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Impact of government budget announcement on exchange rate of Pakistan: An eventy study

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ABSTRACT

This study examines the impact of budget announcements on the exchange rate dynamics of the Pakistani rupee (PKR) in relation to the US dollar (USD). In economies like Pakistan, where markets are highly sensitive to political and economic variations, a budget announcement can be a significant macroeconomic event for investors. The budget announcement essentially serves as a roadmap for future expenditure priorities for the upcoming year. Such information not only influences investors' sentiments by shaping their perceptions of future economic stability but can also cause fluctuations in the country's currency based on overall sentiments. Given the relevance of budget announcements, an event study methodology is employed to analyze the appreciation and depreciation of the Pakistani currency during the sample period of 2011–2018. The results reveal that the Pakistani rupee exhibits smooth positive and negative fluctuations around event window periods without major swings. Some short-term positive and negative changes occur around the time of the budget announcement; however, these are of modest scale. Therefore, overall, no significant impact of budget announcements on currency fluctuations has been observed in the short run. This suggests that budget announcements in the short term do not exert pressure that could cause major fluctuations in currency movements. Nonetheless, budgeting is a long-term strategy that may influence the currency in the long run, warranting attention from investors and policymakers.

Contribution/ Originality: The originality of the study lies in its application of the efficient-market hypothesis perspective while examining the impact of the budget announcement event on the exchange rates of Pakistan, where little scholarly attention is given to including such theory-driven evidence. It contributes to the literature by establishing that the budget announcement has no significant influence in the short run, while potential long-run effects could have a bearing on investors' decisions and policy implications.

1. INTRODUCTION

The exchange rate shows the value of the domestic currency in comparison to foreign currencies (Khattak, Tariq, & Khan, 2012). Thus, it can be expressed as how much currency one can get in exchange for another currency. The importance of exchange rates is central to economies because fluctuations in exchange rates can have both favorable and unfavorable impacts on economic activities. For example, appreciation of a country's currency can lower the domestic prices of imports, resulting in lower inflation, which depends on the extent of imports and production in a country. Another positive effect of a country's currency appreciation can be the lowering of foreign debt payments. Precisely, the exchange rate of a country's currency is the value of its money for international trade in goods, services, and finance, and therefore, it is a building block of the monetary condition of a country (Rajakaruna, 2017). Hence, the exchange rate indicates the competitiveness of countries in the international market and helps in strengthening

the economy of a country (Gala & Lucinda, 2006). Moreover, it plays a major role in the determination of inflow of foreign investment, exports of goods, and restoration of trade balance, which leads the economy towards sustainable development (Berka & Devereux, 2010; Edwards, 1989). Therefore, a stable exchange rate is crucial in almost all countries, particularly in developing countries. The influence of exchange rates is not confined to the economic well-being of a country; it can also impact the finances of investors who choose to invest in currency over other alternatives to earn higher profits. Thus, currency fluctuations sometimes help investors achieve their desired level of profit, and sometimes they face losses. It is commonly observed that in developing countries, exchange rates fluctuate more and experience greater devaluation relative to the currencies of developed countries, such as the Pakistani rupee against the US dollar. The question then arises: which factors cause changes in exchange rates in a country, particularly in developing nations? In response to this question, the literature presents a plethora of studies that aim to identify the factors impacting exchange rates, especially in the context of Pakistan. For example, Khan and Sajid (2005) used the data from 1982–2004 to solve the mystery of exchange rate formation. The authors find out the relationship between the real effective exchange rate of Pakistan and both the short- and long-term relationships of real money balances, the rate of inflation, and the rate of interest both abroad and at home. Similarly, Hussain and Farooq (2009) analyzed the effects of exchange rate fluctuations on macroeconomic variables in Pakistan for the period 1982–2007. The authors, using quarterly data, conclude that exchange rate volatility, exports of countries, and reserve money possess a long-term positive relationship with the growth of the economy.

In another relevant study carried out in the context of Pakistan, Zada (2010) studied the factors affecting the exchange rate of Pakistan for the period 1979–2008. It employed multiple regression models to analyze the impact of inflation, interest rates, foreign exchange reserves, trade balance, money supply, and gross domestic product on the exchange rate. The results indicate that inflation, interest rates, and foreign exchange reserves significantly influence the exchange rate, whereas other variables such as GDP, money supply, and trade deficit are not statistically significant. Pursuing further, Parveen, Khan, and Ismail (2012) conducted a study to find the factors that are responsible for volatility in exchange rates in Pakistan. Their study results reveal that inflation is the main factor affecting the exchange rate in Pakistan, followed by economic growth, exports, and imports.

