

ARBITRAGE AND INTEREST RATE PARITY: IMPLICATIONS FOR FOREIGN EXCHANGE INVESTORS AND SPECULATORS

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Abstract: Globalization has an impact on the development of international trade, which can increase market share. In addition, in foreign exchange trading, currency is not just a transaction tool but also a commodity traded in the foreign exchange market. The study aims to analyze arbitrage and interest rate parity on its implications for foreign exchange investors and speculators. Secondary data used in the study were obtained from books, national and international edited journals, news, and working papers conducted by a literature review. It is found that unstable economic conditions, increased inflation, and speculators can increase the volatility of exchange rate imbalances in the foreign exchange market. exchange rate differences can be utilized by arbitrageurs and will naturally move towards efficiency. However, the enactment of purchasing power parity implies indifferent behavior to invest domestically or internationally because the returns obtained are not greater than domestic. In addition to maintaining foreign exchange stability, intervention policies are needed through controlled floating exchange rates, interest rate policies, maintaining liquidity and capital flows carried out by monetary authorities and central banks, as well as reducing import dependence and increasing exports

Keywords: Arbitrage, Interest Rate Parity, Investors, Speculators, Foreign Exchange

INTRODUCTION

Globalization can be said to be a process of integration and connectivity between countries without borders between countries or continents. Globalization is characterized by increased trade between countries to sell various commodities, foreign investment made by developed Countries, and

multinational companies, the establishment of international organizations, and technological innovations that can accelerate the flow of information and capital. Globalization can provide opportunities and challenges faced by governments, multinational companies, and business people. International trade between countries is carried out using foreign currencies, this is because in international trade activities, both exports and imports are carried out across countries involving the currencies of the countries in the transaction. The currency used as an international means of payment is called Foreign Exchange or Foreign Exchange. Foreign exchange to facilitate international trade and financial transactions is carried out in the foreign exchange market to trade the country's currency with the currency of a foreign country (Ashlihah & Muhammad, 2023).

The development of globalization, advanced technology, increased trade and investment across countries drives the growth of the foreign exchange market, which in 2024 with assets of \$0.93 Trillion, which is predicted in 2030 to increase by \$1.16 trillion dollars, according to the Compounded Annual Growth Rate (CAGR) increasing by 3.80 percent (GlobeNewswire, 2025). The Foreign Exchange Market is a gathering place for individuals and companies that act as speculators, investors, tourists, commercial banks, or central banks as sellers or buyers. The mechanism is based on the supply and demand of foreign exchange (Rostiana, 2020). International trade transaction tools tend to use relatively strong and stable hard currencies such as the US Dollar and the Euro. While weak currencies are called soft currencies, whose countries tend to carry out import activities, such as the rupiah, bath, dong, and peso, when importing must exchange the currency of the country of origin to a hard currency according to the exchange rate in the foreign exchange market (Amalia & Ariyanto, 2020). Companies exchange currency through commercial banks. New York City, London, and Tokyo are the largest foreign exchange trading centers, where half of the world's currency trading is dominated by London with a trading volume of 33 percent, while New York City is 20 percent (Madura, 2015). The following is data on the rupiah exchange rate against foreign currencies as of April 17, 2025:

Table 1. Exchange Rate of Rupiah against Foreign Currencies

Currency	Value	Sale Rate	Buy Rate
AUD	1	10.751,75	10.639,74
CAD	1	12.169,66	12.045,12
CHF	1	20.810,35	20.590,64
EUR	1	19.279,00	19.085,50
GBP	1	22.488,78	22.263,34
JPY	100	11.915,27	11.792,57
NOK	1	1.595,82	1.578,90
NZD	1	10.022,10	9.917,35
SEK	1	1.725,59	1.707,77
USD	1	16.929,22	16.760,78

Source: (Bank Indonesia, 2025)

