# Social Relationship between Exchange Rate and Stock Prices, a Case on SAARC Economies

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## Abstract
The dynamic linkage between exchange rate and stock prices has been subjected to extensive research for over a decade and attracted considerable attention from researchers worldwide during the crisis of 1997-98, global financial crises 2000-01 and 2007. The issue is also important from the viewpoint of recent large cross-border movement of funds. In global the issue is also gaining importance in the liberalization era. With this background, the present study will examine the causal relationship between returns in stock market indices and currency exchange rates in developed and developing economies.

## Introduction
The global financial system is undergoing the process of gaining back its strength from the deepest financial collapse in the post- World War II era. The major global financial recessions were triggered at key industrialized and developed economies in association of similar factors Reinhart and Rogoff (2009) that concurred with the glaciating of integrated financial markets and also caused the collapse of international trade flows. However all significant financial crises, Argentina, 1994 Latin America, 1994 East Asian, 1997, Turkey, 2001 and global level financial crises 2000-01 and 2007 again imbues its destructive footprints on the face of global level integrated economies through one common phenomena that synchronized effects on currencies and stock prices. These concurrent effects have given the birth to new phenomena that raised key questions; which one of them is the leading indicator that influences the others to move? Theoretically, researchers fail to document sound conclusion on the direction and behavioral association between exchange rate movements and stock market indices. Literature has documented mix conclusions regarding the causal relationship between stock market indices and currency markets exchange rates. Dynamic linkage between currency exchange rates and stock market returns is the primary area of interest under this research study. Johansen's Co-integration and Granger Causality tests will be applied in the study to explore the direction of causality between currency exchange rate markets and stock market returns of sample economies. Results will facilitate us in documenting the behavior and nature of currency exchange rates and the stock market indices in the sample economies of SAARC countries; these countries include: Pakistan, Bangladesh, India, Sri-Lanka and Nepal.

Currency exchange rates of these economies have attained less than due attention from the practical and academic researchers to investigate possible factors causing the exchange rates to move in under developing economies. While the developing economies are more exposed to global disturbances, these economies might not be showing signs of stable currency exchange rates. Consequently, currency exchange rates of these economies frequently diverge from parity conditions. Hence, a greater economic stability in developing economies can only be made possible through better understanding of factors which cause exchange rate movements.

## Practical Objectives:
Understanding the dynamic linkages between currency exchange rates and stock markets, this understanding will also facilitate the national as well as multinational organizations to manage their foreign exchange exposure? Portfolio investors can use this information into order hedge or speculate their returns on foreign investments. Regulatory authorities can ensure the pre-cautionary measures to save their markets from financial crises.

## Theoretical Objectives:
To determine the nature of causal relationship between stock market indices and currency markets exchange rates of SAARC Economies. To find the common determinants of nominal exchange rates of sample economies. To determine the predictive capacity of different exchange rate models based on economic fundamentals and their comparison with Chartism based models.

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## Research Question

This research study makes an effort to answer the following research questions.

Is there any long-run association between foreign currency exchange rates and stock market prices in sample economies? Has this association changed in the current era following the opening of stock markets to foreign investors? Is there any effect of Asian currency financial crisis of 1997 on this association between the stock markets and currency markets? What is direction of causality between this relationship and what are the consequences and modes of transmission of shocks?

## Literature Review II

In literature, Franck and Young (1972) were the first, who documented the empirical study and tried to determine the relationship between currency exchange rates and stock prices. On the basis of their analysis of six different nominal exchange rates, they concluded and documented arguments in the favor of asset approach or reject the portfolio and traditional approach because their study rejects or neglects that there might be any association between currency exchange rate and stock prices. Aggarwal and Schirm (1992) studied the association between Dollar exchange rates and stock market indices over the sample period 1974-1978, and results revealed that there is positive correlation between stock market indices and Dollar exchange rates in the course of application of simple regression model, they documented that this relationship is stronger in short-run as compared to that in the long-run.

