence

Investor confidence plays a crucial role in the stock market as it drives investment decisions, market stability, and economic growth. When investors have confidence in the market's future prospects, they are more likely to invest, leading to higher market capitalization and increased trading activity. This increased flow of capital enables companies to raise funds for expansion and innovation, ultimately contributing to higher levels of productivity and economic growth. Additionally, strong investor confidence reduces market volatility, fosters a positive investment climate, and encourages long-term investments, creating a stable financial environment that supports sustainable economic development. Tiep (2021) discusses how consumer self-confidence, especially in information acquisition and social outcomes, plays a critical role in the business environment. Enhancing this confidence can encourage consumers to become investors, fueling industrial growth. This tie into broader themes of behavioral influences on investor decisions, such as the findings of Bouteska & Regaieg (2020), who argue that loss-aversion bias hinders economic performance, while overconfidence boosts market performance in industrial sectors but harms service firms.

Liquidity is attractive to investors and is linked to market stability and confidence. Hidden orders, used by liquidity providers, help reduce adverse selection costs, and traders tend to become more aggressive with secret orders over time (Pardo & Pascual, 2016).

Behavioral Influences on Investment Decisions

Behavioral influences significantly impact investment decisions in the stock market, often leading investors to act based on emotions, biases, and psychological factors rather than purely rational analysis. Common behavioral tendencies like overconfidence, herd mentality, and loss aversion can drive market trends, causing investors to either overreact to market changes or follow crowd behavior without proper evaluation. Such influences can lead to price volatility, bubbles, or sudden market corrections, affecting overall market stability. Understanding these behavioral patterns is essential, as they shape investor sentiment, impact stock valuations, and ultimately play a key role in influencing economic growth. Behavioral finance factors—loss aversion, overconfidence, and risk perception—significantly influences individual investors' stock investment decisions in the Saudi Stock Market, while herd behavior does not. Among demographic variables, only education significantly affects investment decisions, while gender, age, income, and experience do not (Alquraan, 2016).

2. Literature on impact of investors' confidence on economic development

One of the key factors driving the equities markets is investor confidence (Banyen, 2022). We can quantify the level of investors' anxiety and greed by looking at the shifting prices of Treasuries compared to that of high-yield bonds. It can be practically felt the shift in the emotional temperature of the stock market as their returns either diverge or converge. This spread frequently occurs before the stock market turns.

Global factors also shape investor confidence. Nowzohour & Stracca (2020) point out a strong correlation between consumer confidence and economic and financial variables across countries, underscoring the international influence on economic sentiment. Behavioral influences, such as heuristics, prospect theory, market trends, and herding, play a major role in shaping investment decisions in the Vietnam stock market, with Cao (2021) highlighting the significance of the prospect factor in driving investment outcomes.

Yes and Ling (2022) add another layer by showing that overconfidence in financial literacy affects stock market participation and retirement planning. Interestingly, even individuals with low literacy may act due to overconfidence, while those with high literacy may hold back due to a lack of confidence. Banyen (2022) underscores that awareness, trust, education, and herding behavior significantly influence stock market participation. Enhancing financial literacy and ensuring transparency are vital for promoting broader stock market participation as demonstrated in Ghana.

Sharifi et al. (2024) detail the severe consequences of declining investor confidence, as seen in the collapse of the Tehran Exchange Price Index (TEPIX). Their study identifies key factors affecting investor trust and proposes solutions such as enhancing economic stability and transparency to restore confidence in financial markets.

Strong investor confidence is implied by a high ratio, whilst lower confidence may be suggested by a low ratio. But it's crucial to remember that a variety of factors can affect investor sentiment and stock prices, therefore for a thorough study, this ratio should be considered in addition to other financial and market data. An increase in stock market capitalization of 10% on average results in an average 5.4% growth. Stock markets as a potential means of accelerating economic progress by the study's found a positive and significant association between stock market capitalization and economic growth (Jalloh, 2015).

Economic growth can be strongly impacted by investors' confidence in the stock market. Generally speaking, high investor's confidence encourages more stock market investment. Investors are more likely to purchase stocks and other financial instruments when they have optimism about the state of the economy going forward. This money inflow can be distributed around the economy's sectors, promoting capital formation. According to an analysis of Ngerebo and Torbira (2014), capital market activity and gross fixed capital formation in Nigeria have a positive and significant long-term association. Market capitalization and gross fixed capital formation (GFCF) are causally related in a unidirectional manner. This implies that an increase in GFCF may improve the value of listed securities, increase the firm's worth, drive up the cost of listed equity, and expand the size of the nation's capital market.

