

# IMPACT OF SOFT POWER FACTORS ON EXCHANGE RATE VOLATILITY: EVIDENCE FROM SOUTH AND EAST ASIAN COUNTRIES

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## Abstract

This paper aims to examine the impact of soft power factors on exchange rate volatility of South and East Asian countries. In past, very limited research work has been done regarding soft power factors and their relationship with exchange rate volatility in South and East Asian countries. This paper is an attempt to explore how soft power factors (including governance variables, population variables, education variables, financial variables, and economic growth variables) capturing countries influence components of exchange rate volatility. However, present paper has used monthly panel data set of nineteen South and East Asian countries during the period of 2007-2017, PCA index of soft power variables are constructed and common effect fixed effect panel data techniques are used for analysis. Exchange rate volatility is measured through Arch Garch. Results concluded that, population variables and financial variables have significant negative relationship with exchange rate volatility. Meanwhile, governance variable, education variables, and economic growth variables have insignificant relationship with exchange rate volatility. This paper will contribute in existing literature theoretically and also provides important policy implications for financial and public institutions.

**Key Words:** Soft Power, Governance, Population, Education, Financial, Economic Growth, Exchange Rate Volatility

## Background of the Study

The failure of Bretton Woods system has caused significant movement in global markets. However, magnitude of exchange rate fluctuations has been intensified as a result of significant movement within financial markets. The study of Friedman (1953) has explained exchange rate volatility as an illustration of macroeconomic volatility. Whereas, several empirical studies have explained that theoretical models of exchange rates are influenced by riddles and oddities. For instance, Meese and Rogoff (1983) has highlighted that there exists no significant relationship between fundamental factors and exchange rate movements, as it develops a conflict with theoretical models helping in prediction of exchange rate volatility, as exchange rate volatility only increases with the increase of variability of the underlying fundamentals. Market practitioners, policymakers, and academicians are focusing highly over studying the concept of exchange rate volatility because of their prime interest in the concept and significant association amongst behavior of exchange rates and other financial or economic variables (Rogoff, 1983).

With respect to developing regions, financial institutions are highly effective in developed regions. Effectiveness of financial institutions in developed regions is primarily due to regulatory quality, rule of law, and control over corruption, as these aspects are helping developed regions in promotion of economic growth for long run. For instance, East Asia is experiencing better economic growth in comparison to South Asia based on the factors mentioned above. Various types of financial institutions are required by different countries for the promotion of long run economic growth (Nawaz, 2011).

Exchange rate risks are experienced by any individual engaging within international business. A country's currency is depreciated due to increased political risk. The relationship is much better and there are freely floating exchange rates where market players have the freedom to respond to political risk through purchasing the currency of the country having better economies and selling the currency of the country having unstable economies (Ochieng, 2012).

In 1990, frequent policy maker and American scholar named as Joseph Nye Jr. was the first to formulate the concept of soft power. He defined soft power as co-optive power and the concept in which one country persuades other countries to work the way it wants them to (Nye, 1990). Soft power is also known as coercive power in which one country has the ability of persuading other countries to do what one wants. The concept of soft power was

introduced in 1990 by Joseph Nye Jr. and further expanded the concept in his later works. Within foreign policy discussions, soft power has been considered as a central analytic term. Simply, soft power is defined as the ability of an individual party to influence or persuade rather than to coerce other party to work in the manner the individual party wants other party to work (Nye, 1990). Soft power helps in building attraction and is considered as highly effective power merely less than economic and military power (Cooper, 2004). The study of Nye (2004) has explained that soft power resources are considered as highly effective assets which result in production of attraction or persuasion necessary to attract or persuade others.

