

Study on the Forms of Interest Rate Swap Markets between China and the United States under the Background of Fed Rate Hikes

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Abstract

The research on forms of interest rate swap markets between China and the United States under the background of fed rate hikes aims to determine the reason for using various types of interest rate swap markets used between the two countries. Various previous studies have been reviewed to provide a viewpoint on the gaps in the research. The methodology to be applied in the research project is an empirical method. Secondary sources will be used for data collection and analysis using SPSS and Excel software. Independent and dependent variables are to be used in analyzing the research. The research shows how China and U.S. apply various forms of interest rate swap markets as influenced by the fed rate hikes hence the reason for developing variables to show the relation between fed rate hikes and swap markets. Hypothesis testing is used to analyse the findings based on the variables developed for the research to offer the forms of interest swap markets and the relation with fed rate hikes. The empirical method is considered convenient since hypothesis testing can be used in analyzing the forms of interest rate swap markets between China and the USA using the findings of verified sources. The conclusions of the research project are to show that forms of IRS market between the USA and China include cross-currency, fixed-floating and onshore swaps from various previous studies conducted.

Keywords

Interest Rate Swap Market; Onshore Market; Fixed-Floating; Cross-Currency; Federal Reserve Rate.

1. Introduction

1.1. Background

Interest Rate Swap (IRS) plays a significant role when countries or parties find terms for making payments or managing credit within a given time frame. The United States and China have been engaging in various economic activities, and financial conditions or aspects between the two countries influence credits or payments. IRS markets between USA and China play a significant role in both countries' federal reserve rates and financial conditions, considering its impact on monetary policies [1]. The IRS markets influence the interest rate by controlling trade or other economic activities between China and the USA.

Federal reserve rate hikes for every country determine the form of interest rate swap markets, and this is entirely based on the financial and economic situation of China and the USA. China and USA function with two different reserve rates, meaning that each fed rate hike implicates the IRS differently [2]. A comparison of the two countries provides a better understanding of the forms of IRS markets and the fed rate hikes being applied to ensure the payment structure is feasible. The interest rate swap market is essential to understand how federal reserve rate

hikes change depending on a country's economic or financial situation to support the mode of payment.

Various interest rate swap markets exist, including fixed-to-floating, over-the-counter markets, central clearing counterparties, exchange-traded markets and floating-to-floating interest swaps. USA and China have their interest rate swap, which depends on their agreement which would be convenient in relation to their financial situation [3]. Every form of IRS market has its own risk, and studying the form applied allows showing the strategy behind the form in relation to how fed rates hike [2]. Therefore, the study aims to deliver the type of interest rate swap market used by the USA and China under the background of the fed rate hike, explaining how convenient it is for the USA and China, which are the parties involved.

1.2. Research Problem and Significance

The research aims to solve the problem of determining which form of interest rate swap market is used between the USA and China. The study will uncover the interest rate swap market used based on the fed rates hike between the two countries. China and USA provided rate hikes are known to implicate the financial situation in the countries, and this affects the interest rate swap market, considering how the reserve rates are one of the controlling aspects of currency value and credit rate. The research is, therefore, to analyze the strategy behind the form of interest rate swap market between the USA and China to explain its relation to federal reserve rates hike.

The significance of the research is to provide an understanding of how forms of interest rate swap markets work in relation to federal rate hikes, focusing on the USA and China. The research will provide relevant findings showing how the form of IRS market adopted by the USA and China is appropriate and convenient for both countries' federal reserve rate hikes. Economists or financial experts can use the study to further research the relationship between federal rate hikes and IRS markets to show the situation in countries other than the USA and China.

1.3. Objectives and Research Questions

Objectives of the research of the forms of the interest rate swap markets between China and the United States under the background of Fed rates hikes include:

- 1) To determine the forms of interest rate swap markets existing between China and the USA;
- 2) To determine the influence of federal reserve rate hikes on the interest swap markets;
- 3) To analyze the challenges involved in interest rate swap markets between China and USA.

The research questions of the study are:

- 1) Which are the forms of interest rate swap markets between China and the United States?
- 2) How does the federal reserve rate hike influence the interest swap markets?
- 3) What are the challenges in the interest rate swap market between China and the United States due to the federal rate hike?