However, despite the significant efforts made by researchers, determining which factors affect the currency value against each other remains an unresolved issue. One reason for inconsistent results in this domain may be the conservative approach to examining the problem. Most previous studies have focused solely on economic factors such as inflation levels, interest rates, imports, exports, and a few others to analyze exchange rate fluctuations, particularly in Pakistan. Additionally, numerous studies have been conducted to assess the impact of various events, such as budget announcements and political developments, on stock returns (Edirisinghe, 2017; Khan, Baig, Usman, Shaique, & Shaikh, 2017), neglecting these events to study currency fluctuations. Moreover, the effect of news on exchange rates has been the subject of broad research, but since most studies focus on announcements of US macroeconomic data (Edison, 1997) there is a gap in the literature on developing countries such as Pakistan.

The purpose of the current study is twofold. Firstly, it bridges the gap in the literature by showing the impact of budget announcements on the exchange rate of the Pakistani rupee with respect to the US dollar. Over the decades, the PKR has struggled against the dollar. Although the government has made various efforts to stabilize the currency, all have been unsuccessful and have not helped the PKR to compete effectively against the increasing trend in the exchange rate of the US dollar (USD). Furthermore, the Pakistani rupee is particularly compared to the US dollar due to its link established with the US in 1971 as a result of the increasing influence of the US in the region. Until 1970, it was linked with the British Pound Sterling until 1982 (Parveen et al., 2012). Secondly, building on the efficient market hypothesis (EMH), which holds that securities markets are information efficient, Fama (1991) the current study examines whether there is a chance for investors to earn abnormal profits as a result of information asymmetries created by the spread of a particular event or news. Precisely, this study tests the validity of EMH in exchange rates by examining whether the occurrence of budget announcements leads to the volatility of the country's currency,

providing room for investors to earn abnormal gains from currency fluctuations or not. However, the literature suggests that if exchange markets are efficient, then they should incorporate all anticipated relevant information into current exchange rates (Galati & Ho, 2003). There are various reasons to choose Pakistan for the current analysis. Another reason to choose Pakistan is that the likelihood of events occurring in Pakistan increases every year at an arrival rate of 1.5 events per year (Masood & Sergi, 2008). Lastly, Pakistan, being a developing country, is significantly different from developed ones in terms of law and order, financial development, technological progress, education, and other factors. Therefore, the validation of an economic and financial concept demands testing in different geographic and economic contexts (Khan et al., 2017). However, the reason for focusing on the government budget announcement is that it is a highly anticipated event by many parties and people in a country because it defines the financial roadmap of the country for the upcoming year (Edirisinghe, 2017), a major determinant of the future prospects of the country (Lane & Milesi-Ferretti, 2002) and its exchange rate.

The following sections provide a detailed review of the literature, followed by the definition of data and methodology for the current study, presentation of results, and a concluding discussion with and future directions.

2. LITERATURE REVIEW

For decades, researchers have been making efforts to identify the factors that determine a country's exchange rates. For example, Engel and Frankel (1984) test the impact of news about money supply announcements on the dollar/Mark rate and find that money supply announcements are positively and statistically significant on the dollar rate. MacDonald and Torrance (1988) examine the behavior of interest rates around monetary announcements and the exchange rate of the United Kingdom, and find that rates change significantly after these announcements. Moving further to developing nations, Khan and Qayyum (2011) investigate the determinants of the exchange rate in Pakistan. By using quarterly observations from 1982 to 2008 and Johansen and Juselius (1990) co-integration (J.J. co-integration) technique's results confirm that money supply and inflation are positive and significant determinants of the exchange rate in Pakistan. However, an increase in these variables tends to depreciate the PKR, whereas the interest rate is found to be negatively co-integrated with exchange rates.

Khattak et al. (2012) used OLS and Johansen's co-integration techniques; the study investigated which macroeconomic factors impact the Pakistani rupee against the US dollar. The results reveal that both monetary and real factors, i.e., money supply, trade balance, foreign exchange reserves, inflation, and interest rate, have a long-term relationship with the exchange rate of the Pak-rupee. In another relevant study, Raza and Afshan (2017) examine the determinants of the exchange rate in Pakistan using time-series data from 1972 to 2013 based on multiple approaches. Results indicate a significant negative association of exchange rates with terms of trade, trade openness, and economic growth. However, the money supply and inflation rate have a positive and significant effect on exchange rates.