Based on the table, it is known that the selling rate if 1 USD is bought with rupiah, the value is IDR 16,929.22, while the purchase rate if 1 USD is sold in rupiah, the value is IDR 16,760.78. The selling rate can be said to be the position of the bank selling and the customer buying, while the buying rate is the position of the bank buying and the customer selling (Hery, 2021). This means that the selling rate is used to exchange or convert rupiah with foreign currencies, while the buying rate is used to exchange/convert foreign currencies with rupiah. The forex market can be used by arbitrageurs and speculators to profit from buying foreign exchange from financial centers for the purpose of reselling it to other financial markets (Maharani & Ibrahim, 2024). The movement of foreign exchange is influenced by the level of demand, if demand decreases, then the local currency appreciates and vice versa, while the factors that decrease foreign exchange are increased imports, capital outflows such as debt payments, and speculation (Ihwanudin & Febriani, 2022). Differences in exchange rates and interest rates can be utilized by investors and speculators to profit from the different exchange rates and interest rates of each country.

Countries with unstable conditions with high inflation rates have an impact on exchange rate depreciation and apply high interest rates by central banks as a response to offset inflationary movements and increase investors which can be utilized by arbitrageurs and speculators in the

foreign exchange market. Arbitrage is a form of utilizing differences in prices to gain profits. If there is a difference in the foreign exchange market in the form of a variation in the price of a currency from the market price, the exchange rate alignment is based on certain market forces (Madura, 2015). Excessive volatility of exchange rates in a given period can lead to unstable or volatile speculative activities. Speculation by dealers (market makers) in the foreign exchange market can affect fluctuations in currency exchange rates, resulting in multinational companies and investors and cash flows facing an uncertain future due to changes in future exchange rates (Abina & Praise, 2023). Changing interest rates can have implications for the volume of investment of both foreign and local investors in a country, and affect the level of demand and supply of domestic money markets (Wahyuni & Satria, 2024). Investment activities carried out by investors in the capital market are influenced by uncertainty factors which result in investors not being able to know exactly the results of the investment (Marco & Khafid, 2022).

Arbitrage actors arise due to inefficiencies in international financial markets and the balancing relationship between interest rates and exchange rates. The existence of arbitrage activities can help adjust market inefficiencies which more and more arbitrage actors will create efficiency. Interest rate parity as a form of market power balance between exchange rates and interest rates so that arbitrage cannot be carried out (Madura, 2015). Interest rate parity as a concept of the mechanism and behavior in the foreign exchange market, where changes in the value of the currency measured by the interest rate cause changes in the exchange rate. Interest rate parity is the doctrine that the exchange rate is based on the interest rate (Yanti et al., 2022). Interest rate parity theory that the forward rate (future value) of another currency is set based on the interest rate differential between the two countries which results in interest rate arbitrage not yielding a return that is not higher than that of domestic investment (Rangkuty & Mesra, 2022). The financial crisis led to a deviation in interest rate parity due to borrowing at low interest rates which was then invested in other countries to make a profit (Fernandez Mejia, 2022). Excessive speculative activities may lead to irregularities that result in currency mispricing, volatility and indicate financial uncertainty.

With uncertainties affecting the global market outlook in 2025, coupled with geopolitical risks, there is an impact on economic volatility. The policy of strengthening US growth by restricting trade could destabilize global supply, inflation, sentiment and threaten international expansion. The impact of the US policy has an impact on the direction of the foreign exchange market and to maintain a long USD position until 2025 in the first quarter. However, with the trade conflict affecting the outlook for the Euro declining. Likewise, the Japanese Yen weakened against the Dollar due to declining productivity growth, if the Yen depreciates continuously, it can be offset by aggressive Yen buying interventions (Bassi, 2024). According to Kristen Macleod, head of global macro distribution, the geopolitical war in Ukraine, political instability in France and Germany, and US tariffs are fueling market sentiment. The imposition of tariffs has an impact on currency shocks, according to Barclays Research predicts the Renminbi exchange rate will depreciate 15 percent, the peso will depreciate 25 percent. This has an impact on foreign exchange rate volatility (Macleod, 2025). In addition, the Federal Reserve's policy of aggressively pushing the dollar higher has resulted in emerging market currencies depreciating and affecting foreign capital flows and foreign exchange market conditions (Ardiyana, 2025). Uncertain global conditions affect investor expectations in investment decisions because they increase the risks arising from inflation rates, interest rates, exchange rate volatility, and economic conditions. Uncertain global conditions can cause exchange rate deviations in the foreign exchange market, especially when speculators' activities can fluctuate exchange rate movements that change rapidly. In addition, it has an impact on developing countries due to shocks from developed policies, which certainly have an impact on financial instability and economic conditions, which result in uncertainty. Therefore, monetary policy has an important role in maintaining stability amidst global economic uncertainty. By using literature studies, this research is structured based on actual conditions associated with theory and previous research, so that this research aims to analyze the relationship between volatility, arbitrage, and interest rate parity in influencing investment and speculation decisions and monetary policy in maintaining the stability of the foreign exchange market.

