
Trade Tensions and Currency Management: Evaluating China's Exchange Rate Strategies in the Era of Economic Nationalism

Dr. Palvinder Kaur Bakshi

Associate Professor

PGDAV College evening, University of Delhi

Abstract: The trade tensions between China, the United States, and Australia have gone far and wide in influencing the dynamics of the global economic processes particularly on the value of the CNY and the stability of the finances in the region. The paper is based on the issue of fluctuation of Chinese yuan against US dollar and Australian dollar, and the impact of this on the demand and supply of loans in the Chinese credit market and financial stability of the country at large. By use of an auto-regressive distributed lag (ARDL) model, a strong relationship between the conditions in credit market and exchange rate volatility has been found. The trade tensions and consequent devaluation of the CNY have caused the Chinese financial institutions to increase the lending conditions and interest rates, credit restriction, and the cost of borrowing. The current trade wars also demonstrate the significance of being alert and dynamic through diversifying the economy and making the policy more coherent to make the financial system of China resilient in the long-run perspective.

Key words: Trade Wars, Exchange Rate, Credit Market, Policy Strategies, Auto-regression Distributed Lag

1. Introduction

The current trade wars between the nations are significantly altering the global economic relationships with an impact on the international trade, economic stability, and growth. These clashes are the emerging problems which come by as a result of tariffs, trade barriers and geopolitical tensions, which threaten the financial system of the world, particularly to the emerging markets. China, the largest exporter in the world, is one such vulnerability, especially prone to the change in international trade trends (Angelov, 2023). This paper examines the impact of trade wars in terms of currency exchange rate volatility with respect to the case of the Chinese yuan (CNY) versus the US dollar (USD), as well as the Australian dollar (AUD). Due to the trade tensions and other related developments, there has been a reversal of international competitiveness of China to its financial markets and more particularly its credit markets. This research will focus on trade disputes, currency rate pressures, and policy changes in the credit markets in China, as well as on instance studies will enable the researcher to examine real-life examples of trade disputes and how they have affected the economy of China. In this instance, the issues include the US and Australia. It seeks to point out the wider effects of these trade wars on the economic well-being and development of China offering an insight into the globalization of trade and finance with increased protectionism and competition between the leading economies.

The aim of the study is to investigate the effects of external economic shocks on the domestic economy in reference to the effect of trade policy on trade terms and exchange rate changes (tariffs and quotas). Tariffs and quotas are trade policies that have a significant effect on the exchange rates since their effect is on the trade balance. The Mundell-Fleming model asserts that such policies have direct impacts on the currency market of demand and supply and that eventually lead to the establishment of the exchange rate (Nicita, 2013). Tariffs introduced by the United States triggered expectations of a decline of Chinese exports, therefore, triggering the decrease in the demand of the Chinese Yuan (CNY) and its devaluation against the United States Dollar (USD.) (Xu and Lien, 2020).

The trade tensions have created an uncertainty in the foreign exchange market, which causes volatility. When economic insecurity is at the global level, investors would opt to find shelter in safe haven currencies such as the USD. (Doroodian & Caporale, 2000). As the US-China trade war was at its

peak, the USD has strengthened against other currencies, indicating the fear of investor on the effect that this dispute will have on the world economy. The CNY fell significantly against USD, especially after significant announcements of tariffs. This state of affairs has caused more volatility of the AUD/CNY exchange rate, which points to the economic uncertainties, which are the result of the trade tensions... (Guo & Chen, 2022).

The volatility in the exchange rates has a great effect on the credit risks experienced by the firms that are involved in international trade as they are more likely to be affected by the volatility levels and this increases the risk of the firm and makes borrowing expensive and access to credit to be limited. (Solakoglu et al., 2008). The Chinese export companies have a tendency to get finances in foreign currencies and as such they are exposed to exchange rate risks that affect the credit risk profile of the financial institutions. As currency depreciates, banks that borrowed extensively a foreign currency have greater credit risk as their loan portfolios are of lower value in domestic currency. (Adcock et al., 2014). The exposure to the foreign currency-based obligations is rising in emerging economies like China and this impacts the banking industry. The changes in exchange rates affect the cost of borrowing, corporate financial reports, and investor confidence, thereby changing the overall credit market in the economy (Zhou, 2022). The changes in the rates of exchange have great influence on the supply and demand of credit that is highly important to most businesses relying on trade finance and external borrowing. The credit policy has been tightened, and this has been linked to high depreciations of Chinese Yuan (CNY). This is attributed to the fact that the banks are more hesitant to lend during such periods because the risk of credit is high. Hunter and Bergbrant (2016). The sensitivity of portfolio investments and foreign direct investment (FDI) to fluctuations in currency rates and trade policies is high.

