Trade Openness and Exchange Rate Stability: Revisiting the Evidence from Upper-Middle RCEP Economies

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Abstract

A study that re-examines the relationship between how open a country is to international trade and the stability of its currency value within the group of Regional Comprehensive Economic Partnership (RCEP) member states classified as upper-middle-income economies. The phrase *"Trade Openness"* refers to the degree to which these economies engage in exports and imports, while *"Exchange Rate Stability"* points to the consistency and predictability of their currency values in global markets. By using the term *"Revisiting the Evidence,"* the title signals that the paper does not present the first attempt at this topic, but rather offers a fresh analysis with updated data or methods to validate, challenge, or extend earlier findings. In essence, the study aims to provide new insights into whether greater trade openness contributes to or undermines exchange rate stability in these strategically important economies.

Keywords: Trade Openness, Exchange Rate, RCEP Countries, Upper-Middle Income

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Introduction

The Regional Comprehensive Economic Partnership (RCEP) is a free trade agreement (FTA) between 15 nations in the Asia-Pacific region. It consists of the ten ASEAN member states - Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam - and their five FTA partners - Australia, China, Japan, New Zealand, and the Republic of Korea. RCEP has often been defined as the natural corollary of the efforts of the Association of Southeast Asian Nations (ASEAN) to strengthen regional integration efforts within ASEAN members and with external partners (Asian Development Bank, 2022).

