Analysis on Changes in Exchange Rate of Egypt over Past Decades

Wenhua Mao

Department of Economics University of California, San Diego, United States, 92093 Corresponding author. Email:w1mao@ucsd.edu

ABSTRACT

The exchange rate, the price of domestic currency as compared against foreign currency, may incur fluctuations according to changes in the national macro-economy. This paper analyzes alterations in the exchange rate of the Egyptian pound over the past decade by tracking the impacts of political and military events, economic policy, as well as foreign exchange reserve. In addition, this paper forecasts risks that Egyptian currency may confront. These risks contain the uncertainty caused by COVID-19 on future economic environment in Egypt, high-interest rates and frequent speculation following the implementation of a floating-exchange-rate system. Using the Purchase Power Parity theory and making reference to the predicted inflation rates in United States and Egypt, this paper links the USDEGP currency exchange rate with the prices of identical goods in the two countries and predicts that Egyptian pound will further depreciate in the coming year. People will take £16.24 Egyptian pound to buy \$1.

Keywords: Exchange rate, Egyptian pound, Economic fundamentals, Egypt, Egyptian pound exchange

1. INTRODUCTION

The exchange rate constitutes the relative price between domestic currency and foreign currency. A stable exchange rate can effectively avoid the impact of exchange rate fluctuations, which is capable of destabilizing and stifling the development international trade. Moreover, fluctuations in the exchange rate tend to be caused by changes in the country's macro-economy. Fluctuating exchange rate can have an impact in the country's real economy and further affect the country's economic situation.

Egypt, as a developing country, experienced fluctuation in the exchange rate throughout the past decade. Earlier in the decade, between January 2011 and January 2016, the Egyptian pound showed slight depreciation, falling from 5.8590 to 7.83 against the dollar; A dramatic change transpired between October 2016 and January 2017, when the Egyptian pound devalued by nearly 111% over a few months, from 8.8799 to 18.7. Not only that, but the Egyptian pound depreciated against the dollar to a record low of 19.56 in January before it appreciated briefly to 15.79 in February of that year. In 2021, the Egyptian pound gradually appreciated from 17.63 to 15.7008. In sum,

over the past decade, Egypt's exchange rate has dramatic fluctuations.

This article provides an in-depth analysis of the changes in the Egyptian currency over the past decade with the Purchase Power Parity theory. In the section 2, it explores factors influencing the exchange rate of the Egyptian Pound, including politics, military events and economic policy. Section 3 summarizes potentials risk to the Egyptian pound. Section 4 forecasts the future Egyptian pound exchange rate against the dollar. Concluding remarks are provided in the final section.

This research has a certain contribution as follows. First, it fills the gap in the study of Egyptian pound. Researches in the past mainly focused on the impact of the floating Egyptian pound on certain sectors in Egypt. However, there is no comprehensive analysis on the reasons for fluctuation of the Egyptian pound and future risks of floating Egyptian pound before. This research focuses on an in-depth analysis of the changes in the Egyptian currency over the past decade, as well as potential risks the Egyptian pound will confront in the future. Second, it provided insights into the new policies issued by the Egyptian government. In order to better formulate future economic policies, the Egyptian



government can refer to the potential risks mentioned in this article. Third, it contributes to the improvement of the exchange rate mechanism. The Central Bank of Egypt may issue regulations to clamp down on foreign exchange transactions that have a significant adverse impact on the Egyptian currency.

2. FACTORS INFLUENCING EXCHANGE RATE IN EGYPT

2.1. The Influence of Political and Military Factors and Economic Policy on Exchange Rate

In Egypt, political and military turmoil is the main cause of exchange-rate fluctuations. Political and military events are often not discussed separately. Behind political struggle, a military struggle generally foments. In 2011, a revolution broke out in Egypt, sparked by public dissatisfaction with the current economic and political situation, along with calls for popular democracy and freedom. During the revolution, both police and the protesters were badly injured. Following democratic elections, Mohammed Morsi became the new president, which did not, however, result in a wave of lasting peace.

Between 2013 and 2014, under pressure from protestations supported by the armed forces, a coup unseated President Morsi. Morsi's presidency was replaced by Abdul Fattah al-Sisi who has a strong military following. Generally, since 2011, Egyptian society has been in a state of turmoil, and the value of Egyptian pound has begun to depreciate.

In addition to politics and social unrest events, Egypt's national economic policies also had a significant impact on the currency exchange rate. Regime change in a country also implies changes in policy. After President Sisi came to power, the economic policy in Egypt made a corresponding response. In 2016, the central bank in Egypt claimed to give up control of the exchange rate and announced the implementation of a floating exchange-rate system [1]. The moment the policy was announced, with the exchange rate standing at 8.85 against the United States Dollar, the Egyptian pound depreciated nearly 13% overnight; The exchange rate of USDEGP fell to 19.56 in January 2017. The Inflation rate also climbed to 23.53% at the same year. In the following few years, the exchange rate of the Egyptian Pound against the dollar remained between 16 and 18.

