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PAKISTAN AND MALAYSIA BILATERAL TRADE AGREEMENT (BTA): A CASE OF THE PAKISTAN STOCK EXCHANGE (PSX) REACTION

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Abstract

The goal of this investigation is to establish a connection between the attributes of listed companies and the effects of the Pakistan-Malaysia Bilateral Trade Agreement (BTA) on Pakistan's stock markets. For that purpose, this research is to look at how the Pakistan Stock Exchange (PSX) was affected by the Bilateral Trade Agreement between Pakistan and Malaysia. The abnormal returns have been computed before and after the announcement using an event study methodology. The results demonstrate that the announcement of the Pakistan-Malaysia (BTA) elicited an immediate response from chosen sectors of Pakistan, with mixed responses, negative as well as positive. Given that the textile industry is one of Pakistan's top export industries, its response was encouraging. The study concludes that the PSX was vulnerable to this event as well as that this paper has important ramifications for investors and trade policy makers.

JEL classification: G14, F13, F14

Keywords: Event Study, Abnormal Returns, Pakistan-Malaysia Bilateral Trade Agreement, Pakistan Stock Exchange

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Introduction

Over the past thirty years, nations and trading blocs worldwide have been primarily concerned about trade liberalization. As a result, multilateral negotiations and unilateral liberalization measures have been organized under the WTO platform. Furthermore, in the current context, initiatives at bilateral and regional liberalization have been sparked by free trade agreements (FTAs) and the innovative idea of global value chains. For example, the findings of Li et al. (2019) demonstrate that global value chains (GVCs) grew between 2012-2017 and are still primarily regional in nature. The partner nations in the lower and medium ends of GVCs will benefit more from the Chinese Trade Agreements than those wealthier countries at the upper end of GVCs, as claimed by Fei et al. (2020).

The majority of the studies, like those by Farhat & Juthathip (2018), Khan et al. (2018), Chien-Jung (2019), Dao (2015), are concerned with trade liberalization and macroeconomic growth in the context of South and East Asia. Nevertheless, this study uses the perspective of Pakistan's stock market to empirically assess the effects of the BTA between Pakistan and Malaysia in order to supplement the body of current work, which has not yet been given adequate attention by scholars. Furthermore, the earlier studies shed light on endogenous growth theories and trade hypotheses, nevertheless, ignoring the trade analysis at the micro level. Therefore, rather than assessing trade indicators at the national level, this study significantly closes a gap in the literature by examining firm stock price reaction. The fundamental idea of this research is that sector-wise analysis can be carried out on the overall reaction of the stock market.

Since its founding in the 1960s, Malaysia has experienced remarkable economic growth and stands out among the nations of East Asia in terms of prosperity. Malaysia's economy was initially dependent on its abundant natural resources, including minerals and agricultural products. In 1968, the government implemented a number of trade reforms, including the Export Oriented Industry (EOI) program, and changed the structure of the economy. Around the same time, the government started capital-intensive industries. Malaysia rated as the third largest economy in the East Asian area as a result of its EOI tactics. In fact, Malaysia plays a major role in the East Asian region, and in order to advance economically and achieve wealth, collaboration, and advancement, initially, Pakistan and Malaysia participated in the Early Harvest Program (EHP). This arrangement's goals were to safeguard the market for their export goods and to increase commerce and provide in the economy a close relationship with important locals. Following the EHP program's successful conclusion, the first BTA was inked between Malaysia and Pakistan on November 8, 2007. This was the first comprehensive bilateral trade agreement (BTA) between Pakistan and Malaysia integrating investment, commerce in products and services, and economic cooperation. For Pakistan, it was also the first BTA of its kind with any South Asian nation. The goal of this free trade agreement was to increase bilateral trade between the two nations by doing away with import and export duties. Thus, the purpose of this study is to examine the Pakistan Stock market response, in context of the announcement of the Pakistan-Malaysia Bilateral Trade Agreement in 2007 (Ministry of Commerce, Pakistan).

