The Determinants of Stock Market Development in Nepal

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Abstract

This research investigates the determinants of stock market development in Nepal from 2003 to 2022 using a quantitative approach. Utilizing time series data, the study employs Pearson correlation and Ordinary Least Square (OLS) methods to analyze the relationship between macroeconomic variables, including income level, banking sector development, gross domestic savings, macroeconomic stability, private capital flows and stock market liquidity and stock market development, specifically market capitalization. The results indicate that banking sector development and private capital flows significantly influence stock market development, suggesting a crucial role for financial institutions and foreign investment in shaping and fostering the growth of Nepal's stock market. However, no significant relationship has been found between income level, gross domestic savings, macroeconomic stability, stock market liquidity, and stock market development. These findings help to design policies to stabilize or stimulate the stock market in Nepal.

Keywords: stock market development, macroeconomic factors, banking sector development, private capital flows, Nepal

JEL Classification: G20, E00, G21, F3
Introduction

The capital market, defined as the financial market facilitating the exchange of long-term debt and equity-backed securities (O'Sullivan & Sheffrin, 2004), holds significant potential for underdeveloped and developing nations grappling with low economic growth like Nepal. Policymakers in the public and private sectors have given capital market development top priority because they understand its importance in generating long-term capital for a variety of stakeholders (Beck, 2006). Based on historical lows of private investment in 2020, World Bank research reveals a global recovery in private investment for emerging and underdeveloped nations, with a noteworthy 49 percent gain in 2021 (World Bank, 2022). Sub-Saharan Africa saw a decline of 17%, South Asia saw a decline of 16%, and the Middle East and North Africa saw a significant 90% reduction in private investment pledges during this time, whilst Europe and Central Asian countries enjoyed an upswing (World Bank, 2021). The data from 2022 show that 37 percent of the GDP of Nepal was allocated to capital formation—a significant decrease from the 41 percent reported in 2019. This disparity underscores the unsatisfactory of private investment in Nepal (World Bank, 2023). To promote sustainable economic growth and development in the area, it is imperative that this disparity be addressed.

Numerous academic studies (Doménech & Sicilia, 2021; Ahamed, 2022; Matvejevs & Tkacevs, 2023) have continually emphasized the pivotal function of private investment in cultivating persistent, enduring economic expansion, clarifying a clear and affirmative association between investment and the economic progress of a country. According to this relationship, increased economic growth is associated with a higher rate of investment in physical capital. Notwithstanding the difficulties posed by a relatively weaker private sector, the data of 2022 for Nepal show that the private sector has made a significant contribution to the country's gross capital formation, making up about 40% of the total since 2002. Moreover, as of 2022, the private sector's share in GDP's gross fixed capital formation increased to 22% (World Bank, 2022). This nuanced viewpoint highlights how the private sector has changed over the past 20 years to shape Nepal's economic landscape.
Nepal continues to grapple with a myriad of economic and social challenges impeding its progress toward sustained economic prosperity and hindered efforts to achieve sustainable economic development (USAID, 2020). Comparative analysis of macroeconomic indicators reveals that Nepal lags behind other developing nations in this regard (Tahir et al., 2019). Notably, in the year 2020, Nepal witnessed a stark decline in its GDP growth rate, registering at -2.37 percent—a notable 9.03 percent contraction from the previous year (Nepal Rastra Bank, 2021). This outcome underscores Nepal's struggle to attain the targeted economic growth rate. The disparity between the actual and proposed growth rates signifies the persistent hurdles hindering the realization of sustainable economic development goals in the country.

