

Regional Financing Arrangements and Currency Swaps: Impact on Investors' Confidence

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Abstract

This paper examines the impact of regional financing arrangements and swap arrangements on investors' confidence for different countries. Using difference-in-differences methodology and event study, we aim to analyze agreement announcement date and the reaction from investors on bond spread data from Global Financial Database. Our results show that investors react positively to signing RFA for a middle income country. Additionally, signing a RFA has a stronger impact on bond spread than signing a swap agreement. Finally, our results indicate that having a swap on top of a RFA does not necessarily lead to a fall in investors' perception of default risk. These findings contribute to the ongoing debate about the necessity of Global Financial Safety Net and its effectiveness to enhance macroeconomic stability.

Keywords: GFSN, RFA, Swap, Bond Spread, Global Finance

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1 Introduction

The importance of the Global Financial Safety Net(GFSN) was realized after the Asian Financial Crisis(AFC), a massive recession after decades of economic growth, in 1997. Prior to the crisis, South Korea saw the “Miracle of Han River” where its GDP grew by 8.2% for the three decades. However, it changed after foreign investors pulled investments overnight ¹. It led to sharp depreciation in Korean Won against US Dollar, making existing USD-denominated loans expensive and creating a “liquidity mismatch” for South Korea. Liquidity mismatch can be defined as the lack of foreign reserve currency to support the interest payments to investors. The crisis had a significant impact on the South Korean economy. Big companies defaulted on their loans costing nearly \$100 billion which accounted for 20% of the Korean economy in 1997. In response to the AFC, Asian countries created a Global Financial Safety Net (GFSN) tool called Regional Financing Arrangements (RFAs) to prevent future financial crises.

Today, the US Dollar ² serves as the leading reserve currency with 58% of foreign reserves being denominated in dollars; and 70% of international loans and bonds are denominated in dollars. The importance of the US Dollar creates the need for tools that mitigate the crisis related to the shortage of dollars. GFSN are such tools. They prevent crises like the AFC or Latin American Debt Crisis by helping countries to repay their existing debt payments. They provide an immediate dollar-denominated loan to mitigate liquidity mismatch and manage default risk of a country. With their significant influence to global financial markets and countries’ economies, many scholars have examined the impact of GFSN from various angles (Kilp et al., (2018), Maurini (2017), Kring & Grimes(2019). The impact of GFSN on crisis prevention motivated us to investigate whether signing a GFSN tool leads to increasing investors’ confidence in a country. Finally, we answer the main question in this paper: “How does signing Regional Financing Agreements(RFA) and Bilateral Currency Swaps affect bond spread of a country?” Bond spread against the US treasury bond is considered as the risk premium which investors are willing to pay. This paper uses difference-in-differences methods to examine the changes in bond spread of the country having a GFSN tool. Our results are inconclusive as for some countries bond spread narrow, but for others widen or stay consistent.

The paper proceeds as follows. The next section introduces contextual terminologies for the paper. Section III discusses previous literature related to GFSN

¹https://www.hofstra.edu/pdf/biz_mlc_ee1.pdf

²<https://data.worldbank.org/indicator/PV.EST?skipRedirection=true&view=map>

and the determinants of bond spread. Section IV explains the data employed for this study. Section V introduces the methodology for estimating the impact of GFSN. Section VI explains interpretation to the regression results. Section VII discusses future exploration. Last section concludes the paper.

2 Terminology

In response to the Asian Financial Crisis and Global Financial Crisis, multiple countries adopted alternative GFSN tools which act as a measure of “self-insurance” against liquidity crises. Among other GFSN tools, we underscore RFA and Swap for the paper.

2.1 RFA

Regional Financing Arrangements(RFAs)³ are agreements where a group of countries, belonging to the same region, mutually pledge to support other member countries who are experiencing liquidity mismatch. RFAs have funding structures like the IMF. For example, the Latin American Reserve Fund(FLAR) and Arab Monetary Fund(AMF), where member countries are required to contribute certain paid-in capital every year.

2.2 Swap

Currency swap lines⁴ are another set of tools aimed to mitigate liquidity mismatch. They are IOUs swapped between central banks of countries who pledge to give instant loans if need be. Dollar swap lines are usually issued by the Federal Reserve. However, in recent years, countries with excess dollar reserves have also issued dollar swap lines to other countries such as the swap line between People’s Bank of China’s dollar and Pakistan.

3 Literature review

The study of the bond risk premium and Global Financial Safety Net (GFSN) has a rich history with historical policy changes and financial crises. Many scholars

³<https://www.esm.europa.eu/about-us/what-we-do/regional-financing-arrangements-rfa>

⁴<https://www.federalreserve.gov/monetarypolicy/bst/liquidityswaps.htm>

studied the determinants of government bond spread from both emerging and economically stable countries (**Dumicic et al., (2011)**, **Ebner et al., (2009)**, **Eichengreen et al., (1998)**, **Ferrucci et al., (2003)**).

Min (1998) analyzed the determinant of the pricing and yield spreads of new emerging market bond issues. They identified several explanatory variables for the cross-country differences in bond spreads; they concluded that two main variables liquidity & solvency and macroeconomic fundamentals are the main determinants of government bond spread in emerging countries. **Csonto & Ivaschenko (2013)** analyzed the relationship between global and country-specific factors and emerging market debt spreads. They found that global factors are main determinants of spreads in the short-run. Moreover, countries with stronger fundamentals tend to have lower sensitivity to changes in global risk aversion. Similarly, **Bellas et al., (2010)** studied the determinants of emerging market sovereign bond spreads by examining the short and long-run effects of fundamental (macroeconomic) and temporary (financial market) factors on these spreads. Their result showed that in the short run, financial volatility is a more important determinant of spreads than fundamentals indicators.

While many scholars examined the relationship between government bond spread and countries' economic/finance situation, a few scholars focused on the impact of Global Finance Safety Net (GFSN) on countries' bond spread. **Kilp et al., (2018)** analyzed the impact of different layers of the GFSN on emerging market bond spreads. They investigated whether countries' diverse access to the various layers of the GFSN – in terms of volume and overall availability – has had an influence on the perceived riskiness of the country. Their result showed that the impact of different GFSN on bond spread varies. **Maurini (2017)** empirically examined the effectiveness of the IMF on emerging market countries' sovereign spreads with panel regression. They concluded that the most important determinant of the bond spread appeared to be the overall resources available for lending by the IMF rather than the channels through which such resources can be accessed by members. However, Maurini only focused on the impact of the IMF, which is a part of GFSN on bond spread, but not RFA or SWAP. **Kring & Grimes (2019)** introduced the impact of RFAs on the global liquidity regime focusing on the systemic effects of the institutional design of RFAs. The paper focused on the relationship between the IMF and RFA. **González Rozada et al., (2006)** showed how the evolution of global factors, global liquidity and contagion could explain variability of emerging market bond spread.