Over the same period, Pakistan's exports to Malaysia climbed from $138.1 million to $232.8 million, while its imports from Malaysia fell from $1.7 billion in 2008 to $956.9 million in 2019. As a result, Pakistan's trade deficit in 2019 was $724.1 million, the lowest since the free trade agreement's inception. Pakistan's imports from Malaysia peaked in 2011 and then continued to fall until 2015 (International Trade Center- Trade Map). The main obstacles to the free trade agreement between Pakistan and Malaysia include Malaysia's membership in the Association of Southeast Asian Nations (ASEAN), as well as its agreements with Vietnam, Indonesia, India, China, and Thailand. The advantageous effects of tariff concessions granted to Pakistan under the FTA in essential industries have been lessened by these free trade agreements (FTAs) with Malaysia. It is important to note that Pakistan's economic growth, wealth, and advancement are greatly impacted by the FTA that has been emphasized. However, in order to identify potential trade sectors and boost Pakistani exports, a thorough examination is necessary. This will enable Pakistan to emerge as the region's economic leader and compete with ASEAN nations. This examination is the main focus of this research.

The Karachi Stock Exchange was established in 1947 and now its name is the Pakistan Stock Exchange, since January 2016, after the merger of the Islamabad Stock Exchange and the Lahore Stock Exchange. It is anticipated that the integration will lessen market fragmentation and make a compelling argument for luring strategic trading partners like Malaysia and China required to supply technological know-how and support.

Along with over 220,000 retail investors, the exchanges also have 1,886 foreign institutional investors and 883 local institutional investors. Additionally, there are 21 asset management firms and roughly 400 brokerage houses that are PSX members. The transactions are totally automated according to international standards. Therefore, international investors can easily settle their transactions online. With 40% participation in the PSX, the Shanghai Stock Exchange emerged as a significant shareholder. Approximately, 154-155 Chinese in-

vestors can now more readily access Pakistan's stock markets. This has been done by PSX's integration with China's stock market via the China Connect Interface (PSX website).

The Bursa Malaysia is among ASEAN's biggest stock exchanges. Its' former name was the Kuala Lumpur Stock Exchange (KLSE). The stock exchange, in conjunction with the Securities Commission of Malaysia just like the Securities Exchange Commission of Pakistan, oversees the country's capital market and, via its facilities, fulfills its responsibility of control. Moreover, it preserves order in the buying and selling of financial securities such as shares, bonds, and financial derivatives.

This research work contributes to the body of knowledge in a number of ways. For instance, the effects of trade integration on Pakistan's stock exchange have not yet been the subject of any empirical research. Thus, by directly demonstrating how Pakistan's stock exchanges responded to the Pakistan-Malaysia BTA, this study is the first to tackle this problem. This study adds to the body of research on the effects of trade policy changes on stock market values, which has primarily focused on developed nations (e.g. Ries, 1993; Breinlich, 2014). Finally, this research expands on significant contributions made to the body of knowledge about productivity of businesses and inefficient use of resources in emerging financial markets.

An event study has been applied to the stock market to determine the cumulative abnormal returns. The daily statistics of stock prices at the firm level have been collected for Pakistani listed firms between January to December 2007 from the Pakistan Stock Exchange, as the research is based on the signing of the Pakistan-Malaysia Bilateral Trade Agreement on November 8, 2007. First, the evaluation is done on how the news of the Pakistan-Malaysia BTA had affected the stock markets in Pakistan. Subsequently, the examination is broadened to encompass several industries in order to ascertain whether the reactions of listed companies to trade policy declarations varies depending on the industry. Ultimately, the goal is to establish a connection between the attributes of listed companies and the effects of the Pakistan-Malaysia BTA on Pakistan's stock markets.

This paper's remainder is structured as follows. Section 2 reviews the literature on stock exchange reactions of the trade agreements. Section 3 goes on to detail the data and research methodology. The primary findings are presented and discussed in Section 4. In Section 5, the concluding observations have been discussed.

