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Impacts of Internal and External Macroeconomic Factors on Firm Stock Price in An Expansion Econometric Model – A Case in Vietnam Textiles Industry

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Abstract: Macroeconomic factors exert a significant influence on investment decisions, as they shape stock prices in accordance with a country's economic policies and conditions. In continuation of this discourse, the current investigation seeks to assess the effects of various internal and external macroeconomic factors on stock prices within Vietnam's textile and garment industry. Internal factors encompass Vietnam's exchange rate and bond yield rate, while external factors encompass US inflation, exchange rate, and bond yield rate. Spanning from 2017 to 2023, the study employs the Quantile Autoregressive Distributed Lag Model (QARDL) for empirical estimation. Results indicate that the aforementioned internal factors exert a negative impact on stock prices, whereas external factors exert a positive impact. The significance of these estimations varies across different quantiles. Based on these findings, recommendations are provided to policymakers and government entities to devise effective policies for managing internal and external macroeconomic factors efficiently, thereby harnessing their contributions to the development of the textile industry.

Introduction

Economists assert that the foremost objective of a firm is to optimize profits¹. The paramount criterion utilized in evaluating the financial performance of a corporation is its profitability. Stakeholders and investors consistently scrutinize a firm's profitability prior to formulating investment decisions. Despite enterprises operating within analogous sectors and confronting similar external conditions, their financial outcomes exhibit disparities. Enhanced financial performance is imperative to meet investor expectations, indicating either expansion or contraction of the company (Mohd & Siddiqui, 2020). Additionally, the performance of a firm significantly influences its corporate valuation, subsequently affecting stock prices. Stock valuation denotes the proportional and relative assessment of a company's worth. Augmented company valuation fosters heightened investor confidence and investment influx (Laksitaputri, 2012). Stock prices in efficient capital markets encapsulate all pertinent information, and market dynamics are responsive to fluctuations in stock prices. To sustain or enhance their market standing, enterprises must strategically revamp their business models to gain competitive advantages, thereby augmenting performance (Chien et al., 2021; Sukesti et al., 2021).

Various technical and fundamental factors, alongside investor sentiments and expectations, exert influence on stock prices. Prior research identifies numerous internal factors that shape firm performance and stock valuations. Notably, factors such as age, size, liquidity, leverage ratios, sales growth, inventory levels, capital turnover, and physical capital intensity are highlighted (Kuntluru et al., 2008; Pavelková & Knápková, 2009). However, the global impact of these factors on business financial performance varies across firms, industries, and nations (Chandrapala & Knápková, 2013). Furthermore, several internal macroeconomic factors, including interest rates, exchange rates, GDP, and inflation rates, exhibit significant relationships with firm performance (Poudel, 2017). Additionally, prominent external macroeconomic variables such as commodity prices, money supply, exchange rates, interest rates, oil prices, political risks, imports, unemployment rates, budget deficits, trade deficits, and real wages profoundly affect firm performance. Awareness of these external and internal variables is crucial for companies to mitigate adverse effects on profitability (Mohd & Siddiqui, 2020).

The primary objective of this study is to assess the impact of key external and internal macroeconomic factors on the stock prices of companies operating within Vietnam's Textile and Garment industry, covering the period from January 2017 to October 2023, utilizing the most recent available data. The rationale for selecting this industry stems from several factors. Firstly, Vietnam has undergone significant integration into the global economy over numerous years, attracting foreign direct investment (FDI) and fostering heightened market competition, thereby necessitating enhanced operational efficiency among businesses. Improved firm performance not only fosters business expansion and output growth but also facilitates job creation, enhances employee welfare, and ensures adherence to financial obligations to the national budget (Nguyen et al., 2021). Secondly, the Textile and Garment sector holds a pivotal position within consumer goods industries due to its substantial contributions towards meeting consumer demands, generating employment opportunities, and bolstering social welfare (Nguyen et al.,

2021). This sector comprises two primary segments: textiles and garments. Textiles encompass shuttle weaving, fibre spinning, finishing, and dyeing processes, while garments utilize fabrics as the primary material and involve accessory incorporation such as threads, buttons, and lace, through cutting, designing, and sewing activities. The Textile and Garment industry encompasses a spectrum of operations including spinning, dyeing, weaving, fabric finishing, and utilization of various materials such as laces, threads, cutters, buttons, and supplementary equipment, culminating in final product manufacturing. Vietnam's Textile and Garment sector has witnessed rapid expansion, significantly contributing to the nation's economic growth, as illustrated in Figure 1. Consequently, the socio-economic progress of Vietnam is intricately linked to the efficacy of business operations and the sustained presence and expansion of Textile and Garment enterprises (Nhunh & Thuy, 2018).