Despite of its detailed explanation, the term of soft power is very much criticized by academicians and practitioners, as they consider the application of soft power as very hard. Academicians have criticized soft power by saying that soft power is only applicable in circumstances where policies offered by an individual party are favorable for other parties as well. Soft power does not provide any party with the ability of hiding or fixing bad policies, as unpopular product cannot be sold even with the help of best advertisement. Policies that seem to other parties as arrogantly presented or narrowly self-serving have less chances to provide soft power to policy-making party (Nye, 2008). In addition, some of the researchers have even suggested that international investment and international aid are not considered while defining soft power which restricts the concept and does not clearly relate it with the exchange rate (Kurlantzick, 2006).

While discussing the instruments of soft power, education and culture are considered as most effective instruments. There are more chances of gaining soft power by a country which has developed education system meeting the requirements of innovative high-tech economy. For a state to get soft power, providing foreign students with educational opportunities is ranked as one of the most effective instruments (Amirbek & Ydyrys, 2014).

Researchers in the past have depicted that soft power and exchange rate volatility are significant variables. On the basis of studies performed in the past, this study will explore the underlying relationship of factors of soft power named as economic and financial development, education, population, and governance, with exchange rate volatility.

### **Theoretical Background**

Researchers have performed numerous studies regarding exchange rates due to which there is significant literature on exchange rates. Through multiple channels, volatility of exchange rates could be having welfare costs. Amongst these channels, reduction of gains to international trade and increase in the transaction costs are the main ones. Several research studies (Baum and Caglayan, 2010; Chong and Gradstein, 2009; Rosenberg, 2004; Devereux and Engel, 2003; Sauer and Bohara, 2001; Bleaney and Greenway, 2001) have shown that exchange rate volatility has a negative impact on international trade, growth, employment, and investment.

There has been no theoretical framework highlighting the relationship between exchange rate volatility and soft power. A conceptual framework has been provided in which the influence of soft power over behavior of exchange rates has been discussed. Researchers all over the world have consensus while defining institutions such as social, political, legal, and economic aspects of a country. This negative relationship has been expanded by Acemoglu et al. (2003) to macroeconomic volatility, as macroeconomic volatility is defined as volatility of growth rate of output per worker. This study has also demonstrated that there is lack of predictive power in macroeconomic policies after managing for impact of institutions. This study has further helped in clarifying the relationship between soft power and exchange rate volatility (Nawaz, 2011).

Institutional theory is explained by Scott (1995) as the theory concerned with various organizations and groups **secure** their validity and positions in a better manner through conformation of norms and rules of institutional environment. Researchers in the past have shown that there is distinction between informal institutions (code of conduct, values, and norms) and formal institutions (codified regulations and laws) (Colin et al., 2014).

Institutional theory is recently developed for explaining and gaining extensive acceptance and to overcome lack of reasons for several entrepreneurs working within informal sector. Institutional theory provides an argument that there are organized regulations and laws (the formal institutions) of all societies considered as the authorized rules of game. On the other hand, all societies are also having informal institutions that are considered as socially shared rules which are enforced, communicated, created, and generally unwritten outside the officially approved channels (William et al., 2014).

## Gap Identification

In comparison to any other market, financial market is very sensitive. Amongst the indicators of financial market, exchange rate is the most prominent one. Exchange rate is directly influencing the entire economy. With the increase in globalization, there is a significant increase within international dependence. However, exchange rate volatility has direct impact on the terms of trade. Variance of volatility could be reduced with better governance that has been an important factor of soft power (Ullah, 2016).

Researchers in the past have focused on explaining the changes with the level of exchange rates over time. From 1996 to 2011, a survey is conducted over 115 countries by using a balanced panel to identify the significance of soft power variables capturing country's social, political, institutional, and demographic underpinnings which have been generally avoided before. Furthermore, controlled variables are included within literature over exchange rate modeling and expected towards capturing the conventional macro-financial drivers of exchange rate volatility is missing within literature (Cevik et al., 2017).

Due to limited research work performed in South East Asian countries regarding soft power factors and its influence on exchange rate volatility, South East Asian countries are not having necessary awareness about how significant soft power factors have been influencing exchange rate volatility. Lack of awareness amongst South East Asian countries regarding soft power factors prohibits them from implicating soft power factors, eventually resulting in having adverse impact on exchange rate volatility (Khodaverdi & Rahmati, 2018).