Literature review

The economic impacts of bilateral trade agreements (BTAs) have been the subject matter of numerous studies in recent decades. Usually, trade related theories and data are used in these investigations. By improving the business environment for the involved trading partners, BTAs usually promote investment and trade in goods and services, as claimed by Kawai and Wingaraja (2008). Both short- and long-term effects on financial markets are caused by free trade agreement effects on the real market. Nonetheless, there aren't many empirical studies that look at how free trade agreements might affect the financial markets, especially the stock market.

According to Fama's (1970) efficient market hypothesis, markets are efficient because security prices fluctuate swiftly in response to new information (such as the signing of a BTA), which is the fundamental theoretical foundation for the empirical research here conducted on the relationship between BTAs and enterprises' financial success. Thompson (1993, 1994) looks into what investors anticipate will happen to Canadian manufacturing companies and industries as a result of the US-Canada Bilateral Trade Agreement. She argues that industry-level abnormal returns only correspond to the October 1987 agreement date. Investor perceptions of the effects of the FTA are influenced by economies of scale as well as comparative advantages, according to firm-level research.

Nezerwe and Karangwa (2018) carried out a ground-breaking investigation into how the Morocco-US BTA deal affected the Stock Market of Casablanca. This research highlighted how stock returns were significantly positively impacted by the accord, which eliminated taxes on more than 95% of products and services. These results lend credence to the notion that capital markets, being forward-thinking entities, swiftly adjust to the anticipated financial benefits of bilateral trade agreements. Daelemans et al. (2018) and Waqar et al. (1995) investigated, with a particular emphasis on the North American Free Trade Agreement (NAFTA), the connection between free trade agreements (FTAs) and the fluctuations of exchange rates and shareholder returns. The findings of the study imply that BTAs may help create a stock market environment that is more predictable and stable, which is good news for investors.

Gap identified under literature review

The contemporary scholars have examined the connection among BTAs and stock exchanges in great detail like (Lan & Thao, 2024; Andreas & Lisa, 2023; Doowon, 2020; Feng et al., 2021). Even though it is commonly recognized that bilateral trade agreements (BTAs) have an impact on trade exports and imports, Gross Domestic Product, and sectoral production, the

story of these agreements' immediate and long-term effects on stock markets is less clear. Budzinski (2013), established the stock market as a judge for evaluating choices made in economic policy, especially those pertaining to free trade agreements. According to Budzinski (2013), because it serves as both an unbiased assessor and a source of stock exchange data for event research, the stock market offers a real depiction of shareholder sentiment and expectations about BTAs. According to this perspective, stock exchange reactions might serve as immediate predictors of the perceived winners or losers of BTAs.

Additionally, Breinlich et al. (2018) looked into how Brexit would affect the stock market. These results suggest that the performance of the stock market can be significantly impacted by changes in policy on trade, like the creation or changes of BTAs. Positive perceptions of the possible advantages of free trade agreements can boost stock prices. Moreover, Kawasaki (2003) proposed that by governments in developing countries like Pakistan could boost investor assurance and recognize economic benefits that lead to capital market growth by establishing agreements with developed and economically stable partners.

Dür and Lechner (2019) looked into how news of the failure to advance the Transpacific Partnership (TPP) and Transatlantic Trade and Investment Partnership negotiations affected the stock prices of various kinds of companies. They discovered proof that the majority of trade agreement benefits go to medium sized businesses. Using Melitz's (2003) dynamic industry model with heterogeneous enterprises, Breinlich (2016) examines how the 1989 Canada-United States Free Trade Agreement (CUSFTA) has affected the stock market. The possible effects of trade integration on the short- and long-term volatility dynamics between the stock market in Malaysia and fourteen major developed and developing stock markets in America, Europe, Africa, Asia, and Oceania are the main subject of Qian and Diaz's (2017) study. They contend that the majority of Malaysia's main trading partners' stock indices have a considerable impact on the country's stock market. The increasing market integration between Malaysia and its trading partners explains these spillover effects. Contemporarily, Crowley et al. (2019) look at the stock market results of Chinese companies that are publicly listed and worked in the solar panel business in 2012 and 2013 in reaction to the European Union's announcement of additional import restrictions and changes to Chinese domestic policy. Their primary finding aligns with Melitz's (2003) model, which postulates that stock market losses were higher for larger, more export-oriented enterprises when news of European trade restrictions was released.