Over the past half-decade, Vietnam's textile industry has demonstrated an average growth rate of approximately 15 percent in export volume, reflecting a notable surge in the export turnover of the textile sector. Furthermore, the textile industry accounts for approximately 5% of the total labour force and more than 12% of the industrial workforce, thereby contributing to social stability and elevating living standards. Additionally, the exportation of textiles and apparel plays a pivotal role in bolstering foreign income, facilitating the acquisition of machinery, and modernizing industrial activities. Nonetheless, various internal and external factors have exerted influences across all sectors of Vietnam's economy, including the subdued inflation of 2014 to 2015 and the economic downturn of 2007 to 2009. Subsequent to this crisis, the economic performance and financial markets of Vietnam have been impacted by developments in the US economy. Furthermore, external factors such as US inflation, US exchange rates, and bond yield rates, alongside internal factors like inflation, exchange rates, and risk-free rates, have the potential to affect the Vietnamese textile sector (Huy et al., 2021). Consequently, Vietnamese enterprises encounter challenges in realizing substantial profits from the garment and textile industry (Nhunh & Thuy, 2018).



Figure 1: Stock Performance of Textile and Garment Industry Over 2019-2023 Period.

Source: Investing.com

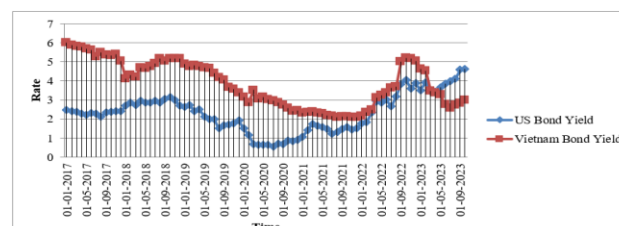


Figure 2: Bond Yield in the USA and Vietnam (2017-2023).

¹ The organization that brings together resources, produces goods, and offers services and sell them to customer through market in order to earn profit is referred to as firm.

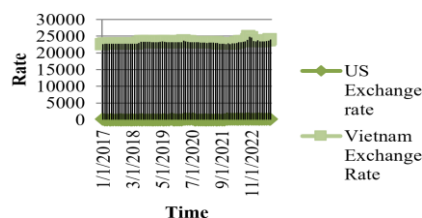


Figure 3: Exchange Rate of Vietnam and USA (2017-2023).

Hence, the primary objective of this research endeavour is to assess the influence of significant internal and external macroeconomic determinants on stock prices within Vietnam's textile and garment industry. Internal factors such as Vietnam's exchange rate and bond yield will be examined alongside external factors, including US inflation, exchange rate, and bond yield. As depicted in Figures 2 and 3, the upward trend in bond yield and exchange rate over the past six years suggests their potential impact on market valuations within the garment sector. Through this investigation, the study seeks to contribute to the scholarly discourse in several key aspects. Firstly, while numerous studies have explored the effects of internal macroeconomic factors, there is a notable scarcity of research focusing on the role of external macroeconomic factors in influencing market prices. Secondly, to the best of our knowledge, previous scholarly endeavours have not specifically addressed the interplay of external and internal macroeconomic factors in shaping market prices within Vietnam's textile and garment industry. Therefore, the present study endeavours to address these gaps in the existing literature.

The subsequent sections of the study are delineated as follows: Section 2 furnishes a comprehensive review of pertinent literature. Section 3 elucidates the data collection process and the methodology employed for analysis. The findings and discussions are expounded upon in Section 4. Finally, Section 5 encapsulates the conclusion drawn from the study's outcomes, along with pertinent policy recommendations.