According to the studies, the capital flows fall when there is uncertainty in trade and fluctuations in the exchange rates since the investors strive to reduce the exposure to risk. (Atella et al., 2003). Capital flight in China occurs in case there is severe depreciation of the CNY whereby the investors move the assets into foreign nations as a means of stability. This makes the banks experience liquidity problems, decreases deposits and increases the demand of foreign currency. This can in turn lead to a stricter lending environment on the part of the financial institutions, the increase in interest rates and the additional burden on liquidity risk management Cheung (2013) is the author of the study. Global financial integration, open capital accounts, and currency rates are all interdependent on China. When there is news about trade, particularly changes in exchange rates, the financial markets respond quite strongly. When combined with shifts in trade policy, movements in exchange rates have the potential to greatly affect bond returns, interest rates, and asset values. Previous research by Hua et al. (2013) says... Industries focused on export, including manufacturing and technology, are particularly vulnerable to price swings caused by changes in the Chinese yuan (CNY). This makes the Chinese stock market exceptionally susceptible to these swings. The exchange rate also responds to the exchange rate with a rise in bond yields of the sovereign bonds since the investors demand greater returns to compensate the risk. Such an increase in the yield of government bonds has been witnessed during trade tensions, which are concerns about the possible impact of the economy in terms of decreased export income and slow economic growth (Cuestas & Tang, 2017) (Chengdong and Quan, 2015).

Central banks and government entities play a crucial role in addressing the impacts of trade wars and exchange rate fluctuations. Direct interventions in the foreign currency market, interest rate changes, and targeted liquidity provisions for important sectors are just a few of the measures put forth by the People's Bank of China to stabilise the Chinese Yuan and bolster the banking sector. (According to Wang, 2023). China's policy solutions to economic issues caused by trade have shown initiative and flexibility. In order to keep the credit market running smoothly even when the economy is struggling, the People's Bank of China employs a number of monetary policy instruments, such as adjusting

reserve requirement ratios and providing liquidity assistance to important industries ("Lessons and Implications for the Present of Chinese Anti-Crisis Measures in 2015," 2022).

The Chinese government intervenes in the foreign exchange market to manage currency fluctuations and maintain export competitiveness in international trade. (Yi, 2011). Credit market stability and decreased volatility have resulted from China's central banking actions, but some academics worry that this may be short-lived comfort and might cause financial distortions in the long run. In the face of massive influxes of money from throughout the world, the literature stresses the need of maintaining monetary policy independence while simultaneously stabilising currencies. (Yang, 2016). The research focusses on the Chinese economy but emphasises comparing it to other economies suffering comparable economic issues, such as the U.S.-EU trade war. It observes that the developed economies understand the effects of trade on the exchange rates and have realized the use of fiscal policies and market interventions to mitigate the effects on their credit markets. (Ahmed et al., 2022).

The responses of Australia to the growing trade tension with China were additional changes in monetary policy, as well as an attempt at diversifying trade partners. Reserve Bank of Australia is forcefully controlling the swings of the Australian Dollar, and the financial institutions are adjusting lending procedures to reduce risks in areas that are susceptible to the Chinese market. These patterns form important background information about the unique issues faced by China and how it has responded to trade conflicts in a strategic way. "When China Strikes: Measuring the Stock Price Reactions of Australian Companies to China's Trade Restrictions," 2023 Marks (2020).

Research Gaps

In the context of trade relations between China, the nation, and Australia, this study will address the research gap on trade wars' effects on currency rates and the credit market. Although much is said about the US-China trade war, the role of this conflict in Australia has received surprisingly little attention. Furthermore, there has been a dearth of research on how changes in China's currency rates impact the country's credit markets. This research aims to bridge that knowledge vacuum by investigating the effects of trade conflicts on China's credit markets via an examination of the effects on currency rates.

Objective: According to the existing academic discourse, this research project will have the purpose of:

1. Analyse how the US-Australia trade war has affected the value of the CNY and what this means for China's economy and currency policies.
2. Look at how changes in the exchange rate influence China's credit market in general, as well as the availability of loans and the stability of credit risk.
3. Assess the efficacy of China's policy actions aimed at alleviating the adverse impacts of trade-related exchange rate volatility within the credit market.
4. Compare how these kinds of trade conflicts affect credit markets in other major economies, notably in Australia and the European Union.