Scholarly study has focused a great deal on the impact that FTA news and events have on stock prices, especially in certain industries. The existing literature has discussed the impacts of Bilateral Trade Agreements (BTAs) announcement and execution on different industries. It provides evidence that these BTAs, together with the information surrounding them, cause noticeable and frequently statistically significant reactions in the market. Klein (2001) shed light on how NAFTA has affected various sections of the Mexican Stock Exchange differently. On the approval and negotiating conclusion dates, positive abnormal returns were clearly seen, with notable impacts on the paper/cellulose, iron/steel, and electronics industries. In contrast, the response from the insurance, chemical, and mining sectors was weaker, demonstrating the varied implications of FTA news across various industries. Hamid et al. (1997) investigated the impact of the Canada-US BTA in several industries. The study emphasized that larger businesses, especially in the sectors of oil and gas, textiles and computers, were more noticeably impacted by the BTA announcement. Additionally, Parinduri et al. (2013) investigated how the US-Singapore Free Trade accord affected company share price listed on the Exchange of Singapore and found that the accord was largely well-received by the market.

The research highlights the complex relationship between industry specific stock market reactions and free trade agreement (FTA) news, highlighting the crucial impact of variables including firm size, industry type, and economic environment. All of the results point to how crucial it is to take sectoral differences into account when analyzing the wider economic impacts of BTAs. By analyzing the complex relationships between Pakistan-Malaysia BTA information, and industry-specific capital market reactions in a developing nation such as Pakistan, this research seeks to fill this gap. Hence, the following hypotheses are developed as follows, drawing on the above highlighted discussion.

H_1: Announcement of the Pakistan- Malaysia BTA had a significant impact on the Pakistan Stock Exchange.

H_2: Announcement of the Pakistan-Malaysia BTA had a significant impact on sectors listed on the Pakistan Stock Exchange.

Methodology

The sample firms chosen for this paper are from the Pakistan Stock Exchange (PSX) during the January–December 2007 period, as well as the KSE 100 index, which serves as a market proxy. The Pakistan Stock Exchange website has been used to collect the information on daily market prices for each firm as well as the daily KSE 100 index. Additionally, through the Ministry of Commerce Pakistan website the announcement

event window was created 5 working days prior to and 5 days following the Pakistan-Malaysia BTA date of announcement. A total of 100 listed firms from various PSX sectors, including textile, auto and allied, cables and electric goods, cement, glass and ceramics, food products and oil and gas, are included in the study for the period from January 1, 2007, to December 31, 2007.

The following formula has been utilized to compute the daily compounded returns for examination:

$$R_{i,t} = ln(P_t / P_{t-1}) \quad (1)$$

Where: $R_{i,t}$ = daily return of the shares on day t and

ln = natural logarithm

P_t = Current day share price

P_{t-1} = Previous day share price

The KSE 100 Index return, which serves as a market proxy, is computed using the following formula:

$$R_{m,t} = ln(P_t / P_{t-1}) \quad (2)$$

Where: $R_{m,t}$ = daily return of the KSE 100 index on day t and

ln= natural logarithm

P_t = Current day KSE 100 index value

P_{t-1} = Previous day KSE 100 index value

The dates of the KSE 100 Index with each firm's share return and its daily returns have been synchronized. The day of the announcement of the Pakistan-Malaysia BTA serves as the basis for creating the event window, which was the day of signing the agreement between the two countries and when it was made public. To measure the share's behavior, estimation and event windows have been created. To be more precise, for the prediction of the model of the stock's returns under typical circumstances, the estimation window is utilized.

