Factors Influencing Exchange Rate Volatilities: Sri Lanka Compared with Ukraine

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Abstract *- This study investigates the determinants of exchange-rate volatility in Sri Lanka and Ukraine, focusing on macroeconomic, sociocultural, and institutional determinants. The research question is: What is the impact of selected macroeconomic, sociocultural, and institutional determinants of exchange-rate volatility in Sri Lanka, and how differently do they affect it in Ukraine? Following previous studies, we gather annual secondary data for the years 1997–2022 from the Central Bank of Sri Lanka, National Bank of Ukraine, the IMF, and World Bank databases. The empirical strategy employs a quantitative regression framework to relate volatility to GDP per capita, foreign direct investment, unemployment, labour-force participation, the Human Capital Index, political stability, rule of law, and the Gini index; trade openness and inflation are used as controls. Results indicate that different determinants of volatility particularly political instability, trade openness, and inflation are relevant in both countries but with varying magnitudes. Notably, exchange-rate volatility is more associated with political instability in Sri Lanka compared to Ukraine. The findings clarify the relative importance of institutional and macroeconomic fundamentals in the two environments and suggest policy levers especially entrenching governance and achieving macroeconomic stability to minimize volatility.*

Keywords: Economic Growth, Exchange Rate Volatility, Foreign Trade Flows, Inflation Rates

I. INTRODUCTION

Exchange rate volatility is a major problem for developing countries since it may harm international trade, capital flows, and economic growth. Investors and regulators must have a good grasp of the factors influencing exchange rate volatility in order to mitigate exchange rate risks.

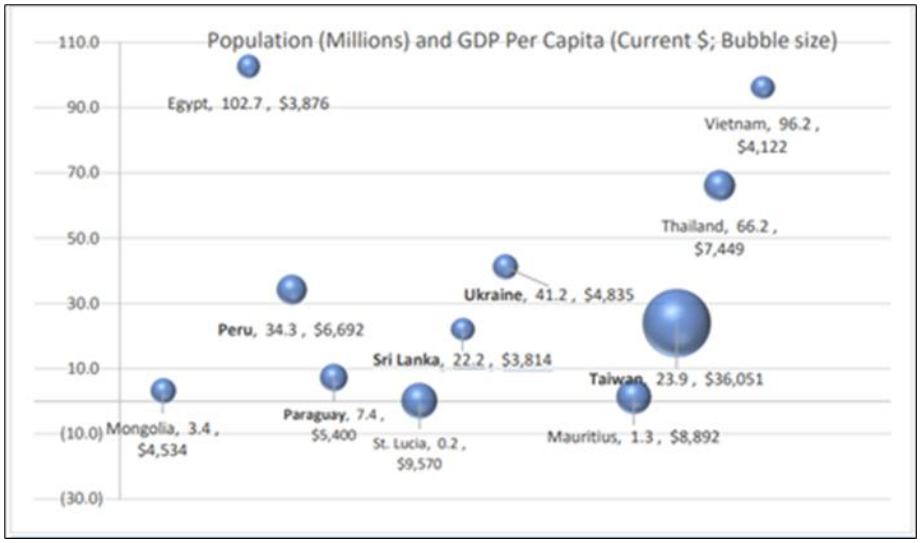
Sri Lanka and Ukraine are two nations that have recently seen a lot of exchange rate fluctuation. Political unrest, a high level of public debt, and a sizable trade imbalance, among other things, have an impact on Sri Lanka's currency rate (Lanka, 2021) On the other hand, political tensions with Russia, economic sanctions, and a substantial current account deficit have all had an impact on Ukraine's currency rate (Ukraine, 2021).
This study compares the variables affecting the volatility of currency rates in Sri Lanka and Ukraine and the research can offer insights into how policymakers and investors might manage exchange rate risk in developing markets by examining the similarities and differences in the factors impacting exchange rate volatility in these two nations.

Macroeconomic indicators, Political instability are only a few examples of the variables that might have an impact on the volatility of exchange rates in developing economies. Exchange rate volatility has been a factor in Sri Lanka due to rising inflation and budget deficits (Lanka, 2021). The conflict with Russia, rising inflation, and political unpredictability has all had an impact on Ukraine's currency rate volatility (National Bank of Ukraine, 2021). According to Ibhagui (2019), in systems with floating exchange rates, central banks may occasionally intervene in the market for currency rates for a variety of reasons, including as part of their macroprudential arsenal, central banks frequently utilize

foreign exchange interventions to address concerns about financial stability brought on by excessive exchange rate volatility and abrupt changes in capital inflows.

Saliya (2022a) reveals that Ukraine have similar characteristics such as people density, population, and per capita income with Sri Lanka. Figure 1 shows the standing of this country compared to their size in terms of per capita income and plots these 11 countries and provides insight about the comparability of this Country. The size of the bubbles represents the comparative amount of the GDP per capita at current US$ prices and the vertical position of Country (Jayasinghe et al., 2024).

