

The Impact of Tax Cuts on Exchange Rate Changes in The Context of High Inflation and High Debt: Evidence from The UK "Mini-Budget"

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Abstract: This research mainly focuses on the exchange rate fluctuations after the British government of Liz Truss announced to introduce the tax reduction policies, mini-budget. This budget covers the abolition of the highest 45% income tax rate, turning down the income tax and partial stamp duty, aiming to provide greater tax relief to the wealthy to encourage investment and consumption. Based on the SVAR, in the case of high inflation and high debt, tax reduction policies may further intensify the pressure of currency depreciation, leading to a significant decline in the exchange rate. In addition, this paper found that fiscal expenditures and inflation rate have significant and persistent impact on the exchange rate. The conclusion of this research emphasizes that the tax reduction policies in the context of high inflation and high debt will exacerbate the exchange rate fluctuations, which has important implications for policy makers and market participants. In the current highly unstable global economy, a deep understanding of the impact of tax reduction policies on the money market is crucial for stabilizing the economy and monetary system.

Keywords: mini-budget, tax reduction policy, high inflation, exchange rate

1. Introduction

As the largest financial market, the foreign exchange trading market, has a huge trading volume and complex market structure. The fluctuation of exchange rates affects the stability and sustainability of cross-border economic activities, making it an important research topic in the financial field. The current research mainly focuses on various factors that affect foreign exchange rates, including but not limited to the impact effects of uncertain events and the implementation of monetary policies. Uncertain events such as trade wars and geopolitical conflicts often lead to emotional fluctuations among market participants, leading to instability in investment behavior. In addition, monetary policy adjustments, especially changes in interest rate policies, can directly affect the volatility and stability of exchange rates. However, the tax reduction policy implemented by the UK government in 2022

has had a significant impact on the foreign exchange market, and it deserves further research. The UK government released the Mini-Budget on September 23, 2022, aiming to implement a £ 45 billion tax exemption package. The implementation of this policy was complicated by multiple factors, such as the late stage of the COVID-19, the Energy crisis, the geopolitical situation, and the global supply chain problems, which led to the rise of prices, pushed inflation to 10%, and debt accounted for 97.4% of GDP. The tax rate adjustment seems to have failed to stimulate economic growth as expected, instead triggering a significant depreciation of the pound in the short term. Through investigation of this event, it was found that when government funds are insufficient, tax reduction measures may not only fail to stimulate economic growth, but may also exacerbate the risk of national debt, leading to short-term sharp fluctuations in the exchange rate. Therefore, this paper aims to study the significant correlation between the impact of tax rate adjustment and the economic indicators of exchange rate fluctuations under the background of high inflation and high debt, using economic theory and statistical methods. Provide useful policy recommendations for decision-makers based on this conclusion.

At present, research on the influencing factors of exchange rate fluctuations mainly focus on the following two aspects. On the one hand, it is pointed out that exchange rates are mainly influenced by economic and political factors. In 2017 Chen analyzed the influencing factors of RMB exchange rate fluctuation from two aspects: economic factors and policy factors through qualitative analysis [1]. The economic factors were divided into five aspects: GDP, inflation, balance of payments, foreign exchange reserves and interest rate level, and the policy factors were divided into three aspects: Exchange rate regime, monetary policy and quantitative easing monetary policy of the Federal Reserve. Li demonstrated the Nonlinear cointegration relationship between the real effective exchange rate of the RMB and basic economic factors by establishing a nonlinear BEER model [2]. On the other hand, it is pointed out that exchange rates are affected by uncertain events. Taking the COVID-19 as the research window, Zhu pointed out that uncertain events can bring negative emotions to people, change people's psychological expectations, thus reducing the risk preference of market participants, affecting their consumption and investment behavior, and ultimately affecting the change of exchange rate [3].