Our original contribution is to assess the impact of RFA and bilateral SWAP on bond spread, risk premium.

4 Data description

We collect various countries' government bond data from the "Global Financial Data" library. They provide global historical bond yields data for various types of bonds. We use bond spread against the US treasury bonds as the measure of investors confidence. We assume the US government bond is a risk-free investment. The US and New Zealand currently have the same interest rate, and both countries are high-income economies with similar economic indicators. However, the bond spread between two countries is 0.3%, and this spread is considered as the risk premium.

We identify countries' membership of RFA/Swap based on the information from Global Financial Safety Net. The website provides information illustrating which countries are part of the RFA and Swap agreement. They also have the data for the countries' total available amount of RFA/Swap. While we collect rich data from these sources, we select only a few countries and the bond types to correspond to our research. We consider two main factors for our selection. First, both countries must have enough historical bond yield data to conduct difference-in-differences. They must include the time period of signing the agreement. Second, the countries must have similar economic circumstances such as their income level, geological area and political stability. We illustrate this information in Table 2 in Appendix. The list of countries allows us to compare multiple aspects. Some countries are part of RFA, but not Swap. By independently estimating two sets of country pairs with different GFSN tools, we compare the different effectiveness of both Swaps and RFA on bond spread. Moreover, we pair countries with similar income levels. We estimate the impact of GFSN on bond spread within emerging countries and economically developed countries. This estimation method compares the impact of GFSN on bond spread in different income levels. Table 2 illustrates all countries and types of bonds that we finally utilize for the research. We employ both short-term and long-term maturity bonds because the long-term and short-term government bond yields react differently for financial events. It further shows whether the RFA/Swap agreements have a corresponding impact on bonds with different maturity dates. To further reduce selection bias, we use countries who have currency swap agreements with the People's Bank of China.

We address other confounders which can affect the bond spread. As we employ difference in differences methods throughout the year, we compare trends for confounders which may potentially affect the bond spread. For this analysis, we collect political stability data from World Bank Open data. The data is calculated

annually after 1994, and we did not have access to Norway and Sweden data. Therefore, we do not include the political stability trend of Norway and Sweden for this research. In addition, we identify exchange rate data as another confounder, and this data was collected from Global Financial Data. The signing and announcement data were collected manually from earliest reporting of newspaper articles from proquest and nexus uni.

5 Methodology/Regression Model

We utilize difference in differences as a main methodology. It analyzes the causal relationship between dependent and independent variables by estimating the treatment effect. As we discussed in the previous section, it is important to address any significant non parallel economic changes to use difference in differences methods. Therefore, we use two elements, the political stability and exchange rate, to address any historical economic impact around the RFA/Swap announcement date.

Graph confirms no significant jumps for both countries around the time period before and after the treatment. It shows consistent political stability, therefore having minimal impact on bond spread. The exchange rate is another confounder which affects bond spread. From Graph, we do not observe any significant changes for countries before and after the announcement date. Thus, it confirms that exchange rate has minimal to no impact on bond spread.

The specification we estimate is

$$\text{Bondspread}_{it} = \beta_1 \text{RFA}_i + \beta_2 \text{POST}_t + \beta_3 \text{RFA} * \text{POST}_{it} + \eta_i + \gamma_t + \epsilon_{it} \quad (1)$$

Bond Spread is the difference in the bond yield between the estimated country i and the USA. RFA is a dummy variable indicating whether the country i is a part of RFA or Swap. It is 1 if the country is a part of RFA/Swap, and 0 otherwise. POST is another time dummy variable indicating the time period after the country signed up for the agreement. It is 1 if the time is after the agreement, and 0 otherwise. Third variable RFA * POST is our interest variable. This is the interaction term between the previous two dummy variables. The coefficient 3 estimates the treatment effect of RFA/Swap on Bond Spread. Variables i , t are the time and country fixed effects. We run both regress with and without fixed effects. We include all results, and they are shown in the Results/Regression Analysis section. In addition to the simple difference in differences, we also utilize event study estimation. This method is useful for our analysis because the changes in

the global financial market often reflect different timings. This approach clearly illustrates the impact of signing the agreement on bond spread by each time period. For our research, we use weekly time dummy variables. The coefficient of interaction, t , estimates the impact of RFA/Swap on bond spread for each period.

$$\text{Bondspread}_{it} = \sum_{t \neq \text{ref}} \beta_t \text{RFA}_i * 1(\text{week} = t) + \eta_i + \epsilon_{it} \quad (2)$$

The specification of the model is similar to (1). The only difference is the interaction term with different time periods and inclusion of multiple time dummy variables.

6 Results/Regression Analysis

This section discusses the results from regression. Table 3,4,6 & 7 presents results from estimating Equation(2). Table 3 & 4 shows the results of the event study regression evaluating impact of RFA/Swap on long-term maturity bonds, 10 years. Table 6 & 7 shows the event study regression of short-term maturity bonds. Additionally, Table 5 & 8 presents the results of the simple difference-in-differences model, Equation(1). It estimates overall effects of a RFA/Swap after a certain time point for different countries. The section **6.1 RFA** explains the effect of RFA on bond spread, and section **6.2 Swap** discusses the effect of Swap on bond spread.

6.1 RFA:

Figure 1 shows that bond spreads for Pakistan and Turkiye, with Pakistan having the RFA, declined significantly after joining the RFA suggesting a positive reaction from institutional investors. The decline is consistent in both 10-year and 3-month bonds. The decrease visible in the event study plot is also confirmed from Table 4 & 7 column 1. The coefficient associated in Table 7 shows a statistically significant decline of 0.207% in bond spread for 3-month short term bond from the time when it was signed to a week after it was signed, holding all else constant and compared to the reference week (2 weeks before it was signed). The trend was lower and continued till week 3 with week -2 as a reference week. However, we do not observe a similar trend from 10-year long-term bonds. Figure 1a illustrates that the decline in bond spread is temporary to week 1 as it increased after week 2. The numerical interpretation can be inferred from Table 4 column 1 where bond spread declined by statistically significant 0.93 percentage from week 0 to week 1, holding all else constant and week -2 as reference week. However, the spread

widened after the initial decline in week 1.