Similar to this, consumer sentiment can be influenced by investment optimism. Well-performing stock markets can make people feel wealthy, which encourages them to spend more money. The increased demand for goods and services by firms can therefore spur economic growth. Another aspect that affects company investment is investor's confidence. Businesses may be inspired to grow and engage in new initiatives by a positive investor's confidence. When the economy is thought to be doing well, businesses

could be more inclined to take chances and commit to long-term projects. Increased productivity and the development of jobs may come from this. In this sense, Morck (1990) believed that if the stock market had no bearing on actual economic activity, then discussions about market efficiency would be meaningless. Market inefficiencies would only shift money between intelligent investors and noise traders if the stock market were a sideshow. However, if actual economic activity is influenced by the stock market, then investor sentiment, which drives stock prices, may also have an indirect impact on actual activity. In a similar way, investor confidence is impacted by capital accessibility. The ease with which businesses can raise funds in the financial markets is influenced by investor confidence. A more hospitable funding climate brought about by high confidence may facilitate the issuance of bonds and stocks by companies. Consequently, this enables businesses to launch expansion initiatives and finance their operations more effectively. Regarding this, Shahid and Abbas (2019) confirm that investor confidence has a major influence on business investment decisions in both nations. Results also suggest that companies with strong corporate governance processes have greater investment levels.

Borrowing expenses significantly impact investor confidence. High confidence can lead to lower interest rates, reducing borrowing costs for individuals and companies. This encourages investment and consumption, driving economic growth. Stock markets promote saving and investing by attracting investors with excess funds, allowing them to choose financial instruments that match their risk tolerance and liquidity needs (Muriuki, 2014). Investor confidence also affects market liquidity, making it easier to buy and sell assets, which ensures the smooth operation of financial markets. Liu (2015) found that stronger investor confidence improves market liquidity, benefiting both individual and institutional investors.

Ratio of market capitalization to paid-up capital, which measures investor confidence, and economic growth are related and have the potential to affect the whole economy. A more substantial market capitalization relative to paid-up capital can attract more investment; consequently, it aids for formation of capital. Investors that are confident in the stock market are more inclined to put money into businesses, giving them access to more funding. When businesses use this capital effectively, it can result in greater productivity, innovation, and expansion—all of which support economic growth. According to Newke (2017), gross capital formation (GCF) influences real gross domestic product (RGDP) both short- and long-term in a positive but negligible way. In both short and long term, there was a substantial negative association between government capital expenditure (GCE) and real gross domestic product (RGDP).

3. Data and methodology
3.1 Research Design
The secondary data and information have been applied in the study. This study employs time series data in assessing the impact of the stock market on economic growth in Nepal. Augmented Dickey-Fuller (Dickey & Fuller, 1979) test is used to know whether the data series are stationary or not. Besides, Toda-Yamamoto approach is used to investigate causal relationships among variables whether there is the unidirectional and bi-directional relationship between stock market indicators and economic growth.

3.2 Conceptual Framework

The framework proposes that economic growth (represented by GDP), stock market performance (indicated by NEPSE), and investor confidence (captured by RMP) are interlinked. A higher RMP implies that investors are willing to pay a premium for the shares relative to their paid-up value. This confidence positively influences the stock market by increasing Market Capitalization. As RMP rises, market capitalization also increases. Higher market capitalization indicates a healthy and growing stock market, leading to increased investor confidence and a stronger RMP. While the paid-up capital remains relatively stable over short periods, a growing market capitalization relative to the paid-up capital (an increasing RMP) indicates higher share prices, reflecting increased investor confidence. As market capitalization rises due to growing investor confidence and stable or slightly increasing paid-up capital, the stock market's growth positively impacts the economy. This rise in market capitalization can increase investment and consumer spending, leading to economic growth.

The framework posits a bidirectional relationship between GDP and NEPSE, where economic growth drives stock market performance, and a well-performing stock market supports GDP growth by channeling funds into productive investments. Investor confidence (RMP) is expected to positively influence both GDP and NEPSE, as higher investor confidence boosts market activity, liquidity, and investment in the stock market. This, in turn, can stimulate economic growth and support NEPSE's performance. Additionally, economic growth (GDP) may have a positive influence on investor confidence (RMP), as a strong economy typically signals stability and profitability, encouraging further investment in the capital market.