Fiscal policy is one of the two pillars of macroeconomic regulation. And the main way to affect the supply and demand relationship of foreign exchange is through the increase or decrease of fiscal expenditures and tax rate adjustments. Tight fiscal policies can suppress overall demand and price increases by reducing fiscal expenditures and raising tax rates, which is beneficial for improving a country's trade and international balance of payments, causing an increase in the foreign exchange rate of a country's currency.

Chinese scholars pay great attention to the research on tax and fee reduction, economic development and exchange rate changes. Shi used Panel data based on 31 provinces and cities from 2000 to 2020 and found that cutting taxes and fees significantly promoted high-quality economic development [4]. Wang Yuwei believes that when the market is optimistic about a country's future economic growth trend, the country's exchange rate will be in an upward trend, and vice versa [5]. However, Guan believes that expanding the scale of tax cuts will increase the pressure on government fiscal expenditure, thereby stimulating the expansion of government debt [6]. Liu found that the impact of the epidemic combined with tax and fee reductions has significantly reduced fiscal revenue, increased debt repayment pressure, and increased debt risk [7]. At the same time, Western scholars mainly focus on factors such as economic and international instability. Oxford Analytica believes that due to borrowing costs and economic and political pressures that are no longer as low as in the past, it is difficult to obtain financing for current income and expenditure account deficits [8]. In 2022, its proportion to GDP has exceeded 5%, and the UK government has not formulated a clear plan for the repayment method of these funds, which has raised concerns about its financing methods and the

impact on the pound, inflation, debt costs, investment and growth. As a result, it has sold the pound instead of purchasing it again, leading to a depreciation of the pound. In addition, Western scholars pay more attention to the relationship between inflation and exchange rate changes. FoEh conducted regression analysis through Panel data of inflation rate, exchange rate and GDP during 2007-2016, and found that inflation rate has a significant negative impact on foreign direct investment, while exchange rate has a positive impact on foreign investment [9]. Ludger Schuknecht believes that expansionary fiscal policies will stimulate currency depreciation and inflation [10].

In summary, previous studies have shown that the impact of tax reduction policies on exchange rate changes is influenced by a combination of various factors, including economic development, market expectations, fiscal conditions, and uncertainty in the international situation. Previous studies have been based on ideal economic conditions, lacking specific analysis of tax reduction policies in high inflation and high debt. This paper will measure exchange rate changes from the scale of tax cuts in the UK government's mini-budget, as well as multiple dimensions such as inflation, economic size, and government finances.

2. Theoretical Analysis

2.1. Tax Cut & Exchange Rate Changed

Tax reduction can not only directly stimulate private investment but also help the government to regulate inflation or deflation, thus indirectly changing the real exchange rate. From a micro point of view, reducing tax rates can directly increase the disposable income of the relevant industries. For enterprises, this can sufficiently reduce the cost and improve the competitiveness of enterprises; for residents, this can increase the disposable income of residents, reducing the cost of living. Therefore, tax reduction measures can stimulate residents' consumption and enterprise investment. From the macro point of view, tax reduction measures can significantly stimulate economic development, increase the country's import and export volume, especially the export volume, and at the same time can attract foreign capital to flow into the country's market for investment, increase the demand for foreign exchange to make the foreign exchange rate in the short term tends to appreciate. Tax reduction measures will increase the government's fiscal pressure. However, the benefits of targeted tax reduction measures to promote economic growth outweigh the negative impact of increased fiscal pressure.