The impact of the floating exchange rate system was significant, resulting in a double-dilemma of overnight depreciation and inflation. However, after several years of implementing a floating exchange rate system, the value of the Egyptian pound started not to have a large fluctuation. Namely, it is relatively stable. The main

reason is that the Egyptian government raised the interest rates to alleviate high inflation caused by the floating exchange rate system. In 2015, before the floating exchange-rate system, Egypt's interest rate stood at 9.25%. However, in the following year, the interest rate was adjusted to 14.75%. In 2017, the interest rate peaked at 18.75% over the past decade [2]. In 2020, in order to ease and stimulate a flagging economy affected by the COVID-19 outbreak, the interest rate in Egypt was set at 8.25 percent.

2.2. The Influence of Foreign-Exchange Reserve on Exchange Rate

Foreign-exchange reserves are an important tool to stabilize a country's exchange rate. The low foreign exchange reserves will bring a negative impact on Egypt's exchange rate. The main sources of foreign exchange reserves in Egypt are mainly from trade surpluses and capital inflows. In 2011, Egypt's foreign exchange reserves started to fall. In 2012, foreign exchange reserves In Egypt were less than a third of the amount they had in previous years. Until 2017, Egypt's foreign exchange reserves stood at about 1,500 million USD - 2,000 million USD [3].

Egypt's main sources of foreign exchange reserve include oil, gas, tourism and income from the Suez Canal, all of which suffered over the decade. First, due to the recession of global market, price of crude oil fell off nearly 50 percent from 2014-2019. Egypt's foreign exchange earnings were greatly impacted by depressed crude oil price. With the price of crude oil stuck in the \$40-\$80 per barrel range, Egypt's export revenues from crude oil dropped sharply.

Secondly, falling natural-gas prices also put pressure on Egypt's foreign-exchange reserves [4]. Global gas prices have been falling for several years since they reached \$6.135 MMBtu in 2014. On March 7, 2016, It reached \$1.822 MMBtu [5]. As an exporter of natural gas, Egypt's foreign exchange reserves have also been hit by continuously falling gas prices.

Thirdly, tourism revenue also declined because of the volatile situation in Egypt at that time. Egypt is a world-famous tourist country with many historic scenic spots. However, due to the political unrest in Egypt, the social situation has a lot of instability, resulting in the decline of Egyptian tourists. A slump in tourism has reduced Egypt's foreign exchange reserves.

Finally, an important source of Egypt's foreign exchange reserves is revenue from the Suez Canal. But at the time, the Suez Canal was not doing well because of the global recession. Since 2011, Egypt's central bank has used its foreign exchange reserves to stabilize the exchange rate. Egyptian exports have been hit by volatile global oil and gas prices, a decline in tourism industry and a decrease in revenue from the Suez Canal.



Foreign exchange reserves in Egypt were reduced by a trade deficit caused by a chronic surplus of imports over exports, contributing to an enormous gap in foreign exchange reserves. Consequently, huge foreign exchange reserves caused the Egyptian currency to depreciate further.

The turning point came in 2016, when Egypt announced a floating exchange rate system. The implementation of floating exchange rate system initiated an increase in foreign exchange reserves. The advantage of floating exchange rate system is that the Egyptian government no longer has an obligation to maintain exchange rate stability. Exchange rate would fluctuate in response to demand in foreign exchange markets. After implementing the floating exchange change rate system, Egyptian pound depreciated sharply. Depreciated Egyptian pound boosted the tourism industry. Egypt's tourism revenue rose from 2.6 billion in 2016 to 7.6 billion in 2017 [6]. Tourism development is an important factor in the rise of Egypt's foreign exchange reserves. Egypt's foreign exchange reserves have since peaked at roughly 45510 million USD. The foreign exchange reserves have been climbing since 2016 and reaching a peak of 45510 million USD [7]. Ultimately, the increase in foreignexchange reserves helped stabilize the pound, which resisted fluctuation under the impact of COVID-19.

3. POTENTIAL RISKS IN EGYPT POUND

Under President Sisi, Egyptian society has gradually stabilized, with a generally improved economy. But there are still potential risks. First of all, Egypt's tourism industry may be continuously affected by the uncertainty of the COVID-19 [8]. As a result of the worldwide spread of the COVID-19, Egypt's tourism industry has shrunk sharply with decreasing number of foreign visitors and a rising unemployment rate. In mid -2020, to boost tourism, Egypt reopened some international flights and opened famous attractions such as the Great Pyramid of Giza and the Sphinx. But so far, the impact of COVID-19 has not shown a trend of weakening. The most virulent variant Delta is also spreading. This creates uncertainty about Egypt's future economic direction, and Egypt's tourism industry will be subject to any new variants at any time.

Secondly, the implementation of the floating exchange-rate system will certainly incur speculation in the foreign exchange market. On the one hand, when markets anticipate appreciating currencies, they will buy them in large quantities. On the other hand, if a depreciation in the Egyptian pound is anticipated, great quantities will be sold. Under the floating exchange-rate system, the appreciation and depreciation of one currency are determined by none other than the demand of the foreign exchange market. A lot of speculation in the market may make the currency more volatile.