The attainment of targeted economic growth in Nepal hinges upon the provision of investment opportunities by the government to both domestic and foreign investors (Hatlebakk, 2008). A prevailing financial gap is evident across various sectors of the Nepalese economy, particularly manifesting as restricted access to finance for small and medium enterprises (SMEs) (Gyawali, 2020). Despite their recognized role in contributing significantly to GDP, generating employment, fostering income opportunities, and instigating innovation in the private sector, a considerable portion of SMEs in Nepal faces limited financial accessibility. A survey by the Nepal Rastra Bank in 2019 revealed that only 50 percent of SMEs had access to loans from banking financial institutions, and among them, only 25 percent had availed of loans (Bank, 2020). Both SMEs and large-scale industries in Nepal encounter financing challenges, with many enterprises hesitating to seek bank loans due to elevated interest rates, consequently impeding the process of capital formation in the country.

In Nepal, the challenge of acquiring capital for businesses has hindered economic growth, prompting the capital market to emerge as a vital source of affordable long-term funds for both private and public sectors, aiming for economic development and poverty reduction (Koirala & Bajracharya, 2004). By connecting surplus and deficit segments of the economy, the capital market efficiently channels public savings to industrial and business companies at minimal costs. Nepal's capital market history traces back to 1937 when Biratnagar Jute Mills Ltd. and Nepal Bank Ltd. initiated public share offerings, setting the foundation for the subsequent transformation into
Nepal Stock Exchange Ltd. in 1993 (Adhikari, 2013). Over the years, Nepal's capital market has seen substantial growth, demonstrated by notable increases in share turnover and market capitalization, underlining its importance in the nation's economic landscape (Rijal, 2022).

The stock market holds immense influence over a nation's economic activities, directly or indirectly impacting developed and underdeveloped countries alike. Despite its significance, the Nepalese capital market grapples with various challenges, exhibiting limitations in market capitalization, turnover, and the number of listed companies (Panthi & Chalise, 2021). Additionally, public awareness about Nepal's capital and share market remains inadequate (Dhungana, 2013). This underscores the critical need for extensive research on the diverse facets of Nepal's capital market development. While some studies have explored factors affecting capital market development in Nepal and its correlation with economic growth, there's a dearth of empirical research focusing on the determinants of capital market development. Existing studies consistently highlight Nepal's capital market as a developing and illiquid entity that intermittently hampers economic growth (Regmi, 2012).

The primary objective of this research paper is to investigate the determinants of the development of the stock market in Nepal. Furthermore, this study seeks to examine the relationship between stock market development with its determinants such as gross domestic product, investment, banking sector development, foreign direct investment, and macroeconomic stability. Through a comprehensive analysis of these factors, the research seeks to shed light on the intricate dynamics shaping the stock market landscape in Nepal. This exploration of relationships is anticipated to offer insights, for policymakers, financial institutions, and investors aiding them in making informed decisions and strategic plans.

**Literature Review**

This section encompasses an overview of the concept of capital market and its development, theories of capital market development, and a review of the related studies.
**Capital Market**

The financial system comprises the money market and the capital market, each serving distinct roles. The money market facilitates short-term loans, involving entities like central banks and commercial banks, while the capital market deals with long-term investments, utilizing personal and institutional savings for lasting economic impacts. Gahlot (2008) emphasizes the capital market's focus on long-term securities and significant fund involvement, distinguishing it from the money market in terms of maturity and liquidity. As a financial cornerstone, the capital market connects savers and investors, aiding capital formation crucial for industrialized economies (Brasoveanu et al., 2008). Emekewu (2009) underscores its role in transferring medium and long-term funds. The capital market bifurcates into the non-securities and securities markets, the latter involving intricate processes in securities trading. Overall, these markets, as highlighted by Regmi (2012), play a pivotal role in the economic dynamics, essential for national growth and stability.

Capital market development involves enhancing quality, quantity, and efficiency within the market, crucial for a nation's overall economic growth (McKinnon, 2010). Developing countries focus on this process, recognizing its positive correlation with economic advancement. Omar et al. (2022) emphasize that macroeconomic indicators are essential for such development, with a robust banking system playing a key role. Banks, as primary lenders, shape market infrastructure and influence perceptions of businesses’ creditworthiness. Capital market development is intricate, covering market size, liquidity, integration, and regulatory frameworks. Measuring development involves metrics like listed companies, market capitalization, and trade value. This study applies these metrics to assess factors influencing stock market development in Nepal.