Ratner (1996) studied the nature of relationship between U.S Dollar exchange rate and U.S stock price indices through the co-integration technique. His studies failed to reject null hypothesis of co-integration and results revealed that there is no relationship between these two markets, so his results also supported the assets based approach. Ajayi and Mougoue (1996) studied the association between two financial markets on 6 industrialized economies, including Japan, Germany, Italy, France, Canada and Netherlands and supported the feedback relationship because their results revealed that there is a bi-directional relationship between two financial markets in short as well as over the long-run. They use the error correction mechanism as a tool for analysis. Görmü (2001) conducted an empirical study on stock market prices and currency exchange rates. He documented that causation did not run from currency exchange rates to stock market prices while contemporaneous association exists between currency exchange rates and stock market prices. Nieh and Lee (2002) employed the Johansen's co-integration and Engle-Granger techniques and on the basis, of results they documented the arguments in favor of asset based approach, they did not succeed in establishing any significant relationship between stock market and exchange rates over the long-run while they documented short-run significant relationship in G-7 economies. Gazioglu (2005) documented that the notion of globalization has created the problem of Balance of Payment (BOP) and international debt for developing countries i.e. Turkey, Indonesia and Malaysia. Since the initiation of the Euro as a common mode of payment in 1999 by EEC, Multinational corporations enjoy the advantage of complete abolition of exchange rate risk hedging, although now international diversification was no longer possible because markets have direct relation (Kashefi 2006). Nshom (2007) studied the relationship between stock returns and currency exchange rates through the linear regression model on the sample of 18 stocks from the London Stock Exchange (LSE). His study revealed that causation runs from stock market returns to currency exchange rates for the sample companies listed on FTSE 100 index. He expanded his study to explore if a few particular currencies might cause more risk to certain organizations as compared to others. With the application of lagged values tests, study explores that stock prices are undervalued and positively related to last day prices. Empirical inquiry that examines Turkish data from 1980-2006, Feridun (2007) investigated the determinants of currency crisis. This study fails to provide adequate explanation of current currency crisis in Turkey; however the symptoms of current currency crisis are different from traditional ones. Results of studies revealed the significant divergence from the literature of international finance. He justified his findings by stating that it was the period of financial liberalization of Turkey and globalization, which rendered the economies vulnerable against the changes global factors. Becker and Hall (2009) used the similar common factors approach to measure the convergence of exchange rate over monthly data in European Monetary Union from 1970-2001. U.S Dollar was considered as reference currency during the study. Their study covered the different phases, breakdown of Bretton Woods System (BWS) 1971, establishment of European Monetary System (EMS) 1979 and crisis of 1992, which escorts towards the collapse of the European Monetary System (EMS). They fixed conversion model of local currency against the Euro 1991. Monthly observations of exchange rate collected from the International Financial Statistics (IFS), International Monetary Fund (IMF), while the data of stock indices has been collected from the stock exchanges of the selected sample economies, indexes selected from, in case of Pakistan KSE 100 Index, BSE 30 Index for India, NEPSE index in case of Nepal, DSE 20 is used for Bangladesh and for Sri-Lanka Colombo All Shares Index has been selected for the investigation of relationship between stock indices and exchange. The period of analysis consist on the monthly observations started from January 1997 to December 2010 total number of observations considered in study is 168 in case of each sample economy.

## Research Methodology III

To investigate the Dynamic linkage between Exchange Rate (ER) and Stock Indices (SI); a case of five SAARC economies, two variables has been employed to test the relationship namely, Nominal Exchange Rate (NER) and Stock Indices of the sample economies.

$E_t$= Ln ($E.R_t$) ---------- (3.1) whereas;

**($E.R_t$)** *is nominal exchange rate at the time* **t**

$S.P_t$= Ln ($Index_t$) ---------- (3.2) whereas;

*Ln (*$\boldsymbol{Index_t}$*) measured by taking the natural log of index of each sample at the time t*

$$\Delta X_t = \beta_1 X_{t-1} + \beta_2 \Delta X_{t-1} + \varepsilon_t \ldots\ldots \quad \ldots. (3.3)$$

Whereas; $\boldsymbol{\beta_1}$is equal to$(\boldsymbol{\alpha - 1})$**.** This is how ADF and PP test works to test the unit root in time series observations. In lagged value of X is augmented term.