However, the UK government has introduced this tax cut stimulus package of up to £45 billion plus the previously promised energy subsidy program. This has led to an increase in fiscal spending by the UK government of around £200 billion. Nevertheless, the British government's program did not show signs of increasing fiscal revenues, and the British government planned to borrow nearly 100 billion pounds (about \$114 billion) to finance to make up for the lack of tax revenues. This allowed the UK, which already has a high level of debt, to continue to increase its debt unsustainably. There was no clear plan for repaying these funds, which led to panic in the financial markets. This, therefore, triggered two effects. First, fiscal pressures have led the government to meet its spending needs by borrowing from the central bank and getting it to issue more money. This practice provided money in the short term but increased inflation in the long term. This was because the supply of money increased without a corresponding increase in the supply of goods and services in the economy, leading to a devaluation of the currency. This can therefore lead to public concern that the government is "Monetization of Financial Deficit", leading to an expectation of higher inflation and precautionary measures, such as buying goods and assets in advance, but this leads to increased demand and further price increases. Such expectation-driven inflation may create a vicious circle, exacerbating the extent of inflation. Second, the aggressive tax cut program conflicts with the tight monetary policy adopted by the central bank to curb inflation. As uncertainty about the economic outlook increases, investors

and businesses may find it difficult to predict the future fiscal policy and economic environment accurately. This led to caution spreading through the market and dampening investment and consumption incentives. Investors may be more inclined to choose relatively safer assets like bonds and gold to avoid potential market volatility and risk. This may lead to an increase in the overall risk premium for UK assets, i.e., the market demands a higher return for the risk of investing in UK assets.

For the Treasury market, inflationary expectations have been pushed up by widening fiscal deficits due to unfunded tax cuts. When investors expected inflation to rise, this led to a decrease in the expected return on Treasuries. This resulted in a reduction in investor demand for Treasuries. Therefore, investors may seek other more attractive investment options instead of buying treasury bonds with declining returns. This caused Figure 1, the demand curve D_1 in the Treasury bond market, to shift to the left to D_2 . Meanwhile, the aggressive tax cut program required the government to increase borrowing to compensate for the revenue loss caused by the tax cuts. In order to raise more funds, the government increased the issuance of treasury bonds. This caused Figure 1, the supply curve in the Treasury market, S_1 , to shift to the right to S_2 . Thus, the dual pressures of a leftward shift in the demand curve and a rightward shift in the supply curve resulted in a decrease in the price of Treasuries and an increase in the yield on Treasuries.

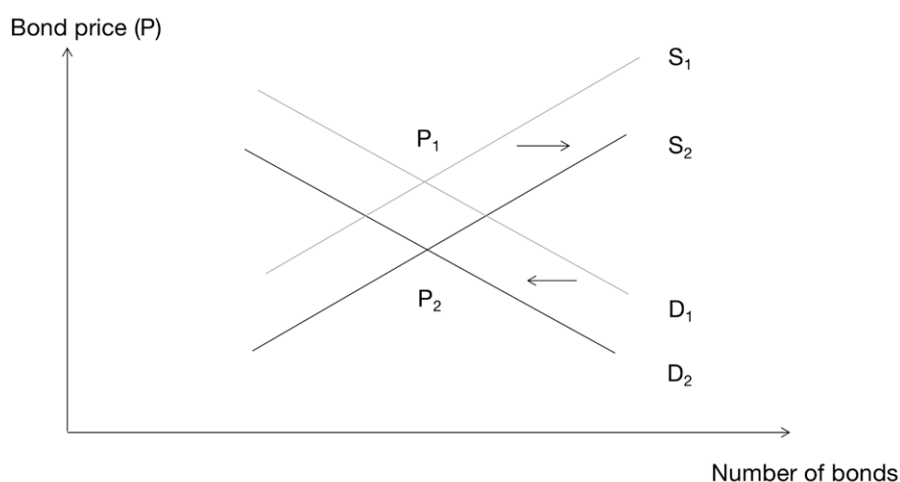


Figure 1: Unfunded tax cut proposal caused Treasury prices to fall.

In the foreign exchange market, the rise in British government bond yields should have attracted an inflow of funds, causing the pound to appreciate, but instead, the pound fell sharply as government bond yields soared. According to the Uncovered Interest Rate Parity between the pound and the US dollar, the rise in UK government bond yields appreciated the pound against the US dollar. However, the unfunded tax cuts created a depreciation synergy by simultaneously pushing up inflation expectations and the overall risk premium on UK assets: firstly, because UK inflation was much higher than in the US, according to the relative Purchasing power parity, this led to an increase in the expected rate of depreciation of sterling, pushing sterling yields down; secondly, due to the rise in the overall risk premium on UK assets, it made US dollar yields to the market, and ultimately the combination leads to a sterling depreciate significantly. As can be seen in Figure 2, the pound's depreciation stems from the combined effect of inflation expectations and rising risk premiums.