To confirm the consistent results from other countries, we repeat Equation (2) for Sweden and Norway. As inferred from Figure 4, the results of the event study with Sweden and Norway are different from the results for Pakistan and Turkiye. 3-month bond spread for Sweden increased slightly after the RFA was signed while 10-year bond spread showed negligible effect with week -2 as the reference week. The trend is confirmed with the numbers in Table 4 & 7 column 2. The bond spread increased slightly in week 1 holding week -2 as a reference week, but the values are not statistically significant. The interpretation is similar to the 3-month bond as the values are not statistically significant.

However, the results from the total difference-in-difference regression model in Table 5 & 8 show an overall increase of 0.382% spread in 3-month bonds and an increase of 0.857% in 10-year bonds for Pakistan during a period of 5 months before and after the treatment. Similarly, for Sweden, the results from the same regression model show an increase of 0.606% in 3-month bonds spread and a decrease of 0.664% in 10-year bonds spread during a period of 1 year before and after the treatment.

6.2 Swap:

As visible in Figure 2a, the spread for Nigeria's 3-months bond has widened after the signing the swap agreement. Table 6 provides the regression results for Figure 2a. The values in Table 6 for week 1 and 2 are statistically significant and positive, suggesting a negative reaction from investors and increase in bond spread with week -2 as the reference week after the swap was signed. In addition, Figure 2b shows the impact of swap on Nigeria's 10-year bond-spread. In this case, it shows a corresponding trend as short-term bonds. It widened slightly and stayed higher than week 0 for all weeks after the treatment. Table 3 suggests a statistically insignificant increase in bond spread by 0.184%, with week -2 as a reference.

For Vietnam and Thailand, Figure 3a illustrates that the spread for the 1-year bond increased slightly in week 1 after the signing the Swap. Column 2 in Table 4 shows the magnitude of this change. The spread increases in week 1 by 0.013%, and it is moderately significant. Then it decreases by 0.021% between week 1 and 2. Similar to the case of Nigeria and Kenya, the trends are comparable in 10-year bond. As shown in Figure 3b, the bond spread increased only for the first week after it signed then reduced after week 1. The regression results in the second column of Table 3 show a moderately significant increase in bond spread in week 1 and a non-significant decrease in spread for the following weeks.

However, the results from total difference-in-differences regression (Table 5 & 8) show an overall increase of 1.706% in 3-month bonds spread and an increase of 1.218% in 10-year bonds spread for the treatment country, Thailand, during a period of 5 months before and after the treatment. Similarly, the results from the same regression model show an increase of 0.382% in 3-month bonds spread and a decrease of 4.912% in 10-year bonds spread for the treatment country, Nigeria, during a period of 1 year before and after the treatment.

7 Discussion

Based on the results, we provide the following interpretations. First, investors have a stronger positive response when a middle income country signs a RFA than a developed country. It is evidenced by a statistically significant drop in bond spread for Pakistan after signing the RFA. In contrast, we didn't find a significant impact of signing the RFA on bond spreads for Sweden. This can be due to the fact that Sweden and Norway are high income countries with a stable financial sector; therefore, having the RFA may not add substantial benefit for investors' confidence. Secondly, we find that investors' reactions to signing RFA/Swap vary depending on bond maturities. This can be due to higher volatility of long-term bonds. Bonds with longer maturities tend to have a higher yield because it accounts for long-run volatility.⁵ Third, signing a Swap does not have a statistically significant impact like signing a RFA. We observed different impacts of signing RFA and Swap to bond spreads from the cases of Nigeria & Kenya and Thailand & Vietnam. This means that investors perceive RFAs as a better tool to mitigate the crisis than a Swap for middle income countries. Fourth, as seen in the case of Thailand and Vietnam, having a swap on top of a RFA does not lead to a statistically significant drop in investors' perception of risk. Thailand and Vietnam were members of the Chiang-Mai initiative before Thailand signed the swap agreement with People's Bank of China. Figure 3 and Table 2 & 4 show that both long-term and short-term bond spreads did not yield a statistically significant result. Fifth, as evidenced from Table 3 & 5, the effect of treatment is different from results achieved in the event study difference-in-difference. This is due to the different time period used. For event study, we look at the effect of treatment on the specific week. In contrast, the entire year of post treatment was taken as a sample for pre-post difference-in-difference. We interpret the results as the effect of announcing the GFSN tool is temporary; thus, it does not lead to a permanent reduction in bond spread.

⁵<https://www.investopedia.com/terms/y/yieldcurve.asp>

Although we show meaningful results from this paper, we suggest that different approaches may further improve the research. This paper uses daily based global bond data. However, financial markets tend to respond more immediately. Therefore, expanding the dataset including intraday response instead of average daily bond data would provide more accurate results. Additionally, this research can be further improved by using alternative methodologies such as synthetic controls or time-invariant regression discontinuity which assess the causal impact. Furthermore, including more countries for comparison can help to generalize the impact of RFA/Swap on bond spread with various characteristics. Finally, another potential suggestion is to estimate the effects of RFA/Swap on other indexes such as JP Morgan's Developing Country Index instead of government bond yield.

8 Conclusions

This paper investigates the impact of signing RFA and Swap on countries' government bond spreads. This estimation implies investors' risk perception on the countries. We use empirical data analysis with the Difference in Differences regression model. In particular, we utilize event study methodology to measure the treatment effect for each week. We run our regression for four different pairs of countries, Sweden & Norway, Pakistan & Turkey, Thailand & Vietnam and Nigeria & Kenya. We observe different impacts from each pair. This separation comparison evidently shows that the treatment effect differs by a few components. Firstly, the treatment effect is less significant for high income countries. Secondly, the treatment effect differs depending on the bonds' maturity date. Thirdly, the impact of RFA is more significant than Swap. Finally, the impact of Swap on the top of RFA is weaker than the impact of one tool alone. Our paper extends to the previous literature related to GFSN and determinants of bond spread. As our results indicate, the impact of financial events on emerging and developing countries differ. This result corresponds with previous literature studies of the global financial market. For this reason, it is vital to investigate the factors that affect emerging countries' economies. Our paper contributes to investigating the impact of important global financial events. We provide a cornerstone to further examine the impact of GFSN on bond spread. Although our research shows statistically significant results, we argue that it can be further enhanced by a larger number of data and different methodologies.