Literature Review

In recent years, scholarly attention has gravitated towards investigating the influence of both external and internal factors on firm performance, prompted by the profound ramifications of certain external shocks to macroeconomic conditions. For instance, Huy et al. (2021) undertook an examination of various internal and external macroeconomic factors' effects on the real estate sector in Vietnam spanning from 2014 to 2019. Through correlation analysis, it was unveiled that the deposit rate and risk-free rate in Vietnam exhibited a negative correlation, while the lending rate displayed a positive correlation with prices within the Vietnamese real estate sector. Likewise, Pangestuti and Tindangen (2020) conducted a study utilizing a panel of mining sector companies listed on the Indonesian stock exchange, assessing the impact of macroeconomic factors such as exchange rates, interest rates, capital structure, and liquidity on stock prices over the period from 2016 to 2019. Results from regression analysis indicated that liquidity and interest rates did not exert significant influences on prices, whereas the exchange rate demonstrated a substantial negative effect on stock prices. Similarly, Akwe and Garba (2019) examined data from the top 21 companies listed on the Nigerian stock market spanning from 2007 to 2016, investigating the effects of various internal and external factors on stock returns. Panel data analysis revealed a significant negative impact of money supply, inflation, and interest rates on stock returns. Conversely, management

quality exhibited an insignificant influence, while firm size and age manifested positive impacts on stock returns among Nigerian companies. Additionally, In'airat (2018) analysed the impact of dividend pay-outs and oil prices, serving as internal and external factors respectively, on the equities of 40 firms listed on Saudi Arabia's stock exchange. The findings indicated a positive impact of oil prices on firm equity.

Furthermore, Khan and Khan (2018) conducted an analysis to gauge the influence of various macroeconomic factors on the stock prices of companies listed on the Karachi Stock Exchange. The study encompassed the time span from 2000 to 2016. Employing the ARDL approach, the research revealed that interest rates, exchange rates, and money supply exerted significant long-term impacts. However, in the short term, all factors except for the exchange rate demonstrated insignificant effects on stock prices. Similarly, Allahawiah and Al Amro (2012) examined panel data from 227 listed companies on the Amman Stock Exchange to investigate the influence of internal factors on stock prices. Their findings indicated that the inflation rate wielded the highest impact, while the nature of business exhibited the lowest impact on stock prices. Subagyo et al. (2020) estimated the impact of internal factors on the stock prices of 25 financial companies within the banking sector of Indonesia over the period from 2013 to 2017. Utilizing a panel data regression approach, they found that factors such as price-earnings ratio, return on assets, debt-to-assets ratio, exchange rates, firm size, and interest rates positively affected stock prices. Conversely, earnings per share, return on equity, and inflation displayed insignificant negative effects, whereas the debt-to-equity ratio had a positively insignificant impact on stock prices. Mohd and Siddiqui (2020) analysed data from 35 companies spanning seven diverse industries in Pakistan, including Sugar, Garments, Textile, Automotive, Cement, Ceramic, and Food industries. They employed the GMM analysis approach to examine the effects of various macroeconomic factors. The findings underscored significant effects of inflation, exchange rates, labour unit costs, unemployment rates, and foreign direct investment on companies within the aforementioned industries. Additionally, Jubaedah et al. (2016) investigated the role of different macroeconomic factors, capital structure, and financial performance using panel data from 20 firms listed in the Indonesian textile industry. Their findings indicated that inflation, depreciated exchange rates, and financial performance positively impacted firm performance.

Literature Gap

Upon reviewing existing literature, certain gaps have emerged, which the present study endeavours to address. Firstly, while numerous studies have delved into the impact of internal macroeconomic factors on firms' stock prices or performance, there is a notable dearth of research examining the role of external factors in firm performance. Secondly, the number of studies investigating the combined influence of external and internal factors on the performance of Vietnamese firms is notably limited. Furthermore, none of the previous studies have specifically focused on the textile sector to explore the role of external and internal macroeconomic factors in the stock prices of Vietnam's textile companies. The current research seeks to bridge these gaps in the literature and aims to contribute to the field accordingly.

