CHAPTER I
INTRODUCTION

1.1 Background

In the context of economic openness, international trade is one of the main channels connecting the domestic economy to global economic dynamics. However, escalating geopolitical conflicts have caused countries' Applied Tariff Rates (ATRs) to rise again. Increasing geopolitical conflicts and global trade fragmentation has caused heightened uncertainty in international trade. Trade uncertainty is an abstract concept influenced by several factors, such as economic, political, and social factors (Görüş & Akyüz, 2023). Trade uncertainty refers to uncertainty regarding the future direction, policies, and conditions of international trade. The rise in trade uncertainty creates confusion for economic agents in making the right decisions. Therefore, trade uncertainty can be viewed as a form of external shock with the potential to affect a country's external stability.

As trade uncertainty rises, companies may delay production decisions, and simultaneously, investor decisions can be affected, driving shifts in capital flows. These changes exert pressure on a country's external sector. Increased global trade uncertainty can impact external sector stability through trade disruptions, exchange rate volatility, and pressure on the BoP, ultimately impacting the dynamics of forex reserves. Therefore, to maintain economic resilience against global trade uncertainty shocks, it is necessary to maintain external sector stability.

Forex reserves are a part of the external sector that plays a key role in a country's economy. Forex reserves are international assets held and managed by monetary authorities for use at any time, taking into account strategic interests (Benny, 2011). Forex reserves indicators are fundamental to a country's economy to see whether the country's economy is strong or weak (Sayoga & Tan, 2017). Forex reserves are used as savings when the country experiences a crisis, or according to Kuncoro (2024) forex reserves function as a safeguard against economic disruption. Besides serving as a tool for international payments, preventing speculative attacks, and accelerating economic growth, forex reserves play another important role: as a country's portfolio, demonstrating its creditworthiness across the global marketplace (Andriyani et al., 2020). Therefore, the stability of forex reserves is necessary for a nation.

To understand these conditions, a more in-depth study of groups of countries with specific economic characteristics is required. According to Gabriela et al. (2014) and Streltsov et al. (2021), one group of countries that contributes significantly to global economic recovery and is highly integrated with the global economy is BRICS+. The BRICS+ group is a coalition of high-growth developing countries. This group is committed to creating a more representative and equitable international order and to reforming the multilateral system (Ross, 2024). In addition, several countries in the BRICS+ group are involved in global geopolitical rivalries, including friction occurring in the trade sector of the two US and China, sanctions against Russia, and tensions in the Middle East experienced by Iran, which also affect the stability of the external sector.

To protect the country's external stability from global economic shocks, BRICS+ countries tend to maintain large forex reserves as a buffer, but it cannot be denied that they also experience declines due to global dynamics (Wu & Chi, 2014). This study selected seven of the eleven BRICS+ nations to examine the macroeconomic variables affecting forex reserves. The representative nations only seven except Middle Eastern country. In addition to data availability, these countries were chosen because their foreign exchange reserve growth trends reflect fluctuations. This aligns with the issues discussed previously. The study runs from 1997 to 2023 in quarters. This timeframe was chosen because it encompasses various global economic dynamics, notably the 1997-1998 monetary crisis, trade wars, and the 2020 COVID-19 pandemic. At the same time enables for capturing the long-term dynamics and fluctuations in forex reserves impacted by various macroeconomic factors.

Addressing this challenge, an index was created to measure the level of uncertainty, known as the World Trade Uncertainty Index (WTUI). Capture the degree of trade related uncertainty, this study draws upon the World Trade Uncertainty Index (WTUI) initiated by Ahir et al. (2018). Using the Economist Intelligence Unit (EIU) country report, compiled by calculating the frequency with which terms related to uncertainty are mentioned in the context of international trade (Ahir et al., 2018). The WTUI is an index normalized to a range of 0 to 1. A point of 0 demonstrates a low scale of trade uncertainty, in contrast, a value of 1 points to a high level of trade uncertainty. As seen in Figure 1.1, the WTUI value does not show much volatility. Still, when the value is higher, it can be interpreted that international trade activities are in an increasingly uncertain condition. This phenomenon was evident in 2019, the year with the highest WTUI value from 1996 to 2020, at 174,340 (Görüş & Akyüz, 2023). After experiencing a decline, the WTU index rose again to 275,152 in the third quarter of 2025.