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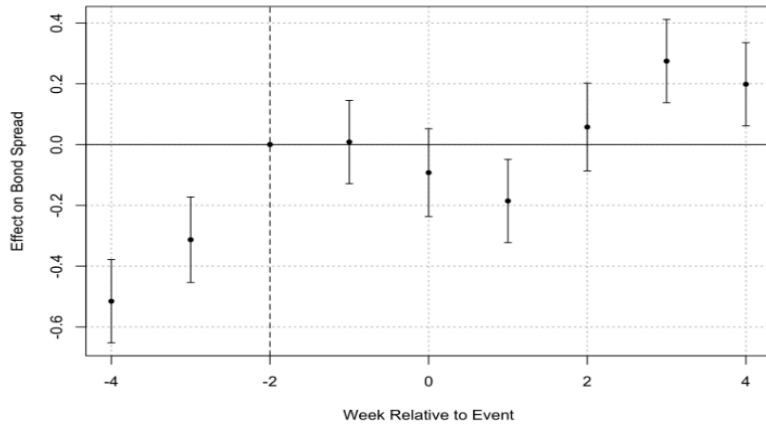
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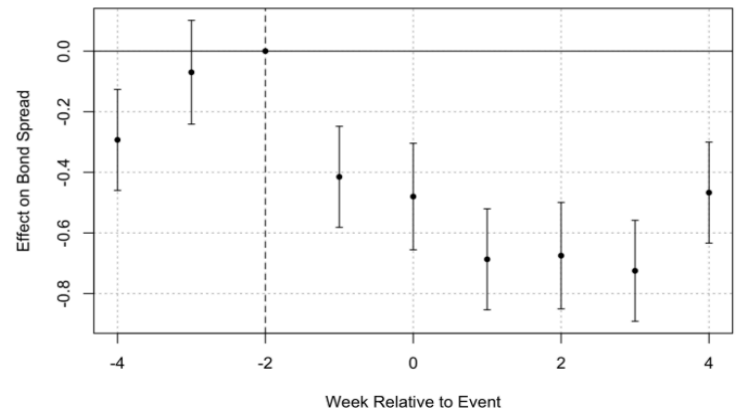
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Appendix:

Impact on 10-year Bond Spread Over Time(Pakistan & Turkiye)

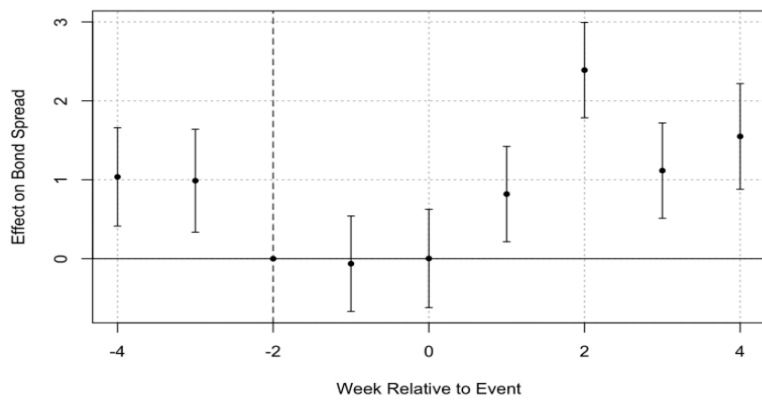


Impact on 3-Month Bond Spread Over Time(Pakistan & Turkiye)

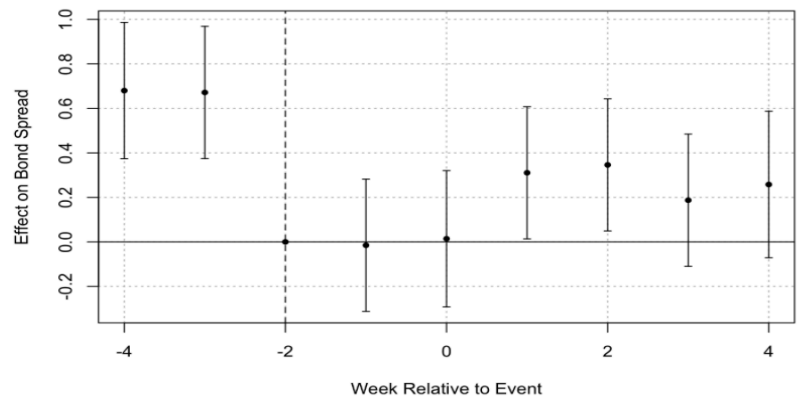


(Figure 1)

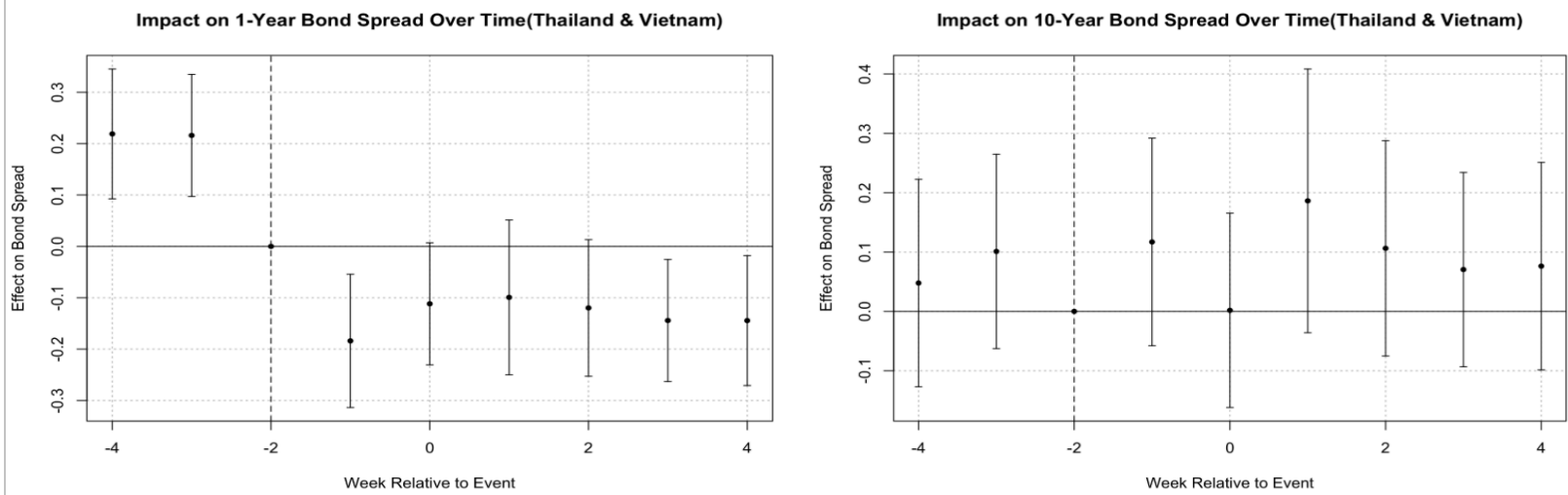
Impact on 3-Month Bond Spread Over Time(Nigeria & Kenya)