Figure 9: comparison of socioeconomic factors of 11 countries Saliya (2022a).



Source: Authors' compilation.

A. Problem

The macroeconomic stability of a country's economy as well as commerce and investment can be significantly impacted by exchange rate fluctuation. It would be fascinating to compare Sri Lanka and Ukraine, two countries that have recently had exchange rate volatility. While Ukraine is a sizable nation in Eastern Europe, Sri Lanka is a small island nation in South Asia.

When Sri Lanka's foreign exchange reserves were depleted, a complex public debt default occurred, according to Kariyawasam and Jayasinghe (2022). Following its descent into a political and economic crisis, Sri Lanka has come to the fore. The disturbance in Sri Lanka is a classic balance of payments problem from an economic perspective. The outbreak affected the nation's tourism-based economy by reducing international travel, which puts stress on a significant outside source of revenue. There was a sharp fall in international reserves because of lax fiscal policies, significant foreign exchange borrowing, rising imports, and high loan servicing expenses. How may macroeconomic, socio cultural, institutional, and social factors influence exchange rate volatility in Sri Lanka in comparison with Ukraine, which has comparable features, is the key research question addressed by this paper.

What is the impact of certain Macroeconomics, Institutional factors, political factors, and social factors influencing the exchange rate volatilities in Sri Lanka and how they are compared with the same of Ukraine?

B. Research Questions

a) How do macro-economic factors have an impact on exchange rate volatilities of SL?
b) How do institutional factors have an impact on exchange rate volatilities of SL?
c) How do socio cultural factors have an impact on exchange rate volatilities of SL?
d) How do social factors have an impact on exchange rate volatilities of SL?

While several studies have investigated exchange rate volatility in emerging economies, limited research has specifically focused on Sri Lanka in a comparative context. Sri Lanka represents a meaningful case due to its unique mix of structural vulnerabilities, including its reliance on external debt, political instability, and exposure to external shocks such as global commodity price fluctuations and crises in the tourism sector (Jagoda et al., 2025). Understanding Sri Lanka's exchange rate volatility in comparison with Ukraine, another developing economy with distinct geopolitical and institutional challenges, extends the current literature by offering valuable insights into how similar macroeconomic pressures yield different outcomes under diverse institutional and socio-cultural frameworks. Hence, this study not only fills an empirical gap but also contributes to broader discussions on exchange rate dynamics in developing nations.

II. LITERATURE REVIEW

The exchange rate volatility can have an impact on economic stability and growth; it has become a big concern for regulators all over the world. Both Sri Lanka and Ukraine are emerging nations with distinctive economic traits and monetary policies. This assessment of the literature compares the variables affecting the volatility of currency rates in Sri Lanka and Ukraine.

Pal et al. (2019) has found out, due to their greater ability to quickly adjust to shocks, nations that adopt flexible exchange rates may experience economic growth. However, some research has found that exchange rate volatility has adverse effects on some macroeconomic indices that may have an impact on economic growth, including the gross domestic product, employment, investment, international trade, and inflation. Washima (2022) and Sehan et al. (2025), state. The Relationship Between Exchange Rate Volatility and Monetary Policy: An Emerging Market Perspective (February 28 – March 1, 2019) Regional Conference on External Vulnerabilities in South Asia, Central Bank of Sri Lanka It's crucial to accurately comprehend and model exchange rate volatility.

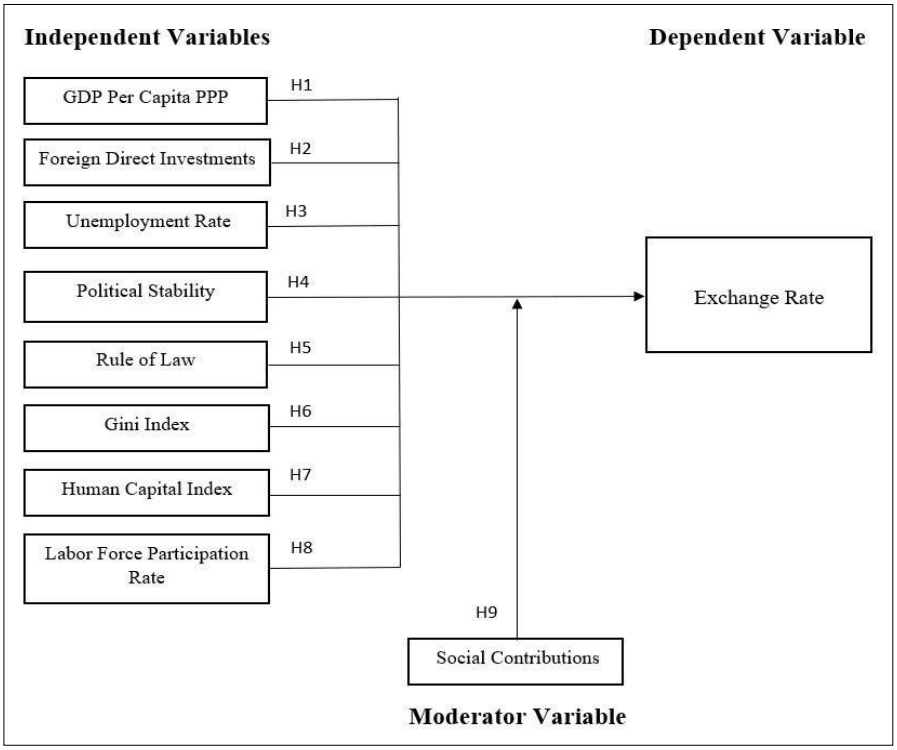
- Macroeconomic significance: capital mobility, growth, trade flows, direct investments, productivity, welfare.
- Microeconomic impact: portfolio selection, asset pricing, and risk management at the level.