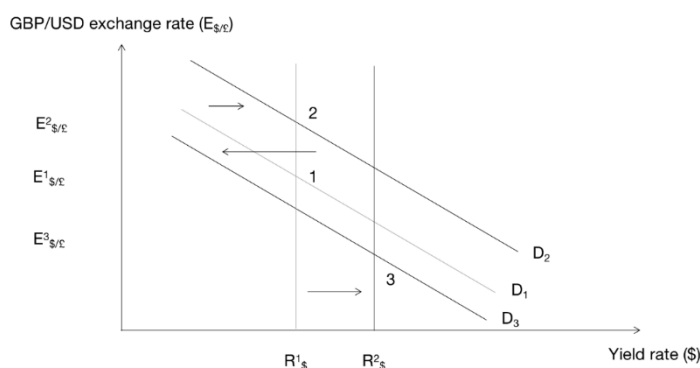


Figure 2: Inflation and rising risk premiums led to depreciation of pound.

2.2. Factors Affecting the Exchange Rate Fluctuations

2.2.1. Inflation (CPI)

Inflation has an essential impact on economic development and is an important indicator of the country's economic policy. Inflation will lead to the devaluation of the national currency, resulting in international funds from the United Kingdom withdrawing funds flowing to the foreign currency market so that the foreign currency exchange rate rises and the local currency depreciation. Inflation distorts price signals and fails to reflect normal market conditions increasing market uncertainty and the impact of investment risk. A slowdown in capital stock growth can significantly impact general economic development and seriously jeopardize the national economy.

2.2.2. Monthly Government Expenditures and Revenues

The government's monthly expenditures and monthly revenues can be an excellent response to the balance of payments situation. The country's economy is in deficit when there is a deficit in the balance of payments. The country's demand for foreign currencies increases, increasing the demand for foreign currencies, which ultimately leads to a rise in the exchange rate of foreign currencies and a fall in the exchange rate of the local currency. However, when there is a trade surplus, the sterling exchange rate rises relative to the foreign currency.

2.2.3. Government Monthly Debt

Government monthly debt is an essential manifestation of the government's fiscal pressures; the rise in debt risk production will exacerbate fiscal pressures. Rising debt risk will make the international market on the national economy lose confidence, making the international market on the national economy confidence decline. Thus, many selling the national currency led to the decline in the local currency exchange rate. Reducing fiscal pressure will significantly enhance market confidence, increasing the international demand for the local currency so that the exchange rate rises.

2.2.4. Yield of Treasury Bonds

Changes in bond yields reflect the market's expectations for the future. A rise in interest rates leads to a fall in bond prices, while a fall in interest rates leads to a rise in bond prices. Changes in Treasury yields are a good indicator of market expectations, risk premiums, and economic cycles, which in turn affects the performance of the money market and leads to changes in the exchange rate.

2.3. Variables and Data Selection

In this paper, according to the model of exchange rate dynamics, fiscal pressure, inflation, growth and stability of the economy, changes in the level of interest rates and investors' psychological expectations affect the movement of the nominal exchange rate. In order to better analyze the impact of tax reduction policy on exchange rate changes, the theoretical model is simplified and expressed as a relationship model of the nominal exchange rate, inflation (CPI), tax, fiscal expenditure, GDP and treasury prices.

In the history of the UK, the tax reduction policy has been widely used as an effective means of stimulating the economy. This is because of its ability to influence exchange rate changes by increasing the disposable income of individuals and businesses, boosting consumption and investment, and driving economic growth. However, the 2022 Truss government choices are how in the face of persistent inflation, chose a substantial tax cut, looking forward to the tax cut policy to promote economic recovery and development, but did not as expect to stimulate the economy at the same time, led to the pound against the dollar exchange rate from the 22nd of the 1.1254 to the 26th of the 1.0697.