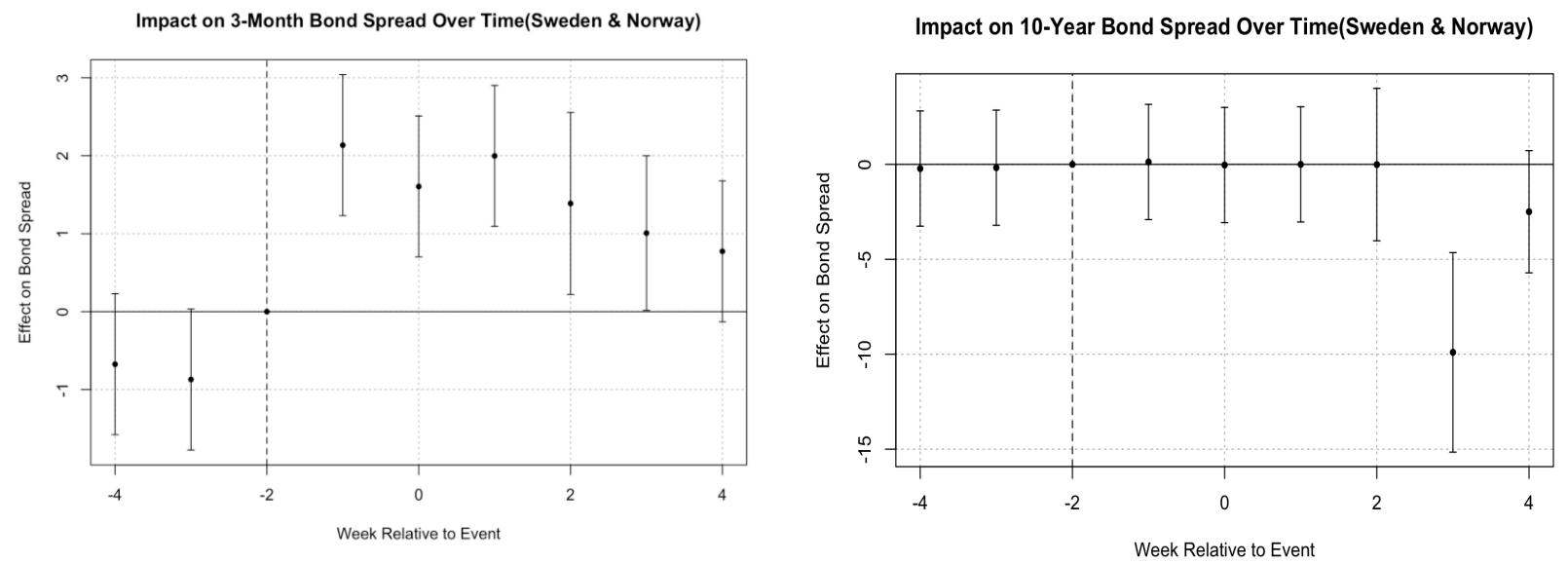
Impact on 10-Year Bond Spread Over Time(Nigeria & Kenya)



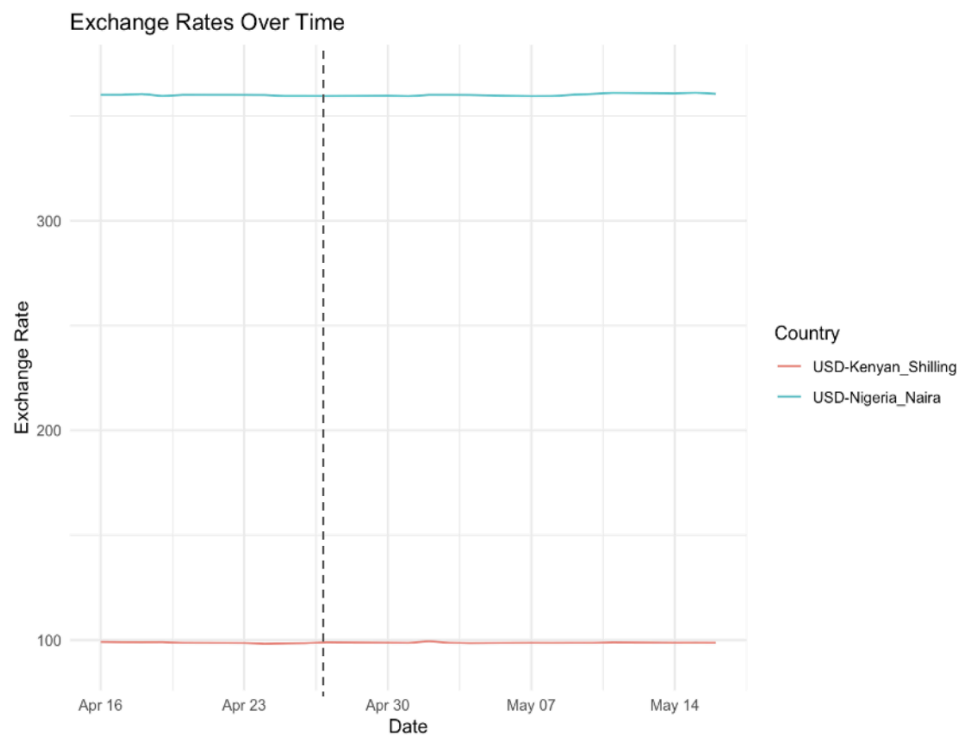
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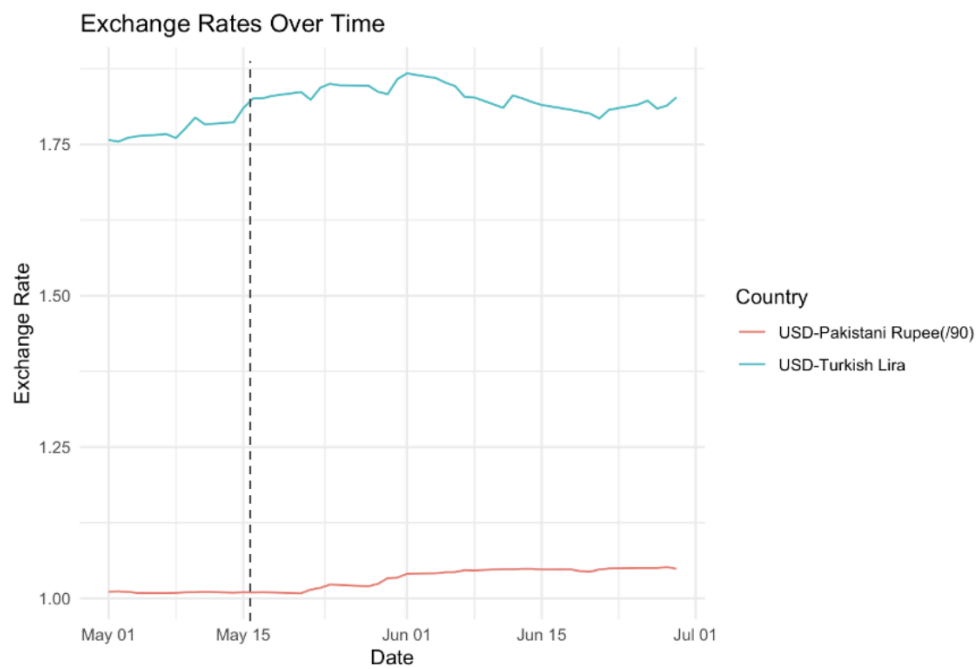
(Figure 3)