LITERATURE REVIEW

Foreign Exchange

A currency used for payment purposes that is recognized in other countries. Can be used by international companies to transact or transfer profits from subsidiaries whose business is in the UK (GBP) to the head office in the United States (USD) which is done by converting currencies in the forex market. The foreign exchange market serves as a place to transfer purchasing power, provide credit and reduce risk. In addition, for investors the foreign exchange as a medium for converting currencies, currency hedging, arbitrage and currency speculation (Ashlihah & Muhammad, 2023). In the foreign exchange market there are 10 currencies that are included in the G10 which are currencies that are often used and high liquidity such as *Dollar US (USD)*, *Yen Jepang (JPY)*, *Dollar Canada (CAD)*, *Dollar Australia (AUD)*, *Euro (EUR)*, *Dollar New Zealand (NZD)*, *Pound Sterling (GBP)*, *Krone Norwegia (NOK)*, *Franc Swiss (CHF)* dan *Krona Swedish (SEK)*. G10 currencies have lower volatility than other currencies (Agrawal et al., 2020).

Arbitration

As a form of utilization of price differences in exchange rates to generate profits without involving risk (Madura, 2015). Arbitrage benefits from discrepancies in actual prices due to different levels of demand in different markets (Darmawan, 2022). Referring to the Arbitrage Pricing Theory by Stephen Ross, it is assumed that the market will not be in a perfectly efficient condition; therefore, sometimes the asset prices in the market are mispriced too low or high in a short time (Azis et al., 2024). The market is efficient when securities are able to represent all information and adjust to new information. However, in reality, securities will not be able to reflect the appropriate price (Yadav & Hegde). According to, (Madura, 2015) there are international arbitration models:

1. Location arbitration

In this arbitrage, commercial banks provide foreign exchange services by following the same currency exchange rate with no aim to obtain more profit. The value of currencies between banks can vary, which is influenced by supply and demand conditions, with the existence of these differences can be utilized by arbitrageurs to gain profits by buying currencies in locations where prices are cheap and selling them in different locations at high prices. With the development of technology, it can be used to detect differences in real time so as to reduce the possibility of significant price differences.

2. Triangulation

Arbitrage activities that deal with the currencies of two different countries. If there is a difference between the quoted cross exchange rate and the actual cross exchange rate, the difference between the two currencies can be exploited and the exchange rate is not in balance. With the development of technology, it can be utilized by dealers to arbitrage with cross by detecting misalignment.

3. Covered interest arbitrage

Currency futures rates are determined by the interaction of future supply and demand. Covered interest arbitrage as an activity to take advantage of the difference in interest rates between two countries by applying futures contracts to cover risks. Covered interest arbitrage a hedging against the value due to exchange rate risk. Arbitrage can help reset the market due to many investors utilizing interest rates 90 days ahead. However, if the forward rate has almost the same discount from the spot rate, arbitrage is no longer possible.

With the existence of arbitrage actors, exchanges in the foreign exchange market can move regularly, location arbitrage can cause differences in exchange rates between banks to be the same in different locations, then triangulation arbitrage can ensure that the flow of currency exchange traffic can be determined properly (Darmawan, 2022). Whereas closed interest parity can hedge volatile exchange rate risk by applying futures contracts.