Research Methodology

This paper analyses trade disputes' impacts on China's currency exchange rate and loan market volatility from 2015 to 2023 using quantitative data from the People's Bank of China and the International Monetary Fund. The research investigates various characteristics of the credit market, including loan demand, non-performing loans (NPLs), and credit accessibility. utilising an auto-regressive distributed lag model, the light of rising prices, GDP, and international interest rates. Financial trends may be identified by Python trend analysis, and China's interest rate adjustments and liquidity policies, which aim to lessen the impact of trade tensions, can be evaluated through qualitative research. The study sheds light on how strong China's financial system is and how effective these changes have been.

I. Econometric Model: Auto-regressive Distributed Lag Model

This model also analyzes the interactions of the Chinese credit market with the exchange rate of the country and focuses on the short and long-term effects of the currency changes on significant credit market indicators. The analytical framework used is mentioned and analyzed in detail.

$$Y_t = \alpha + \sum_{i=0}^p \beta_i Y_{t-i} + \sum_{j=0}^q \gamma_j X_{t-j} + \sum_{k=0}^r \delta_k Z_{t-k} + \varepsilon_t$$

Where:

Y_t = Dependent Variable at time t , here, Loan Volumes

X_{t-j} = The independent variable, representing, exchange rate values at time $t - j$,

especially, exchange rate (CNY/USD) and the exchange rate (CNY/AUD),

Z_{t-k} = Control Variable at time $t - k$ including, inflation rate, GDP growth, and Global interest rates

α = Constant term,

β = The lagged dependent variable coefficient,

$\gamma_j \delta_k$ = The coefficients of the lagged independent and control variables.

ε_t = The error term.

Detailed Model Used in the Study

$$\begin{aligned} \text{Loan Volumes}_t = & \alpha + \beta_t \text{Loan Volumes}_{t-1} + \gamma_0 \text{Exchange Rate}_t(\text{CNY/USD})_t + \\ & \gamma_1 \text{Exchange Rate}_t(\text{CNY/USD})_{t-1} + \gamma_2 \text{Exchange Rate}_t(\text{CNY/AUD})_t + \\ & \gamma_3 \text{Exchange Rate}_t(\text{CNY/AUD})_{t-1} + \delta_0 \text{Inflation}_t + \delta_1 \text{GDP Growth}_t + \\ & \delta_2 \text{Global Interest Rate}_t + \varepsilon_t \end{aligned}$$

$\gamma_0 \gamma_2$ = Showing how changes in the exchange rate affect the amount of loans in the short term.

$\gamma_1 \gamma_3$ = Taking into account the lagged impacts of past changes in currency rates, which show how the exchange rates of the past affect the amount of loans being made now.

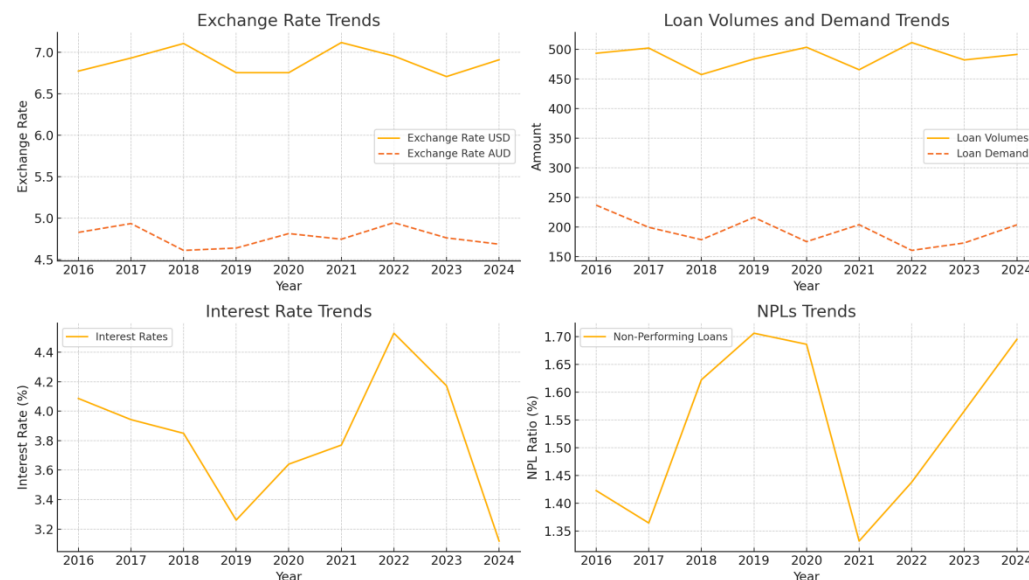
$\delta_0 \delta_1 \delta_2$ = Coefficients for the control variables, which show how inflation, GDP growth, and global interest rates affect the amount of loans given