In order to find the shocks of the tax reduction policy, it is necessary to find the representative variables of the intention of the tax reduction policy. After the global economic crisis in 2008, in order to stimulate the economy, the UK reduced the VAT for the first time since 1974; with the exit of the UK from the European Union in 2020 and the global outbreak of COVID-19, the UK government drastically reduced the VAT of the food and beverage service industry. It increased the stamp duty to 500,000 pounds to fight against the epidemic. The UK government drastically reduced VAT in the food service sector and increased stamp duty to £500,000 to combat the economic risks associated with the outbreak. During this period, the UK economy recovered significantly, with record-breaking growth in GDP, and the pound-dollar exchange rate rose from 1.235 to 1.2518 on June 23rd after the June 21st policy announcement.

Table 1: Variable Description.

Variables	Description	Maximum	Minimum	Mean
Y	GBP/USD	1.42	1.12	1.30
X1	Inflation (monthly CPI)	11.10	0.20	4.16
X2	Government's monthly expenditure	110,327.00	81,468.00	91,728.72
X3	Government's monthly revenue	113,745.00	55,138.00	75805.22
X4	Government's monthly borrowing	51,382.00	-12,610.00	15,923.50
X5	Government's monthly debt	2,530.40	1,918.50	2,273.17
X6	UK's Ten-year bond yields and price	4.096	0.105	1.18
X7	Monthly UK GDP	100.80	73.70	95.23

This paper used the British government's monthly expenditure, monthly revenue, monthly borrowing and monthly debt to measure the financial pressure of the British government, with the

monthly Consumer price index (CPI) index to measure British inflation; and the British ten-year bond yields and price changes to measure the psychological expectations of investors to invest. The variables are described in the Table 1.

3. Empirical Analysis

Since the UK officially left the European Union in 2020 and the global outbreak of the new crown epidemic, the UK cut tax rates to stimulate the economy resulting in a short-term strengthening of the pound exchange rate. 2022 European energy prices soared, the cost of living increased dramatically, the UK abolished the current top income tax rate of 45% while reducing the introductory tax rate from 20% to 19%, while the pound quickly fell below \$1.035, hitting it is 1971 The pound quickly fell below \$1.035, the lowest level since 1971. Therefore, for this study, 36 months of data from January 2020 to December 2022 were selected for analysis from the Office for National Statistics (ONS) and British Financial Intelligence (BFI).

3.1. Model Selection

The Svar Model (Structural Vector Autoregression Model) was proposed by Smis, On this basis, Bernanke, Blanchard and Quah put forward their own decomposition methods and applied them to the research of macroeconomics. In recent years, this research method has been widely used in macroeconomic research, including monetary policy research. There are three types of Svar Model, C model, K model and AB model. This paper chooses AB-Svar model.

The Var Model without constant terms can be written as follows:

$$A(L)y_t = \varepsilon_t \quad (1)$$

$$\varepsilon_t \sim VGW(0, \theta) \quad (2)$$

$$A(L) = I_n - A_1L - A_2L^2 - \dots - A_nL^n \quad (3)$$

Vector Gaussian White Noise (VGM) represents vector Gaussian white noise processes. A(L) is the vector representation of the polynomial of the hysteresis operator. In addition, we assume all the roots of the equation $\det[A(L)]$. That's the determinant of the matrix A (L) is outside the unit circle.