Figure 1

Causal Diagram
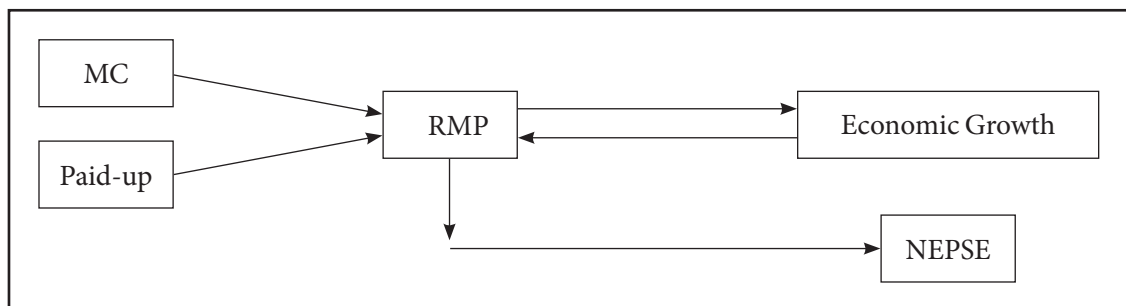
Source: Author's computation

The flowchart represents the relationship among key variables like RMP (the ratio of market capitalization to paid-up capital), Market capitalization, Paid-up capital, NEPSE and GDP, focusing on how they interact with each other.

3.3 Data organization

Data are time series. Sample period covers from 1994 to 2022 as NEPSE opened its trading floor on 13th January 1994. The Nepal Stock Exchange (NEPSE) was established on December 31, 1993, but its operations commenced on January 13, 1994. Secondary data are used in the research work. The Sources of data are the Ministry of Finance, Nepal Rastra Bank and Nepal Stock Exchange. Data are yearly based. July 15 of every year index of NEPSE has been used in the study.

3.4 Variables Specification

Gross domestic product (GDP)

A monetary indicator of the market worth of all finished products and services produced over the course of a year is the gross domestic product, or GDP. The market value of all finished products and services produced in a country in a given year is known as the gross domestic product. Estimates of nominal GDP are frequently used to compare economies across borders and assess the overall economic performance of a nation or region. Here, GDP is used as a proxy for economic growth as use of GDP as a proxy for economic growth is widely accepted in economic studies and policy analysis.

RMP

Ratio of market capitalization to paid-up capital (RMP) is a proxy for investor's confidence. This is calculated by dividing the total value of listed companies (market capitalization) by paid up capital. It gives investors' confidence in the future. The higher the value, the greater confidence made by investors. It also shows the expected performance of companies in future.

Paid up capital

The total sum of money that a business has acquired from investors in return for stock shares is known as paid-up capital. When a business sells its shares to investors directly on the main market, paid-up capital is generated.

Market Capitalization

It measures the total value of a company's outstanding stock, which has a variety of effects on economic growth. Market capitalization can have larger effects on the economy, even though it is vital to highlight that it is more indicative of the financial well-being and success of certain companies or the stock market as a whole. A larger market capitalization can give businesses access to more funds through stock issues, which can be used for growth-oriented operations including acquisitions, research & development, and expansion.

NEPSE

The stock exchange index represents the overall capital market by serving as a composite indicator of the market's health, direction, and investor sentiment. It aggregates the performance of selected major stocks, reflecting both price movements and market capitalization, which provides a snapshot of the overall market's value and trends. Since it includes a diverse range of industries, the index captures the broader economic performance and investor confidence within the economy. A rising index generally indicates investor optimism, economic growth, and increased capital inflow, while a declining index suggests investor caution or economic downturns. Thus, the stock exchange index acts as a barometer for the capital market, influencing investor decisions and policy-making while providing insights into economic conditions.