Discussion

Due to the limited sample size, the model may be overfitting, as shown by the lower Adjusted R-squared value of 0.531. The Autoregressive Distributed Lag (ARDL) model, however, explains roughly 94% of the variance in loan amounts (R-squared: 0.941) according to the research. The CNY/USD and CNY/AUD factors exchange rate have a negative effect on the volume of loans, but since they are not statistically significant, this aspect undermines their reliability. Because the control variables, i.e., inflation, growth of the GDP and global interest rates are not significant, either more data needs to be added or the model will have to be redesigned. The study will illustrate the impact of the exchange rate change on the Chinese loan industry between 2015 and 2023 in a graphical manner. Since the Chinese yuan will vary against the US dollar as well as the Australian dollar, the book dwells into the importance of a stable currency and the connection between the currency and these changes. According to this theory, the changes in exchange rates are associated with the change in the elasticity of the main element of the credit market which is the demand and supply of credit. It also takes into consideration the effects of the changes in the monetary policy as a response to the economic shocks in the cost of borrowing and access to credit. Finally, it means that the threat of loan defaults is connected with the increased pressure of the exchange rates, particularly in the trade exposed

industries, which indicates the possibility of the financial instabilities in the large scale currency changes.

The importance of stable exchange rates in guaranteeing financial stability within the Chinese credit markets has been shown by the diagrams, which show the link between the exchange rates, credit markets, and economic policies. These results however show that further research is required to get more information and more extensive modeling processes are required to comprehend these interrelationships in a holistic way.



Source: Analyzed from (21)(22)(23)

II. China's Policy Reactions to Economic Difficulties Arising from Trade Wars

The paper investigates the manner in which China interaction of monetary and fiscal policies is cooperating with economic issues of trade wars with U.S. and Australia. It examines how efficient the PBOC policies are that include lowering of interest rates and reserve requirements ratios to encourage lending especially to the small and medium sized enterprises (SMEs). Despite this, they attempted this, but the world uncertainties and the capital outflows cut their impacts. PBOC also implemented the foreign exchange dealings so as to stabilize the yuan as well as to regulate the financial risk. The Chinese government devised certain liquidity relief, tax cuts or subsidies to the concerned industries which made it doubtful that these fiscal policy measures would be sustainable in the long run. Credit tightened became the reactions of banks to all economic uncertainties, as well as due to an increased risk control and investment within the country. The discussion highlights weaknesses associated with current fiscal strains and the necessity to implement structural changes to be more resilient in the face of global trade difficulties. The trade war between the US and China significantly weakened the yuan, which augmented the cost of debt services on foreign debts and strained the credit conditions in the country, which further weakened the growth. Although the financial stability measures were put in place, they increased the cost of borrowing and restricted access to credit. In general, the research indicates the importance of implementing policies in a coherent manner and flexibility in a dynamic international economic context to assist growth and financial stability.

The fluctuation in the exchange rates and trade tensions are forcing Chinese financial institutions to tighten and loosen lending requirements and rates. They are becoming more discriminating in the issuance of loans, particularly to the international trade businesses, becoming more stringent on creditworthiness criteria, and demanding additional documentation and confirmation as collateral to reduce the exposure to default. This is a defensive measure against bad loans in the volatile economy.

Lenders are also shifting towards other lines of less risky investments such as domestic consumption and infrastructure and reviving strategies to maximize loan books and minimize exposure to their industries. The interest rates have been raised to keep the profitability and discourage borrowing by weak businesses hence accessibility to credit has become hard. Short-term financing is also shifting as companies in risky industries are accessing short-term funding, and this is with the preference of banks to give short-term loans in times of economic turmoil.

Conclusion

The trade disputes between China, the U.S and Australia have influenced the Chinese exchange rate regimes and credit market and China requires the timely response of policies to ensure financial stability. Interest rate adjustments and foreign exchange interventions have proved to work, but due to the constant trade conflicts, more vigilance and flexible policies are needed in China. The economy can be diversified by encouraging domestic consumption and diminishing the dependence on exports to protect it against exogenous shocks. The increase in the financial infrastructure and alignment of monetary, fiscal, and industrial policies will help to become more resilient. Having large foreign exchange reserves is crucial towards crisis intervention, and the development of domestic investment would reduce reliance on foreign direct investment. The risks of trade disputes can be reduced by forming regional trade blocs and export diversification. In the analysis, more studies should be conducted into the long-term impacts of these adjustments and the analysis shows that strategic efforts should be made to guarantee a stable economic situation amidst global turmoil.