Data and Methodology

The objective of this study is to assess the impact of external and internal factors on the stock prices within Vietnam's Textile and Garment Industry. External factors encompass bond yield, interest rate, and inflation rate of the USA, while

internal factors comprise Vietnam's exchange rate and bond yield. Monthly data pertaining to these variables is collected from secondary sources spanning from January 1, 2017, to October 1, 2023. The model employed in this study is delineated as follows:

$$SP_t = \beta_0 + \beta_1 VEX_t + \beta_2 VBY_t + \beta_3 USEX_t + \beta_4 USBY_t + \beta_5 USINF_t + \mu_t \quad (1)$$

In the specified model, denoted as follows: SP represents the stock price of the Textile and Garment Industry in Vietnam, while VEX signifies the Vietnam exchange rate, VBY represents the Vietnam bond yield, USBY denotes the US bond yield, USINF represents the US inflation rate, USEX denotes the US exchange rate, and μ denotes the error term. The data pertaining to stock prices of the textile industry, US bond yield, Vietnam bond yield, USD VND (US exchange rate), and VND USD (Vietnam exchange rate) were sourced from Investing.com. Additionally, data concerning US inflation was obtained from the FRED Economic database.

QARDL Estimation

In scenarios where variables exhibit mixed integration orders, the QARDL methodology emerges as the most suitable approach for assessing the quantile-dependent relationship between dependent and independent variables. The QARDL framework facilitates the prediction of extreme tail variance of dependent variables. Compared to other nonlinear methods, QARDL possesses several advantages. Firstly, it acknowledges location-based asymmetry, as coefficients are contingent upon the location of the dependent variable within the probability distribution. Secondly, it effectively addresses both the long-term relationship between explained and explanatory variables and the short-term fluctuations of the explained variable across all quantiles simultaneously. Thirdly, QARDL is esteemed for its capacity to capture both asymmetric and nonlinear relationships, rendering it particularly adept for modelling complex interactions. The linear ARDL model can be expressed as follows:

$$SP_t = \alpha + \sum_i^p \beta_1 SP_{t-i} + \sum_i^q \beta_2 VEX_{t-i} + \sum_i^r \beta_3 VBY_{t-i} + \sum_i^s \beta_4 USINF_{t-i} + \sum_i^u \beta_5 USEX_{t-i} + \sum_i^v \beta_6 USBY_{t-i} + \epsilon_t \quad (2)$$

In this context, ϵ_t denotes the disturbance term, and the lag orders p, q, r, s are determined based on the Schwartz Information Criterion. SP, VEX, VBY, USINF, USEX, and USBY

denote stock prices, Vietnam exchange rate, Vietnam bond yield price, US inflation, US exchange rate, and US bond yield price, respectively. Equation (3) presents the quantile version of the linear ARDL model, as described in equation (2).

$$QSP_t = \alpha(\tau) + \sum_i^p \beta_1(\tau) SP_{t-i} + \sum_i^q \beta_2(\tau) VEX_{t-i} + \sum_i^r \beta_3(\tau) VBY_{t-i} + \sum_i^s \beta_4(\tau) USINF_{t-i} + \sum_i^u \beta_5(\tau) USEX_{t-i} + \sum_i^v \beta_6(\tau) USBY_{t-i} + \epsilon_t(\tau) \quad (3)$$

$\epsilon(\tau) = SP_t - QSP_t(\frac{\tau}{\epsilon t - 1})$ & $0 < \tau < 1$, shows quantiles in above both equations. Equation (4) also signifies the possibility of a serial relationship in the error term.

$$Q\Delta SP_t = \alpha(\tau) + \rho SP_{t-i} + \phi_1 VEX_{t-i} + \phi_2 VBY_{t-i} + \phi_3 USINF_{t-i} + \phi_4 USEX_{t-i} + \phi_5 USBY_{t-i} + \sum_i^p \beta_1(\tau) SP_{t-i} + \sum_i^q \beta_2(\tau) VEX_{t-i} + \sum_i^r \beta_3(\tau) VBY_{t-i} + \sum_i^s \beta_4(\tau) USINF_{t-i} + \sum_i^u \beta_5(\tau) USEX_{t-i} + \sum_i^v \beta_6(\tau) USBY_{t-i} + \epsilon_t(\tau) \quad (4)$$