Aliu, Aliu et al. (2022) investigates the financial and economic repercussions of Russia's invasion of Ukraine are discussed in this section along with pertinent facts. War is not a means to a goal since the consequences are irreversible, as human history has demonstrated. The completion of the Yugoslavian wars gave the impression that Europe was at peace, but harsh history is again being relieved. On February 24, 2022, Russia launched a full-scale invasion of Ukraine, sparking the largest military conflict since the Second World War. Aliu et al. (2022).

Francis (2016) showed according to the managed floating exchange system, there is a direct correlation between the exchange rate and the budget deficit. For Sri Lanka, their analysis spanned the years 2000 to 2010. It has been established that the budget deficit actively influences Sri Lanka's real exchange rate. In the current study, many options were included to determine how the exchange rate and external factors interacted. Istiak and Alam (2019) used secondary data and the multiple regression analysis model to find out the effect of variable BI rate, money supply, oil prices and gold prices on the level of inflation. The findings say that inflation is a disease that impacts all activities of the economy. The geographical context used in this study is Indonesia and the aim of this study is to analyze the effect between Indonesian BI rate, money supply, oil prices and gold prices on inflation and their impact on human development.

The theoretical foundation of this study is underpinned by macroeconomic and institutional theories explaining exchange rate dynamics, particularly the monetary model and portfolio balance approach. Recent empirical studies further reinforce these frameworks by showing that exchange rate volatility in developing economies is strongly linked to institutional quality, investor confidence, and political stability (Aliu et al., 2022; Yensu et al., 2022). Moreover, emerging research highlights how socio-cultural and behavioural factors such as public trust and social contributions moderate macroeconomic influences on currency fluctuations (Nor et al., 2022; Washima, 2022). By integrating these updated empirical insights, this study strengthens its theoretical base and situates the comparison between Sri Lanka and Ukraine within the broader discourse on exchange rate behaviour in transitioning economies.

Figure 2. Conceptual framework



Source: Authors' compilation.

III. METHODS

Based on widely discussed research philosophies and methodologies (see Saliya, 2022b;2023), in order to determine how Colombo share market movements, exports, imports, interest rates, worker remittances, and tourist arrivals affect the exchange rate volatility of the US dollar of Sri Lanka, Perera and Rathnayaka (2019) used a three-step procedure (descriptive model, Bivariate model, and Multivariate model) to analyze the monthly data for a period from 2010 to 2017.

A. Statistical Technique

According to Nor et al. (2022) and Umar and Sun (2015), states that the average exchange rate is known as the average of the official exchange rate in force in a certain country for which deferred purchase payment is being paid for financial transactions on the first and last business day of the calendar. The rate at which one country's currency can be exchanged for the currency of another country, between nations or economic zones is known as exchange rates.

Therefore, we calculate the annual average exchange rate volatility to find out the fluctuation in Sri Lankas yearly exchange rate since exchange rate is used to determine the value of various currencies in relation to each other and is important in determining trade and capital flow dynamics. It is movements in the exchange rate influence the decision of individuals, business, and government.

Following these theoretical explanations, we determine the effect on Exchange Rate Volatility using the equation shown below (Equation 1). 25 data points from the years 1997 to 2022 make up the sample size for this study. We shall determine the volatility of exchange rates between the years of 1996 and 2021 in each nation. The mathematical described in mathematical 4.1 may be used to get the Annual Change. The output is taken to be the volatility of the exchange rate.

Figure 10:Annual exchange rate fluctuation

$$\text{Annual Exchange Rate Fluctuation} = \frac{\text{(Annual Average Exchange Rate of the Current Year - Annual Average Exchange rate of the Previous Year)}}{\text{Annual Average Exchange Rate of the Previous Year}} * 1$$

Source: Source: Umar, M., & Sun, G. (2015).