A number of empirical studies have been done to focus on exchange rate volatility, but there is very little research on soft power. There are many studies which have focused on the impact with financial integrity and exchange rate volatility. However, no study has checked this impact with soft power variable. Exchange rate volatility is different in different economies, so this study will help us examine it and see which has more significant effect.

## Research Objectives

This study aims:

- To examine the impact of governance variable on exchange rate volatility.
- To examine the impact of population variables on exchange rate volatility.
- To examine the impact of education variables on exchange rate volatility.
- To examine the impact of financial variables on exchange rate volatility.
- To examine the impact of economic growth variables on exchange rate volatility.

## Significance of the Study

### Theoretical Significance

Researchers in the past have conducted various studies in which theoretical models have been presented to testify the relationship existing between exchange rate volatility and soft power factors. Successful completion of this study will enhance understanding about soft power factors and their impact on exchange rate volatility of Asian countries. Further, it will also provide theoretical support to the concept explained previously. This study will add new features in existing literature by theoretically explaining linkage of all political, social, demographic and institutional determinants of soft power on exchange rate volatility.

### Practical Significance

The study of Cevik et al (2017) has explained numerous policy implications associated with reducing distortionary impacts of excessive exchange rate volatility. Recent literature has explained that macroeconomic strength has remained very crucial. Previous literature certainly helps in identifying countries having higher soft power to have less chances of experiencing a lower degree of exchange rate volatility. This study is the first step towards supporting the theoretical and empirical studies for unlocking the interactions amongst exchange rates and quantitative measures of soft power.

## LITERATURE REVIEW

### Theoretical Evidence

The study of Nye (1980) has explained the concept of soft power through exploring international relations and to capture intangible resources. From the period of 2009 to 2012, Institute for Government has performed an index over a limited set of countries and concluded that it had been very hard to quantify a multidimensional concept in a single indicator.

In 1980s and 1990s, major currencies have continued working on exchange rate volatility, as central banks in majority of the developed countries have reduced their inflations rates by focusing over exchange rate volatility. In various countries, RER volatility has not been stabilized through monetary policy, as rate of inflation is controlled by monetary policy in developed countries. For example, exchanges rates across Japanese yen, the Euro, and the US dollar have remained volatile, whereas the annual inflation rates of Japan, Europe, and United States have reduced and converged to 3% range at the mid of 1990s. With respect to New Open Economy Macroeconomics, non-monetary factors such as productivity shocks, demand shocks, and labor supply shocks.

Political stability is negatively and narrowly defined as the absence of civil wars, coups (attempted or successful), expropriation, corruption, domestic political terrorism, and frequent constitutional changes (e.g. a change from dictatorship to democracy). Political stability is achieved through supplementing purely symptomatic measures of stability with measures of political liberty, as reliably stable regimes are those having no symptoms of political unrest (Posner, 1997).

There have been numerous factors such as level and distribution of income, education, foreign threats, national history, religion, ethnic origins, and homogeneity (or difference) of language, which play a vital role in explaining the difference between some nations being politically stable and some nations being politically unstable. The inequality or equality of measured income across social classes, percentiles of the population, individuals, households, or other standard aggregates used within social and economic scientific research have been a crude measure of real economic inequality.

The correlation between political liberty and democracy as well as correlation between political stability and political liberty gives an indication of their relationship with each other. However, income equality is considered as a major factor which causes a political stability within any country (Posner, 1997).

Public administration has focused on searching for government performance (or effectiveness), as the public management has adopted numerous reforms in last few years to or to further improve their performance (Ingraham and Moynihan, 2000). Government performance is improved through these reforms, as these reforms assist in increasing the accountability of government organizations and regulatory authorities (Boschken, 1994).