AB-Svar model is formed by constructing simultaneous equations on the basis of var simplified formula. Suppose AB are invertible matrices of n*n dimensions, and the following conditions are met:

$$AA(L)Y_t = A\alpha\varepsilon_t \quad (4)$$

$$A\varepsilon_t = Be_t \quad (5)$$

$$E(e_t) = 0 \quad (6)$$

$$E(e_te_t') = I_n \quad (7)$$

3.2. Selection Model Variable

Research in the field of macroeconomic policy requires attention to a large number of economic variables. However, too many variables in the benchmark model will require a large amount of data and increase the identification constraints. In this paper, 36 observational values from January 2020 to December 2022 are selected, and the input variables should not be too large. To begin with, a multiple regression model is established, which purpose is to observe whether there is redundancy in each variable. According to the size of VIF value, the multiple regression model has multicollinearity, and the model needs to be modified. The paper adopts stepwise regression method to delete variables

for correction. The final variables are GDP, CPI and Expenditure, and the corresponding indicators are shown as Table 2:

Table 2: Stepwise regression result.

Variable	Coefficient	Std.Error	t-Statistic	Prob.
LNGDP_INDEX	0.3501	0.1144	3.0603	0.0044
LNCPI	-0.0365	0.0083	-4.4193	0.0001
LNEXPENDITURE	-0.1142	0.0453	-2.5225	0.0167

Observed residual, there is no obvious trend. Through JB test and white test, the residuals follow normal distribution, and there is no heteroscedasticity.

3.3. Empirical Results

3.3.1. Unit Root Test

The unit root test is used to check whether a sequence of variables is stationary. The results show that the original sequence of variables is not stationary in Table 3. However, the first-order difference sequence is stable, which indicates that the established model satisfies the stability condition.

Table 3: ADF test results for each variable.

Variable	Test value	P-value
DLNgbp_usd	-4.997	<0.01
DLNcpi	-7.629	<0.01
DLNgdp_index	-9.053	<0.01
DLNexpenditure	-7.161	<0.01

3.3.2. Optimal Lag Order

As is shown in Table 4, The optimal maximum lag order of this set of data is 6.

Table 4: Lag order estimation table.

Lag	LogL	LR	FPE	AIC	SC	HQ
1	181.484	NA	1.91E-10	-11.032	-10.284 *	-10.793
2	201.208	28.928 *	1.56E-10	-11.28	-9.785	-10.802
3	221.189	23.977	1.37E-10	-11.545	-9.304	-10.828
4	234.863	12.762	2.17E-10 *	-11.391 *	-8.401	-10.434 *
5	263.418	19.036	1.73E-10	-12.227	-8.491	-11.032
6	314.891	20.589	5.89E-11	-14.592	-10.108	-13.158

Note: *mean significant.

3.3.3. Model Stability Test

All the roots of the Model are less than 1, in other words, they're all in the unit circle. The model is stable.

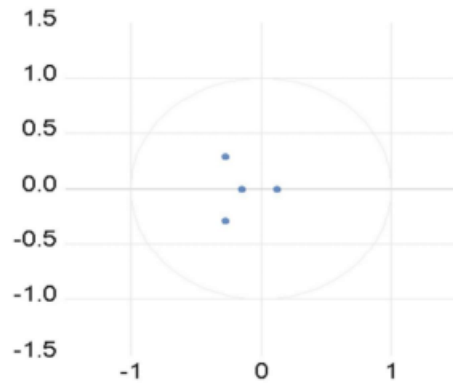


Figure 3: Inverse roots of AR characteristic polynomial.

3.3.4. Pulse Response Analysis

To learn more about how variables affect exchange rates, the paper analyzed the impulse response. The following figure 4 is the structure impulse response diagram of each variable, and the tracking period of impulse response is 10 periods.