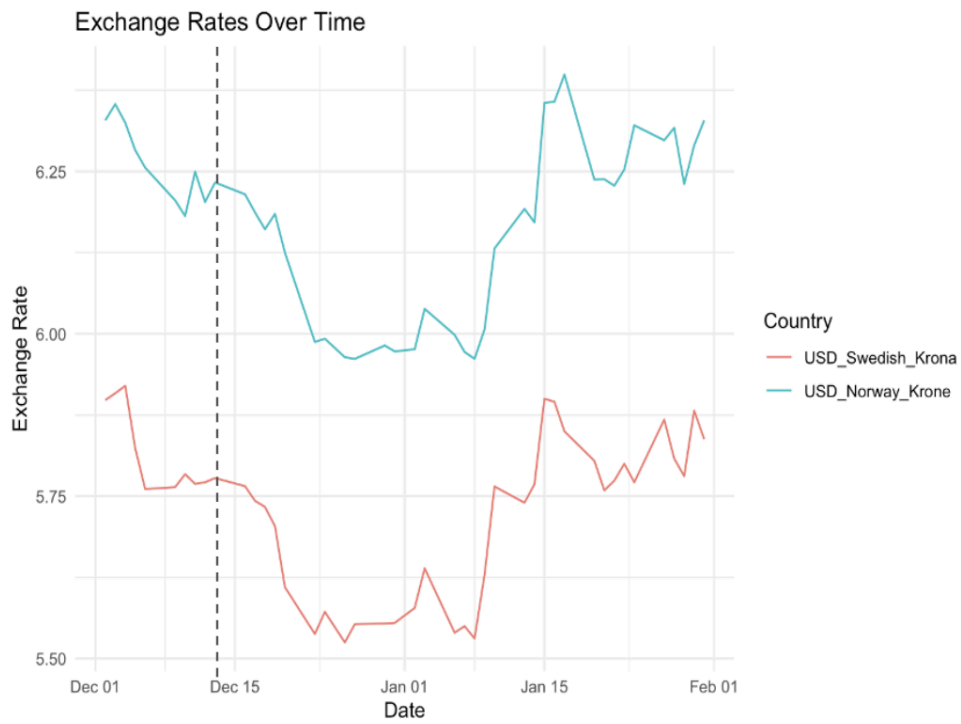
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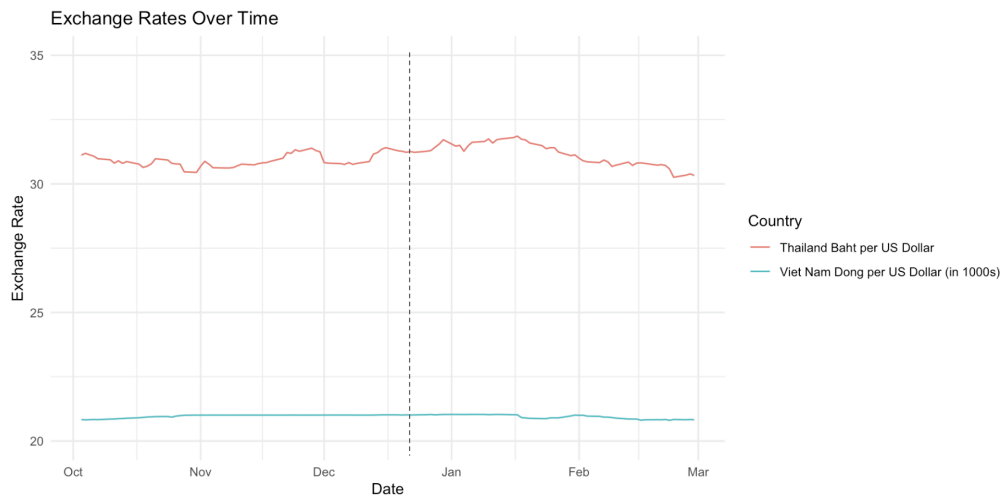
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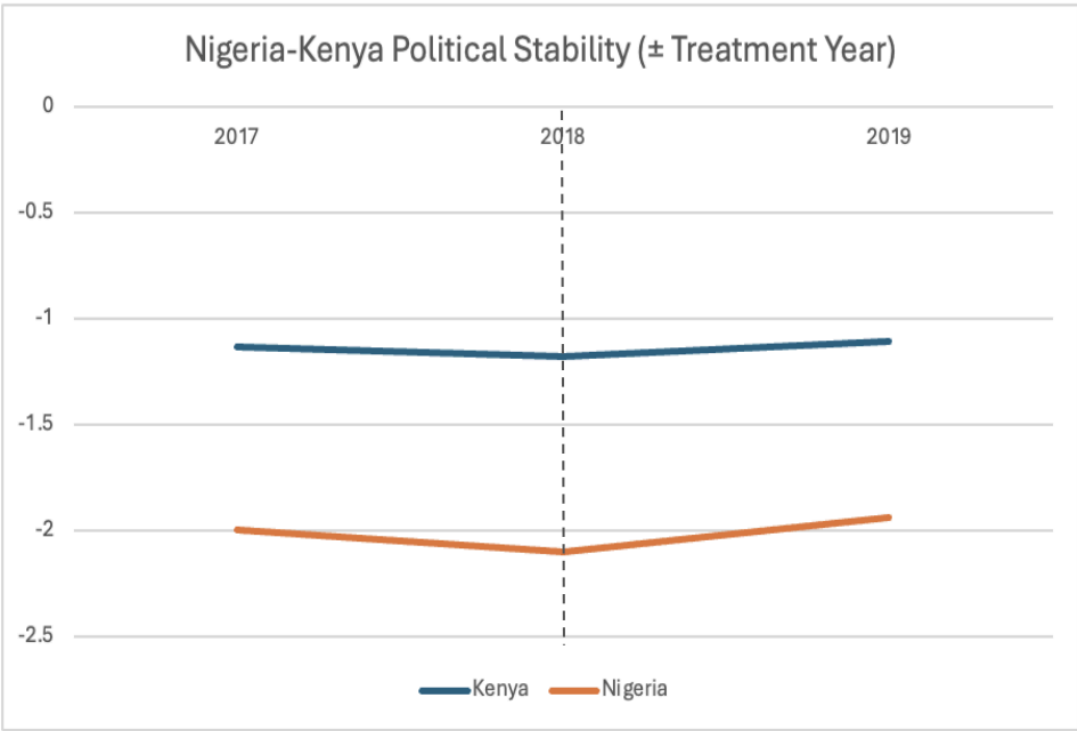
(Figure 6)