1) Equation 1

$$ERV = [(Y_t - Y_{t-1}) / Y_{t-1}] \times 100$$

In this equation,

- ERV = Exchange Rate Volatility
- Yt = Annual Average Exchange rate of the current year
- Y_{t-1}= Annual Average Exchange rate of the previous year

B. Regression Analysis

To examine the impact of independent variables on the dependent variable (exchange rate volatility), and the moderating variable (social contributions). Specifically, the authors used a moderated regression analysis, which is a statistical technique that tests the relationship between an independent variable, a dependent variable, and a moderator variable. According to (Finter et al., 2010; Schmidt, 2017; Sehan et al., 2025; Yensu et al., 2022), Authors used a multiple regression model to estimate the impact of each independent variable on exchange rate volatility while controlling for the effects of the other independent variables. Wilson and Bettis-Outland (2019), used a multiple regression analysis would examine the relationship between the independent variables, the dependent variable (Exchange Rate Volatility), and the moderating variable (social Factors) for each of the two countries.

This research study uses four independent variables (IVs): macroeconomic, institutional, sociocultural, and social factors. The dependent variable (DV) is exchanging rate volatility, and the moderator variable (MV) is social factors. Interaction terms (IVs x MV) are created to examine the moderating effects of social factors on the relationship between the variables and exchange rate volatility.

1) Equation 2

$$DV = \beta_0 + (\beta_1 \times IV1) + (\beta_2 \times IV2) + (\beta_3 \times IV3) + (\beta_4 \times MV) + (\beta_5 \times IV1 \times MV) + (\beta_6 \times IV2 \times MV) + (\beta_7 \times IV3 \times MV) + \varepsilon$$

Where:

- DV is the dependent variable (exchange rate volatility)
- IV1 is the first independent variable (Macroeconomic factors)
- IV2 is the second independent variable (Institutional factors)
- IV3 is the third independent variable (sociocultural factors)
- MV is the moderator variable (Social factors)
- β0 is the intercept.
- β1-β4 are the coefficients for the independent variables.
- β5 is the coefficient for the moderator variable.
- β6-β9 are the coefficients for the interaction terms between each independent variable and the moderator variable.
- ε is the error term.

IV. DATA ANALYSIS

A sample size of 25 annually data points from 2 countries Sri Lanka with Ukraine the study hopes to cover the period ranging from 1997 to 2022.The literature study up top provides a summary of the factors that went into choosing the nations. To reflect elements including macroeconomic, sociocultural, institutional, and social factors, a few proxy variables have been chosen. The relationship between the dependent and independent variables is moderated by using social contribution as the moderator variable under social factors.

The data suggests that due to its higher FDI inflows, lower unemployment rate, relative political stability, stronger rule of law, lower income inequality, higher human capital index score, and higher labor force participation rate, Ukraine may be less vulnerable to exchange rate volatility than Sri Lanka. It is crucial to keep in mind that these elements are intricately linked, and that additional aspects of the economy, society, and politics may also have an impact on the volatility of the exchange rate.

According to Madurapperuma (2022) Main focus of this research study is to identify how the recent economic crisis as well as the unrest situation in SL has impacted in the exchange rate fluctuations and what are the main dimensions that have resulted in fluctuations. Since this research is focusing on secondary data, the researchers hope to obtain the data and information regarding the independent variable from various databases such as CBSL, National Bank of Ukraine, IMF, and World Bank databases.

V. RESULTS AND DISCUSSION

Multiple R is used to determine the multiple correlation coefficient between three or more variables, according to Gao (2023) and Balogun et al. (2025). R-Squared, which may be

calculated as (Multiple R)2, is a measure of how much variance in the response variable of a regression model can be explained by the predictor variables. This number ranges from 0 to 1. The multiple R symbol stands for the multiple correlation coefficient. A measure of how. In any case, the regression model matches the data. The mean of squares error is a term used to describe the error in the regression line used as a model to understand the data. R-squared is a statistical measure of how closely the data follow the fitted regression line (Cameron & Windmeijer, 1997; Chicco et al., 2021; Kim, 2025). It is also known as the coefficient of determination or the coefficient of multiple determination for multiple regression. 100% denotes that the model completely accounts for all variance in the response data around the mean. Multiple R is the correlation between the actual and predicted values of the dependent variable in a multiple regression. It can only fall between 0 and 1, as it is calculated using a sum of squares, which cannot be negative.

A. Sri Lanka

GDP per capita has a significant impact on the exchange rate volatility of a country since the p value is 0.003. Here since the p value is less than 0.05, we reject the null hypothesis which states that GDP per capita has no impact on the exchange rate volatilities of a country. Therefore, we can conclude that GDP per capita has an impact on the exchange rate volatilities of a country and both the factors have a positive significant relationship (Table 01).