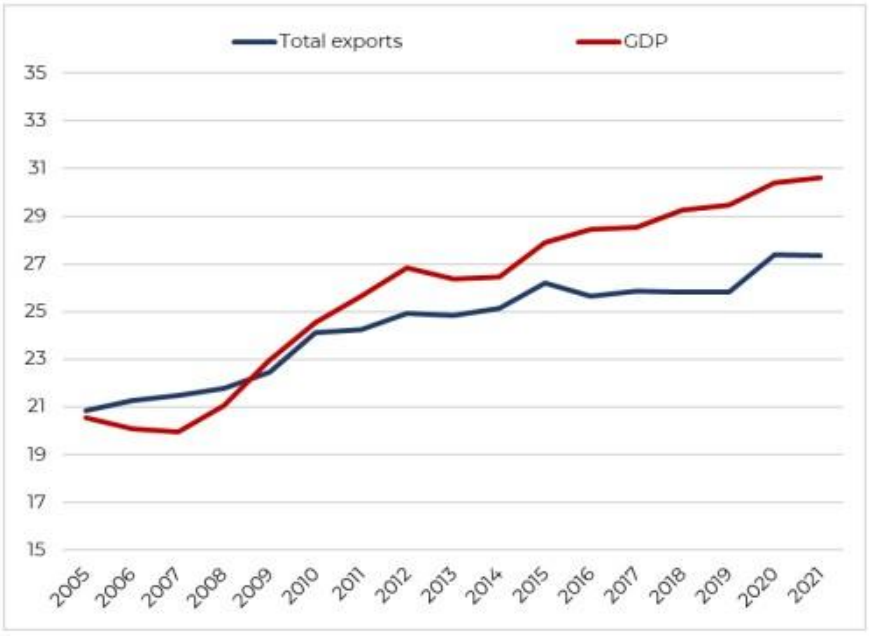


Source: Library of Parliament

Figure 1. RCEP Member States

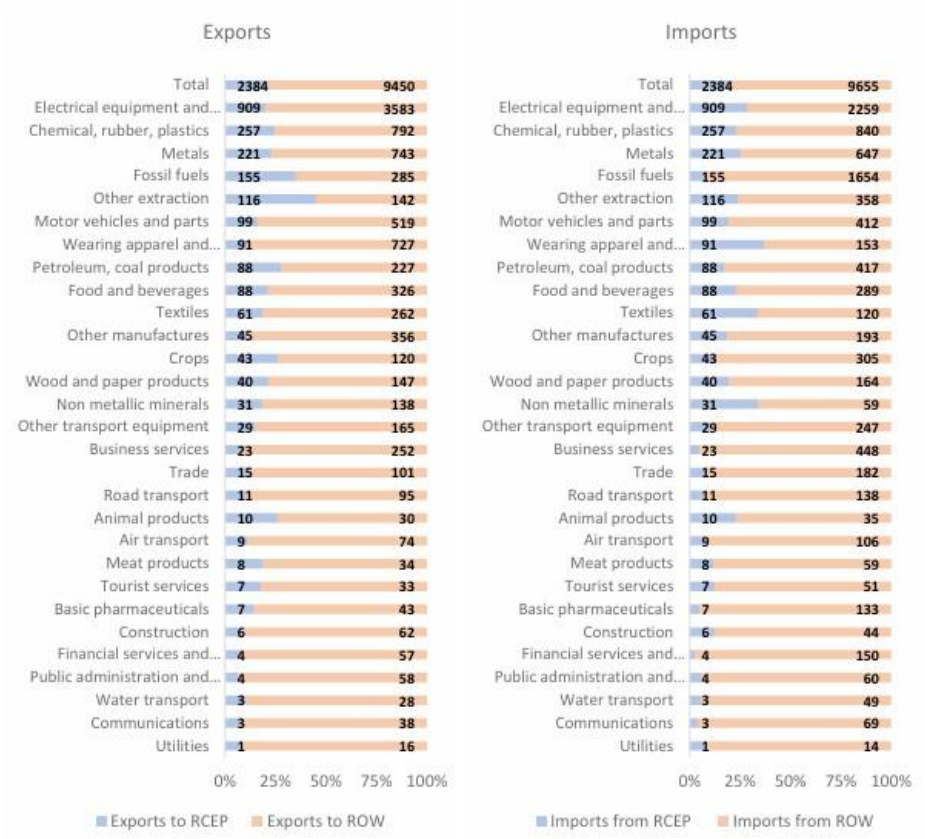
In recent years, the Regional Comprehensive Economic Partnership (RCEP) is being negotiated to form a more comprehensive region-wide free trade arrangement (FTA) from current bilateral and smaller regional agreements. Many would argue that RCEP is implicitly assumed as China's attempt to counteroffer the US-led TPPA (Das et al., 2013; Hamanaka, 2014; Tang & Petri, 2014). This FTA aims to attain a comprehensive and mutually beneficial economic partnership agreement that will entail deeper engagement between ASEAN and its FTA partners. The core of RCEP covers trade in goods and services, investment, economic cooperation and dispute settlement; this has sparked an interest among smaller ASEAN economies as ASEAN is awarded the coordinating role of the RCEP process (Fukunaga, 2015; Tang & Petri, 2014).

Recognized as the largest trading bloc, RCEP represents about 28.0 percentof world Gross Domestic Product (GDP) as of end-2023 and is poised to become a new center of gravity for global trade (United Nations Conference on Trade and Development (UNCTAD)). IntraRCEP trade in goods and services grew from US$2.5 trillion in 2019 to US$2.9 trillion in 2023. Moreover, the shares of intra-RCEP exports to total world exports and RCEP countries' GDP to world GDP have both steadily increased from 2005 to 2021 (Figure 2). These trends underscore the growing significance of RCEP to world exports and output. (UNCTAD, 2021).



Source: World Development Indicators (World Bank)

Figure 2. Share of the Regional Comprehensive Economic Partnership



Source: Data from Comtrade and GTAP (Estrades et al., 2022)

Figure 3. Trade in RCEP by sectors. In percentage and billion dollars

Currently, trade within RCEP countries represents only 20 percent of the total trade of RCEP member states, so there is considerable potential for increasing trade flows within the region (Figure 3). Intra RCEP trade takes place mostly in manufactures and minerals: Electrical equipment and machinery; Chemicals, rubber and plastic; Metals; Fossil Fuels, and Other extraction products. These four sectors represent the highest share of trade in the region.

Between 30 and 40 percent of total RCEP trade in fossil fuels and extraction products is traded within the region. On the other hand, agriculture and services trade take place mostly outside RCEP. Less than 10 percent of services trade in the region takes place between RCEP countries.