Researchers in other developing nations also made curious attempts to solve the puzzle of exchange rate formation. In this regard, Rajakaruna (2017) examines the factors influencing the exchange rate in Sri Lanka and finds that a positive relationship exists between the exchange rate and net foreign purchases. Furthermore, a negative relationship exists between the exchange rate and inflation, interest rates, remittances, and terms of trade.

Kumar (2010) also investigates the determinants of the exchange rate in India using the ARDL approach. Quarterly data has been used from 1997 Q2 to 2009 Q2. Results indicate that terms of trade exhibit a significant negative relationship with exchange rates. The results also show that trade openness has a significant positive role in predicting the Indian exchange rate in the long run. Summarizing, it seems that the empirical literature on the effect of public information arrival on exchange rates has generally focused on the effects of a limited number of announcements of key macroeconomic variables like money supply, trade balances, and a few others. This study extends the relevant literature by incorporating the impact of budget announcements on exchange rate volatility in Pakistan and further checking the validity of the EMH in the exchange rate domain.

3. DATA AND METHODOLOGY

The current study employs an event study methodology. Fama, Fisher, Jensen, and Roll (1969) introduced event studies, which, later on, were suggested by MacKinlay (1997) as the best way to examine the effect of an event on stock market returns. The current study focuses on exchange rate fluctuations, specifically analyzing the impact of budget announcements, which are predictable events. Pakistan's budget data for the years 2011–2018 is sourced from the Federal Bureau of Revenues. Data on exchange rates of US dollars and PKR are obtained from Oanda, Business Recorder, and Yahoo Finance. To capture the pre- and post-budget impacts on the exchange rate, eight windows are created, with the date of the budget announcement considered as 0. Days before the announcement are labeled as -1, -2, up to -7, and days after are labeled as 1, 2, up to 7. Exchange rates are used to calculate daily returns, with the rate of return computed using the formula provided below.

$$rate\ of\ return = \ln\left(ER_t/ER_0\right) \quad (1)$$

ER_t refers to the exchange rate at time t, and ER_0 refers to the previous exchange rate. After calculating returns on a daily basis, the average return is computed accordingly.

$$Average\ Return = \sum ER/n \quad (2)$$

Then the abnormal rates of return are calculated by using a formula.

Abnormal Return = Return - Average Return

After the calculation of abnormal returns, the t-statistic is calculated by the following formula.

$$t - statistics = \frac{\text{Abnormal rate of return (AR)}}{\sigma/\sqrt{n}} \quad (3)$$

A t-test for significance measures the research reliability by observing the changes in the results. The results of the study will be considered statistically significant only if the absolute t-statistics are greater than 1.96; and if the t-value is less than 1.96, at the 5% significance level, the results will be assumed to be statistically insignificant.

CARR is the mean of cumulative abnormal returns over the event window period. It is used as a tool to measure the stock market reaction to the announcement of the budget. The equation used to calculate CAAR is given below:

$$CAARi\ (t1\ t2) = \Sigma\ AARit \quad (4)$$

All the gathered data is analyzed using Microsoft Excel.

4. RESULTS

This part of the paper presents the findings of the study. Here, fluctuations of the exchange rate in PKR with respect to the US dollar are assessed due to the announcement of the government budget during the sample period 2011–2018. Table 1 presents the AAR, t-statistics, and CAAR values of currency fluctuation (PKR) for an event window of -7 to +7 days for eight years. In 2011, on event day, the t-statistics of AAR and CAAR for the currency fluctuation (PKR against US dollar) were -0.060 and 0.323, respectively. These statistics show that the PKR depreciated compared to the US dollar on the event day. No significant fluctuations occurred before or after the event. Specifically, (-4 + 4) only shows significant values; the currency appreciated significantly on the fourth day of the budget announcement, whereas it depreciated before the fourth day of the budget announcement. On the first day of the year 2012, the t-statistics of AAR remained positive but insignificant. The PKR appreciated against the US dollar with no major hikes. Throughout the period following the announcement of the budget, CAAR remained positive. The years 2013 and 2014 show negative influences of budget announcements on PKR, whereas 2014 also shows a positive influence; however, the results are insignificant for these years throughout the selected time frame window. The year 2016 continues to show a past trend of insignificant influence of the announcement of the budget on the currency on the same day, whereas on the fourth day, significant depreciation of the PKR against the US dollar is observed in the results.