Likewise Foreign Direct Investments (p value: 0.02), Social contributions (p value: 0.02), Unemployment (p value: 0.03) and Human capital index (p value: 0.03) has a positive significant impact on the exchange rate volatilities of Sri Lanka (Table 04). Political stability, GINI index, Labor force Participation Rate, and CPIA property rights have a negative significant relationship with the exchange rate volatilities in Sri Lanka since the p value is greater than 0.05 (Table 01).

Also, both the interactive terms social contributions *GDP Per Capita growth (Annual %) and social contributions *Foreign Direct Investments show a P value of 0.001 and 0.02, respectively. Therefore, we can say that these two terms have a positive significant relationship with the exchange rate volatilities in Sri Lanka. (Table 1).

Table 1. Regression 01

Variable	Coefficient	Std. Err.	z-Stat	P-value	Lower 95%	Upper 95%	Lower 99.9%	Upper 99.9%
(Intercept)	-5.6661	1.3843	-4.093		-8.3793	-2.9529		
GDP per capita, PPP (US $)	0.0001	0	2.923	0.0035	0	0.0002		
Foreign Direct Investments, Net Inflow (% of GDP)	0.0621	0.0277	2.2393	0.0257	0.0078	0.1165	-0.0163	0.1406
Social Contributions	0.2376	0.1066	2.2287	0.0225	0.0287	0.4465	-0.072	0.5473
Unemployment Rate	0.0667	0.0307	2.1729	0.0301	0.0065	0.127	-0.0231	0.1566
HDI	4.5444	1.9439	2.3378	0.0194	0.7345	8.3543	-0.7951	9.8839
Political Stability	-0.0147	0.0143	-1.0317	0.3022	-0.0427	0.0132	-0.0617	0.0322
Gini Index	0.011	0.0067	1.631	0.103	-0.0044	0.0264	-0.0149	0.037
Female Force Participation Rate	-0.011	0.0051	-2.1584	0.0309	-0.021	-0.001	-0.0278	0.0058
The quality of public education system rating (1-10 scale)	-0.1196	0.1036	-1.1544	0.2483	-0.3227	0.0835	-0.4673	0.2281
sc×GDP PC	0	0	-3.257	0.0011	0	0		
sc×FDI	-0.233	0.1068	-2.1824	0.029	-0.4423	-0.0236		

Source: Authors' compilation.

B. Ukraine

Foreign direct investments, GDP per capita, social contributions, with p values 0.02, 0.01 and 0.03 respectively show that they have a positive significant relationship with the exchange rate volatilities of a country since the p value is less than 0.05 (Table 07).

The other terms unemployment rate, human capital index, political stability, Gini index, labor force participation rate and CPIA property rights with p values 0.2, 0.9, 0.4, 0.8, 0.9 and 0.6 respectively show that there is a negative significant relationship between these terms and exchange rate volatility since their p value is greater than 0.05 (Table 02). The interactive terms social contributions *GDP Per Capita growth and social contributions *Foreign Direct Investments shows that there is a positive relationship with exchange rate volatilities since the p values are 0.022 and 0.029, respectively (Table 02).

In conclusion we can say that social contributions *Foreign Direct Investments, Net Inflow (% of GDP) and social contributions *GDP Per Capita growth (Annual %) can be moderated for Ukraine (Table 2).