Interest Rate Parity

As a condition of equilibrium, where the difference in interest rates is offset by the difference between the forward rate and the spot rate (Rangkuty & Mesra, 2022). Interest rate parity is an equilibrium condition that occurs from market forces that cause interest rates and exchange rates to adjust and closed interest arbitrage does not apply. Interest rate parity reflects

the comparison between foreign versus domestic investments to determine the parity of interest rates can be done by comparing interest rates forward or discounted at the same time if the current interest rates and futures are not the Simultaneously. Then there will be a distortion. Factors that affect or consider interest rate parity are transaction costs, political risks such as crises that can limit exchange activities, and differential tax laws in the form of differences in investor country rates that are different from the host country rates. (Madura, 2015). Interest rate parity explains the relationship between interest rates, bond yields, and exchange rates of two different countries, divided into two models, including (Sahroni & Zulfitra, 2024):

1. Covered Interest Rate Parity

It is assumed that using futures contracts can be used by investors to hedge against exchange rate risk and that interest rate differentials in different countries should be equal to future exchange rate changes.

2. Uncovered Interest Rate Parity

Interest rate differentials that occur in different countries reflect desirable changes in currency exchange rates and the absence of protection from exchange rate risk.

Speculation and Investors

Speculation is an action by way of betting because it expects a price change on the difference in exchange rates between the prevailing forward rate (future) and the expected future spot rate (Rangkuty & Mesra, 2022). Speculation is an activity of placing capital for profit based on predictions relating to differences in future price levels and market expectations. Meanwhile, investment is a form of activity that allows the parties to the transaction to get satisfactory results, in contrast to speculation, which produces winners and losers (Inker, 2021). Speculation and investment both aim to make a profit, and both bear risk. Speculators do forecasting regarding estimates on prices that will occur in the future, while investment is based on analyzing assets that are of good value and can be maintained to generate profits over time (Chu, 2023). Investment as a form of investing more than one asset with a long time span for the purpose of obtaining future profits (Puryandani & Robiyanto, 2019). Investment activities carried out by investors in the capital market are influenced by uncertainty factors which result in investors not being able to know exactly the results of the investment (Marco & Khafid, 2022).

METHODS

The research method uses qualitative methods, while the type of research is a literature study. Qualitative research is research whose data is not in the form of numbers but in the form of a statement or sentence, and does not require a hypothesis in research. Meanwhile, Library Research is research with objects sourced from literature (Abdullah, 2015). Library Research is sourced from various books, journals, or publications related to a research topic (Wekke, 2019). The research literature study technique is based on secondary data sources from various literatures, such as books, national and international edited journals related to international finance, working papers, or relevant sources such as news related to global economic conditions. The literature used in the research in the analysis is done by identified, selected, and interpreted to obtain the findings used to answer research problems. Sources were selected with a range of years 2020-2025 by searching Google Scholar using the inclusion criteria including interest rate arbitrage, exchange rate arbitrage, interest rate volatility, interest rate parity, speculation and investors, international monetary policy and foreign exchange markets with book references from Jeef Madura. In this research, articles related to the topic have been collected and then reviewed, analyzed in depth to draw conclusions according to the research problem.

FINDING AND DISCUSSIONS

The Relationship Between Exchange Rate Volatility, Arbitrage, and Interest Rate Parity in Influencing Decision Making in the Foreign Exchange Market