2. Literature Review

There are prior studies done on the forms of interest rate swap markets which exist for various countries, including China and the USA hence providing insights on how the countries in relation to the fed rates can be hiked. Lin et al. researched China's bilateral currency swap lines since the global financial crisis, which occurred in 2008. The study aimed to show several economic factors which implicated the swap line agreement for China. The methodology applied in the research paper is empirical, including the application of regression analysis for the data analysis and collection [4]. Findings from the empirical study explained the aspects which affect China's interest rate swap market with other countries, and the exchange rate is

highlighted as one of the monetary aspects which implicate the interest rate swap market. The paper by Lin et al. provided information on the interest rate swap market for China with other countries, making it relevant in relation to the research. The working paper has a gap in some interest rate swap markets used between China and other countries.

Brophy et al. varied research on the role of cross-currency swap markets in funding and investment decisions on the U.S. dollar to explore cross-border flow from investors and change trends in the cross-currency interest swap market, implicating the Europe asset purchase programme. The paper's methodology is a secondary analysis of prior finance and economic studies on cross-currency interest swaps as a form of IRS across Europe. Findings from the study describe how the dollar cross-currency interest swap market is expensive and warranted by the covered interest rate parity condition hence making the monetary policy alter the price of money, which in the long run influences the cross-border capital flows [5]. The federal reserve rate hikes also increase since the foreign exchange risk exists based on the demand for the dollar. Thus, The paper is resourceful in explaining how the cross-currency interest rate swap market is used between the U.S. and other countries influenced by fed rate hikes. However, more must be highlighted about the challenges or risks of the swap market.

Fu and Ho studied the monetary policies and interest rates under China's evolving monetary policy framework to assess the effectiveness of the monetary policy in China on market interest rates. The event study approach is the research methodology used in the research paper, which shows how the fed reserve plays a vital role in rates hike [6]. The research results explain how price-based instruments impact the market interest rates, which increase over time, and the Federal Reserve or central bank communication is essential in controlling the rate hikes [6]. The study is relevant to the research by providing essential information on how monetary policy in China influences the interest rate swap market based on the federal rate hike, considering that it monitors the interest rates. The research has a gap on how the federal reserve rate hike is used to decide the interest rate swap market between China and other countries.

Sun and Park researched the onshore interest rate swap between the exchange rate of RMB and U.S. markets. The study aimed to show the exchange rate reform on the onshore and offshore swap markets before and after "8.11". The study applies the Granger causality test, impulse response and co-integration test as the primary research methods [7]. The research results show how the authority of the central parity rate is affected by the deviation of the market transaction price, onshore and offshore price. The findings from the research help showcase how the onshore interest rate swap market is being utilized by China in exchange with the U.S. dollar based on the central parity rate, which is influenced by fed rate hikes. The study, however, needs to explain some of the influence of rate hikes by the fed reserve on the onshore interest swap market, which China and other countries are using.

3. Research Method

3.1. Methodology

The research process will involve the use of empirical methods as the approach to conducting the study. Empirical studies use secondary sources of information for the data collection for the research project. Research papers, working papers and journals will be the data sources in this case based on their reliable and credible sources of information [8]. The findings collected will be analyzed based on variables. The independent variables for the study are a market reaction to fed rate hikes in relation to the interest rate swap market, cross-border capital flow and financial stability and financial market integration. On the other hand, the dependent variables are the market volatility, market liquidity and type of swaps. Hypothesis testing will be used in analyzing the findings collected on the forms of IRS markets between China and the U.S.

3.2. Data Analysis

The collected data will be analyzed using SPSS and Excel software. SPSS and Excel are one of the available software which can be used in hypothesis testing. The software can be tailored with the appropriate statistical test to determine whether the hypothesis is null or true [9]. Hypothesis testing involves confirming whether an assumption about a parameter truly exists. The hypothesis to be tested is whether America and China use the onshore and cross-currency interest rate swap market as payment.

3.3. Justification

The empirical research approach is the appropriate choice based on how convenient it is to research where the hypothesis can be tested against empirical data. The study is an observation of an economic phenomenon based on previous studies done by other scholars within the same area of research [10]. Using verified and credible sources is recommended for this type of research. Still, it is however limited by how it takes a lot of time to analyze and collect credible and relevant secondary sources [10]. Some of the advantages include its reliable data collection method and flexible and credible findings [10].

4. Conclusion

In conclusion, the research project uncovers the interest rate swap market forms used based on the fed rates hike between the two countries. Various kinds of literature in relation to the topic are to be reviewed in support of prior studies. Empirical research methods will be applied in the research. Hypothesis testing will be used in the research data analysis, and SPSS as well as Excel will be the software used. The study will use secondary reliable sources verified as data sources. Independent and dependent variables will be important in data analysis since they will show the relation between parameters in explaining the forms of interest rate swap market between China and the USA. The expected results of the study show how China and America use onshore swap, cross-currency and fixed-floating swap markets.

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