Several researchers throughout the world have studied government effectiveness by focusing on technical questions including impact of career stability, internal promotion, and meritocratic recruitment over performance within less developed countries. Furthermore, research has also been performed on corruption and administrative reforms within Asian countries and Organization for Economic Co-operation and Development (OECD) countries (Brewer et al., 2007; Brewer, 2004).

The study of Back and Hadenius (2008) has focused on the effect of democratization and the difference between pressure from above and pressure from below. However, this study has shown a J-shaped relationship between state capacity and democracy. Benefits and costs of disorder and dictatorship have been observed in this study and a U-shaped relationship amongst income-adjusted perceptions of government effectiveness and democratization has been observed.

Individuals, organizations, and institutions have their own established rules and norms. Weak institutions have the tendency of causing problems for multinational enterprises (MNEs), as these institutions keep on looking for new markets within the developing countries. When regulations govern, economic, social, and political business transactions are weakly enforced, more poorly specified, and less transparent. Contrary to that, this does not happen in societies with uncertainty results and effective regulatory regimes (Ramamurti and Doh, 2004).

Government effectiveness and high performance tend to have a significantly positive impact on all activities of a business venture such as commencement of a business, payment of tax, trade beyond the borders, drafting of contracts, accessing credit, and liquidation of the business. In a situation where a multinational firm tends to face quintessential internationalization decision about to what extent control and commitment should be used while establishing new venture abroad, it should be focusing on considering how its interests are protected by the local laws. In case of host government not having adequate or comprehensive legislation in place, or not being able to uphold its own laws, such lack of government effectiveness highlights the important sources of potential cost and uncertainty for the firm (Martinez, 2012).

Laws and legislations are made by the government, whereas organizational actors and citizens tend to follow them under sanctions, fines, penalties, or worse. In context of transaction making business across borders, there has been an important element of formal institutions (regulations and rules) which influences MNEs and firms which is that laws and legislations are considered as very fair and highly enforceable (Williamson, 1996).

The meaning of Rule of Law is contested widely despite it is considered as a basic principle of governance. Tom Bingham's words state the formal essence of the Rule as: [that] all authorities and persons in the state, whether private or public, are obligated to the benefit of laws publicly and publicly administered (Rijkema, 2013).

In addition, legislations and laws of a legal system must be according to the principle ruled by the law and participating within its promulgation. These have been considered as minimum requirements which a system of procedures, institutions, and authoritative rules (also known as authoritative system) must be meeting to qualify as governance by law (Rijkema, 2013).

There have been several requirements regarding Rule of Law, as Rule of Law could be explained through defining either a minimum standard which is needed to be met to be the law or there has been an inspirational standard which is to be met by identification of what is meant by a good law. These two distinctions of their combination help in defining the range of perspectives over the nature of the Rule of Law which have been complementary instead of mutually exclusive (Rijkema, 2013).

Rule of Law is a principle of governance defined by the nation as a prescriptive and normative principle which claims about all power relations in any society must be legalized with respect to certain fundamental principles such as Rule of Law. Rule of Law must be distinguished as a separate law and regarded as principle Law. Likewise, it has been a descriptive and analytical principle which claims about quantifying of a legal term or an authoritative system that is needed to be, with respect to certain fundamental principle, enforced on the individuals (Juris, 2004).

While describing Rule of Law, it has been obvious that Rule of Law is a principle of governance which highly emphasizes over proper administration and adjudication. A law is needed to be adjudicated and administered properly in order to be considered as a legal rule or to properly function. Rule of Law and its requirements must be fulfilled as a principle of law in order to adjudicate and administer it properly so that this Rule of Law could be implemented in an effective manner (Rijkema, 2013).

A popular risk measure used for measuring of financial and banking stability is known as z-score, Z-score is used for reflecting of probability of insolvency of a bank. Studies of Boyd et al. (1993) and Boyd & Graham (1988) have explained z-score a risk measuring indicator.