3.5 Toda-Yamamoto Methodology

In the Toda-Yamamoto technique, the levels are used to generate the conventional vector autoregressive model (VAR), independent of the series' order. Then, the true order of the VAR model is intentionally modified to k + d max by adding the maximum integration order d max. The coefficients of the terms that were added to the model, however, are not taken into account. The integration order (dmax) in this causal procedure cannot be greater than the VAR model's real range (k). The GDP, Ratio of market capitalization to paid-up capital and NEPSE are shown in the following equations in accordance with the Toda-Yamamoto causality test procedure:

$$GDP_t = \alpha_0 + \sum_{i=1}^{k+d\max} \alpha_1 GDP_{t-i} + \sum_{i=1}^{k+d\max} \alpha_2 NEPSE_{t-i} + \sum_{i=1}^{k+d\max} \alpha_3 RMP_{t-i} + \varepsilon_1$$

$$NEPSE_t = \eta_0 + \sum_{i=1}^{k+d\max} \eta_1 NEPSE_{t-i} + + \sum_{i=1}^{k+d\max} \eta_2 GDP_{t-i} + \sum_{i=1}^{k+d\max} \eta_3 RMP_{t-i} + v_2$$

$$RMP_t = \mu_0 + \sum_{i=1}^{k+d\max} \mu_1 RMP_{t-i} + \sum_{i=1}^{k+d\max} \mu_2 NEPSE_{t-i} + \sum_{i=1}^{k+d\max} \mu_3 GDP_{t-i} + b_3$$

Where, GDP is gross domestic product

NEPSE is Nepal Stock Exchange Index

RMP is ratio of market capitalization to paid up capital

3.6 Lag order of (K+d max)

The term "lag order of (K+d max)" typically refers to the selection of lag order in a time series model or in the context of vector autoregression (VAR) models, where "K" represents the lag order for the variables in the model, and "d max" represents the maximum order of differencing required to achieve stationarity for the time series data.

3.7 Lag Order (K): The lag order (K) represents the number of past time periods that are considered when modeling a time series. In a time series model, variables at time "t" are regressed on their own past values at time "t-1," "t-2," and so on, up to time "t-K." Selecting an appropriate lag order is essential to capture the temporal dependencies in the data.

3.8 Maximum Order of Differencing (d max): This represents the maximum number of differencing operations needed to make the time series stationary. In time series analysis, differencing is a technique used to remove trends and achieve stationarity, which is often a requirement for many time series models. "d max" indicates the highest number of differences required to make the data stationary. If the data is already stationary, "d max" would be 0.

The term "lag order of (K+d max)" suggests that we should consider both the lag order (K) and the maximum order of differencing (d max) when modeling a time series. The appropriate lag order and differencing order depend on the specific characteristics of the data, and selecting the right values is crucial for building an effective time series model. This combination ensures that we capture relevant temporal dependencies while also accounting for the necessary differencing to achieve stationarity.

4. Analysis of Data
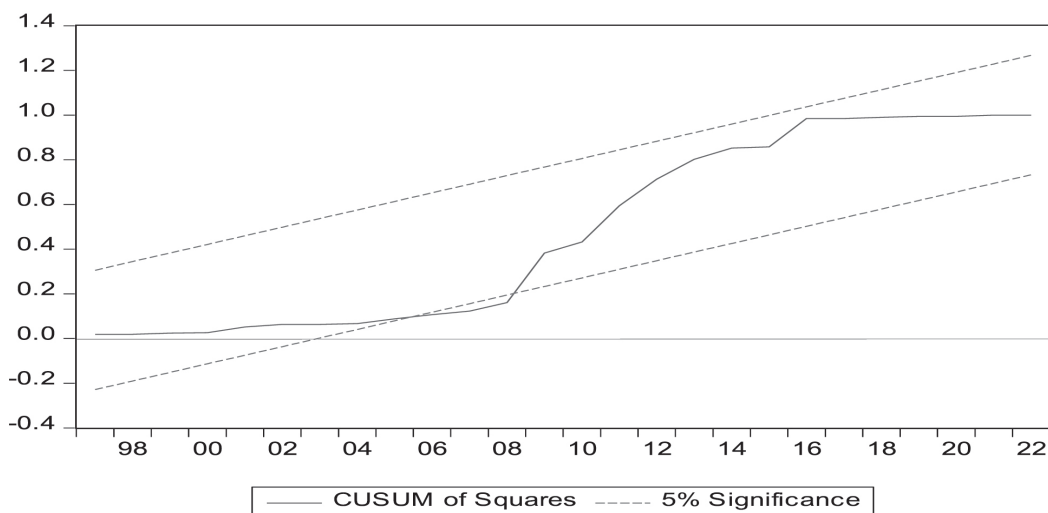
4.1 Structural Break:

The COVID-19 pandemic, which began in late 2019 and continued into subsequent years, caused significant disruptions across various aspects of society, including the economy. The dataset spanning from 1994 to 2022, the period encompassing the pandemic, might indeed exhibit a structural break due to the unprecedented and widespread impact of COVID-19. So we check whether there is structural break or not.