Equation (5) enhances equation (4) by incorporating the probability of serial correlation into consideration.

$$Q\Delta SP_t = \alpha(\tau) + \rho(\tau) SP_{t-i} - \omega_1(\tau) VEX_{t-i} - \omega_2(\tau) VBY_{t-i} - \omega_3(\tau) USINF_{t-i} - \omega_4(\tau) USEX_{t-i} - \omega_5 USBY_{t-i}(\tau) + \sum_{i=1}^{p-1} \beta_1(\tau) \Delta SP_{t-i} + \sum_{i=1}^{q-1} \beta_2(\tau) \Delta VEX_{t-i} + \sum_{i=1}^{r-1} \beta_3(\tau) \Delta VBY_{t-i} + \sum_{i=1}^{s-1} \beta_4(\tau) \Delta USINF_{t-i} + \sum_{i=1}^{u-1} \beta_5(\tau) \Delta USEX_{t-i} + \sum_{i=1}^{v-1} \beta_6(\tau) \Delta USBY_{t-i} + \epsilon_t(\tau) \quad (5)$$

$\beta_* = \sum_{i=1}^{p-1} \beta_1$ shows the short run effect of previous SP on present SP. $\beta_* = \sum_{i=1}^{q-1} \beta_2$ denotes the short run effect of VEX on current SP. Similarly, we compute the effects of preceding VBY, USINF, USBY, and USEX in a similar fashion. Additionally, it is imperative for the error or disturbance term in the aforementioned equation to be both significant and negative (Cho et al., 2015).

Results and Discussion

Initially, Table 1 presents descriptive or summary statistics. These statistics reveal that VEX exhibits the highest average or mean value, while USINF displays the lowest mean value. Additionally, among all the data series, SP demonstrates the highest standard deviation, whereas USINF exhibits the lowest standard deviation. The statistics of the Jarque-Bera test for normality are also included in the last column of Table 1. This test indicates that, except for USBY, none of the data series follows a normal distribution.

Table 1: Summary Statistics Results.

Name of Series	Mean	Minimum	Maximum	Standard Deviation.	J-B Stat
SP	11819.6	5151.0	25482.0	4893.4	21.120***
VEX	23180.5	22590.0	24840.0	444.4	58.492***
VBY	3.8370	2.08200	6.0100	1.2203	6.8863***
USEX	100.00	91.690	112.980	4.7603	6.5113***
USINF	0.0029	-0.0080	0.0130	0.0033	10.860***
USBY	2.3176	0.5330	4.6160	1.0107	1.7462

Table 2 presents the correlation matrix depicting the relationships among variables. It is discernible that SP exhibits a negative correlation with VEX and VBY, but a positive correlation with all other variables. VEX displays a negative correlation with USINF but a positive correlation

with all other variables. Similarly, VBY demonstrates a negative correlation with USEX and USINF, yet a positive correlation with the remaining variables. On the other hand, USBY and USEX exhibit positive correlations with all variables.

Table 2: Correlation Matrix.

Variables	SP	VEX	VBY	USBY	USEX	USINF
SP	1.000					
VEX	-0.2077	1.000				
VBY	-0.5425	0.0573	1.000			
USBY	0.0598	0.4285	0.4802	1.000		
USEX	0.1751	0.7406	-0.1120	0.4216	1.000	
USINF	0.5766	-0.1098	-0.3495	0.0020	0.0788	1.000

Conducting unit root testing constitutes the primary phase of empirical estimation. Table 3 furnishes the outcomes of Augmented Dickey Fuller (ADF) and Phillips-Perron (PP)

unit root tests. According to the results, all series, with the exception of US inflation, exhibit unit root at the level in both the ADF and PP tests yet become stationary at the

first difference. Conversely, US inflation demonstrates stationarity at the level in both ADF and PP tests. Thus, both tests indicate a mixed order of integration among

variables, suggesting that the QARDL model can be efficiently employed as it does not necessitate any specific order of integration.

Table 3: Unit Root Test Findings.