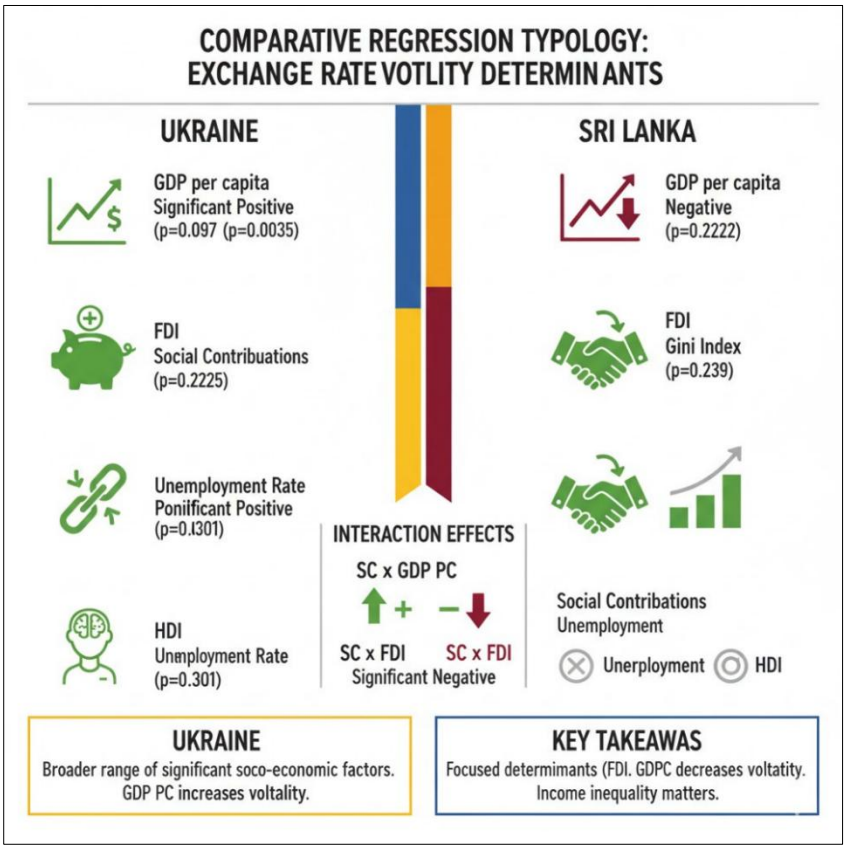
Table 2. Regression 02

Variable	Coefficients	Standard Error	t-Stat	P-value	Lower 95%	Upper 95%
Intercept	-723.4433	962.6701	-0.7515	0.4648	-2,788.17	1,341.28
GDP Per Capita (Annual %)	-39.076	14.2926	-2.734	0.0161	-69.7306	-8.4213
Foreign Direct Investments, Net Inflow (% of GDP)	85.8987	33.4203	2.5703	0.0222	14.2193	157.5781
Social Contributions	4.8882	2.7465	1.7798	0.0968	-1.0025	10.7789
Unemployment Rate	5.8365	5.3801	1.0848	0.2963	-5.7026	17.3756
Labour force Participation Rate	0.2465	14.6251	0.0169	0.9868	-31.1212	31.6141
HDI	466.8822	624.2636	0.7479	0.4668	-872.08	1,805.79
Political stability	4.4291	19.5625	0.2264	0.8242	-37.5282	46.3865
Gini index	6.2878	3.1054	2.0248	0.0239	-0.3725	12.9481
CPIA property rights and rule-based governance index	-4.2335	9.3573	-0.4524	0.6579	-24.3029	15.836
SC*GDP Per Capita growth (Annual %)	1.025	0.4013	2.5543	0.0229	0.1643	1.8858
SC*Foreign Direct investments, Net Inflow (% of GDP)	-2.384	0.9814	-2.4292	0.0292	-4.4888	-0.2791

Source: Authors' compilation.

The Figure 4 infographic, titled "Comparative Regression Typology: Exchange Rate Volatility Determinants," visually contrasts the statistically significant factors influencing exchange rate volatility in Ukraine and Sri Lanka. The key finding is the divergent impact of GDP per capita: it is significantly positive (increases volatility) in Ukraine, but significantly negative (decreases volatility) in Sri Lanka. Ukraine's model shows a broader range of significant socio-economic factors, including FDI, Social Contributions, Unemployment Rate, and HDI, whereas Sri Lanka's significant determinants are more focused on FDI and the Gini Index (income inequality). The central vertical bar highlights the consistency of interaction effects across both countries: Social Contributions significantly amplify the volatility effect of GDP per capita while significantly attenuating the effect of FDI.

Figure 4: Comparative Regression Typology: Exchange Rate Volatility Determinants



Source: Umar, M., & Sun, G. (2015).

VI. CONCLUSION

The focus of this research project will be exchanging rates that are impacted by the economies of Sri Lanka and Ukraine. The research will thoughtfully evaluate all the macroeconomic, institutional, sociocultural, and social factors that will have an influence on Sri Lanka's exchange rate volatility. To determine the similarities and differences between the nations in terms of the factors affecting exchange rate volatility in Sri Lanka, the authors also evaluated the influence of the moderating variable with each independent variable of Ukraine. The study will investigate Sri Lanka's exchange rate and the variables influencing its volatility using secondary data from the years 1997 to 2022.

To fully comprehend how these factors connect to the exchange rate, this research does a complete analysis using interest rates, capital inflows, and terms of trade as the main exchange rate drivers. The impact of capital inflows on the exchange rate is the main topic of this paper. The proposed empirical study would have a deductive nature and test well-known hypotheses using Sri Lanka-specific data. Secondary data from the Central Bank of Sri Lanka, National Bank of Ukraine, IMF, and World Bank will be used for the empirical study. The relationship between the dependent and independent variables of Sri

Lanka's exchange rate volatility is therefore moderated by the authors' use of the moderator variable of social contributions, a social factor.