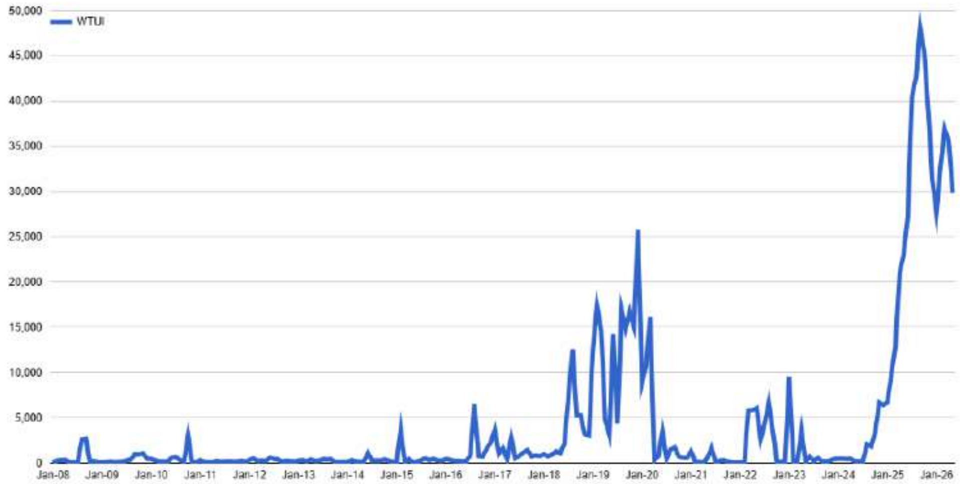

Figure 1.1 World Trade Uncertainty Index 2008-2026

Source: World Uncertainty Index (WUI), 2026

Amidst escalating geopolitical conflict, global economic fragmentation, and trade uncertainty, these issues have become crucial for research. Several researchers have previously conducted research on the factors influencing forex reserves. However, research that attempts to capture geopolitical risks by emphasizing the contribution of global trade uncertainty, represented by the WTUI, in influencing the dynamics of forex reserves is still rarely conducted. This study attempts to evaluate whether this influence is uniform across the entire distribution of forex reserves. Most studies also rarely use panel data, especially for BRICS+ member countries. Considering the existing gaps, this study attempts to conduct panel quantile regression analysis with seven BRICS+ countries as the research unit.

1.2 Problem Statement

The increasing volatility of global trade conditions has raised concern regarding its implications for the store and management of forex reserves in emerging economies. Since forex reserves act as a key cushion against exogenous shocks, understanding the nexus between trade uncertainty and forex reserves is crucial. Therefore, this study investigates how trade uncertainty, measured by the WTUI, affects forex reserves across low, medium, and high quantiles in BRICS+ countries.

1.3 Research Objectives

Having formulated the research problem in the previous section, it is evident that the aim of this study is to assess the consequences of the World Trade Uncertainty Index on the forex reserves of BRICS+ countries, as well as whether this impact varies across the distribution of forex reserves.

The objectives of this study are divided into three specific points:

1. To identify the influence of trade uncertainty on forex reserves in the group of countries with low levels of forex reserves
2. To identify the influence of trade uncertainty on forex reserves in the group of countries with moderate levels of forex reserves
3. To identify the influence of trade uncertainty on forex reserves in the group of countries with high levels of forex reserves

1.4 Research Benefit

a. For Researchers:

This research not only provides experience in working on a large, complex task, but also helps researcher deepen their knowledge of the external sector, particularly forex reserves, which are one of the fundamentals of a nation's economy. Researcher can understand the determinants that influence the value of forex reserves. Researchers can also determine the consequences of trade uncertainty on forex reserves as reviewed through the world trade uncertainty. This research helps researchers understand that uncertainty has various impacts on forex reserves, depending on the amount held. Through this research, researcher can also improve their analytical skills, both in reading and interpreting data and analyzing using software.

b. For Academic:

Research can contribute to the development of the theory used by supporting empirical evidence. Furthermore, the research was conducted using credible statistical data, allowing for accurate results for the hypotheses proposed. This research is envisaged to serve as a source for future researchers exploring the same or broader topic.

c. For Government and Policy Makers:

Results of this research can provide recommendations for policymakers in considering strategic interests in maintaining the stability of the country's forex reserves.