

# The Impact of Exchange Rate Volatility on International Trade and Economic Recovery Pathways

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## ABSTRACT

Exchange rate volatility profoundly influences international trade flows and economic stability. This paper examines the extent of this impact by analysing two pivotal case studies: the Asian Financial Crisis of 1997 and the Eurozone Crisis. The findings illustrate how fluctuating currency values disrupt trade, create inflationary pressures, and exacerbate foreign debt, leading to prolonged economic instability. However, they also highlight instances where currency devaluation, when managed effectively, facilitates export-led recovery, as seen in South Korea and Germany. The paper underscores the necessity of flexible exchange rate regimes, prudent fiscal policies, and coordinated global measures to mitigate adverse effects.

**Key Words:** Exchange rate volatility, international trade, economic stability, financial crises, currency devaluation

## INTRODUCTION

The Brexit referendum in 2016 triggered massive disturbances in the global markets and pushed the British pound to its lowest level against the US dollar in 31 years. While this situation temporarily favoured British exporters as their products became cheaper and competitive in the international market, importers faced a dramatically different scenario. The growing costs of imported

goods such as food, fuel, and raw materials interrupted supply chains and put pressure on business operations. The problems for small and medium enterprises were serious, especially in managing the volatility, decreased trade activity, and economic uncertainty, which grew as a consequence. The pound's dramatic fluctuations exposed international trade vulnerability and highlighted how exchange rate instability could reverberate through economies, disrupting trade flows and undermining business confidence (Plakandaras, Gupta and Wohar, 2017).

This case is a conclusive example of how exchange rate volatility can significantly impact international trade and economic stability. The exchange rate refers to the value at which one nation's currency can be converted into another across nations or economic zones. It plays a critical role in determining the relative value of currencies and influences the dynamics of international trade and the flow of capital between countries (CFI, 2022b). On the other hand, exchange rate volatility refers to both - the fluctuations in a currency's value on a regular basis and the capriciousness of these changes. As international trade expands its horizon, diverse regulatory measures often emerge that can potentially hinder trade. As a result, exchange rate volatility is a significant barrier that directly and indirectly influences trade activities, inevitably

disrupting trade relationships and a country's trade balance.

From a macroeconomic perspective, exchange rate fluctuations can notably impact the economy by reshaping economic output and investment patterns, causing inefficiencies in resource allocation for domestic consumption and international trade, affecting labour markets and price levels, and altering a country's external account (Auboin and Ruta, 2011). Furthermore, on a global scale, exchange rates are strongly correlated with competing financial markets and, therefore, with international trade (Mehtiyev, Magda and Vasa, 2021). It can have both positive and negative effects, but the key challenge lies in creating conditions that sustain this competitiveness amidst these fluctuations. Considering these complexities, this research paper seeks to address the critical question: To what extent does exchange rate volatility impact international trade flows and economic stability?

This paper argues that exchange rate volatility significantly impacts international trade by increasing economic uncertainty and influencing trade dynamics, as seen through case studies of the Asian Financial Crisis and the Eurozone Crisis.

**Research Question:** To what extent does exchange rate volatility impact international trade flows and economic stability?

## **LITERATURE REVIEW**

As mentioned earlier, exchange rates refer to the value of one country's currency compared to another's. This metric is typically expressed in terms of the national currency per US dollar (OECD, 2025). Exchange rate volatility is the exchange rate change between a common currency pair within a short period. There are three exchange rate types: fixed, floating and managed systems.

The government and central bank of the respective country set fixed exchange rates. Countries like Saudi Arabia and Hong Kong use this system. The benefit gained from this