### **Hypothesis Development**

Following are the research hypothesis of this study

**Hypothesis 1:** Governance variables have negative effect on exchange rate volatility.

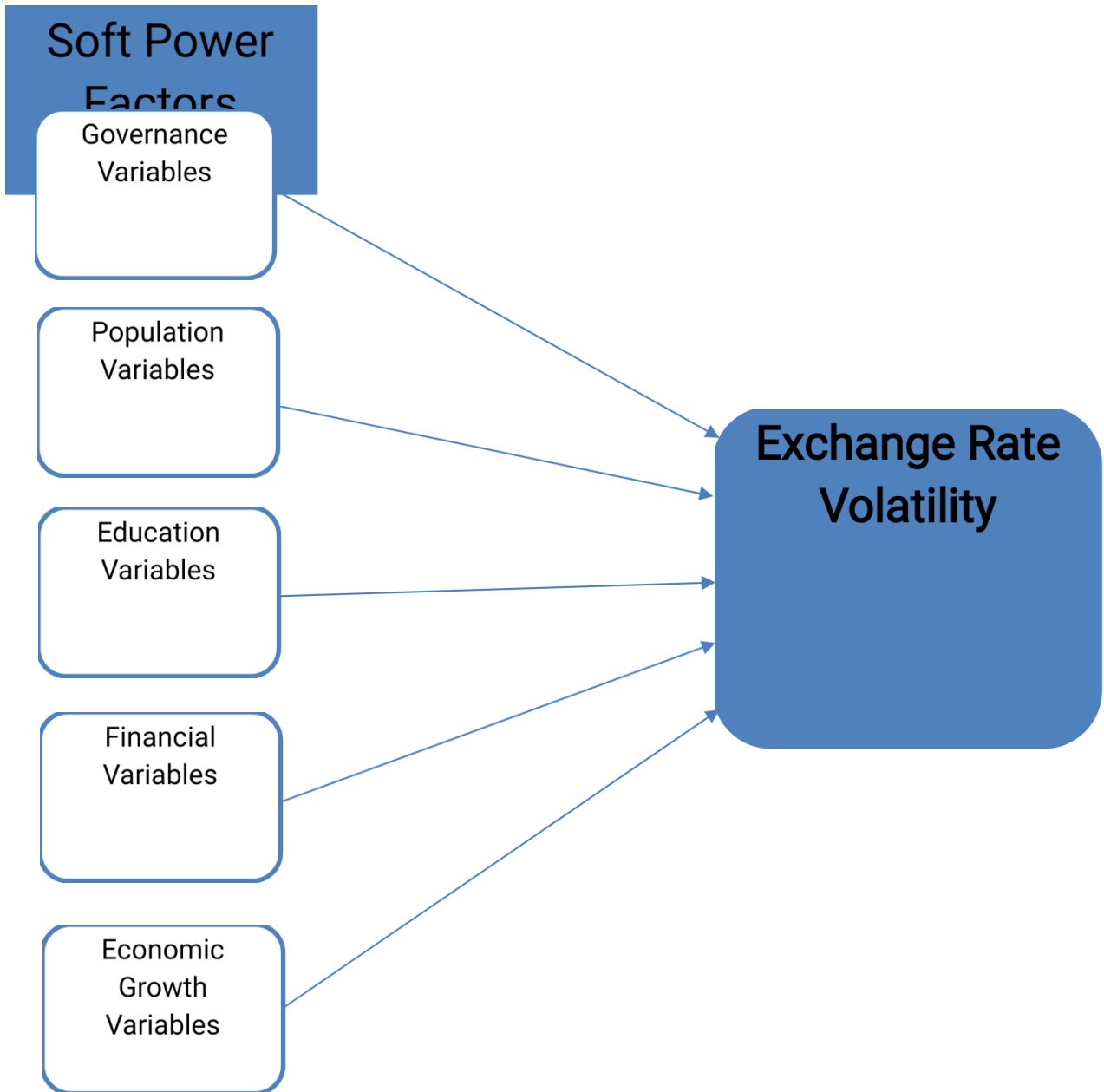
**Hypothesis 2:** Population variables have negative effect on exchange rate volatility.