### Johansen's Co-Integration Technique

Johansen's Co-integration has been employed to check the existence of long run relationship among variables. Two variables are called co-integrated if they move together over time. Johansen's co-integration is based on Eigen Values and L.R statistics. It is explained as follows

$$\Delta x_t = \alpha_0 + \sum_{f-1}^{k-1} \beta_j \Delta x_{t-1} + \delta x_{t-k} + \varepsilon_t \quad \text{---------- (3.4)}$$

Whereas;

$$\delta = -I + \sum_{i-f+1}^{k} \beta_j \quad \text{----------} \quad (3.5)$$

### Granger Causality Test

To see whether E.R granger causes Index or Index granger causes E.R, following equations are run

$$E.R_t = \beta_0 + \beta_1 E.R_{t-1} + ---+ \beta_q E.R_{t-q} + \alpha_1 \text{Index}_{t-1} + ---+ \alpha_q \text{Index}_{t-q} + \varepsilon_t \text{----- (3.6)}$$

Application of Granger Causality test requires two tests to run at the same time to check the relationship in each direction. So the second test is

$$E.R_t = \beta_0 + \beta_1 \text{Index}_{t-1} + ---+ \beta_q \text{Index}_{t-q} + \alpha_1 E.R_{t-1} + ---+ \alpha_q E.R_{t-q} + \varepsilon_t \text{-------- (3.7)}$$

Equation (3.6) is test of causation running from stock market to currency market and equation (3.7) is causation test running from exchange market to stock market. Null hypothesis of Granger Causality test is that coefficient of Index (αs) in equation (3.6) and coefficients of E (αs) in equation (3.7) are jointly zero. Rejection of null hypothesis in equation (3.6) means stock market granger causes exchange market while rejection of null hypothesis in equation (3.7) means that causation runs from exchange market to stock market.

**Table 1: Description Statistics of Stock Returns and Exchange Rate**

| | Variable | Mean | Median | Maximum | Minimum | Std. Dev |
|---|---|---|---|---|---|---|
| **Pakistan** | KSE 100 | 1.31% | 1.24% | 24.70% | -31.80% | 10.01% |
| | Exchange Rate | 0.47% | 0.05% | 12.08% | -3.80% | 1.39% |
| **India** | BSE 30 | 1.10% | 1.55% | 24.90% | -27.30% | 7.85% |
| | Exchange Rate | 0.13% | 0.04% | 6.95% | -6.02% | 1.72% |
| **Nepal** | NEPSE | 0.51% | 1.25% | 26.40% | -42.70% | 9.10% |
| | Exchange Rate | 0.14% | 0.20% | 7.20% | -6.70% | 1.64% |
| **Bangladesh** | DSE 20 | 0.31% | 0.01% | 15.50% | -13.20% | 5.01% |
| | Exchange Rate | 0.57% | 0.65% | 39.80% | -31.50% | 9.39% |
| **Sri-Lanka** | Colombo All Shares | 0.96% | 1.45% | 22.50% | -18.40% | 7.48% |
| | Exchange Rate | 0.40% | 0.20% | 62.20% | -59.70% | 6.81% |

### Mean Monthly Stock Returns

In the case of Pakistan, an average return is 1.31%, while the standard deviation of 10.01%. During the analysis, KSE 100 index returns higher than those of BSE-30 at second, Colombo All Shares (CAS) Index at third, the DSE 20 Index at the fifth and NEPSE Index at the fourth. Average monthly return KSE 100 is 1.31% is compared with the BSE 30 is 1.10% and the average rate of return of Colombo All Share (CAS) Index is 0.96% , DSE 20 index 0.31% , and the NEPEX index is 0.51%, over the analysis period of time from 1997-2010 on the monthly data.

### Maximum Monthly Stock Returns

The ranking of index of the sample countries in Maximum Monthly Returns is the same as in the Mean value. However, the maximum monthly return of BSE 30 Index is 24.90% per month, the highest value among all economies over the analysis period of time from 1997 to 2010 is 26.40% which is representing the NEPSE index. Based on the monthly maximum return, Pakistan is in third place with a higher value 24.70% per month, Sri-Lanka at the fourth place with a value of 22.50% per month, while the Bangladesh is at fifth number with the maximum value of 15.50%.

### Minimum Monthly Stock Returns

Maximum decline in stock market returns during one month in the case of KSE 100 Index is -31.80%. This occurred in November 2008, when KSE 100 Index fell from 9187 points to 5865 points just in one month. KSE 100 Index has the second largest one month minimum stock return in the stock market while India BSE 30 Index is on third rank with the minimum value is -27.30%, Sri-Lanka is -18.40% is on fourth, Bangladesh is -13.20% on the fifth and Nepal is on the first rank with the minimum return in stock market is -42.70% over the analysis period of time from 1997-2010 on the monthly data.