RCEP members are expected to benefit from the agreement to varying degrees, shaped by factors such as tariff concessions (UNCTAD, 2021), trade facilitation (Kimura et al., 2022; Wang & Thangavelu, 2022), liberalization of modern services (Findlay et al., 2022), and investment liberalization (Matsuura, 2022). This study delves into other factors affecting trade among RCEP member-economies, particularly exchange rates and monetary policy frameworks. These are critical elements of international trade that have remained underexplored within the RCEP context. The varying exchange rate arrangements and monetary policies amongmember economies present a unique opportunity to analyze their impact on economic outcomes.

Numerous empirical studies have examined the impact of various exchange rate variables on trade, including the impact of exchange rate volatility on international trade. The primary argument is that exchange rate volatility can reduce trade by increasing the uncertainty associated with transaction costs. Firms may face unpredictable costs and revenues when converting currencies, which may lead them to limit their exposure to foreign markets. Additionally, exchange rate uncertainty may reduce the willingness of international traders to enter into long-term trade contracts.

Literature Review Trade Openness

Conceptually, trade openness may be defined as the degree to which an economy maintains its outward orientation in trade. However, empirically, adopting this definition is challenging because it requires detailed and consistent data for many countries on the extent of explicit and implicit trade impediments in various forms that are product-, destination-, and origin-specific and time-variant. Even if such data are available, an additional hurdle exists. Aggregating the detailed data into an overall index that qualifies as a universal measure of trade openness is difficult (Harrison, 1996). In fact, although various indicators are invented, (Pritchett, 1996) showed that they are virtually uncorrelated with each other, casting doubt on their consistency and reliability.

Exchange Rate

Exchange rate is defined as the price of a currency in terms of another currency. In parallel, real currency exchange rate should be defined as the price of the currency in real terms. In the literature and textbooks, however, it is defined as the relative price levels between two countries, rather than how muchthe currency can purchase in real terms.

The subject in the term “currency exchange rate,” nominal or real, should be a currency, anda real variable is converted from its corresponding nominal counterpart after adjusted for purchasing power. Based on these two principles of economics, we propose to define real currency exchange rate as the nominal exchange rate adjusted for the relative purchasing power. It can also beinterpreted as the purchasing power of the currency abroad relative to that at home. In this treatment, the currency is the subject of the exchange rate and it serves as medium of exchange at home as well as abroad. In the conventional definition for the real exchange rate, in contrast, the subject is the relative national prices and the currency only plays a role of unit of accountas the nominal exchange rate merely helps convert different price levels into a common currency. Conceptually, these two treatments are different in the starting point: our definition starts with the nominal exchange rate and hence the subject is currency and exchange, whereas the conventional treatment starts with the ratio of national price levels and hence the subject is the relative cost of living (Yang & Zeng, 2014).

Upper-Middle Income

Upper-Middle Income is a term used by organizations like the World Bank to classify countries or by sociologists to define a social class. In the World Bank's classification, it refers to a country with a gross national income (GNI) per capita between approximately $4,046 and $12,535, though these exact thresholds are updated periodically. In sociology, it describes a social group, often defined by high levels of education, professional occupations, and comfortable incomes.

Research Methodology

This research is aqualitative descriptive study using a literature study research method through abibliography study sourced from previous research journals (Kurniawan, 2014) related to the title, as well as through access to dataobtained from websites as information publications. Qualitative descriptive research can be interpreted as the researcher being the key instrumentwhere data collection techniques are carried out by combining and analyzing datainductively (Sugiyono, 2015) to produce and process descriptive datasuch as narrating the results of interviews and/or observations.

Results

The findings from these studies are varied. Some showed that exchange rate volatility significantly reduces bilateral exports or trade flows (Banik & Roy, 2021; Njoroge, 2020; Vo et al., 2019).

Others did not find a robust relationship between trade and exchange rate volatility. For example, (Clark, 2004) suggested that allowing for time-varying country effects diminishes the negative association between volatility and trade. (Senadza & Diaba, 2017) reported that volatility has a negative effect only in the short run. Meanwhile, (Satawatananon, 2014) observed a short-run negative impact limited to the textile sector, with no long-term effect. (Chi & Cheng, 2016) noted that the relationship varies depending on the country pair. Some studies also found no significant relationship at all (Prajakschitt, 2015).