**Hypothesis 3:** Education variables have negative effect on exchange rate volatility.

**Hypothesis 4:** Financial variables have negative effect on exchange rate volatility.

**Hypothesis 5:** Economic growth variables have negative effect on exchange rate volatility.

### 2.3 Research Framework



## METHODOLOGY

### Data Description and Methodology

Construction of our sample has included South and East Asians countries. There are total 16 countries. In this study, monthly data, from the period of 2007 to 2017, has been taken. We have used PCA (Principle Component Analysis) for soft power variable index. We will be using variable reduction technique **which says that systematically eliminates** those variables in the original set that are best explained by the remaining variables. Multicollinearity has been checked for several variables of this study having p-value more than 0.5. Variables having p-value more than 0.5 show that there exists multicollinearity amongst these variables. To check multiple collinearities, formula that has been used is as follows:

$$VIF = 1 / 1 - r^2$$

If VIF is more than 5 that means multicollinearity exists and we should omit that variable.

### Sample Size

South and East Asia is taken as both are open economies and share same history, economic, social, and political characteristics. South Asian countries include Sri Lanka, Pakistan, Nepal, Maldives, India, Bhutan, Bangladesh, and Afghanistan. Whereas, East Asian countries includes Macau, Hong Kong, Taiwan, South Korea, North Korea, Japan, and China.

### Time

10 years' data from 2007 – 2017 has been taken to investigate the impact of soft power factors on exchange rate volatility of South and East Asian countries.

### Data Collection

This study has been quantitative in nature. Secondary data has been collected by using different websites to collect the data of soft power variable. Different site sources are used for governance variables. Worldwide governance indicator (world bank) is used for population variables. UN world pop prospect source is used to extract the data for financial variable and education variable. World Bank source has been used for economic development variables UNCTAD source has been used.

### Data Type

This study has used panel data technique to check the impact of soft power factors on exchange rate volatility. The current study takes the data from South and East Asian countries over 10year period of time so pooled panel data technique is applied on the data.

### Statistically and Econometric Model

However, numerous models have been also presented by the researchers for examining exchange rate volatility. Meanwhile, Autoregressive Conditional Heteroskedasticity-ARCH has been developed by Engle (1982) and Generalised ARCH-GARCH models have been developed by Bollerslev (1986) and Taylor (1986) have been used mostly to measure instability of exchange rates.

### ARCH(p) Model

ARCH model has been an autoregressive process (AR) which could be represented as follows:

$$E_t = z_t \sigma_t$$

where  $z_t$  is white noise

$$\sigma_t^2 = w + \sum \sigma_1 e_t^2$$

**GARCH(p,q) Model**

The extended ARCH model is known as GARCH model which is expressed as:

$$E_t = z_t \sigma_t$$

where  $z_t$  is white noise

$$\sigma_t^2 = w + \sum \sigma_i e_{t-1}^2 + \sum \beta_j \sigma_{t-j}^2$$

It has been assumed that  $q > 0$  and  $p \geq 0$ , parameters are unknown and since variance has been positive, then following relations must be positive too  $w \geq 0$ , and  $\sigma_i \geq 0$  for every  $i = 1, \dots, q$  and  $\beta_j \geq 0$  for  $j = 1, \dots, p$ . If the parameters are constraint such that  $\sum \sigma_i + \sum \beta < 1$ , they imply a weak stationarity. If  $q = 0$ , then GARCH model is becoming an ARCH model.