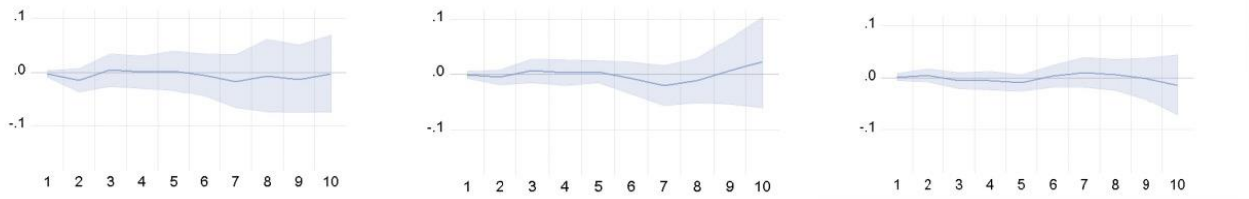


Figure 4: Response of DLNGBP_USD to DLNCPI, DLNEXPENDITURE and DLNGDP_INDEX innovation.

The impulse response function represents the effect on all variables when a shock of one standard deviation is applied to the error term in the model. It can vividly depict the dynamic conduction mechanism between variables. First, in the face of a one standard deviation positive shock to the rate of inflation (CPI), The rate of inflation has a negative impact on the exchange rate (GBP_USD). Second, look at monthly government expenditure (EXPENDITURE), It has a slight positive effect on the exchange rate at first, and then turns negative in the sixth period. In the ninth phase, it turns positive, alternating between positive and negative. The effect of gross domestic product (GDP) is weaker than that of inflation and government spending. Therefore, this paper finds that EXPENDITURE and CPI have a lasting and strong impact on the exchange rate.

3.3.5. Variance Decomposition

In order to further analyze the effect of each variable on exchange rate change, this paper use the variance decomposition of exchange rate changes. As shown in table 5:

Table 5: Variance decomposition of exchange rate changes.

Period	S.E.	DLN CPI	DLN EXPENDITURE	DLN GDP_INDEX	DLN GBP_USD
1	0.017	2.289	0.381	0.508	96.821
		(-8.154)	(-4.841)	(-4.203)	(-10.178)

Table 5: (continued).

2	0.028	26.150	3.724	2.710	67.417
		(-19.046)	(-11.032)	(-7.596)	(-18.905)
3	0.030	25.533	7.633	6.102	60.731
		(-18.860)	(-10.962)	(-7.662)	(-17.610)
4	0.033	20.357	6.623	7.721	65.298
		(-19.490)	(-11.685)	(-8.827)	(-17.642)
5	0.040	14.849	5.731	11.361	68.059
		(-20.736)	(-11.057)	(-9.960)	(-17.133)
6	0.042	15.227	8.165	11.009	65.599
		(-20.954)	(-12.107)	(-8.488)	(-17.042)
7	0.057	16.566	17.750	9.057	56.627
		(-22.306)	(-14.250)	(-8.240)	(-17.572)
8	0.064	14.050	17.144	7.823	60.982
		(-22.705)	(-15.823)	(-9.731)	(-17.916)
9	0.066	16.780	17.085	7.539	58.597
		(-23.540)	(-15.134)	(-8.438)	(-18.148)
10	0.078	12.064	19.791	8.710	59.436
		(-24.117)	(-15.387)	(-8.226)	(-18.811)

As can be seen from Table 5, in the current period (number of periods is 1), 96.82% can be explained by changes in the exchange rate itself. Inflation can explain 2.29%, government expenditure and GDP can explain 0.38% and 0.51%. In the long run (number of phases 10), government expenditure is explained by 19.79% and inflation by 12.06%. Therefore, the rate of inflation is the key indicator to focus on, and in the long run, the impact of government expenditure is gradually increasing.

4. Conclusion

The theoretical conclusion of this paper is as follows: Tax reduction policy in the case of high inflation and high debt, tax reduction policy caused inflation expectations and the overall risk premium of assets, which produced a depreciation force, resulting in the devaluation of the domestic currency.

The above hypothesis is supported by empirical evidence: The SVAR model is used in this study. The sample time span is 202001 to 202212, with 36 observations, which be used in this paper to explore the influencing factors and degree of exchange rate changes. Using impulse response function analysis, it is further confirmed that the increase of fiscal expenditure and the rate of inflation has a significant impact on the exchange rate, and this impact may last for a period of time. Especially in the case of high inflation and high debt, the tax cut policy may further exacerbate the pressure of currency depreciation, resulting in a significant decline in the exchange rate. This study finds that expenditure and the rate of inflation have significant and lasting effects on exchange rates.