**Theories of Capital Market Development**

To validate the proposed research Calderon-Rosell Theory of capital market development has been considered. Calderon-Rossell (1991) developed a theory which explored the main determinants of capital market development. Calderon-Rossell (1990, 1991) have identified that stock market liquidity and economic growth are the determinants of stock market development.
A model created by Calderon-Rossell in 1991 examined the key factors influencing the growth of the capital market. This model is the most comprehensive effort to date to lay the groundwork for CMD’s financial theory. Economic growth and stock market liquidity are regarded as the major indicators in this approach. Yartey (2008) modified the Calderon-Rossell model to include other variables that could affect the growth of the capital market. The determinants are divided into two groups known as institutional and macroeconomic factors. Savings, income level, banking industry development, private capital flows, investment, stock market liquidity, and macroeconomic stability are all macroeconomic determinants. Corruption, law and order, democratic accountability, and bureaucracy quality are institutional variables (Yartey, 2008). In this paper, the determinants of stock market development in Nepal are exclusively examined through the lens of macroeconomic variables.

Review of Related Studies

Yartey (2008) used panel data from 42 emerging economies covering the years 1990–2004 to investigate the institutional and macroeconomic drivers of stock market development. His empirical analysis showed that institutional factors like political risk, law and order, and bureaucratic quality, along with all macroeconomic factors including income level, gross domestic investment, banking sector development, private capital flows, and stock market liquidity, had a major impact on the growth of the stock market.

Similar to this, Aduda et al. (2012) looked into what factors influenced the Nairobi Stock Exchange between 2005 and 2009. Key variables were found by their regression analysis, and these were domestic savings, income per capita, institutional quality, stock market liquidity, and bank development. Significantly, institutional elements that emphasized the significance of managing political risk for growth included law and order, bureaucratic quality, democratic accountability, and the corruption index.

Kemboi & Tarus (2012) examined Kenyan stock market growth using quarterly secondary data from 2000 to 2009. Their findings affirmed the influence of macroeconomic factors like income levels, banking sector expansion, and stock market liquidity on Nairobi Stock Exchange growth. Notably, the study emphasized that macroeconomic stability alone was not a dependable predictor of stock market trends.
Tangjitprom's (2012) study challenged the conventional belief that macroeconomic factors significantly influence stock market performance. Conducted in Thailand from 2001 to 2010, the research demonstrated that stock return proved to be a more reliable financial indicator for predicting macroeconomic behavior. The study highlighted that in the Thai context, macroeconomic considerations alone were insufficient to predict stock market transactions accurately.

In their investigation of the determinants of the Pakistani stock market using regression analysis employing monthly time series data, Dev & Shakeel (2013) determined that portfolio investment and market liquidity were the two primary factors that fueled the expansion of the stock markets in Pakistan (2007-2012). Discount rates and market capitalization were shown to have had negligible positive effects on Pakistan's stock market expansion.

Msangi (2015) examined capital market development in Tanzania using 15 years of data. The research identified investment, foreign direct investment, and banking sector development as significant determinants of capital market growth. Msangi suggested government regulation, financial sector control, and infrastructure improvement to attract foreign investors and bolster the capital market.

Akosah (2016) used quarterly time series data from 2000 to 2014 to conduct a structural autoregressive (SVAR) method investigation into the factors affecting the growth of the Ghanaian stock market. It was shown that election cycles, financial depth, foreign direct investment (FDI), economic growth, and current inflation rates were the most important long- and short-term positive indicators of stock market development in Ghana. Academy of Accounting and Financial Studies Journal found that the country risk premium, treasury bill rates, and government spending were among the factors that negatively impacted the development of the Ghanaian stock market.