Speculation on currencies is one of the causes of currency volatility that is prone to fluctuations carried out by predicting the price of the currency that will weaken or increase and speculation that continues to be carried out intensely triggers changes in the value of the currency quickly. Increases or decreases in the value of currencies that continue to change can have an impact on instability affecting international payments, reducing trade volumes, price changes and public confidence in the currency. decreases and speculative activities can increase the risk of

instability (Rangkuty & Mesra, 2022). The influence of stable politics and a perfect free market has an impact on exchange rate stability and low inflation rates can be used as a signal for investors who expect exchange rate appreciation (Nirmali & Rajapakse, 2016). Widespread economic activity will increase the use of foreign exchange, and other factors such as inflation, income changes, government regulations and expectations of economic conditions can affect currency changes in the foreign exchange market. (Moridu et al., 2021). The level of foreign exchange demand can be influenced by an increase in import financing, speculation activities and capital outflows such as debt payments will increase the demand for foreign exchange which will have an impact on weakening the local currency exchange rate. Meanwhile, the increase in foreign exchange supply is influenced by export activities and increased capital inflows, which have an impact on strengthening the value of the currency (Witjaksono et al., 2023). According to study (Ramoni-Perazzi & Romero, 2022) The existence of exchange rate volatility has a negative impact on economic growth significantly resulting in uncertainty, increasing speculative investors, weakening the financial system, and inhibiting productive investment. Likewise, in the previous study (Keshtgar et al., 2020) that an unstable exchange rate increases speculators in the foreign exchange market, reducing the bank's ability to repay loans or return on capital, which results in declining bank profits.

The foreign exchange market as a place to facilitate trading transactions of local currencies with foreign currencies for the purpose of export and import payments, foreign investment or foreign debt payments. The foreign exchange market is not just for these purposes but can be used as a place of arbitrage to profit from differences in the value of different currencies between countries, but speculators are at risk of causing inefficiencies and currency pricing errors. According to (Madura, 2015) As the price difference of a currency varies from what the currency should be, international arbitrage is a form of market force to rebalance the exchange rate. Arbitrage as a form of utilizing price differences to gain profit without risk. Arbitrage pricing theory expects a high value in the market before a correction in the fair value. According to this theory, setting a price that is not true, supposing that the market is not always efficient, tends to be a mistake in setting a price that tends to be high or low in a short term and becomes an opportunity to gain profit (Baariu & Peter, 2021). As there is a higher interest yield on US bonds than Japanese bonds, the difference in the yield is more favorable when borrowing money in Japanese Yen and investing it in Dollar assets (Robertson, 2025). Thus, the Covered Interest Arbitrage of borrowing in Yen, which is then invested in dollar futures by utilizing the different interest rates between the low Japanese Yen and the high US Dollar, from the return on bonds.

The diverse conditions of various countries with macroeconomic problems as a trigger factor for currency exchange rate instability in the foreign exchange market and speculator activities increase the risk of exchange rate volatility and opportunities for arbitrageurs to take advantage of actual exchange rate differences that have an impact on stability and financial balancing by buying currencies at low interest rates and selling at high prices and naturally arbitrage will equalize the price level in the foreign exchange market. Arbitrage assumes that there are no two prices for an identical asset, as stipulated by the law of one price and the law of one return. Arbitrage, according to financial economists, can produce an efficient market by re-normalizing the price of an asset. Arbitrage relates to financial accumulation and finding mispricing in securities (Musthaq, 2021). The law of one price is that goods or services or other commodities traded around the world have the same exchange rate around the world, which means that the unit value of the domestic currency should have the same purchasing power for commodities around the world (Moridu et al., 2021). Thus, in principle, arbitrage profits by utilizing exchange rate differences without risk because arbitrage is not done by predicting future prices like speculators but based on existing price differences. In addition, referring to the law of one price, which means that one asset does not have different prices at the same time, the price difference can be utilized to buy a currency at a low price and sell it in a market with a high price. The abuse of the law of one price is the cause of arbitrage.

However, when the market can balance with its power to balance interest rates and exchange rates, interest rate parity applies. The equilibrium state in the market occurs when there are no favorable arbitrage opportunities, and interest rate parity is a form of the Law of One Price (LOP) relating to interest rates in different countries (Sa'diyah & Widagdo, 2022). According to

(Madura, 2015) Interest rate parity in its interpretation does not state that investors will earn the same return. It is assumed that if the interest rate in the US is 10 percent, and in the UK is 14 percent. If investors invest domestically, they will earn 10 percent interest, and if investors in interest rate parity (IRP) conditions conduct Covered Interest Arbitrage, then American investors will get the same 10 percent return as in America. Conversely, UK investors will get the same return of 14 percent under IRP conditions. This is in accordance with the theory of Interest Rate Parity that the forward rate (agreed future rate value) on a currency with a different country's currency in accordance with the premium (additional) and discount (reduction) will be adjusted to the difference in interest rates of the two countries. So that interest rate protection arbitrage will obtain a rate of return that is not greater (the same) than domestic investment (Rangkuty & Mesra, 2022).