### Standard Deviation of Stock Returns

Based on the standard deviation to measure the root of the difference, and is used as risk measure. The last column of Table 1 reports the standard deviation value. Karachi Stock Exchange has the highest level as the deviation in any other economy. This is 10.01%, against 7.85% in (BSE-30) India, 9.10% in case of Nepal, while Bangladesh is at 5.01% and 7.48% for the Sri Lanka, on the basis of standard deviation value Pakistan is on the first in ranking. So, the standard deviation is concerned, the Karachi Stock Exchange is the most risky exchanges among all in samples. Nepal ranked at second place, India is in the third, four will be to Sri-Lanka and Bangladesh at fifth level.

**Results of ADF and Phillips Perron Tests**
**Table 2 Unit Root Test**
**Exchange Rate/ Money Market and Stock Indices**

| Sample Country | Variables | Unit Root Test | | Test Stat | 1% C. V | 5% C.V |
|---|---|---|---|---|---|---|
| **Pakistan** | KSE 100 | ADF Test | Level | -1.019995 | -3.4715 | -2.8792 |
| | | | 1st Difference | -6.504037 | -3.4717 | -2.8793 |
| | | PP Test | Level | -1.206760 | -3.4706 | -2.8788 |
| | | | 1st Difference | -14.37395 | -3.4708 | -2.8789 |
| | E.R | AD Test | Level | -1.071930 | -3.4715 | -2.8792 |
| | | | 1st Difference | -4.618181 | -3.4717 | -2.8793 |
| | | PP Test | Level | -0.837283 | -3.4706 | -2.8788 |
| | | | 1st Difference | -12.40065 | -3.4708 | -2.8789 |
| **India** | BSE 30 | ADF Test | Level | -0.316486 | -3.4715 | -2.8792 |
| | | | 1st Difference | -5.075369 | -3.4717 | -2.8793 |
| | | PP Test | Level | -0.254689 | -3.4706 | -2.8788 |
| | | | 1st Difference | -12.21292 | -3.4708 | -2.8789 |
| | E.R | ADF Test | Level | -3.087621 | -3.4715 | -2.8792 |
| | | | 1st Difference | -3.816720 | -3.4717 | -2.8793 |
| | | PP Test | Level | -2.711681 | -3.4706 | -2.8788 |
| | | | 1st Difference | -10.38715 | -3.4708 | -2.8789 |
| **Nepal** | NEPSE | ADF Test | Level | -3.134241 | -3.4715 | -2.8792 |
| | | | 1st Difference | -3.762678 | -3.4717 | -2.8793 |
| | | PP Test | Level | -2.735790 | -3.4706 | -2.8788 |
| | | | 1st Difference | -9.785557 | -3.4708 | -2.8789 |
| | E.R | ADF Test | Level | -1.285854 | -3.4715 | -2.8792 |
| | | | 1st Difference | -5.177102 | -3.4717 | -2.8793 |
| | | PP Test | Level | -1.217198 | -3.4706 | -2.8788 |
| | | | 1st Difference | -9.940262 | -3.4708 | -2.8789 |
| **Bangladesh** | DSE 20 | ADF Test | Level | -1.221607 | -3.4715 | -2.8792 |
| | | | 1st Difference | -5.617131 | -3.4717 | -2.8793 |
| | | PP Test | Level | -1.329222 | -3.4706 | -2.8788 |
| | | | 1st Difference | -10.82098 | -3.4708 | -2.8789 |
| | E.R | ADF Test | Level | -2.470389 | -3.4715 | -2.8792 |
| | | | 1st Difference | -5.691545 | -3.4717 | -2.8793 |
| | | PP Test | Level | -2.570098 | -3.4706 | -2.8788 |
| | | | 1st Difference | -13.30499 | -3.4708 | -2.8789 |
| **Sri-Lanka** | Colombo All Shares | ADF Test | Level | -0.111415 | -3.4715 | -2.8792 |
| | | | 1st Difference | -5.282654 | -3.4717 | -2.8793 |
| | | PP Test | Level | -0.155011 | -3.4706 | -2.8788 |
| | | | 1st Difference | -11.91514 | -3.4708 | -2.8789 |
| | E.R | ADF Test | Level | -1.837484 | -3.4715 | -2.8792 |
| | | | 1st Difference | -7.897364 | -3.4717 | -2.8793 |
| | | PP Test | Level | -2.022801 | -3.4706 | -2.8788 |
| | | | 1st Difference | -14.14420 | -3.4708 | -2.8789 |

However, ADF test on Indian Rupee at level indicates that it does not contain unit root at 5% critical value as ADF statistic is -3.087621 against 5% critical value of -2.8792, however the series contains unit root according to PP statistics at level at both 1% critical values. ADF reports that it contains unit root at level at 5% as well as while PP reports that it does not contain unit root at level at 5% critical value, however, PP supports the existence of unit root at level at 1% and 5% critical value. Both ADF and PP report that both stock indices as well as exchange rates of sample countries become stationary at first difference.