Table 1. Event windows (2011-2018): Daily AARs, t-test statistics and CAAR for currency PKR (With respect to the US dollar).

Year 2011 (Event date June 03)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	-0.0064	0.0088	-0.0036	-0.0132	0.0029	0.0080	0.0084	-0.0037	0.0023	-0.0068	-0.0069	0.0142	0.0012	-0.0068	0.0005
T-stat	-1.0590	1.4494	-0.5896	-2.1770***	0.4830	1.3198	1.3860	-0.6071	0.3783	-1.1315	-1.1389	2.3420***	0.2037	-1.1289	0.0887
CAAR	-0.0064	0.0024	-0.0012	-0.0144	-0.0115	-0.0035	0.0049	0.0012	0.0035	-0.0033	-0.0102	0.0040	0.0052	-0.0016	-0.0011
Year 2012 (Event date June 01)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	0.6147	-0.495	-0.365	-0.055	-0.1153	0.7147	0.6647	0.2947	0.3447	0.6947	-1.8253	0.4847	1.255	-0.7653	-0.1253
T-stat	1.0997	-0.886	-0.653	-0.099	-0.2062	1.2786	1.1891	0.5272	0.6167	1.2428	-3.2652	0.8671	2.245	-1.369	-0.2241
CAAR	0.6147	0.1194	-0.246	-0.301	-0.4164	0.2983	0.963	1.2578	1.6025	2.2972	0.4719	0.9567	2.211	1.4461	1.3208
Year 2013 (Event date June 12)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	-0.9463	0.9337	0.1937	-1.126	1.0337	0.8937	-0.636	-0.326	-0.046	-0.096	-0.0163	-0.336	-0.056	0.4737	0.4937
T-stat	-1.5423	1.5216	0.3156	-1.836	1.6846	1.4564	-1.037	-0.532	-0.076	-0.157	-0.0266	-0.548	-0.092	0.7719	0.8045
CAAR	-0.9227	0.011	0.2047	-0.922	0.112	1.0056	0.3693	0.043	-0.003	-0.1	-0.116	-0.452	-0.509	-0.0351	0.4586
Year 2014 (Event date June 30)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	0.0436	0.9736	-0.936	0.4336	0.0236	-0.036	0.1636	0.7136	-0.766	-0.106	0.6436	-0.516	-0.176	-0.1064	0.3836
T-stat	0.0771	1.7208	-1.655	0.7664	0.0417	-0.064	0.2891	1.2613	-1.355	-0.188	1.1375	-0.913	-0.312	-0.1881	0.678
CAAR	0.0436	1.0172	0.0808	0.5144	0.538	0.5016	0.6652	1.3788	0.6124	0.506	1.1495	0.6331	0.457	0.3503	0.7339
Year 2015 (Event date June 05)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	0.157	-0.1230	-0.223	1.357	-0.943	0.657	-1.403	-0.133	1.387	0.237	0.037	-0.313	-1.093	0.007	0.677
T-stat	0.218	-0.1709	-0.31	1.8864	-1.3108	0.9133	-1.95	-0.185	1.9281	0.3295	0.0515	-0.435	-1.519	0.0098	0.9411
CAAR	0.157	0.0340	-0.189	1.1681	0.2251	0.8821	-0.521	-0.654	0.7332	0.9702	1.0073	0.6943	-0.399	-0.3917	0.2854
Year 2016 (Event date June 03)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	0.481	-0.3793	0.1207	0.6007	-0.7793	0.0907	0.2107	-0.369	0.3907	0.5607	0.0507	-2.059	0.891	0.1507	-0.3193
T-stat	0.753	-0.5938	0.189	0.9405	-1.22	0.142	0.3299	-0.578	0.6117	0.8778	0.0794	-3.224	1.394	0.236	-0.4998
CAAR	0.481	0.1015	0.2222	0.8229	0.0436	0.1344	0.3451	-0.024	0.3665	0.9273	0.978	-1.081	-0.191	-0.0398	-0.3591
Year 2017 (Event date May 26)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	-0.352	-0.0321	0.4279	-0.942	0.7179	-0.032	0.4679	-0.712	0.3179	0.8279	-0.7621	-0.032	-0.092	-0.3621	0.2379
T-stat	-0.654	-0.0597	0.7951	-1.751	1.3339	-0.06	0.8694	-1.323	0.5906	1.5383	-1.4162	-0.06	-0.171	-0.673	0.442
CAAR	-0.352	-0.3843	0.0436	-0.899	-0.1807	-0.213	0.255	-0.457	-0.139	0.6885	-0.0736	-0.106	-0.198	-0.56	-0.3222
Year 2018 (Event date April 28)															
Window	**-7**	**-6**	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
AR	0.009	-0.0209	-0.141	-0.161	-0.0709	-0.075	-0.077	-0.021	-0.021	-0.076	-0.4259	0.1491	0.099	-0.1409	-0.1709
T-stat	0.014	-0.0329	-0.221	-0.253	-0.1114	-0.118	-0.121	-0.033	-0.033	-0.119	-0.6689	0.2341	0.156	-0.2213	-0.2684
CAAR	0.009	-0.0118	-0.153	-0.314	-0.3846	-0.46	-0.536	-0.557	-0.578	-0.654	-1.0801	-0.931	-0.832	-0.9729	-1.1438