(Figure 7)



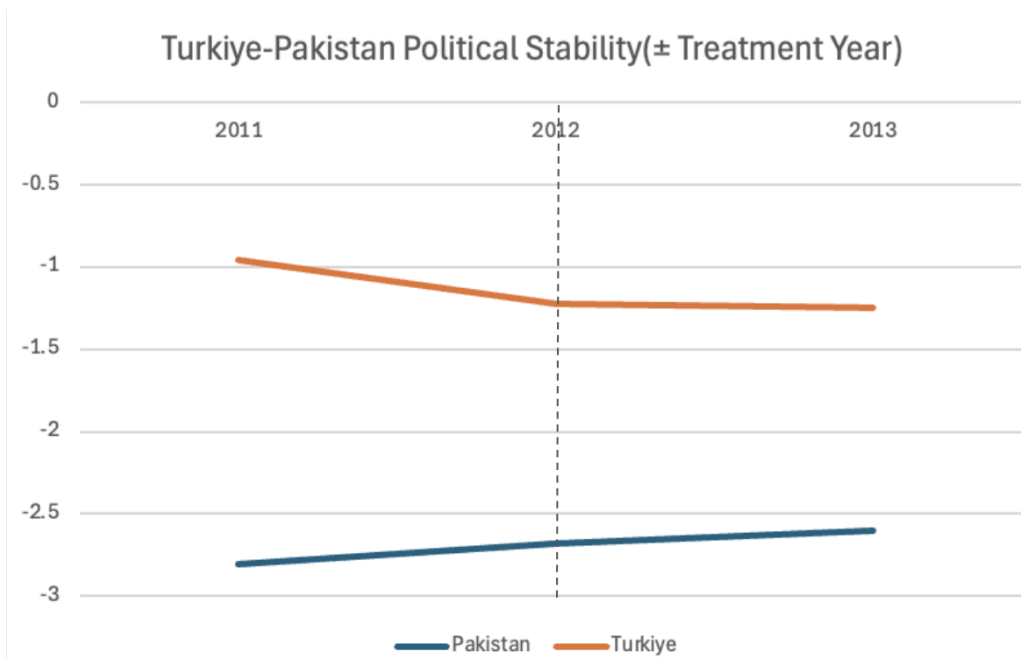
(Figure 8)



(Figure 9)



(Figure 10)



(Figure 11)

Table 1 - Data Availability

Country	Availability of Short-term Bond (maturity of bonds)	Availability of Long-term Bond (maturity of bonds)
Sweden	Yes(3-months)	Yes (10 years)
Norway	Yes (3-months)	Yes (10 years)
Pakistan	Yes (3-months)	Yes (10 years)
Türkiye	Yes (3-months)	Yes (10 years)
Vietnam	Yes (1-year)	Yes (10 years)
Thailand	Yes (1-year)	Yes (10 years)
Kenya	Yes (3-months)	Yes (10 years)
Nigeria	Yes (3-months)	Yes (10 years)

Table 2 - RFA & Swap Announcement Date

Country	Year	Region	Income	RFA sign date	Announcement	Swap sign date	Announcement
Kenya	2022	Sub-Saharan Africa	Middle				
Nigeria	2022	Sub-Saharan Africa	Middle			4/27/18	4/27/18
Thailand	2022	East Asia & Pacific	Middle	7/30/01	5/6/00	5/31/20	12/22/11
Viet Nam	2022	East Asia & Pacific	Middle	7/30/01			
Pakistan	2022	South Asia	Middle	11/15/12	5/16/12	12/23/11	
Norway	2022	Europe & Central Asia	High				
Sweden	2022	Europe & Central Asia	High	6/1/98	12/11/91		
Türkiye	2022	Europe & Central Asia	Middle			1/19/22	

Table 3: long-term bond (Swap)