The market model that has been employed was first presented by Brown and Warner (1985). For that purpose, the regression is executed for both the share returns and the KSE 100 Index returns. Here is how the market model for a share i might be stated:

$$E(R_{it}) = \alpha_i + \beta_i * R_{mt} \quad (3)$$

Where: E (R_{it}) is the predicted return based on the share's α_i and β_i as well as the return of the KSE 100 index.

Ordinary least-square regression is used to estimate the coefficients α_i and β_i over the estimation window, where R_{it} and R_{mt} stand for the stock and the market return of KSE 100 Index on day t, respectively.

To measure the effect of the Pakistan-Malaysia BTA date of announcement on the return of the stock during the event period, having first computed the estimated return E (R_{it}) the abnormal return (AR_{it}) of the share for a given day t during the event window has been calculated in this study, on the signing date of the Pakistan-Malaysia BTA. As the discrepancy between its actual return and the return predicted by applying the subsequent formula to determine (AR_{it}):

$$AR_{it} = R_{it} - E(R_{it}) \quad (4)$$

Where: AR_{it} = The abnormal return, $E(R_{it})$ = predicted return based on the share's α_i and β_i as well as the return of the KSE 100 index, R_{it} = actual stock return on event window day t.

The abnormal return during the event window has been regarded by the study as an indicator of how the share's market value was affected by the announcement of the Pakistan-Malaysia BTA signing date. The entire abnormal returns throughout the course of the event window are measured by the cumulative abnormal return, or CAR. For every day between Day -5 and Day +5, the Cumulative Abnormal Return (CAR) has been calculated. The formula to calculate the CAR for time t is as follows:

$$CAR_t = \sum AR_t \quad (5)$$

Where: CAR_t = Cumulative Abnormal Return and AR_t = The abnormal return, t = -5, … + 5.

The announcement of the Pakistan-Malaysia BTA signing date's impact on equities within the period of event, both pre and post day of the event, has been measured using ARs. Then, in order to determine whether or not compared to day 0, the ARs are much different during the course of the event period, the t-statistics for each day is computed. For each AR value, the t-statistics are computed utilizing the following formula:

$$t - statistic(AR) = \frac{AR}{Standard\ Error} \quad (6)$$

Where: AR =The abnormal return.

The average AARs and CAARs for each company for each day in the event window are determined after the ARs and CARs for the days in the event window which have been determined. The following formula is used to get average AAR and CAAR values:

$$CAAR = \frac{\sum CAR_t}{n} \quad (7)$$

Where: CAAR = Cumulative Average Abnormal Return.

To determine the effect on stocks during the event window prior to and following the event day, CARs have been computed. After computing the average CAARs, the event window's t-statistics are calculated to determine whether or not the mean CAARs differ

significantly from day 0 during the course of the event window. For each average CAR value, the t-statistic is computed by utilizing the formula below:

$$t - statistic(CAAR) = \frac{CAAR}{(\frac{\sigma}{n})} \quad (8)$$

where σ = the standard deviation of the time series.

Results

One company's results are discussed here, however the event analysis has attempted to assess the effect of the announcement of Pakistan-Malaysia BTA signing day for PSX's 100 listed companies' returns. The event window has been set up for the 244 trading days that preceded the 5 days prior to Prosperity Weaving Mills Ltd.'s announcement on November 8, 2007. The findings of the regression show that Prosperity Weaving Mills Ltd., behaved normally over the estimation window:

$$E(R_{Prosperity,t}) = -0.001233 + 0.024806 * R_{KSE100,t} \quad (9)$$

Performing the regression will yield the standard error of the expected y-values. Additionally, the significance of the event's abnormal returns has been determined with the assistance of this value. -5 days prior to and +5 days following the announcement having been established in the event window. Equation 9 is the market model that has been utilized to quantify the announcement's impact in the event period. The findings indicate that there were multiple notable substantial abnormal returns within the event window of Prosperity Weaving Mills Ltd., following the announcement of the Pakistan-Malaysia BTA signing date. As previously noted, the importance of the abnormal returns is determined using the standard error of the regression forecast. Table 1 shows that the t-statistic values are significant after the event day on November 13, 14, and 16, 2007.