References:

- Adcock, C. J., Hua, X., Mazouz, K., & Yin, S. (2014), “*Derivative activities and Chinese banks’ exposures to exchange rate and interest rate movements*”, *European Journal of Finance*.<https://doi.org/10.1080/1351847X.2014.899260>
- Ahmed, S., Correa, R., Dias, D. A., Gornemann, N., Hoek, J., Jain, A. K., Liu, E. X., & Wong, A. (2022), “*Global spillovers of a Chinese growth slowdown.*”, *Journal of Risk and Financial Management*.<https://doi.org/10.3390/jrfm15120596>
- Angelov, I. (2023), “*Global currency wars: Implications for emerging economies*”, *Social Science Research Network*.<https://doi.org/10.2139/ssrn.4417611>
- Atella, V., Atzeni, G. E., & Belvisi, P. L. (2003), “*Investment and exchange rate uncertainty*”, *Journal of Policy Modeling*.[https://doi.org/10.1016/S0161-8938\(03\)00074-7](https://doi.org/10.1016/S0161-8938(03)00074-7)
- Bergbrant, M. C., & Hunter, D. M. (2016), “*Do credit market conditions affect firms’ post-hedging outcomes? Evidence from bank credit standards and firms’ currency exposure*”, *Social Science Research Network*.<https://doi.org/10.2139/SSRN.2044975>
- Chengdong, X., & Quan, Z. (2015), “*Research on the impact of RMB exchange rate fluctuation on Chinese stock market: From the perspective of index*”, *International Journal of Economics, Finance and Management Sciences*.<https://doi.org/10.11648/J.IJEFM.20150305.40>
- Cheung, Y.-W., & Qian, X. (2010), “*Capital flight: China’s experience*”, *Social Science Research Network*.<https://doi.org/10.2139/SSRN.1628042>

Cuestas, J. C., & Tang, B. (2017), "Asymmetric exchange rate exposure of stock returns: Empirical evidence from Chinese industries", *Studies in Nonlinear Dynamics and Econometrics*.<https://doi.org/10.1515/SNDE-2016-0042>

Doroodian, K., & Caporale, T. (2000), "Currency risk and the safe-haven hypothesis", *Atlantic Economic Journal*.<https://doi.org/10.1007/BF02298360>

Guo, W., & Chen, Z. (2022), "China–US economic and trade relations, trade news, and short-term fluctuation of the RMB exchange rate", *Review of International Economics*.<https://doi.org/10.1111/roie.12622>

Hua, X., Huang, W., & Jiang, Y. (2013), "Exchange rate risk, transmission channels, and asset returns: Evidence from China", *Social Science Research Network*.<https://doi.org/10.2139/SSRN.2311617>

Lessons and implications for the present of Chinese anti-crisis measures in 2015. (2022), *Academic Journal of Business & Management*.<https://doi.org/10.25236/ajbm.2022.041905>

Marks, A. (2020), "An analysis of the structure of trade between Australia and China: An Australian perspective", *The Economists' Voice*.<https://doi.org/10.1515/EV-2020-0004>

Nicita, A. (2013), "Exchange rates, international trade and trade policies", *International Economics*.<https://doi.org/10.1016/J.INTECO.2013.10.003>

Solakoglu, M. N., Solakoglu, E. G., & Demirağ, T. (2008), "Exchange rate volatility and exports: A firm-level analysis", *Applied Economics*.<https://doi.org/10.1080/00036840600749888>

Wang, Z. (2023), "Analysis of factors influencing the fluctuations in the RMB to US dollar exchange rate", *Frontiers in Business, Economics and Management*.<https://doi.org/10.54097/fbem.v12i1.14084>

When China strikes: Quantifying Australian companies' stock price responses to China's trade restrictions. (2023, *Australian Journal of Agricultural and Resource Economics*.<https://doi.org/10.1111/1467-8489.12532>

Xu, Y., & Lien, D. (2020), "Dynamic exchange rate dependences: The effect of the U.S.-China trade war", *Journal of International Financial Markets, Institutions and Money*.<https://doi.org/10.1016/J.INTFIN.2020.101238>

Yang, S. (2016), "Capital flows, sterilization, and macro-prudential policy in China", *Emerging Markets Finance and Trade*.<https://doi.org/10.1080/1540496X.2016.1148026>

Yi, J. (2011), "The political economy of China's exchange rate policymaking in the Hu-Wen era", *China: An International Journal*.<https://doi.org/10.1142/S0219747211000094>

Zhou, C. (2022), "Identifying the impact of exchange rate volatility on corporate credit risk: Firm-level evidence from China", *Emerging Markets Finance and Trade*.<https://doi.org/10.1080/1540496x.2022.2072205>