In the research (Mandei, 2020) Balanced conditions in the foreign exchange market cause market players to not care about storing their assets in local or foreign currency because the rate of return offered is the same. This is because the existence of interest rate parity conditions will indicate balance in the foreign exchange market. The findings show that when the foreign exchange market mechanism is in a balanced condition, both bank term deposit assets (IDR) and bank deposits (USD) will get the same rate of return for each market player, which balance occurs at the level of Rp13,740/US\$. However, the results deviate from the balance at the actual value of IDR because it is too low from the balance value obtained. This occurs because of unexpected economic conditions as a trigger for inflation. So that the foreign exchange market conditions are inefficient, price anomalies occur, causing investors to take advantage of differences in exchange rates. If the occurrence of interest rate parity deviations occurs, investors will tend to choose to borrow in countries with low interest rates and invest with high interest rates, which means arbitrage opportunities for interest rate protection (Sa'diyah & Widagdo, 2022). According to (Hamiani et al., 2020) if there is a deviation in the interest rate parity condition, then theoretically investment will flow to countries that have high interest rates. Other findings in the study (Chen et al., 2022) The implementation of health protocols during the COVID-19 pandemic has an impact on changes in foreign currency values and deviations in the Covered Interest Parity (CIP) and Uncovered Interest Rate Parity (UIP) conditions in G10 currencies, where, when a country experiences high infection cases, the currency will depreciate. Thus, the interest rate parity condition can experience distortion or imbalance when unexpected conditions occur, such as a pandemic or an increase in interest rates due to inflation.

Thus, based on the literature, it shows that uncertain economic conditions, international trade activities of exports and imports and inflation rates are the causes of exchange rate volatility which is exacerbated by the presence of speculators who predict future exchange rates which are at risk of changing exchange rates too quickly which causes inefficiency in the foreign exchange market. With these conditions, it can be utilized by Arbitrageurs and investors to gain profit from differences in interest rates and currencies which are done by making loans with low interest rates and making investments with high interest rates that apply Covered Interest Arbitrage and naturally arbitrage can balance the difference in exchange rates so that the foreign exchange market moves towards efficiency. With the existence of balanced market power, the law of one price applies and the interest rate parity is fulfilled, so the foreign exchange market is efficient and balanced. Arbitrage actors will not gain profit because there is no mismatch in exchange rates and interest rates that can be utilized to gain profit. The implementation of interest rate parity has implications for arbitrageurs and investors who will be indifferent to investing domestically or internationally because they will get the same return and not a greater than domestic investment.

Monetary Policy Maintains Stability of Foreign Exchange Market

The level of price volatility is influenced by the level of speculation, where in Singapore, Japan, and Hong Kong, almost 90 percent of players in the foreign exchange market consider speculation to increase price volatility. In Somalia, currency prices can be manipulated to be very low and high due to activities in the foreign exchange market without regulation, supervision, and protection. This can create a financial crisis, resulting in unpredictable prices impacting poor households, declining income, and falling exchange rates. In Somalia, exchange rate volatility is influenced by macro factors such as speculation, money circulation and imports. Therefore, the Somali government issued a new currency along with the establishment of regional offices,

increasing local production to reduce imports and regulating foreign capital, using local currency in transactions, and limiting the opening of foreign currency accounts as a form of policy to maintain the stability of exchange rate volatility (Nor et al., 2020). The exchange rate that is not targeted by the central bank and fluctuates as a result of the exchange rate gap, and increases the desire of speculators in the foreign exchange market to gain short-term profits. Speculation has a negative impact on investment and a positive impact on inflation, which causes problems in Iran. Therefore, the policy is focused on implementing exchange rate unification to maintain investment and interest rate policies in the real and nominal sectors in Iran (Sadeghi et al., 2022).