system is that it is a stable system, but the downside is that it can cause trade imbalances and loss of monetary policy independence (Larson, 2024). On the other hand, a floating exchange rate is a regime where the forex market sets the price of a nation's currency based on demand and supply relative to other currencies (Mitchell, 2023). Simply put, if the demand for a currency is high, its value will increase, whereas low demand will drive its value lower. In this system, the government has limited power to intervene, making the currency flexible. This flexibility allows exchange rates to adjust 'automatically' to economic conditions, helping to correct trade imbalances through natural adjustments in import and export trade. However, this system has drawbacks, including fluctuations in currency value that can create uncertainty and pose challenges for international trade and investment planning. The hybrid of these two systems is the managed exchange rate in which the market forces mainly determine currency values, with occasional intervention from governments and central banks. A managed exchange rate can help to balance flexibility and stability, but this can only happen if the management works fast and takes immediate action. China, Vietnam, etc., use this exchange rate system (Larson, 2024). Exchange rates are a building block of the global economy as they influence international trade, economic stability and investment flows. They determine the relative price of products that we use in our routine, affecting a country's import and export trade (ECB, 2021). Significant exchange rate volatility can lead to economic uncertainty, influencing inflation rates and the monetary policies of the respective country (Twin, 2018). It not only affects foreign direct investment by impacting potential returns but also plays a pivotal role in broader economic comparisons between countries. One metric used to evaluate economic productivity and standards of living across countries is purchasing power parity (PPP). PPP is the rate at which the currency of one country must be converted

into another to buy the same amount of goods and services in each country (Investopedia, 2023). The World Bank periodically publishes a report that evaluates different countries' productivity and economic growth, using PPP and USD as reference measures. The insights provided by these reports offer valuable information for financial markets. Some forex traders resort to PPP to identify currencies that may be overvalued or undervalued. Similarly, investors holding stocks or bonds in foreign companies may prefer to use PPP's data to assess the potential impact of exchange rate fluctuations on a country's economy and investments (Investopedia, 2023).

Another economic theory is The Marshall-Lerner Condition, a framework used to determine specific circumstances under which a depreciation/devaluation of a country's currency will improve its trade balance (Grotkowska and Siwińska-Gorzela, 2020). As stated by this condition, currency depreciation will improve the trade balance only if the sum of the price elasticity of demand for exports and imports is greater than 1. Although the Marshall-Lerner condition offers a valuable framework for analysing the link between exchange rates and trade balances, it has its own set of limitations in precisely forecasting real-world outcomes. Firstly, the Marshall-Lerner condition assumes that import and export demand is highly sensitive to exchange rate fluctuations. In the real world, however, various factors, such as income levels, trade barriers, and consumer preferences, also play an important role in shaping trade flows. Secondly, it deduces that the demand elasticities are constant, even though these elasticities can vary greatly in the real world, especially due to structural shifts in the economy. Thus, policymakers should discern these limitations and use the Marshall-Lerner condition as one of the many analytical tools when evaluating the potential impact of exchange rate policies on a nation's trade balance (Fiveable, 2025).

Apart from the theoretical models such as the PPP & Marshall-Lerner condition,

businesses should also consider the practical risks associated with foreign trade and the uncertainty of volatility of exchange rates. The relative value of the two currencies might change between the day the deal is signed and when the payment is received. Without adequate protection, a devaluation or depreciation of the foreign currency can lead to financial losses (Fiveable, 2025). To alleviate these risks, businesses and investors must adopt different measures to safeguard their financial interests. One of the most effective measures is hedging, which helps reduce market risk (Investopedia, 2024). Hedging involves recognising the dangers associated with every investment and opting for protection against unfavourable events that can impact one's finances (CFI, 2023). This approach is particularly important for MNCs operating in volatile economic environments. For example, as a global automobile manufacturer, Toyota is exposed to various financial risks, including the risks associated with fluctuations in exchange rates. To manage these risks, Toyota has adopted long-term currency swap agreements with financial institutions. These agreements help strengthen the firm's cash flows by protecting them against fluctuations in dominant currencies such as the USD and Euro. This strategy has allowed Toyota to maintain its competitive advantage in the global automotive industry. While large businesses such as Toyota have access to these sophisticated financial instruments to hedge against currency fluctuations, smaller businesses often lack such resources. The volatility of exchange rates impacts the success or failure of companies, especially Small and medium-sized enterprises (SMEs), significantly. SMEs play a crucial role in the economy, providing employment opportunities, fostering innovation, and contributing to economic diversification. Yet, these firms are exposed to external shocks, such as fluctuating exchange rates, which profoundly affect their operational strategies and decision-making processes (Harshita, 2024).