Interestingly, a smaller number of studies reported a positive relationship between exchange rate volatility and trade flows (Senadza & Diaba, 2017). Exchange rate volatility can be trade-creating if exporters and importers decide to increase their trade volumes to compensate for its possible effects (Bahmani-Oskooee & Hegerty, 2009).

A potential factor contributing to these mixed results is the increasing availability of financial hedging instruments, which may reduce firms' vulnerability to unpredictable currency movements (Senadza & Diaba, 2017). While these instruments offer a way to manage exchange rate risks, they come with additional costs that firms must bear. These expenses can deter companies—especially smaller firms with limited resources—from participating in international trade. Additionally, firms in countries with less developed financial markets may find hedging particularly challenging (Chui et al., 2016).

Real exchange rate is an important issue for a country's economy as real exchange rate stands for the price level in general and more specifically for relative competitiveness. Even though, there are few studies on the determinants of real exchange rate and specifically on the effect on trade on real exchange rate, while there are many studies on the impact of exchange rate on trade (Hau, 2002).

(Holden et al., 1979) were among the first to identify that the exchange rate variation is negatively depending on openness of the economy. They study the overall determinants of exchange rate and the overall effect of variables on the exchange rate policy. The result of their model regarding openness is that a better measure is probably needed (because of the relatively low significance) and probably the effect of openness on the exchange rate may not be as strong as predicted by Mundell's optimum currency area theory.

Since 1979 there were almost no studies on this issue until 2000 when Hau published his first article on real effective exchange rate volatility and economic openness, which provided the most thorough research on the effect of trade openness on exchange rate volatility. By this time globalization and trade liberalization became a very important economic issue related with exchange rate. At the same time many countries worldwide have chosen exchange rates with different degrees of flexibility which basically provide a reason for studying exchange rate volatility.

A much focused study on identifying the relationship between trade and exchange rate volatility was provided by (Broda & Romalis, 2011). They developed a model according to which international trade depresses exchange rate volatility. They wanted to prove that an increase in trade by 1 percent of GDP from the median trade relationship implies a decrease in the volatility of the bilateral real exchange rate by 12 per cent. But the result shows that an increase in bilateral trade volume by 10 per cent reduces the volatility of the associated exchange rate by only 0.3 per cent. The results of their study differ from the predictions because usually a bilateral trading relationship is rather small, which implies a smaller variation of the bilateral real exchange rate while typical exchange rate is quite volatile (11 per cent from its trend).

(Hau, 2002) relates the volatility of the (trade-weighted) effective real exchange rate to the degree of trade openness of an economy. He examines if economic integration through the expansion of world trade decreases real exchange rate volatility even in the absence of monetary integration. As a theoretical base Hau uses inter-temporal monetary model with nominal labor market rigidities and examines how different degrees of trade integration affect the real exchange changes in presence of asymmetric monetary and real shocks for the two countries. The main conclusion of the model is that both monetary and real shocks have a smaller effect on the real exchange rate if the two countries import larger percentage of their consumption basket, hence trade integration promotes real exchange rate stability. Hau is studying the real effective exchange rate volatility for 54 countries from 1980 and finds strong empirical support for negative correlation between openness (measured by import share of GDP) and the real exchange rate volatility. Hau finds that the impact of economic openness on exchange rate volatility is statistically significant (in most of the cases at 1 per cent significance level) and openness explains up to 52 per cent of exchange rate variations (Stancık, 2006).

(Tseng et al., 2007) provide more evidence on whether international trade may help to stabilize exchange rate movements, as in (Mundell, 1961). Their finding is that an increased trade volume (relative to domestic aggregate demand) tends to reduce exchange rate volatility when a domestic absorption shock disturbs the economy.

Conclusion

Based on the results of research from various findings by experts, it is explained that trade openness has a negative relationship with exchange rates. Increased trade tends to reduce exchange rate volatility when domestic absorption shocks disrupt the economy. The results of the study show that a 10 percent increase in bilateral trade volume reduces exchange rate volatility by 0.3 percent.

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