Table 1: Prosperity Weaving Mills Ltd. Textile Sector

Days	Dates	ER	Abnormal Return	CAR	t stat	Decision
-5	1.11.07	-0.001233000	0.001233000	-0.001233000	0.048808487	No
-4	2.11.07	-0.001233000	0.001233000	0.000000000	0.048808487	No
-3	5.11.07	-0.001233000	0.001233000	0.001233000	0.048808487	No
-2	6.11.07	-0.001233000	0.001233000	0.002466000	0.048808487	No
-1	7.11.07	-0.001233000	0.001233000	0.003699000	0.048808487	No
0	8.11.07	-0.001233000	0.001233000	0.004932000	0.048808487	No
1	12.11.07	-0.001233000	0.001233000	0.006165000	0.048808487	No
2	13.11.07	0.001131264	0.094178915	0.100343915	3.728086275	Yes
3	14.11.07	0.000925404	0.086085973	0.186429888	3.407725943	Yes
4	15.11.07	-0.001233000	0.001233000	0.187662888	0.048808487	No
5	16.11.07	0.000752539	0.079290168	0.266953057	3.138713018	Yes

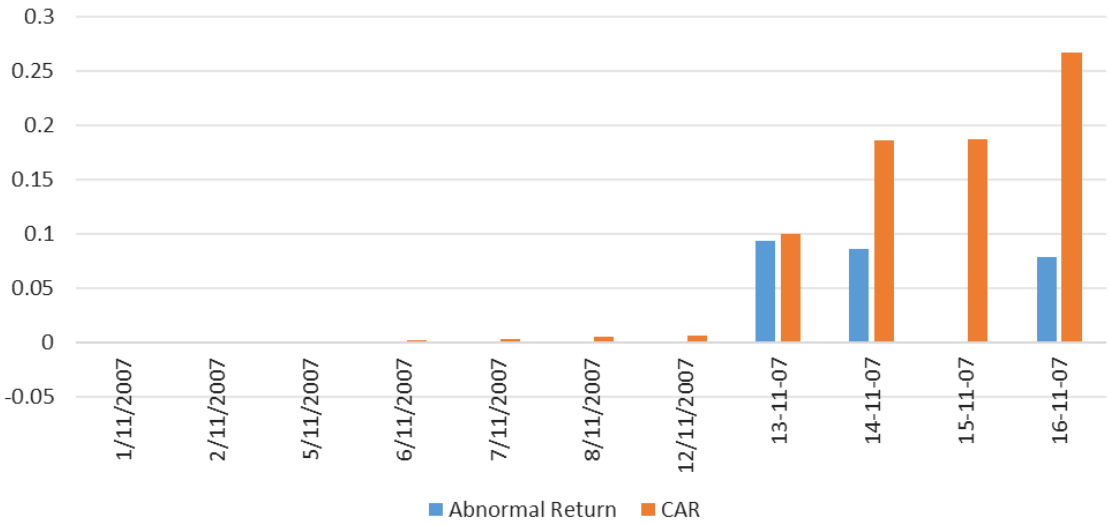
Source: Authors' own work.

The significance level of the t-statistic is set at 1%, if it is greater than 2.58. Table 1 shows that the abnormal returns on November 13th, 14th and 16th of 2007 is significant at the 1% level. Additionally, the stock returns demonstrate that Prosperity Weaving Mills Ltd.'s stock returns improved as a result of the Pakistan-Malaysia BTA signing date announcement.

As seen by Graph 1, the Cumulative Abnormal Return (CAR) following the events of November 13th, 14th, 16th is quite noteworthy. There had been positive wealth creation for Prosperity Weaving Mills Ltd. stockholders throughout the brief time frame captured by this event window.