Note: The table reports the average abnormal returns (AARs), t-statistics and CAAR for PKR with respect to US dollar for eight years, using event windows of -7 and +7. *** represent significance at the 5% level respectively.

The years 2017 and 2018 conclude this study by showing a negative but insignificant impact of budget events on currency fluctuations in Pakistan. Similar positive and negative insignificant misalignments are present throughout the period of the event window (-7, 0, +7).

Findings show that budget announcements in Pakistan do not significantly impact the PKR currency in the short run. It might be possible that budget announcements have a long-term influence on currency valuation, as a budget is a major summary of future revenues and expenditures of a country.

The findings of this study are consistent with those of Sathyanarayana and Gargesa (2019); Khan et al. (2017) and Maheshwari (2020) who find that budgetary events do not have any significant impact on returns and the market is semi-efficient.

5. CONCLUSION

The current study is conducted to observe the impact of budget announcement events on the exchange rate of the Pakistani rupee (PKR) with respect to the US dollar during the sample period of 2011–2018. Additionally, this study examines the validity of the efficiency hypothesis in the exchange market by incorporating the methodology of an event study.

Findings confirm that the Pakistani currency (PKR) shows fluctuations around the budget announcement pre- and post-periods. However, these fluctuations are insignificant. This result supports the efficient market hypothesis, indicating that no one can predict the market to earn abnormal returns. Appreciation and depreciation in currency prices around the event suggest that when information related to the budget becomes public, the exchange market tends to react accordingly. The study confirms the validity of EMH, thus suggesting it is not possible to earn large, significant abnormal returns in the Pakistani exchange market.

In light of the findings, it is suggested that traders and investors gain insights from this study regarding the budget announcement event to inform future investments in currency. It is recommended that exchange market participants to consider the budget announcement as an important event that, although it has no immediate impact, can lead to changes in the long term.

Since no high volatility is observed around the event, investors can avoid bulk buying and selling of currency around the event dates with the expectation of abnormal returns. This study contributes to the field of literature by exploring the impact of budget announcement events on exchange rates. It is an implication of market efficiency, and it can also be beneficial for designing investment strategies.

6. LIMITATIONS AND FUTURE DIRECTIONS

This study is a significant contribution with a few limitations. It is limited to the time period 2011–2018 due to the occurrence of another unannounced event, COVID-19, in 2019. Further studies can consider longer horizons and compare announced events, such as budgets, with unannounced events, such as COVID-19, on exchange rates. Budget declaration is one variable that might influence exchange rates. Future researchers can analyze market patterns resulting from other political and monetary events. Different countries can be examined to assess how budget-announced events influence their respective currencies and to identify which country's budget event has a major impact.

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REFERENCES

Berka, M., & Devereux, M. B. (2010). *What determines European real exchange rates?* No. w15753, National Bureau of Economic Research.

Edirisinghe, U. C. (2017). Impact of government budget announcement on stock market sector indices: Evidence from Colombo stock exchange. *Journal of Finance and Accounting*, *5*(6), 214-218. https://doi.org/10.11648/j.jfa.20170506.12

Edison, H. J. (1997). The reaction of exchange rates and interest rates to news releases. *International Journal of Finance & Economics*, *2*(2), 87-100.