Acquah-Sam (2016) analyzed the macroeconomic determinants of capital market development in Ghana by using multiple regression analysis based on secondary data from 1991-2011. The key empirical finding of this research is that GDP growth and gross capital formation (GFI) have a favorable impact on Ghana's capital market development, whereas Treasury bill rates have a negative impact (T-BILLS). The estimated equation did not show that inflation or foreign direct investments (FDI) were important.
Olgić Draženović & Kusanović (2016) examined the factors that influence the capital market in the newly joined EU nations. They highlighted how institutional investors and other factors affect the growth of the capital market. Their findings pointed to a favorable correlation between the chosen countries' economic growth and their level of financial development. They also found a causal relationship between the expansion of the capital market and non-bank financial intermediaries, based on evidence of the importance of the growth of insurance companies and investment funds for explaining stock market capitalization.

Ho & Iyke (2017) investigated the impact of macroeconomic factors on stock market development in Hong Kong and the Philippines (from 1992–2016 and 2001–2016, respectively). The study revealed that banking sector development and economic growth positively influenced stock market development, while the inflation rate and exchange rate had a negative impact on Hong Kong's capital market. In the Philippines, banking sector development and exchange rate showed a positive relationship, while trade openness had a negative one, highlighting the importance of economic growth and banking sector development for capital market investment.

Ho (2019) investigated the relationship between capital market development and economic growth in MENA region countries. Using Ordinary Least Square regression and a 13-time period quantitative approach, he found a positive correlation between Egyptian capital market development and the country's economic growth. However, Tunisia, Saudi Arabia, and Kuwait showed minimal impact. The study emphasized the need for effective economic policies linking the capital market to overall economic growth.

The performance of the Nairobi Stock Exchange (NSE) in equities securities and that of other financial institutions as part of the financial markets from 2007 to 2017 is examined by Murgor & Saxunova (2022). According to the coefficient of determination (R) of 0.618 and the correlation coefficient (R-Square), which should be less than 0.3 and be as high as 1, he found that there is a weakly positive relationship between the chosen macroeconomic variables and the NSE 20-Share Index. This relationship is indicated by the value of 0.382, which indicates that this relationship is weakly positive.

Ghimire (2022) analyzed the macroeconomic variables that affect the stock prices in Nepal. The inflation rate, gross domestic product, broad money supply, and per
capita income are four macroeconomic factors that are considered annually to determine the impact of these variables on the NEPSE index from 2011 to 2021. It investigates the association between stock prices and macroeconomic variables using the Pearson correlation matrix. The findings of the correlation study showed that, as anticipated, the broad money supply, the gross domestic product, and the inflation rate all had an impact on the market performance of stock prices. Additionally, changes in the country's per capita income have no impact on the NEPSE index.

Methodology

Research Design and Method of Data Analysis

The study employs a quantitative approach to address its objectives, aligning with the strategy outlined by Vogt et al. (2012) that emphasizes numerical data analysis integrating theoretical considerations with empirical observations. This approach, utilized by Acquah-Sam (2016), Olgić Draženović & Kusanović (2016), and Islam et al. (2017), proves effective in investigating factors influencing the stock market development. The research spans 21 years from 2003 to 2022, utilizing data from the World Bank IBRD-IDA database and Nepal Stock Exchange annual reports. Statistical Package for the Social Sciences (SPSS) is chosen for data analysis due to its specialized capabilities. The analysis involves descriptive statistics, Pearson's correlation, and multiple regressions to demonstrate the impact of independent variables on stock market development, aligning with established research methodologies.

Model Specification

In this study, regression analysis has been employed to analyze the data suggested by several researchers, including Acquah-Sam (2016), Olgić Draženović & Kusanović (2016), Islam et al. (2017) to support their claims. As a result, the study includes both theoretical model and empirical model.