A structural break in a model refers to a significant change or discontinuity in the underlying relationships or parameters that govern the behavior of the data being analyzed. It implies that the relationship between the variables or the behavior of the system being modeled has altered abruptly or gradually at a certain point in time. Chow (1984) stressed that ignoring these structural breaks in economic modeling might result in inaccurate estimates, incorrect deductions, or unreliable predictions. Consequently, his research highlighted the significance of considering these breaks in econometric analysis to construct more precise models that aptly reflect the evolving dynamics within economic systems.

As shown in the figure, the curve crosses the dotted line in 2006. It means there may be structural break. To make it conform whether there is structural break or not, we conduct a Chow test.

Figure 2

Recursive Estimate: CUSUM of square test

Source: Author's computation

As shown in the figure, blue line which denoted estimation crosses the red line in 2008 which means estimation is not stable. And it means there is structural break, change in series or mean has changed in the series. So, there might be structural break in the model. So, to make it conform, we conduct a Chow test.

4.2 Chow Breakpoint Test

Table 1

Chow Breakpoint Test: 2006

Equation Sample: 1994 2022

F-statistic	0.600809	Prob. F(3,23)	0.6210
Log likelihood ratio	2.187970	Prob. Chi-Square(3)	0.5343
Wald Statistic	1.802426	Prob. Chi-Square(3)	0.6144.

Source: Author's computation

As P-value of is 0.62 we accept the null hypothesis which conforms that there is no structural break in the model.

4.3 Order of Integration
In this section, we test for integration order of the time series. For this testing, we use Augmented Dickey-Fuller (ADF) test.

Table 2

Stationarity Test: Augmented Dickey-Fuller

S.N.	Variables' names	Symbol	Level	1st difference	2nd difference
1.	Gross domestic product	GDP	1	0.234	0.001
2.	Ratio of market capitalization and paid-up capital	RMP	0.015	-	-
3.	Nepal Stock Exchange	NEPSE	1	0.00	-

Source: Author's computation

Gross domestic product is stationary at second difference whereas ratio of market capitalization to paid up capital is stationary at level. Similarly, NEPSE is stationary at the first difference. Thus, variables are at different orders of integration. Therefore, the Toda-Yamamoto VAR model is used in this study.

Table Table 3

VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-593.2326	NA	7.60e+17	49.68605	49.83331	49.72512
1	-527.5794	109.4220	6.83e+15	44.96495	45.55398	45.12122
2	-519.7249	11.12730	7.85e+15	45.06040	46.09120	45.33388
3	-492.9487	31.23889	1.99e+15	43.57906	45.05162	43.96973
4	-477.7521	13.93015	1.49e+15	43.06268	44.97702	43.57055
5	-450.7707	17.98760*	5.17e+14*	41.56423*	43.92034*	42.18930*

Source: Author's computation

Based on the lag order selection criteria, the model with lag order 5 is preferred. As per guideline, the lag is selected, which is supported by the majority of methods. The asterisks indicate that all the criteria support lag 5 statistically significant, according to the likelihood ratio test.

4.4 Testing of Serial Correlation

Table 4

Serial Correlation LM Test

Lag	LRE* stat	df	Prob.	Rao F-stat	Df	Prob.
1	11.79076	9	0.2254	1.425499	(9, 24.5)	0.2313
2	15.30077	9	0.0830	1.979518	(9, 24.5)	0.0869

Source: Author's computation

Null hypothesis is no serial correlation. Here, p-value is more than 5 percent, null hypothesis is accepted, which means there is no serial correlation. It is a good sign for the model.

4.5 Non-Granger Causality based on Toda-Yamamoto Methodology

VAR non-Granger causality test results provide significant insights into the interrelationships among GDP, the ratio of market capitalization to paid-up capital (RMP), and the Nepal Stock Exchange (NEPSE).