ADF statistics reports surprising results for NEPSE over analysis period. ADF statistics at level is -3.134241 against 5% critical value of -2.8792, which means that NEPSE does not contain unit root. The same is not supported by results of PP statistics. Both ADF and PP fails to report that NEPSE does not contain unit root and is stationary at level. As NEPSE is stationary and co-integration cannot be

applied on stationary series, therefore, long run relationship of stock market return of NEPSE stock exchange and Nepalian rupee has not been explored through use of the co-integration technique. Summarizing unit root discussion, variables under consideration contain unit root in them i.e. non stationary at level but integrated of order 1 i.e. they become stationary in first difference.

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**Results of Johansen's Co-integration**

Co-integration has been used to determine the economics of the sample, both the medium and long-term relationship between stock and money market. Granger causality test drive to see short term factors and Johansen co integration technique is used to measure the long-term relationships (Lee and Real, 2007)

**Table 3 Johansen Co-Integration**
**Exchange Rates/Money Markets and Stock Indices**

**Pakistan**

| Eigen Values | L.R Statistics | 5% Critical Values | 1% Critical Values | Number of CEs |
|---|---|---|---|---|
| 0.043480 | 9.645369 | 12.53 | 16.31 | None |
| 0.014612 | 2.399408 | 3.84 | 6.51 | At most 1 |

L.R. rejects any co-integration at 5% significance level

**India**

| Eigen Values | L.R Statistics | 5% Critical Values | 1% Critical Values | Number of CEs |
|---|---|---|---|---|
| 0.043035 | 7.720887 | 12.53 | 16.31 | None |
| 0.003373 | 0.550774 | 3.84 | 6.51 | At most 1 |

L.R. rejects any co-integration at 5% significance level

**Nepal**

| Eigen Values | L.R Statistics | 5% Critical Values | 1% Critical Values | Number of CEs |
|---|---|---|---|---|
| 0.033402 | 6.549774 | 12.53 | 16.31 | None |
| 0.006190 | 1.012164 | 3.84 | 6.51 | At most 1 |

L.R. rejects any co-integration at 5% significance level

**Bangladesh**

| Eigen Values | L.R Statistics | 5% Critical Values | 1% Critical Values | Number of CEs |
|---|---|---|---|---|
| 0.116307 | 24.52441 | 12.53 | 16.31 | None ** |
| 0.026455 | 4.370250 | 3.84 | 6.51 | At most 1 * |

L.R. test indicates 2 co-integrating equation(s) at 5% significance level

**Sri-Lanka**

| Eigen Values | L.R Statistics | 5% Critical Values | 1% Critical Values | Number of CEs |
|---|---|---|---|---|
| 0.048268 | 8.519984 | 12.53 | 16.31 | None |
| 0.002794 | 0.456004 | 3.84 | 6.51 | At most 1 |

L.R. rejects any co-integration at 5% significance level

As likelihood ratio has not exceeded the 5% critical value or 1% critical value, therefore, Johansen co-integration rejects any co-integrating relation between stock market indices and exchange rates of sample economies except Bangladesh where two co-integration equations has been found at the 5% critical value. Table 3 reports that in four sample economies stock market indices and exchange rates do not move together in the long time. Our findings are in line with those of Lee and Boon (2007), who found short run linear causality between stock market and exchange rate but no long run relationship between them.

**Results of Granger Causality Test**

When two variables are known to be related but the direction of their causality is not known, then granger causality is applied. Table 3 shows the results of Granger causality tests. Column 2 presenting the null hypothesis, column 3 reported the value of F-statistic and column 4 the probability value. As series under consideration are non stationary at levels and are not co-integrated, therefore Granger Causality has been employed in first difference on stock market indices and exchange rates of sample economies. Initially, lags were set equal to 10 and then dropped until the last lag was significant. In case of Pakistan, lag 8 is significant while 2, 9, 10 and 10 are significant lags in case of India, Nepal, Bangladesh and Sri Lank are spectively.