The theoretical model for this research is as follows:

\[ Y = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \epsilon_i \] .................(I)

In equation (I), \( Y \) denotes the dependent variable. \( \alpha_0 \) represents the constant term, \( \beta \) is the coefficient of predictors of ‘i’. \( \epsilon_i \) represents the error term and \( X \) is the independent variable.
By adopting the above model, the empirical model for this study becomes

\[ SMD = \alpha_0 + \beta_1 \text{IL} + \beta_2 \text{BSD} + \beta_3 \text{GDS} + \beta_4 \text{MES} + \beta_5 \text{PCF} + \beta_6 \text{SML} + \epsilon_i \tag{II} \]

In this equation, the SMD represents the Stock Market Development, \( \alpha_0 \) represents the Constant term, \( \epsilon_i \) represents the Error Term, IL represents Income Level, BSD represents Banking Sector Development, GSD represents Gross Domestic Product, MES represents Macroeconomic Stability, PCF represents Private Capital Flows, and SML represents Stock Market Liquidity.

**Stock market development.** Stock market development refers to the process of enhancing the efficiency, liquidity, transparency, and overall functionality of a country’s financial market. This study measured stock market development using total market capitalization as a ratio of GDP. Many researchers have used market capitalization as a measurement tool of stock market development (Yartey, 2008; Chepkoiwo, 2011).

**Income level.** Real income level has been found to be highly correlated with the stock market development of a country (Yartey, 2008; Masila, 2010; Nazir et al., 2010). In this study, the log per capita in US dollars has been used to measure the income level. It is proposed that the greater the income level, the higher will be the stock market development.

**Banking sector development.** The domestic credit to the private sector by banks relative to GDP has been used to measure the banking sector development. It is proposed that the banking sector development be positively correlated with the stock market development.

**Savings and investments.** Gross domestic savings as a proportion of GDP and gross domestic investment as a percentage of GDP are utilized to gauge savings and investments. A higher savings rate is expected to contribute to larger stock market development.

**Macroeconomic stability.** The inflation rate has been employed to access macroeconomic stability. A higher inflation rate typically indicates greater instability within the economy. It is anticipated that a higher level of macroeconomic stability will positively correlate with increased market capitalization.
**Private capital flows.** The net inflows of foreign direct investment as a proportion of GDP have been utilized to measure private capital flows. It is anticipated that FDI will foster increased confidence in the domestic market.

**Stock market liquidity.** Stock market liquidity reflects the extent to which financial instruments can be expeditiously bought or sold in the market (Foucault et al., 2013). In this study, stock market liquidity has been quantified based on market turnover relative to GDP. It is anticipated that a higher market turnover will contribute to greater stock market development.

**Figure 1**

*Research Framework*

![Research Framework Diagram]

**Results**

**Preliminary Analysis**

It contains the descriptive statistics as well as Pearson correlation analysis results as follows:

**Descriptive statistics**

Table 1 presents the descriptive statistics for the dependent variable, stock market development, and its determinants. The data set comprises 21 cases, revealing an average stock market development rate of 0.38 with a standard deviation of 0.24. the maximum value of the SMD is 0.98 while its lowest value is 0.07. The range of income level spans from 2.38 to 3.13, with a standard deviation of 0.25. The mean of banking...
sector development is 0.56 with a standard deviation of 0.23. The highest value of BSD is 1.04 and the lowest value is 0.04. Additionally, gross domestic savings influence stock market development, ranging from 0.36 to 0.15, averaging 0.09 with a standard deviation of 0.29.

The average macroeconomic stability is 2.27. the highest value is 11.09 and the lowest is 2.27 with a standard deviation of 2.66. The private capital flows show a notable impact on stock market development, with values ranging from 0.01 to 0.05. Stock market liquidity ranges from 0.001 to 0.30, with an average of 0.04 and a standard deviation of 0.076.