It follows that is necessary to fully consider the potential impact of factors such as inflation rate and fiscal burden on the exchange rate when formulating economic policies, so as to ensure the

stability of the money market and the sustainable development of the economy. These research results not only provide empirical support for economic theory, but also provide valuable reference and guidance for policy makers.

It should be emphasized that this study was only based on a limited selection of economic variables and time periods. studies in the future can further expand the data set and consider more relevant factors to deepen the understanding of exchange rate fluctuations.

First, Economic development needs to pay attention to the supply-side constraints, and fiscal stimulus is not enough to solve the problem of stimulating the economy. Supply-side structural reform is crucial to optimize resource allocation, raise productivity and break bottlenecks. High-quality development should be promoted, combined with expanding domestic demand and deepening supply-side reform. At the same time, we need to enhance supply chain resilience and energy supply stability to prevent supply constraints from impeding economic growth.

Second, Policy stability is critical to exchange rate market expectations. The failure of the tax cuts overturned Modern Monetary Theory (MMT), MMT Argue that fiscal deficits do not lead to fiscal crises, But Truss's failure shows how irrational fiscal expansion can create hyperinflation and Increased investor and corporate risk aversion, resulting in financial market volatility. Therefore, macroeconomic policies should be stable and sustainable, extreme policies should be avoided to undermine economic and financial stability, so as to guide the market to form reasonable expectations.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

References

- [1] Chen, H. X. (2017). *Analysis of Influencing Factors of RMB Exchange Rate Fluctuation*. *Times Finance* (18), 2.
- [2] Li, F., Zhang, Z. Y., & Liu, X. Z. (2016). *A Study on the Sources of RMB Exchange Rate Fluctuations-An Empirical Analysis Based on the Nonlinear Beer Model*. *Price Theory and Practice* (12), 4.
- [3] Zhu, N., Zhong, J. Y., & Xu, Y. X. (2021). *How Uncertain Events Affect RMB Exchange Rate Fluctuations-Based on the Factual Analysis and Transmission Mechanism of the New Coronary Pneumonia Epidemic*. *Theory and Practice of Finance and Economics*, 42(4), 8.
- [4] Shi, S. B., & Zhang, X. D. (2022). *The Economic Effect of Tax and Fee Reduction-Analysis Based on the Dimension of High-quality Development*. *Journal of Shanxi University (Social Science Edition)* (05), 51-61.
- [5] Wang, Y. W. (2021). *A Study on Factors Affecting International Exchange Rate Fluctuations-Taking British Pound as an Example*. *Modern Business* (09), 118-120.
- [6] Guan, Z. H., & Li, Y. H. (2023). *Tax cuts and fee reductions, financial pressure and local government debt risk: action path and impact effect*. *Journal of Anhui University (Philosophy and Social Sciences Edition)* (01), 144-156.
- [7] Liu, S. X., Xu, Y. D., & Zhao, Z. G., (2021). *Fiscal economy out of the trough, beware of local government debt risk concentration-Based on the investigation of Hunan, Anhui, Liaoning and Shandong provinces*. *Financial Science* (1): 106-115.
- [8] Oxford Analytica. (2022). *Record UK external deficit will cut long-run GDP*. *Emerald Expert Briefings oxandb*.
- [9] FoEh, J., Suryani, N. K., & Silpama, S. (2020). *The influence of inflation level, exchange rate and Gross Domestic Product on foreign direct investment in the ASEAN countries on 2007-2018*. *European Journal of Business and Management Research*, 5(3).
- [10] Schuknecht, L. (1999). *Fiscal policy cycles and the exchange rate regime in developing countries*. *European Journal of Political Economy*, 15(3), 569-580.