The most significant components that have an impact on a country's exchange rate volatility are macroeconomic and social factors. The most important proxy variables under these criteria are GDP per capita, unemployment rate, and social contributions. Foreign Direct Investments will become a significant proxy variable under the social variables when Social Contributions, the moderating variable, moderates it. The comparative analysis showed that Sri Lanka has the highest exchange rate volatility when compared to Ukraine because the variation of a dependent variable to the independent variables in the regression model gets a high value (Appendix 06: Table 11). Therefore, in the context of Sri Lanka, the variables that have the most effect on the country's exchange rate volatility are the GDP per capita, foreign direct investments, unemployment rate, and human capital index (Appendix 06: Table 11). Therefore, it is evident that sociocultural and macroeconomic factors have the biggest effects on the exchange rate volatility in Sri Lanka. Regression research shows that institutional elements, such as political stability, the lack of violence, and index variables for rule-based governance, have no discernible impact on Sri Lanka's exchange rate volatility. To preserve a positive connection with its exchange rate volatility, Sri Lanka as a nation should concentrate more on improving its institutional evidence in support.

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VIII. APPENDIX 01

Country - Sri Lanka

Year	Dependent Variable(DV)		Independent Variables(IV)								Moderating Variable(MV)	Interactive Terms	
	USD - Sri Lankan Rupees		Macroeconomic Factors			Sociocultural Factors		Institutional Factors			Social Factors		
	Annual Average Exchange Rate	ERV Lag	GDP per capita, PPP (US $)	Foreign Direct Investments,Net Inflow (% of GDP)	Unemployment, total (% of total labor force) (national estimate)	Labour force Participation Rate,total (% of total population ages 15+)	Human capital index (HCI) (scale 0-1)	Gini index	CPIA property rights and rule-based governance index	Political stability and absence of violence/terrorism (index)	Social contributions (% of revenue)	SC*GDP per capita, PPP (US $)	SC*Foreign Direct Investments,Net Inflow (% of GDP)
1997	57.69	0.0746	3.10	0.86	11.35	55.40	0.672	34.7	0.6	1.77538	0.80	2.477931	0.690108
1998	62.25	0.0790	5.81	2.85	10.60	55.24	0.678	32.6	0.6	1.27538	1.04	6.064776	2.97528
1999	68.83	0.1056	4.17	1.22	9.17	58.82	0.683	35.7	0.6	1.47962	1.56	6.494266	1.907155
2000	73.15	0.0628	3.75	1.13	8.88	57.31	0.691	37.4	0.6	1.67962	1.76	6.587546	1.979914
2001	89.5	0.2235	5.35	1.06	7.74	55.57	0.688	34.7	1.8	1.90479	1.67	8.958004	1.771595
2002	93.45	0.0441	2.24	1.09	7.90	55.34	0.69	34.3	1.8	1.50479	1.11	2.49648	1.213666
2003	96.8	0.0358	3.14	1.19	8.76	55.12	0.694	40.2	1.8	0.777436	0.99	3.095451	1.170485
2004	97.28	0.0050	5.05	1.21	8.22	54.89	0.699	37.1	1.8	0.833546	1.07	5.396131	1.294368
2005	99.05	0.0182	4.56	1.13	8.38	54.66	0.683	39.2	1.8	1.01155	1.08	4.9047	1.212408
2006	102.12	0.0310	5.38	1.12	7.67	54.43	0.71	38.4	2	1.15486	1.19	6.411348	1.329153
2007	108.58	0.0633	6.84	1.70	6.50	54.20	0.714	39.7	2	1.4218	1.28	8.734399	2.165137
2008	107.84	-0.0068	6.01	1.86	5.97	53.98	0.719	33.7	2	1.74826	1.48	8.866247	2.749531
2009	113.92	0.0564	5.20	1.85	5.22	53.75	0.721	36.7	2	1.79686	0.99	5.141674	1.827666
2010	114.65	0.0064	2.82	0.96	5.85	53.52	0.713	36.1	2	1.34219	1.54	4.341008	1.477848
2011	110.85	-0.0331	7.28	0.81	4.78	53.29	0.737	34.2	2	0.942947	1.33	9.703275	1.085681
2012	113.85	0.0271	7.94	1.41	4.12	52.87	0.744	32.6	2	0.724771	1.33	10.55651	1.875599
2013	126.2	0.1085	8.49	1.34	3.88	52.57	0.751	38.7	1.9	0.717079	1.10	9.343762	1.470048
2014	130.7	0.0357	3.24	1.21	4.24	53.62	0.756	38.5	1.9	0.612895	1.31	4.258617	1.590384
2015	132.15	0.0111	5.39	1.08	4.19	53.11	0.76	32.5	1.9	0.330464	1.26	6.774199	1.360921
2016	143.81	0.0882	3.25	0.80	4.52	53.67	0.764	34.7	1.9	0.090368	1.04	3.38661	0.831352
2017	149.95	0.0427	3.90	1.02	4.24	53.73	0.767	39.3	1.2	0.00403	1.07	4.155897	1.086335
2018	153.9	0.0263	5.26	1.45	4.05	53.99	0.771	33.2	1.2	0.07119	1.25	6.564784	1.813874
2019	178.15	0.1576	1.24	1.71	4.32	51.72	0.776	32.3	1.2	0.183164	1.30	1.621951	2.228703
2020	181.35	0.0180	0.83	0.84	4.67	52.25	0.778	34.4	2.1	0.224771	1.53	1.26567	1.274937
2021	190.5	0.0505	3.98	0.51	5.20	51.47	0.78	38.2	2.1	0.317079	2.36	9.40223	1.199955
2022	290.5	0.5249	2.22	0.67	5.24	51.88	0.782	39.3	2.1	0.512895	2.56	5.687015	1.720121