During the 1997 crisis in Asian finance, foreign exchange accumulation was carried out by developing countries to protect their currencies from speculative activities and reduce the level of exchange rate volatility. With the extreme volatility in the foreign exchange market, it became the focus of policymakers and influenced investor sentiment (Musthaq, 2021). Exchange rates can be influenced by central banks through floating exchange rate policies that are carried out directly and planned by buying or selling local currency in the foreign exchange market. Foreign exchange intervention can create balance and is applied in developing countries, newly industrialized countries, including the United States (Chaboud et al., 2023). Likewise, India uses a floating exchange rate by intervening in the foreign exchange market through the central bank to maintain and maintain exchange rate volatility and balance against currency speculators, as well as increasing export competitiveness (Gona & Sahoo, 2020). The interaction between supply and demand affects exchange rate fluctuations in the foreign exchange market, currency demand as a result of the increasing need for money for transactions and increasing speculation. As an effort to maintain monetary stability, Bank Indonesia intervenes in the foreign exchange market and manages foreign exchange reserves to stabilize the exchange rate and prevent excessive fluctuations (Avedish et al., 2025).

Financial instability is triggered by sudden selling actions that can suddenly affect foreign capital flows that have an impact on the mismatch in the exchange rate that increases and the possibility of transferring funding with foreign currency at a reasonable cost cannot be done. This can shake investor confidence in investing in the financial markets of developing countries. The IMF's response in maintaining financial stability to these problems is by conducting foreign exchange interventions that can overcome stagnant market liquidity, managing capital flows to reduce outflow pressures (Adrian et al., 2024). Results of findings (Yang & Peng, 2024) that China's policy in influencing exchange rate volatility with market openness through foreign exchange control, as well as the role of FDI as a signal of future economic growth. Volatility in the market has an impact on uncertainty in investor confidence which assesses assets as too high or too low which increases speculation. Monetary intervention policy through foreign exchange reserves has a vital role in maintaining exchange rate stability in the foreign exchange market which has an impact on economic activity (Witjaksono et al., 2023). With the difference in belief in asset prices, it can encourage activity in the foreign exchange market, and these differences in views encourage speculative action and exchange rate instability in the foreign exchange market. So that the impacts arising from macro conditions such as economic instability, increased imports, and speculation can result in exchange rate volatility in the foreign exchange market, which can cause imbalances and opportunities for speculators or arbitrageurs to gain profits, and imbalances can affect investor sentiment. To maintain exchange rate stability in the foreign exchange market, governments, especially in developing countries, intervene through controlled floating exchange rates, interest rate policies, maintain liquidity and capital flows carried out by monetary authorities and central banks and reduce dependence on imports and increase exports.

CONCLUSION

The volatility of the exchange rate in the foreign exchange market can be influenced by macroeconomic conditions, political turmoil, inflation, and speculators who can influence the movement of the exchange rate, which changes drastically. Arbitrage actors, in addition to taking advantage of distortions and imbalances in the foreign exchange market by buying currencies with low interest rates or exchange rates and selling them in markets with high interest rates but also naturally help balance the exchange rate towards efficiency. With the implementation of interest rate parity and the law of one price, arbitrage can not make a profit because the market is in a balanced condition, and there is no distortion that can be exploited by arbitrage actors. In

addition, interest rate parity has implications for investors to be indifferent in making investments because they will get returns that are not greater than domestic investments. Maintaining the volatility of the foreign exchange market but stable involves the role of monetary authorities, is involves by implementing interventions carried out through controlled floating exchange rate policies, maintaining liquidity, increasing exports, and interest rate policies.

SUGGESTIONS

In accordance with the research results that this research is still far from perfect research because this research only relies on literature sources not measured by statistics. Therefore, the researcher hopes that the results of this study can be used as a reference for further research.

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