Table 2 shows the cumulative abnormal returns and associated t-statistics for the representative 100 PSX-listed firms. The findings demonstrate that (day -5) and (day -3) exhibit negatively significant t-statistics values prior to the event day. The t-statistics values on days 2, 3, and 5 following the occurrence are all positively significant. Day 4 following the occurrence, however, has a negative significance. As a result, it has been shown that during the course of the event window, CAARs differ significantly from day 0.

Graph 1: Event window - prosperity Weaving Mills Ltd. textile sector



Source: Author own work.

Table 2: Cumulative Abnormal Returns of selected 7 sectors

Sectors	Variables	Event Day					
		-5	-4	-3	-2	-1	0
Textile	CAR	-0.0057	0.0080	0.0047	-0.0031	0.0018	-0.0008
Glass and Ceramics		-0.0491	0.0059	0.0026	-0.0077	-0.0004	-0.0030
Cables and Electric goods		-0.1009	0.0054	-0.0068	0.0012	-0.0267	-0.0050
Food Products		-0.1069	-0.0021	-0.0171	-0.0046	-0.0284	-0.0050
Auto & Allied Industry		-0.1366	-0.0388	-0.0600	0.0145	-0.0054	0.0188
Cement		-0.1385	-0.0416	-0.0619	0.0082	-0.0115	0.0145
Oil and Gas		-0.1682	-0.0783	-0.1049	0.0273	0.0115	0.0383
CAAR		-0.1009	-0.0202	-0.0348	0.0051	-0.0084	0.0083
T-Value		-4.6717	-1.4206	-2.1913	0.5335	-0.5849	0.8491

Sectors	Variables	Event Day				
		1	2	3	4	5
Textile	CAR	-0.0002	0.0993	0.0880	0.0047	0.0862
Glass and Ceramics		-0.0023	0.0972	0.0858	0.0025	0.0841
Cables and Electric goods		0.0443	0.1081	0.0738	-0.0148	0.0836
Food Products		0.0541	0.1119	0.0690	-0.0251	0.0733
Auto & Allied Industry		0.0372	0.1091	0.0635	-0.0495	0.0665
Cement		0.0310	0.1049	0.0616	-0.0514	0.0646
Oil and Gas		0.0141	0.1021	0.0560	-0.0758	0.0578
CAAR		0.0255	0.1047	0.0711	-0.0299	0.0737
T-Value		1.2554	2.9627	2.0697	-2.8798	2.3519

Source: Authors' own work.

Discussion

The results show the changes in policy of trade, like the adoption or alteration of BTAs. Subsequently, it had substantial effect on capital market response. Therefore, the results are aligned with the studies of researchers like Crowley et al. (2019), Breinlich et al. (2018), Nezerwe and Karangwa (2018), Daelemans et al. (2018), Budzinski (2013) and satisfy the hypothesis H_1.

However, behavioral finance suggests that individuals who enter the capital market due to a representational bias behave like an investor who under-reacts or overreacts to the latest information. In line with earlier research in the literature, the study estimates cumulative abnormal returns to record these reactions five days prior to and after the incidents.

The industries that showed a statistically significant negative reaction on the 4th day after the announce-

ment, when the Pakistan-Malaysia BTA signing of the Agreement was made official, were auto and allied, cables and electric goods, cement, food products, "and oil and gas. However, on the 4th day following this announcement, the textile and glass and ceramics sectors responded positively. Day 2, Day 3, and Day 5 saw excellent responses from every industry. As a result, this is a typical example to demonstrate the industry's capacity to pass costs forward to customers. These findings are similar to the examination of Klein (2001), Hamid et al. (1997) and Parinduri et al. (2013) and hypothesis H_2 also was accepted.