**Table 1**

*Descriptive statistics*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMD</td>
<td>21</td>
<td>.0709</td>
<td>.9842</td>
<td>.380243</td>
<td>.2371727</td>
<td>.856</td>
</tr>
<tr>
<td>IL</td>
<td>21</td>
<td>2.3784</td>
<td>3.1261</td>
<td>2.803875</td>
<td>.2498455</td>
<td>-.456</td>
</tr>
<tr>
<td>BSD</td>
<td>21</td>
<td>.2287</td>
<td>1.0365</td>
<td>.561595</td>
<td>.2325978</td>
<td>.421</td>
</tr>
<tr>
<td>GDS</td>
<td>21</td>
<td>.0360</td>
<td>.1530</td>
<td>.093762</td>
<td>.0293205</td>
<td>.250</td>
</tr>
<tr>
<td>MES</td>
<td>21</td>
<td>2.27</td>
<td>11.09</td>
<td>6.7043</td>
<td>2.66202</td>
<td>-.192</td>
</tr>
<tr>
<td>PCF</td>
<td>21</td>
<td>.0100</td>
<td>.0530</td>
<td>.027190</td>
<td>.0099931</td>
<td>.738</td>
</tr>
<tr>
<td>SML</td>
<td>21</td>
<td>.0011</td>
<td>.3007</td>
<td>.044485</td>
<td>.0760841</td>
<td>2.774</td>
</tr>
</tbody>
</table>

**Correlation Analysis**

The Pearson correlation coefficient was employed to assess the relationship between the dependent variable, stock market development, and independent variables, including income level (IL), banking sector development (BSD), gross domestic savings (GDS), macroeconomic stability (MES), private capital flows (PCF), and stock market liquidity (SML). It is a measure of the linear relationship between two variables, ranging from -1 to 1, where 1 indicates a perfect positive relationship and -1 indicates a perfect negative relationship (Hayes, 2023).
Table 2

Correlation between Variables

<table>
<thead>
<tr>
<th></th>
<th>SMD</th>
<th>IL</th>
<th>BSD</th>
<th>GDS</th>
<th>MES</th>
<th>PCF</th>
<th>SML</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMD</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL</td>
<td>.750**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSD</td>
<td>.865**</td>
<td>.897**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDS</td>
<td>-0.351</td>
<td>-0.134</td>
<td>-0.199</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MES</td>
<td>0.026</td>
<td>0.154</td>
<td>0.036</td>
<td>-0.311</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCF</td>
<td>-0.101</td>
<td>-0.329</td>
<td>-0.416</td>
<td>-0.143</td>
<td>0.131</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SML</td>
<td>.798**</td>
<td>.529*</td>
<td>.742**</td>
<td>-0.386</td>
<td>-0.119</td>
<td>-0.242</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 2 presents the Pearson correlation coefficient between dependent and independent variables of stock market development. The results indicate a significant and positive relationship between stock market development and income level, banking sector development, and stock market liquidity. Moreover, there is a positive and statistically insignificant relationship between macroeconomic stability and stock market development. However, the data reveals a negative association between gross domestic savings, private capital flows, and stock market development.

Regression Analysis

The Overall Fitness of the Model

Table 3, 4, and 5 show the overall fitness of the regression model. The adjusted R-square for regression statistics is 0.819, indicating that the independent variables, including income level, banking sector development, gross domestic savings, macroeconomic stability, private capital flows, and stock market liquidity, explain 81.9 percent of the variation in stock market development. This suggests that the regression equation fits the data well. The p-value of 0.000, which is less than 0.05, indicates that the model of stock market development is significant at the 5 percent or the 95 percent confidence level.
### Table 3

**Variable entered/removed**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SML, MES, PCF, GDS, IL, BSD&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.</td>
<td>Enter</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMD

### Table 4

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.934&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.873</td>
<td>.819</td>
<td>.1009229</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), SML, MES, PCF, GDS, IL, BSD

### Table 5

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.982</td>
<td>6</td>
<td>.164</td>
<td>16.076</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>.143</td>
<td>14</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.125</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMD  
b. Predictors: (Constant), SML, MES, PCF, GDS, IL, BSD