	Variables ADF PP			
	Level	First Difference	Level	First Difference
SP	-1.361	-8.639***	-1.631	-8.639***
VEX	-0.958	-7.994***	-1.397	-7.009***
VBY	-1.726	-4.571***	-1.869	-8.190***
USINF	-5.214***	-----	-5.108***	-----
USEX	-1.391	-5.601***	-1.068	-5.338***
USBY	-0.129	-8.407***	-0.037	-8.405***

The results from the QARDL analysis are presented in Table 3. The stock prices of the textile and garment industry are partitioned into nine quantiles. The Error Correction Term or Mechanism is deemed significant and negative within the 0.1 to 0.4 quantiles, suggesting that our model tends to return to long-run equilibrium following any external shock. Firstly, focusing on internal factors, we observe that the coefficient of the exchange rate is negative and statistically significant across the 0.3 to 0.9 quantiles. This implies that within this range of stock prices, an increase in the exchange rate in Vietnam corresponds to a decrease in the stock price of the textile industry. This relationship arises as the value of the domestic currency diminishes with an increase in the exchange rate, impacting local market pricing. Conversely, the depreciation of the domestic currency stimulates investors to allocate more funds towards stocks. Khan (2019) also reported similar findings in the context of the Shenzhen stock market.

Additionally, Dang et al. (2020) in Vietnam found that both exchange rate appreciation and depreciation were negatively associated with stock prices. However, Singh (2015) in India reported contrasting results, suggesting a positive effect of exchange rate on stock prices. Similarly, regarding bond yield, we observe a long-term decline in stock prices across the 0.3 to 0.9 quantiles. An increase in bond yield leads to a reduction in investment capital in the stock market. High bond yields incentivize individuals to purchase more bonds and invest less in shares or stocks of industries. This finding is corroborated by earlier studies such as Huy et al. (2020) in Vietnam, who observed a negative relationship between the risk-free or bond yield rate and stock prices. Likewise, another study conducted for Vietnam by Huy et al. (2021) also concluded that there exists a negative relationship between the risk-free rate and stock prices.

Table 4: QARDL Findings.

(τ)	Quantiles Constant ECM Long Term Coefficients Short-Term Coefficients											
	$\alpha_*(\tau)$	$\rho_*(\tau)$	$B_{VEX}(\tau)$	$B_{VBY}(\tau)$	$B_{USINF}(\tau)$	$B_{USEX}(\tau)$	$B_{USBY}(\tau)$	$\varphi_1(\tau)$	$\omega_0(\tau)$	$\psi_0(\tau)$	$\lambda_0(\tau)$	$\theta_0(\tau)$
0.1	1.434	-0.172***	-5.011	-8.889	-1.90	9.527	3.017***	-2.159***	2.329	9.360	0.234	-5.200
0.2	5.056	-0.160***	-6.037	-2.605	0.71	6.235	4.630***	-1.964***	-7.995	9.627	-1.118	-1.189
0.3	6.78**	-0.150***	-8.630***	-7.356***	4.39**	3.296	1.310***	-1.892**	-7.234	0.669	-0.581	-6.767
0.4	5.944***	-0.145***	-8.354**	-9.363***	-0.33***	5.308	1.591***	-1.964	-0.919	4.631	-7.969	-1.502
0.5	3.745***	-0.114	-7.066**	-10.365***	-2.96**	6.098**	2.177***	-2.030**	-1.148	-0.144	-0.831	-6.008
0.6	1.073***	-0.114	-6.675***	-9.750***	-1.86**	7.632**	7.572***	-2.030**	-1.148	-0.144	-0.831	-6.008
0.7	2.632***	-0.100	-5.390***	-1.034***	-2.33***	7.794***	7.478***	-2.253***	-7.712**	-3.902	-3.793	9.368
0.8	7.548***	-0.063	-5.600***	-3.444***	-1.24***	3.406***	6.298**	-2.447***	-10.422***	-3.377	9.190	0.273
0.9	7.982***	-0.003	-7.676***	-7.016***	-9.76***	0.741***	1.752	0.603	-2.494***	-2.365	5.333	6.155