VIII. APPENDIX 02

Country - Ukraine													
Year	Dependent Variable		Independent Variables								Moderating Variable	Interactive Terms	
	USD - Ukraine Hryvnia		Macroeconomic Factors			Sociocultural Factors			Institutional Factors		Social factors		
	erage Exch	ERV-Lag	r capita, PP	vestments,Net In	of total labor fo	Gini index	te,total (%	al index (H	ence of vi	nd rule-ba	contributions (% of re	er capita,	estments,N
1997	1.87	60.58	-9.20	1.17	7.65	37.2	58.13	0.685	-0.15246	9.679626	36.76	-338.117	42.98202
1998	1.93	-0.49	-2.11	1.24	8.93	35.2	57.90	0.689	-0.25246	8.430423	34.86	-73.6225	43.3053
1999	3.95	3.27	-1.02	1.77	11.32	35.2	57.67	0.696	-0.11984	8.43275	37.88	-38.6167	67.19833
2000	5.55	104.24	0.75	1.57	11.86	39.3	57.44	0.698	-0.31984	8.622659	38.27	28.51947	60.10124
2001	5.43	40.38	6.97	1.84	11.71	38.3	57.21	0.7	-0.41023	9.046224	30.41	212.0312	55.89665
2002	5.36	-2.08	9.95	2.01	11.06	39.3	56.97	0.715	-0.31023	10.02858	34.45	342.718	69.40098
2003	5.34	-1.34	6.34	1.58	10.14	29	56.74	0.722	-0.29723	8.953725	36.21	229.73	57.08391
2004	5.34	-0.37	10.41	2.74	9.06	28.7	56.51	0.732	-0.36328	8.492625	36.26	377.3885	99.26784
2005	5.31	-0.01	12.65	2.55	8.59	28.9	56.28	0.74	-0.47192	7.384976	37.88	479.0433	96.64173
2006	5.06	-0.51	3.83	8.75	7.18	29	56.04	0.743	-0.28603	6.461825	35.40	135.5763	309.7756
2007	5.06	-4.70	8.30	5.01	6.81	29.8	55.81	0.751	-0.03583	6.346632	35.43	294.0925	177.4491
2008	5.06	-0.09	8.86	6.85	6.35	27	56.24	0.757	0.173132	5.706725	37.12	328.9849	254.3628
2009	7.69	0.14	2.80	5.69	6.36	26.6	56.25	0.761	0.042411	5.342437	33.84	94.70321	192.4804
2010	8.05	51.82	-14.76	3.92	8.84	25.3	56.25	0.758	-0.30188	4.872643	35.57	-524.99	139.5588
2011	7.95	4.75	4.51	4.57	8.10	24.8	56.26	0.764	0.013132	4.341362	36.06	162.5034	164.7403
2012	8.03	-1.24	5.83	4.26	7.85	24.6	56.27	0.769	-0.07043	5.424371	33.55	195.4396	142.7968
2013	8.14	0.94	0.40	4.48	7.53	24.7	56.27	0.773	-0.09227	5.139284	34.40	13.75934	154.0193
2014	8.61	1.46	0.27	2.37	7.17	24.6	56.28	0.773	-0.77729	5.392837	36.02	9.850846	85.25316
2015	16.16	5.75	-4.88	0.63	9.27	24	56.29	0.773	-2.02083	6.306592	30.01	-146.284	19.03673
2016	25.6	87.66	-9.44	-0.22	9.14	25.5	56.29	0.774	-1.9618	6.065917	26.54	-250.676	-5.77352
2017	27.07	58.44	2.85	4.42	9.35	25	56.30	0.779	-1.85648	6.591685	18.12	51.72129	80.11074
2018	27.77	5.74	2.81	3.28	9.50	26	56.31	0.782	-1.87023	6.837306	18.94	53.22562	62.17182
2019	27.60	2.59	4.02	3.80	8.80	26.1	56.31	0.783	-1.82618	6.183731	20.23	81.24764	76.88806
2020	25.01	-0.60	3.79	3.77	8.19	26.6	56.32	0.786	-1.97043	6.373057	21.84	82.84788	82.25333
2021	28.1	-9.41	-3.10	0.19	9.48	25.6	55.09	0.775	-1.52275	5.283719	21.80	-67.6307	4.232359
2022	32.64	12.38	4.32	3.98	9.83	25.6	54.64	0.773	-1.77729	5.009284	22.65	97.81308	90.04054