**DATA FINDINGS AND ANALYSIS****Descriptive Statistics****Descriptive Statistics**

Variables	Obs	Mean	Std.Dev.	Min	Max	Skew.	Kurt.
Exchange rate	143	3.699	4.017	.67	37	4.807	35.776
Governance Variable	143	0	2.218	-3.813	4.555	.432	2.227
Population Variable	143	.002	2.037	-2.906	5.428	.649	2.872
Education Variable	143	0	1.042	-3.641	2.986	-.498	4.556
Financial variable	143	0	1.107	-2.741	1.827	-.321	2.1
Economic variable	143	0	1.617	-3.528	2.616	-.681	2.393

Population variables have the highest mean, whereas governance variable has the highest standard deviation and second highest mean. On the other hand, governance, education, financial, and economic growth variables have zero mean. However, financial variables have the lowest standard deviation. Similarly, governance variable has highest skewness and kurtosis, whereas, financial variables have lowest skewness and kurtosis.



**Correlation Analysis Matrix of Correlations**

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) Governance Variable	1.000					
(2) Population Variable	-0.813	1.000				
(3) Education Variable	0.431	-0.463	1.000			
(4) Financial Variable	0.436	-0.345	0.135	1.000		
(5) Economic Variable	-0.833	0.815	-0.500	-0.677	1.000	
(6) Exchange rates	0.038	-0.060	0.180	-0.386	0.237	1.000

The table above shows that a relationship exists between governance variable and exchange rate volatility. It is significant with the magnitude of .038 in a positive direction, whereas the relationship that exists between population variables and exchange rate volatility is significant with the magnitude of .060 in a negative direction. In addition, the relationship that exists between education variables and exchange rate volatility is significant with the magnitude of .180 in a positive direction. Furthermore, the relationship that exists between financial variables and exchange rate volatility is significant with the magnitude of .386 in a negative direction. Finally, relationship that exists between economic growth variables and exchange rate volatility is significant at 0.01 levels with the magnitude of .237 in a positive direction.

**VIF TABLE**

S. No.	Variables	VIF
1	Economic and Governance	1.894
2	Population and Governance	2.363
3	Economic and Population	2.198
4	Economic and Financial	1.278

Multicollinearity has been checked for several variables of this study having p-value more than 0.5. Variables having p-value more than 0.5 shows that there exists a multicollinearity amongst these variables. To check the multiple collinearity, formula that has been used is as follows:

$VIF = 1 / 1 - r^2$  Through the formula, VIF value for variables have been 1.894 (economic and governance), 2.363 (population and governance), 2.198 (economic and population), and 1.278 (economic and financial). The value of VIF should be less than 5, as VIF less than 5 shows that multicollinearity amongst the variables. As VIF values for these variables are less than 5, therefore multicollinearity amongst them is bearable.

**Regression Analysis Regression Results**

Exchange Rates	Coef.	St.Err.	t-value	p-value	[95% Conf Interval]	Sig
Governance Variable	-0.150	0.391	-0.38	0.701	-0.917 0.617	
Population Variable	0.765	0.383	2.00	0.046	0.015 1.515	**
Education Variable	0.414	0.349	1.19	0.236	-0.270 1.099	
Financial Variable	0.274	0.389	-2.91	0.004	-1.894 -0.369	***
Economic Variable	-1.239	0.818	-1.51	0.130	-2.843 0.365	
Inflation CPI	-0.047	0.067	-0.69	0.489	-0.179 0.085	
Volatility of terms of trade	0.118	0.071	1.66	0.097	-0.021 0.257	*
Vol of lab prod growth	-0.015	0.212	-0.07	0.945	-0.430 0.401	

Vol of gov con gdp	0.374	0.104	3.60	0.000	0.170	0.577	***
Current Account Bala~p	-0.047	0.092	-0.51	0.610	-0.228	0.134	
Trade Openness	-0.380	1.111	-0.34	0.732	-2.559	1.798	
Export Concentratio~x	-2.919	3.853	-0.76	0.449	-10.470	4.633	
Fxregime	0.778	1.657	0.47	0.639	-2.469	4.025	
Credit gdp	0.009	0.009	1.01	0.313	-0.009	0.027	
Stock Market_ Cap gdp	-0.003	0.004	-0.83	0.408	-0.010	0.004	
Constant	2.953	3.401	0.87	0.385	-3.714	9.619	
Mean dependent Var		3.699	SD dependent var		4.017		
Overall r-squared		0.462	Number of obs		143.000		
Chi-square		108.995	Prob > chi2		0.000		
R-squared within		0.051	R-squared between		0.970		