## Analysis and Case Studies

### Asian Financial Crisis 1997

The Asian Financial Crisis began in Thailand in 1997 when the Thai Baht plunged in value. It resulted from a series of currency devaluations and other significant events that ultimately led to the collapse of the currency exchange rate, spreading steadily into different parts of Asia (Scott, 2024). What started as a government plan to support manufacturers in increasing exports and foreign currency inflow led to a considerable moral hazard in Asian economies, which eventually affected East and Southeast Asia. In particular, domestic credit increased significantly, creating substantial leverage; current account deficits worsened; heavy

foreign borrowings with short-term maturities heightened risks, resulting in a buildup of external debts. When the peg finally disintegrated, companies that owed money in foreign currencies faced much higher amounts in their local currencies. Consequently, within weeks after the collapse of the Thai Baht, other currencies also fell. The Thai Baht exchange rate to USD was approximately 26 before the crisis but lost half its value by the end. The value of the Indonesian rupiah dropped by 80%, the South Korean won by nearly 50%, and the Malaysian ringgit by 45%. The impact of the crisis on the GDPs of the Asian countries can be seen in the graph below, taken from Scott, 2024.



The crisis was mitigated by intervention from the International Monetary Fund and the World Bank, which assisted the affected countries by providing around \$118 billion to help bail out their economies (Scott, 2024). As mentioned in the Marshall-Lerner condition, the depreciation of a country's currency can improve its trade balance (Lal and Lowinger, 2002). We can see the same situation in the Asian financial crisis, but the only difference is that it was not as easy in real life as the theory; the situation actually worsened significantly before the trade balance improved. Due to the currency's depreciation, the import prices soared to such an extent, leading to inflation in the country.

Alongside this, foreign debt burdens surged due to loans denominated in USD. This led to extremely low business confidence, which triggered the stock market to crash. Eventually, several components helped restore the trade balance after the severe shock. Firstly, as the local currency lost value, the exports became cheaper for the buyers. The strong manufacturing countries benefited a lot from this situation. One very prominent example is South Korea's Automobile & Electronics industry - as the Won became weaker, Korean automobiles and electronics (particularly Hyundai Motors, Samsung, LG Electronics, etc.) were a lot cheaper and more affordable than the

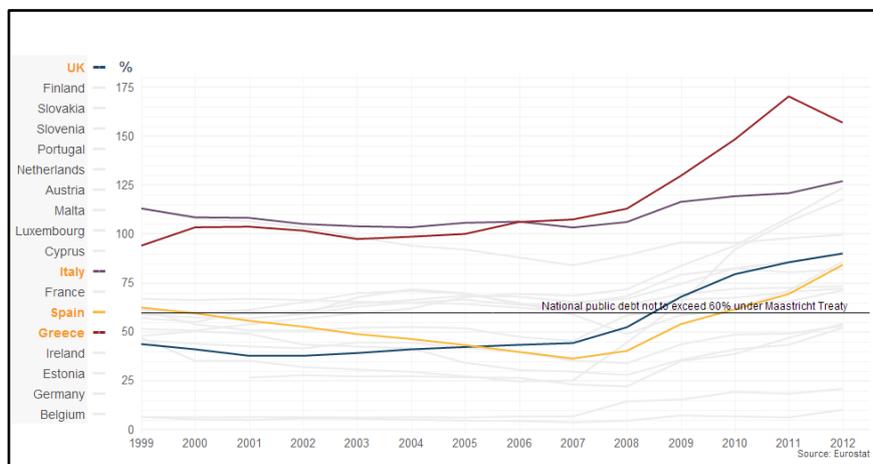
ones produced and sold by the US & European companies. This gave the South Korean Manufacturers a competitive advantage, and the exports skyrocketed, helping the South Korean economy & trade balance stabilise again. South Korea faced a trade deficit of around 4.74 billion USD in 1997. Nevertheless, in just a year, it had a trade surplus of 40.54 billion USD (Macrotrends, 2025). This positively impacted its currency devaluation and is also a very eminent example of how currency depreciation led to an export-led recovery. Another factor was that as imports became increasingly expensive, citizens and manufacturers of the countries had no choice but to switch to the nearest local alternative for the required products. This helped boost domestic industries and the economy in general.