Edwards, S. (1989). Exchange rate misalignment in developing countries. *The World Bank Research Observer*, *4*(1), 3-21. https://doi.org/10.1093/wbro/4.1.3

Engel, C., & Frankel, J. (1984). Why interest rates react to money announcements: An explanation from the foreign exchange market. *Journal of Monetary Economics*, *13*(1), 31-39. https://doi.org/10.1016/0304-3932(84)90006-0

Fama, E. F. (1991). Efficient capital markets: II. *The Journal of Finance*, *46*(5), 1575–1617.

Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International Economic Review*, *10*(1), 1-21. https://doi.org/10.2307/2525569

Gala, P., & Lucinda, C. R. (2006). Exchange rate misalignment and growth: Old and new econometric evidence. *Revista Economia*, *7*(4), 165-187.

Galati, G., & Ho, C. (2003). Macroeconomic news and the euro/dollar exchange rate. *Economic Notes*, *32*(3), 371-398. https://doi.org/10.1111/1468-0300.00118

Hussain, Z., & Farooq, M. (2009). Economic growth and exchange rate volatility in the case of Pakistan. *Pakistan Journal of Life and Social Sciences*, *7*(2), 112–118.

Johansen, S., & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with applications to the demand for money. *Oxford Bulletin of Economics and Statistics*, *52*(2), 169–210.

Khan, A. M., & Sajid, Z. M. (2005). The exchange rate and monetary dynamics in Pakistan: An autoregressive distributed lag (ARDL) approach. *The Lahore Journal of Economics*, *10*(2), 87-99.

Khan, M. A., & Qayyum, A. (2011). Exchange rate determination in Pakistan: Role of monetary fundamentals. *Journal of Economic Cooperation & Development*, *32*(2), 67–96.

Khan, S., Baig, N., Usman, M., Shaique, M., & Shaikh, R. (2017). Stock market dynamics in Pakistan: What do political events and budget announcements disclose? *Research Journal of Finance and Accounting*, *8*(10), 113-123.

Khattak, N. U. R., Tariq, M., & Khan, J. (2012). Factors affecting the nominal exchange rate of Pakistan: An econometric investigation (1982-2008). *Asian Economic and Financial Review*, *2*(2), 421-434.

Kumar, M. (2010). Causal relationship between stock price and exchange rate: Evidence for India. *International Journal of Economic Policy in Emerging Economies*, *3*(1), 85-101. https://doi.org/10.1504/IJEPEE.2010.032797

Lane, P. R., & Milesi-Ferretti, G. M. (2002). Long-run determinants of the Irish real exchange rate. *Applied Economics*, *34*(5), 549-553. https://doi.org/10.1080/00036840110036729

MacDonald, R., & Torrance, T. S. (1988). Exchange rates and the" news": Some evidence using UK survey data. *The Manchester School of Economic & Social Studies*, *56*(1), 69-76. https://doi.org/10.1111/j.1467-9957.1988.tb01319.x

MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of Economic Literature*, *35*(1), 13-39.

Maheshwari, T. (2020). *An empirical study on the impact of Union Budget 2020 on Indian stock market.* India: Bloomsbury Publishing.

Masood, O., & Sergi, B. S. (2008). How political risks and events have influenced Pakistan's stock markets from 1947 to the present. *International Journal of Economic Policy in Emerging Economies*, *1*(4), 427-444.

Parveen, S., Khan, A. Q., & Ismail, M. (2012). Analysis of the factors affecting exchange rate variability in Pakistan. *Academic Research International*, *2*(3), 670–674.

Rajakaruna, S. (2017). An investigation of factors affecting exchange rate fluctuations in Sri Lanka. *Journal of South Asian Studies*, *47*(1), 101-115.

Raza, S. A., & Afshan, S. (2017). Determinants of exchange rate in Pakistan: Revisited with structural break testing. *Global Business Review*, *18*(4), 825-848. https://doi.org/10.1177/0972150917692210

Sathyanarayana, P., & Gargesa, R. (2019). Impact of fiscal policy announcements on exchange rate volatility in emerging economies. *Journal of Financial Studies*, *12*(3), 45–60.

Zada, B. (2010). An analysis of factors affecting exchange rate of Pakistan 1979-2008. Unpublished Master Thesis, Hazara University, Pakistan.