Results and Discussion

Table 5

Dependent variable: GDP

Excluded	Chi-sq	Df	Prob.
NEPSE	19.97732	5	0.0013
RMP	13.86680	5	0.0165
All	66.16869	10	0.0000

Source: Author's computation

P-value of 0.0013 indicates strong evidence against the null hypothesis that NEPSE does not Granger-cause GDP. This suggests that changes in the NEPSE index provide information about future movements in GDP, highlighting the stock market's influence on the economy. Similarly, p-value of 0.0165 also suggests that RMP Granger-causes GDP, though to a slightly lesser extent than NEPSE. This implies that investor confidence, as represented by the RMP, also plays a significant role in predicting GDP. The overall p-value of 0.00 indicates that jointly, NEPSE and RMP significantly Granger-cause GDP. This reinforces the idea that both variables are crucial in understanding economic growth.

Table 6

Dependent Variable: NEPSE

Excluded	Chi-sq	df	Prob.
GDP	15.07306	5	0.0101
RMP	19.76768	5	0.0014
All	56.07130	10	0.0000

Source: Author's computation

Table 7

Dependent variable: RMP

Excluded	Chi-sq	Df	Prob.
GDP	16.12131	5	0.0065
NEPSE	5.736515	5	0.3327
All	28.93214	10	0.0013

Source: Author's computation

P-value of 0.0065 shows that GDP Granger-causes RMP, economic conditions influence investor confidence. P-value of 0.3327 indicates that NEPSE does not Granger-cause RMP. This suggests that

fluctuations in the stock market do not significantly impact investor confidence as measured by RMP. In the same way, p-value of 0.0013 suggests a significant relationship where GDP has a meaningful effect on RMP, but NEPSE does not significantly contribute to changes in investor confidence.

6. Conclusion

The results indicate a complex interdependence among the variables. GDP influences both NEPSE and RMP, while NEPSE and RMP also have a predictive power over GDP. This bidirectional causality suggests that policies aimed at enhancing economic growth could lead to improved performance in the stock market, and vice versa. The strong Granger causality from GDP to RMP highlights that economic growth enhances investor confidence, which is critical for capital market development. This may reflect how economic indicators influence investor sentiment and behavior. The finding that NEPSE does not significantly Granger-cause RMP suggests that while the stock market influences GDP and vice versa, the stock market itself may be less directly impactful on investor confidence in the context of Nepal. This could indicate that factors other than stock market performance play a more significant role in shaping investor perceptions.

Policy Recommendations

The government should prioritize investments in sectors like manufacturing, tourism, and technology to stimulate GDP growth and enhance stock market performance, as a strong economy attracts investor interest and boosts NEPSE. Key measures to strengthen investor confidence include ensuring transparency, stable regulations, and high corporate governance standards to create a trustworthy environment. Investor education programs could also reduce market volatility by promoting informed decision-making.

Improving stock market infrastructure would make it more attractive to investors, benefiting both the market and the broader economy. This could involve encouraging diverse sector listings beyond banking, updating trading platforms for smoother transactions, and introducing new financial products like exchange trade funds (ETFs) to broaden investment choices.

Given the role of investor confidence (RMP) in influencing both GDP and NEPSE, maintaining liquidity and positive market sentiment is essential. The government and central bank should ensure sufficient liquidity during downturns and monitor for speculative bubbles, intervening when necessary to protect stability and investor trust.

Limitations of the Study:

Limited Variables: The study focuses on three main variables (NEPSE, RMP, GDP). Other economic factors like foreign investments, government policies, or sector-specific developments are not considered.

Short-Term Analysis: The study may not fully capture long-term trends or external shocks that could influence the relationships between the variables.

Potential Data Limitations: The data may have structural breaks due to external events like the COVID-19 pandemic or global financial crises, which might impact the reliability of the findings without additional robustness checks.

Avenues for Future Research

Future research should expand the scope by incorporating additional variables such as foreign direct investment, government expenditure, interest rates, and sector-specific indices to provide a more holistic view of the factors influencing GDP. Moreover, considering potential external shocks and conducting robustness checks like structural break tests can strengthen the findings. Exploring the long-term dynamics through a more extended time horizon and applying alternative econometric techniques could further validate and deepen the understanding of the causal relationships identified in this study.

Conflict of Interest: The authors declare having no conflict of interest in the research work.

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