Dependent variable:		
Bond Spread		
	Kenya & Nigeria	Thailand & Vietnam
RFA	0.041 (0.105)	-9.306*** (0.059)
week_dummy_-4 \times RFA	0.680*** (0.153)	0.048 (0.087)
week_dummy_-3 \times RFA	0.672*** (0.149)	0.101 (0.081)
week_dummy_-2 \times RFA	Reference	Reference
week_dummy_-1 \times RFA	-0.015 (0.149)	0.117 (0.087)
week_dummy_0 \times RFA	0.014 (0.153)	0.002 (0.081)
week_dummy_1 \times RFA	0.311* (0.149)	0.186+ (0.111)
week_dummy_2 \times RFA	0.346* (0.149)	0.106 (0.090)
week_dummy_3 \times RFA	0.187 (0.149)	0.070 (0.081)
week_dummy_4 \times RFA	0.258 (0.165)	0.076 (0.087)
Num.Obs.	85	67
R2	0.764	1.000
R2 Adj.	0.704	1.000
R2 Within Adj.	0.600	1.000
FE: week_dummy_pre_post	X	

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 4: long-term bond(RFA)

	Dependent variable:	
	Bond Spread	
	Pakistan & Turkey	Sweden & Norway
RFA	4.128*** (0.051)	0.068 (1.071)
week_dummy_-4 \times RFA	-0.516*** (0.069)	-0.188 (1.514)
week_dummy_-3 \times RFA	-0.313*** (0.070)	-0.142 (1.514)
week_dummy_-2 \times RFA	Reference	Reference
week_dummy_-1 \times RFA	0.008 (0.069)	0.032 (1.514)
week_dummy_0 \times RFA	-0.093 (0.072)	0.160 (1.514)
week_dummy_1 \times RFA	-0.186** (0.069)	0.032 (1.514)
week_dummy_2 \times RFA	0.057 (0.072)	0.022 (2.003)
week_dummy_3 \times RFA	0.274*** (0.069)	-9.868*** (2.623)
week_dummy_4 \times RFA	0.198** (0.069)	-2.463 (1.606)
Num.Obs.	83	74
R2	0.999	0.441
R2 Adj.	0.999	0.271
R2 Within Adj.	0.999	0.154
FE: week_dummy_pre_post	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 5: Long term bond DID

Dependent variable:				
bond spread				
	Kenya & Nigeria	Pakistan & Turkey	Sweden & Norway	Thailand & Vietnam
RFA/Swap	0.549** (0.070)	3.483*** (0.068)	0.618*** (0.158)	-8.521*** (0.065)
Post	-0.096 (0.064)	-0.533*** (0.063)	0.680*** (0.152)	-0.579*** (0.065)
Treatment Effect	0.382*** (0.092)	0.857*** (0.090)	-0.664*** (0.215)	1.218*** (0.091)
Constant	10.145*** (0.049)	7.590*** (0.048)	2.409*** (0.112)	9.605*** (0.044)
Obs	291	280	1,016	763
R ²	0.522	0.967	0.025	0.976
Adjusted R ²	0.517	0.967	0,022	0.976
Residual Std. Error	0.386 (df = 287)	0.372 (df = 276)	1.712 (df = 1012)	0.625 (df = 759)

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 6: Short-term bond event study (Swap)

Dependent variable:		
Bond Spread		
	Kenya & Nigeria	Thailand & Vietnam
RFA	4.056*** (0.214)	-9.621*** (0.044)
week_dummy_-4 \times RFA	1.037** (0.312)	0.219*** (0.064)
week_dummy_-3 \times RFA	0.989** (0.327)	0.216*** (0.060)
week_dummy_-2 \times RFA	Reference	Reference
week_dummy_-1 \times RFA	-0.063 (0.302)	-0.184** (0.065)
week_dummy_0 \times RFA	0.003 (0.312)	-0.112+ (0.060)
week_dummy_1 \times RFA	0.819** (0.302)	-0.099 (0.076)
week_dummy_2 \times RFA	2.390*** (0.302)	-0.120+ (0.067)
week_dummy_3 \times RFA	1.116*** (0.302)	-0.144* (0.060)
week_dummy_4 \times RFA	1.550*** (0.335)	-0.144* (0.064)
Num.Obs.	83	97
R2	0.986	1.000
R2 Adj.	0.982	1.000
R2 Within Adj.	0.984	1.000
FE:		
week_dummy_pre_post	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 7: Short-term bond event study (RFA)

Dependent variable:		
Bond Spread		
	Pakistan & Turkey	Sweden & Norway
RFA	2.295*** (0.062)	1.412*** (0.337)
week_dummy_-4 × RFA	-0.293*** (0.083)	-0.674 (0.452)
week_dummy_-3 × RFA	-0.070 (0.086)	-0.870+ (0.452)
week_dummy_-2 × RFA	Reference	Reference
week_dummy_-1 × RFA	-0.415*** (0.083)	2.136*** (0.452)
week_dummy_0 × RFA	-0.480*** (0.088)	1.605*** (0.452)
week_dummy_1 × RFA	-0.687*** (0.083)	1.998*** (0.452)
week_dummy_2 × RFA	-0.675*** (0.088)	1.388* (0.583)
week_dummy_3 × RFA	-0.725*** (0.083)	1.008* (0.496)
week_dummy_4 × RFA	-0.467*** (0.083)	0.774+ (0.452)
Num.Obs.	83	79
R2	0.993	0.927
R2 Adj.	0.991	0.907
R2 Within Adj.	0.992	0.881
FE:		
week_dummy_pre_post	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 8: Short term bond DID

	Dependent variable:			
	bond spread			
	Kenya & Nigeria	Pakistan & Turkiye	Sweden & Norway	Thailand & Vietnam
RFA/Swap	0.059 (1.920)	0.549*** (0.070)	1.210*** (0.202)	-8.674*** (0.088)
Post	-6.416*** (1.733)	-0.096 (0.064)	3.233*** (0.194)	-1.934*** (0.072)
Treatment Effect	4.912** (2.494)	0.382*** (0.092)	0.606** (0.275)	1.706*** (0.123)
Constant	12.220*** (1.328)	10.145*** (0.049)	4.582*** (0.143)	11.752*** (0.048)
Obs	287	291	977	1,162
R ²	0.066	0.522	0.447	0.938
Adjusted R ²	0.057	0.517	0.445	0.938
Residual Std. Error	10.375 (df = 283)	0.386 (df = 287)	2.146 (df = 973)	0.988 (df = 1158)

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001