### Table 6

**Coefficients<sup>a</sup>**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.271</td>
<td>.518</td>
<td>-.524</td>
</tr>
<tr>
<td></td>
<td>IL</td>
<td>.027</td>
<td>.237</td>
<td>.028</td>
</tr>
<tr>
<td></td>
<td>BSD</td>
<td>.758</td>
<td>.331</td>
<td>.743</td>
</tr>
<tr>
<td></td>
<td>GDS</td>
<td>-.520</td>
<td>.947</td>
<td>-.064</td>
</tr>
<tr>
<td></td>
<td>MES</td>
<td>-.003</td>
<td>.010</td>
<td>-.029</td>
</tr>
<tr>
<td></td>
<td>PCF</td>
<td>.583</td>
<td>.613</td>
<td>.277</td>
</tr>
<tr>
<td></td>
<td>SML</td>
<td>.841</td>
<td>.557</td>
<td>.270</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMD
Note: The significant level is 5%.
The estimated empirical equation is:
SMD = - 0.271 + 0.027 IL + 0.758 BSD – 0.520 GDS – 0.003 MES + 0.583 PCF + 0.841 SML.

Table 6 highlights the results of the regression analysis, which examines the impact of controlled variables on stock market development. The findings reveal that two factors, banking sector development, and private capital flows, have a significant effect on stock market development. Banking sector development is found to have a positive and significant impact on stock market development at the 5 percent confidence level. This implies that an increase in banking sector development by 1 point leads to an increase in stock market development by 0.758 points. Similarly, private capital flows have a positive and significant effect on stock market development, with a coefficient of 0.583 at the 5 percent confidence level. It indicates that a point rise in private capital flows leads to a 0.58-point increase in the stock market development. Moreover, the table shows a positive but insignificant impact of income level on stock market development. However, the table reveals a negative and insignificant impact of gross domestic saving and macroeconomic stability on stock market development.

Discussion

The findings of this study provide valuable insights into the relationship between stock market development and various macroeconomic factors, including income level, banking sector development, gross domestic savings, macroeconomic stability, private capital flows, and stock market liquidity. The study highlights the significant impact of banking sector development on stock market development. This result aligns with previous studies (Yartey, 2008; Aduda et al. 2012; Ho, 2019), they similarly found a strong association between banking sector development and stock market development. The robustness of this relationship suggests a consistent and influential role of banking sector development in driving stock market growth, emphasizing the interconnectedness of financial institutions in shaping economic dynamics. Similarly, the positive and significant impact of private capital flows on stock market development highlights the importance of foreign direct investment and other forms of private capital influx in
fueling stock market development. This finding aligns with the findings of previous studies (Yartey, 2008; Msangi, 2015; Ho & Iyke, 2017; Tsaurai, 2018), they found that private capital flows have a long-term impact on stock market development. This result is consistent with the idea that increased private capital flows can bring in new investment opportunities, technologies, and managerial expertise, which can positively influence the stock market.

However, the relationship between independent variables such as income level, gross domestic savings, macroeconomic stability, and stock market liquidity and the dependent variable, stock market development did not exhibit statistical significance \((p > 0.05)\). This finding contradicts the results of (Yartey, 2008), who reported a significant impact of income level, gross domestic savings, macroeconomic stability, and stock market liquidity on stock market development. However, aligning with the findings of Aduda et al. (2012), which also demonstrated a non-significant impact of macroeconomic stability and private capital flows on stock market development, it suggests that the relationship between these variables may vary across different contexts or time periods. This underscores the nuanced nature of the factors influencing stock market development and emphasizes the importance of considering diverse factors in comprehensive analyses of financial markets.

**Conclusion**

The article explores the macroeconomic factors influencing stock market development in Nepal using time series data from 2003 to 2022. The Nepalese stock market has played a vital role in the country's overall development, showcasing significant growth and expanding market capitalization. The study emphasizes the significant and positive impact of banking sector development and private capital flows on stock market development. However, the non-significant relationships between income level, gross domestic savings, macroeconomic stability, and stock market liquidity and stock market development. The study underscores the importance of considering diverse factors in comprehensive analyses of financial markets and provides valuable policy recommendations to foster sustained capital market growth in Nepal.
influencing stock market development, emphasizing the interconnectedness of financial institutions and the need for strategic policy interventions.

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