Thus, the results clearly indicate that Pakistani stock markets showed strong and statistically significant sensitivity to the Pakistan-Malaysia BTA event both before and right after the announcements. Few industries faced negative effects because consumers were choosing imported brands over local ones, which lowers demand for local brands. However, the event was well received by the industries that gained from reduced manufacturing costs. In the third and fifth days before the announcement, a few sectors showed cumulatively negative abnormal returns. After the announcement, the cumulative abnormal returns showed varied results. Additionally, the results show that not all industries were in favor of free trade agreements (FTAs), which could lead to more competition from foreign companies for local businesses. Consequently, the findings are consistent with both hypotheses; (H_1) and (H_2) and are deemed acceptable.

Conclusion

The November 2007 signing of the Pakistan-Malaysia BTA was anticipated to have a major positive impact on Pakistan's economy. This study looks at how the events surrounding the Pakistan-Malaysia BTA affected the country's stock market. Using recognized event methodology, the abnormal returns have been measured around the news events for this reason. Measurements of the reactions both before and after the announcements produced a number of intriguing findings.

First, both immediately following and prior to the announcements, the Pakistani stock market exhibited considerable and statistically significant sensitivity to the Pakistan-Malaysia BTA event. Second, the news incident had a detrimental impact on a few industries and elicited a negative reaction from the investment community. Local brands faced reduced demand as a result of the Pakistan-Malaysia BTA, which shifted consumer preference towards imported brands. The sectors that benefited from lower manufacturing costs, however, reacted favorably to the event. Third, an intriguing image was painted by sectoral performance in the vicinity of the events. The industry features shifted in the degree of competition brought about by changing tariff structures, and new market entries all had differing degrees of impact on the sectors. All industries were affected by the new level of market risk brought about by the Pakistan-Malaysia BTA, which may have had an effect on investor risk premiums. Lastly, a small number of sectors exhibited cumulatively negative abnormal returns on the third and fifth days prior to the announcement. The cumulative abnormal returns were mixed following the announcement. The findings also indicate that not all industries support free trade agreements (FTAs), meaning that local businesses may observe increased rivalry from international enterprises.

The study's conclusions have important ramifications for investors and decision makers in various areas. First, investors may be able to benefit from future free trade agreements (FTAs) between Pakistan and other South Asian nations. In doing so, they can allocate more money to industries that stand to gain from the FTAs and less to or none at all to industries where the FTAs may raise risk. Second, in order to reduce any potential negative effects on specific industries that might be more vulnerable to the FTAs the trade policy decision makers can use the information from this research to inform relevant trade policy modifications. As it has been observed that on Day 2, Day 3, and Day 5 of the event every industry responded well. Consequently, it is advised that those responsible for trade policy will help these industries to boost their exports, as this could help Pakistan's economy to achieve sustainable development goals. Policymakers must pay particular attention to safeguarding the interest of potential exports sectors such as textiles, food products, glass and ceramics, and cement. For example, for the sake of reduction in production costs it is suggested that the government should provide cheap electricity as well as reduced import duty on raw commodities, and on imported machinery in order to boost exports of highlighted sectors.

The Pakistan-Malaysia BTA had been in force for approximately 18 years, after analyzing the economic situation of Pakistan during this time period. It has been found that the Pakistan Stock Exchange (PSX) had developed and was contributing to sustainable economic development by using a digital system for trading. Therefore, the investors responded swiftly and strongly to a good news announcement. The sectors which performed well in the PSX contributed to the development of the Pakistan economy because of their export potential. It is evident that the ten top exports such as textile products and food products (cereals, edible vegetables, fish items) to Malaysia made up 83.9% of Pakistan's total exports to Malaysia during the period from 2008 to 2019 (Pakistan Business Council).

Limitations and further research

For future studies, since Pakistan participates in bilateral trade agreements (BTAs) and is not an ASEAN member, additional BTAs between Pakistan and Indonesia, Thailand and Singapore can be analyzed in the context of Pakistan Stock Exchange reaction.

Due to the limitations of this study, the conclusions may not be applicable in other countries. Moreover, the results may be impacted by co-founding events that occurred throughout the sample period, despite the study's best efforts to isolate the effect of the Pakistan-Malaysia BTA event on the Pakistan stock market.

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