The Asian Financial Crisis highlights the dual-edged nature of exchange rate volatility. While initial depreciation exacerbates economic instability, it can ultimately stimulate export-driven recovery and trade

balance improvements, provided that structural and institutional resilience supports the process.

### Eurozone Crisis

The European Sovereign Debt Crisis refers to the financial crisis that occurred in several European countries due to the collapse of financial institutions, high government debt and institutional failures (Liberto, 2024). The debt crisis began in 2008, and a series of events played a role that led to this crisis. While the countries used the common currency, the Euro, each member country had its own fiscal policies. This complicated system caused countries like Greece & Portugal to borrow and spend beyond their limits. Another major event that led to this was the 2008 Global financial crisis, which crashed the financial institutions and increased the cost of borrowing. And lastly, all these things led to high sovereign debts, as can be seen in the graph below taken from BBC, 2013.



Greece was a particularly notable example with debt at a record high of 113% of GDP, due to which it needed several bailouts from banks and international organisations (CFI, 2022a).

Countries requesting bailouts were required to implement austerity measures as a condition for receiving funds. These measures included factors that further worsened the situation of the citizens, as these policies limited the government

spending on the public sector, including curtailing the public sector wages and increasing income taxes, which limited the government's contribution to its country's economic growth. Furthermore, peripheral countries like Greece, Portugal, and Spain were also asked to cut healthcare spending, leading to a crisis in their health systems and, generally, political instability (CFI, 2022a).

The impact of the crisis was not confined to the European continent; it affected the global

economy, which was still fragile due to the Global Financial Crisis of 2008. For example, the drop in the value of the euro made U.S. exports more expensive and less desirable for Europeans. As Europe accounted for roughly 20% of U.S. exports, this decline significantly impacted the American economy. Another effect, says Dadush, was the intensified competition between American and European countries in other markets. For instance, European goods and services became cheaper for buyers in Asia or South America (Flintoff, 2010).

While countries like Greece may have suffered, Germany benefitted from this crisis. Due to a decline in the euro exchange rate and the stabilisation of economic conditions in emerging markets, the value of German exports increased by as much as 23.3% compared to March 2009, exceeding the value from the year before the crisis – 2008. Strong export results indicated that, in the short term, the weaker euro exchange rate would positively influence economic growth in Germany. Similarly, German imports grew by 18.3%, partly due to increased internal consumption in the German economy. The high growth rate of exports caused Germany's trade balance to soar by 48.7% to EUR 17.2 billion compared to March 2009 (OSW, 2010).

The Eurozone Crisis demonstrates the complex interplay between fiscal policy, exchange rate volatility, and global trade dynamics. While the depreciation of the euro initially exacerbated trade imbalances, it eventually benefited export-led economies like Germany, aligning with the Marshall-Lerner condition. However, the crisis also underscores the limitations of the PPP theory in regions with shared currencies, where fiscal disparities and austerity measures can hinder the natural equilibrium of trade and prices.

## CONCLUSION

This research paper intended to analyse exchange rates and evaluate how exchange rate volatility can impact countries' trade and

recovery through the examples of the Asian Financial Crisis 1997 and the Eurozone crisis.

From the evaluation of both case studies, we can conclude that volatility in exchange rates (currencies) has a profound impact on the trade of almost all countries, whether they are involved directly or indirectly. It can either make or break an economy; its effect depends largely on the risk management tools and fiscal resilience of the affected economy. Another key observation is that currency devaluations can lead to crises whose impacts linger long after the immediate effects have subsided, as seen in the case of Greece. Conversely, some economies can leverage currency depreciation to recover and strengthen their trade position, as demonstrated by South Korea and Germany, despite the crises in these nations occurring over a decade apart. One measure to minimise the impact of such an event is to create flexible exchange rates and monetary policies, as rigid structures and excessive dependence on external loans can exacerbate economic vulnerabilities. Additionally, economies should prioritise building robust financial frameworks that limit exposure to high external debt, particularly in dominant foreign currencies, which often intensify the effects of exchange rate volatility. Global coordination among economies, coupled with strengthening local currencies and reducing reliance on foreign debt, can help mitigate the long-term consequences of such crises. Lastly, if a crisis occurs, governments should immediately focus on stabilising consumer and business confidence, which is essential for recovery and sustained growth (The Economic Times, 2017).

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