**Table 4 Granger Causality Test**
**Exchange Rates/Money Markets and Stock Indices**

| Country | Null Hypothesis | F-Test | Probability |
|---|---|---|---|
| **Pakistan** | LNINDEX does not Granger Cause LNER | 0.89589 | 0.41027 |
| | LNER does not Granger Cause LNINDEX | 0.61952 | 0.04948 |
| **India** | LNINDEX does not Granger Cause LNER | 0.10018 | 0.90473 |
| | LNER does not Granger Cause LNINDEX | 3.41292 | 0.03535 |
| **Nepal** | LNINDEX does not Granger Cause LNER | 3.17813 | 0.04429 |
| | LNER does not Granger Cause LNINDEX | 0.81970 | 0.44239 |
| **Bangladesh** | LNINDEX does not Granger Cause LNER | 0.13622 | 0.87276 |
| | LNER does not Granger Cause LNINDEX | 3.92838 | 0.02159 |
| **Sri-Lanka** | LNINDEX does not Granger Cause LNER | 2.99928 | 0.05261 |
| | LNER does not Granger Cause LNINDEX | 4.05795 | 0.01908 |

**LNINDEX** is first difference of natural log of stock market index of sample countries and
**LNER** is first difference of natural log of nominal exchange rate of sample economies

Table 4 shows the causality runs from stock market (LNINDEX) to exchange rate (LNER) while in the case of Pakistan, and there is no causality from LNINDEX to LNER. P-value of null hypotheses of no granger causality from LNINDEX to LNER is above 0.10 thus null hypotheses cannot be rejected while P-value of null hypotheses of no granger causality from LNER to LNINDEX is below 0.10 and thus null hypotheses cannot be accepted. Granger Causality Test reports that causality runs from LNER to LNINDEX in case of Pakistan.

In case of India, causality has been found running from exchange rate to stock market. However, literature supports the test and the existence of causality running from exchange rate (LNER) to stock market (LNINDEX). Thus direction of this causality is same in Pakistan and India. In case of Nepal, Table 4 reports the results of causality running from stock market (LNINDEX) to exchange rate (LNER) but not from exchange rate to stock market. Table 4 supports the existence of directional causality from LNINDEX (Stock Prices) to LNER (Exchange Rate) in case of Bangladesh. Null hypothesis of no granger causality running from stock market to exchange rate or cannot be accepted. The probability values of null hypothesis are 0.87276 and 0.02159 respectively. As p values do not exceed 0.10 in the case of stock price to exchange rate, therefore, at 10% significance level, directional causality exists in Bangladesh. Thus, empirical investigation of Bangladesh Won and DSE 20 index supports the existence of directional relationship between exchange rate and stock market. Granger Causality results of Sri Lanka are quite different to those of Pakistan for both types of causality. As the probability values of null hypothesis of no granger causality running from exchange rate to stock market and stock market to exchange rate is below than 0.10 in both the cases bi directional relationship exist. Thus, in case of Sri Lanka, bi directional causality runs from stock market to exchange rate.

**Conclusion**

The association of stock market indices and exchange rates has been examined in current paper; both for the short run and long run. Granger Causality test is applied to discover the short run linear relationship, whereas Johansen Co-integration method has been employed to test the presence of long run relationship. The empirical exploration of monthly stock index facts and exchange rates, dated January 1997 to December 2010, signifies that in Pakistan and Sri Lanka causality flows from stock and financial market to currency market while from currency market to stock market in case of India, however bi directional relationship is present between these two financial markets of Nepal and Bangladesh. Thus Pakistan and Sri Lanka aid the transmission channel of portfolio balance approach in the short run, while India supports the transmission channel of traditional approach toward relationship between capital and currency markets.

Though, in stock market and currency exchange rates a feedback relationship has been measured, while analyzing Nepal and Bangladesh. This result is coherent with study of Ajayi and Mougoue (1996). The result of this research suggests that in long run these stock markets are controlled by the policy recommendations given by the regulators, but the instability of exchange rate is hard to be restricted or controlled by these stock market policies. Nevertheless, in India, the shift of short run causality from exchange rate is examined, towards stock market. Investors can utilize these results in decision making about the investments.

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