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Based on the results, factors of soft power are impacting exchange rate volatility. Through regression analysis, there exists a relationship between population, governance, education, financial and economic growth variables (independent variables) and exchange rate volatility (dependent variable). The governance variable is insignificant, as p value is 0.701 which is greater than 0.05. This shows that governance variable is not affecting exchange rate volatility which rejects Hypothesis 1. The population variables are significant, as p value is 0.046 which is less than 0.05. This shows that population variable is affecting exchange rate volatility which accepts Hypothesis 2. The education variables are insignificant, as p value is 0.236 which is more than 0.05. This shows that education variables are not affecting exchange rate volatility which rejects Hypothesis 3. The financial variables are significant, as p value is 0.004 which is less than 0.05. This shows that financial variables are affecting exchange rate volatility which accepts Hypothesis 4. The economic growth variables are insignificant, as p value is 0.130 which is more than 0.05. This shows that economic growth variables are not affecting exchange rate volatility which rejects Hypothesis 5.

## DISCUSSION AND CONCLUSION

### Discussion

This study is aimed to explore the impact of soft power factors (governance variable, population variables, education variables, financial variables, and economic growth variables) on exchange rate volatility. The current study has selected South and East Asian countries for data collection. Secondary source of data has been used within this study for gathering of data from South and East Asian countries to explore the relationship between soft power factors and exchange rate volatility. **In this study seen individual explanation of each chapter in the previous chapters**, the researcher will now see how this research is implicated to the modern word and present-day scenario and what the limitations of it are. A scale has been set which ranges 5% of the significance level. Based on this scale, the researcher has accepted or rejected the designed hypotheses. Based on data analysis through correlation and regression with the help of States' software, H<sub>2</sub> and H<sub>4</sub> have been accepted, whereas, H<sub>1</sub>, H<sub>3</sub>, and H<sub>5</sub>, have been rejected. H<sub>2</sub> and H<sub>4</sub> have been accepted because significant level of population variables and financial variables has been 0.046 and 0.004 respectively, which is less than 0.05. Therefore, H<sub>2</sub> and H<sub>4</sub> have been accepted and proved significant. Whereas, H<sub>1</sub>, H<sub>3</sub>, and H<sub>5</sub> have been rejected because significance level of governance variable, education variables, and economic growth variables have been 0.701, 0.236, and 0.237 respectively, which are more than 0.05. Therefore, H<sub>1</sub>, H<sub>3</sub>, and H<sub>5</sub> have been rejected and proved insignificant.

## Conclusion

For investigating the relationship between soft power factors (governance variable, population variables, education variables, financial variables, and economic growth variables) and exchange rate volatility, secondary data sources have been used to collect the data regarding variables. Collected data has then been analyzed through correlation and regression analysis with the help of Stata software. Effect of each soft power factor on exchange rate volatility has been clearly observed in this study. Based on the data analysis, negative effect of population variables and financial variables has been found significant on exchange rate volatility. However, negative effect of governance variable, education variables, and economic growth variables, has been found insignificant on exchange rate volatility. Soft power factors (governance variable, population variables, education variables, financial variables, and economic growth variables) are empirically tested with exchange rate volatility in east and south Asian countries. The correlations of governance variable, population variables, education variables, financial variables, and economic growth variables are .038, -.060, .180, -.386, and .237 respectively, whereas significance of governance variable, population variables, education variables, financial variables, and economic growth variables are 0.701, 0.046, 0.236, 0.004, and 0.130 respectively. Conclusively, this study has shown that population variables and financial variables are significantly correlated to exchange rate volatility, whereas, governance variable, education variables, and economic growth variables, are insignificantly correlated with exchange rate volatility. Hence, soft power factors are making certain contribution towards influencing exchange rate volatility in east and south Asian countries.

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