Moving on to external factors, the long-run QARDL analysis reveals that US inflation initially causes stock prices to decline at the first quantile. However, over the 0.2 to 0.9 quantiles, its impact becomes significant and positive on stock prices. Previous studies by Amanda et al. (2023) in Indonesia and Huy et al. (2021) in Vietnam also corroborate our findings, indicating a positive relationship between inflation and stock prices. Similarly, in Pakistan, Chang et al. (2019) provide strong support for this relationship. Poudel (2017) in Nepal also arrives at similar estimations. This suggests that higher inflation rates in other countries motivate investors to allocate more funds into stocks. This occurs because higher inflation in the US leads to a depreciation of the US dollar, making Vietnamese exports more competitive and profitable (Dilanchiev & Taktakishvili, 2021).

Secondly, the US exchange rate also exhibits a positive relationship with stock prices, albeit its effect is significant only over the 0.5 to 0.9 quantiles in the long run. A higher value of the US exchange rate corresponds to higher stock prices in the textile industry. Kisaka and Mwasaru (2012) and Yau and Nieh (2006) also support these results. One possible explanation for this finding could be the increase

in foreign reserves in Vietnam due to a higher US exchange rate, leading to greater economic stability and investment incentives in various stocks by investors (Pan et al., 2007). Similarly, the coefficient of the risk-free rate or bond yield in the US is statistically significant and positive across all quantiles (0.1 to 0.9). One potential reason for this unexpected finding could be the spillover effect of economic growth and recovery, accompanied by a rise in the bond yield of the US. This boosts the demand for Vietnamese products and increases profitability, thereby stimulating investments in Vietnamese stocks. Empirically, the findings of Huy et al. (2021) align with our findings. Regarding short-run dynamics, the QARDL results indicate a negative coefficient for the Vietnam exchange rate. This adverse effect is statistically significant over the 0.1 to 0.3 and 0.5 to 0.8 quantiles, while it becomes insignificant over the 0.4 and 0.9 quantiles. Similarly, the coefficient of the Vietnam bond yield price is also negative but significant only at the extremely higher quantiles of 0.7 to 0.9. In terms of external factors, the coefficient of US inflation is insignificant and positive over the 0.1 to 0.4 quantiles, shifting to negative over the 0.5 to 0.9 quantiles. However, the overall effect of US inflation

remains insignificant across all quantiles. Similarly, the US bond yield price exhibits an insignificant but negative effect over the 0.1 to 0.8 quantiles. The impact of the US exchange rate is significant only at the 1st quantile and insignificant over the 0.2 to 0.9 quantiles.

Conclusion and Recommendations

The study aimed to investigate the impact of internal and external macroeconomic factors on the stock prices of Vietnam's textile and garment industry. Internal factors included Vietnam's exchange rate and bond yield, while external factors comprised US inflation rate, bond yield, and exchange rate. Data was collected monthly from January 2017 to October 2023. QARDL estimations revealed that Vietnam's bond yield and exchange rate negatively affected the textile industry's stock prices, while US inflation rate and bond yield had a positive impact. The significance of these effects varied across different quantiles.

Based on the findings, the study recommends that policymakers in Vietnam focus on stabilizing the exchange rate through appropriate policies. This stabilization is crucial for promoting investments in textile firms and industry, as significant fluctuations in the exchange rate can disrupt stock market performance trends, leading to uncertainty among investors. Additionally, it is important for financial and macroeconomic policies to account for the impacts of external variables such as US inflation, exchange rate, and bond yield rate. Given their positive association with stock prices, the Vietnamese government should implement relevant macro policies to leverage the benefits of changes in these factors in the USA.

The current study possesses certain limitations that warrant further investigation in future research endeavours. While the study has incorporated crucial external and internal macroeconomic factors, there remains an opportunity to include additional factors such as interest rate, lending rate, discount rate, and economic growth. Moreover, the focus of the present research is on the textile and garment industry, yet several other industries such as construction, aquaculture, food, and fertilizer industries, which hold significance in the economic growth of the country, could also be examined. Furthermore, in terms of methodological considerations, future researchers have the opportunity to explore asymmetric relationships by employing non-linear estimation methods.

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