Third, Egypt's interest rates are higher than those of other developing countries. On the demand side, higher borrowing costs for the Egyptian pound could lead to lower demand for the currency. On the supply side, high interest rates in Egypt will bring higher returns on the use of the Egyptian pound, leading to short-term capital inflows. Therefore, high interest rates in Egypt might be a double-edged sword in foreign exchange markets.

4. PREDICTION OF FUTURE EXCHANGE RATE IN EGYPT

Based on theory of Purchase Power Parity, this article tracks and analyzes the relationship between USD and EGP exchange rates, making reference to price of the same item in both countries and employing the predicted inflation rate in order to forecast the future exchange rate between the USD and EGP. According to the website trading economics, it suggests the inflation rate in the united states will decrease by 2.7% in 2022 [9], while the inflation rate in Egypt will increase by 0.8% in 2022 [10]. The inflation difference between Egypt and USA will be 0.8% - (-2.7%) = 3.5%. The current exchange rate between EGP and USD is 15.69 Egyptian pounds per United States Dollar. Then the purchase power parity forecasts an exchange rate of 16.24 Egyptian pounds per 1 united states dollar. In conclusion, EGP currency will further depreciate, which means it will take 16.24 Egyptian pounds to buy \$1 united states dollar. That is, $(1 + 3.5\%) \times (15.69)$ Egyptian Pound per 1 United States Dollar) = 16.24 Egyptian Pound per 1 United States Dollar.The Egyptian pound is forecast to depreciate by 3.5% next year.

5. CONCLUSION

In conclusion, the three main sections in this article generally investigate a range of factors impacting the fluctuation of the Egyptian Pound over the past decade, analyze the future risk that may confront the Egyptian currency, and forecasts the Egyptian exchange rate against the dollar in 2022.

Specifically, Section 2 focused on the impact of political and military factors, economic policy factor and foreign-exchange reserves on the exchange rate of the Egyptian pound, while Section 3 forecasts the risks to Egypt pound exchange rate, and Section 4 employs the theory of Purchase Power Parity to predict Egypt's exchange rate against the dollar over the next year.

Several crucial findings emerge from these analyses. First of all, with Egypt's past decade of turbulence and instability, Egypt's exchange rate continued to depreciate throughout the early years. After President Sisi came into power, he responded to a flagging economy with the implementation of a floating exchange rate system. The high inflation created by



floating exchange rates has also been stabilized by higher interest rates. Meanwhile, Egypt's exchange rate was impacted by low foreign exchange reserves over the past decade. Egypt, a big exporter of tourism, oil and gas, and owner of the Suez Canal, incurred a highly substantive foreign exchange reserve gap due to global economic adversity. But this situation has also been resolved by a surge in tourism spending because of the depreciation of the Egyptian pound. Generally, the domestic political situation improved since 2016. Simultaneously, Egypt's foreign exchange reserves have gradually increased, and Egyptian pound's exchange rate has stabilized compared with previous years.

Secondly, there are still some potential risks to Egyptian pound. Although the Egyptian government has responded positively and restored the Egyptian economy under the COVID-19, for example, they opened some flights in order to promote tourism industry. But the uncertainty surrounding the COVID-19 could affect tourism in Egypt at any time. Meanwhile, market speculation may increase due to the implementation of the floating exchange-rate system. In addition, Egypt's high interest rates are a double-edged sword. Egypt's interest rates are higher than those of other developing countries, leading to less demand for its currency. Nonetheless, short-term capital inflows could also be attracted by the higher interest rates in Egypt.

Finally, referring to prediction rate in Egypt and United States, the paper employs the theory of purchase power parity to predict the Egypt's exchange rate against the dollar in the coming year, concluding that the pound will trade at 16.24 to the dollar over the next year, a fall of 3.5 percent on a year-on-year basis.

Future research will be further supplemented and improved on the basis of this study First, the future study will focus on the next ten years about the exchange rate forecast . And future research can look into additional factors influencing the Egyptian pound.

REFERENCES

- [1] BBC. (2016, November 3). Egypt allows its currency to float freely. BBC News. Retrieved September 26, 2021, from https://www.bbc.com/news/business-37857468.
- [2] Focus Economics. "Egypt Interest Rate Egypt Economy Forecast & Dutlook." Focus Economics | Economic Forecasts from the World's Leading Economists, www.focus-economics.com/country-indicator/egypt/interest-rate.
- [3] "Egypt Foreign-exchange reserves1992-2021 Data: 2022-2023 Forecast: Calendar." Egypt Foreign-exchange reserves | 1992-2021 Data | 2022-2023

- Forecast Calendar, trading economics.com/egypt/foreign-exchange-reserves.
- [4] Laessing, Ulf, et al. "Egyptian Pound's Initial Coronavirus Immunity Seen Waning." Reuters, Thomson Reuters, 28 Apr. 2020, www.reuters.com/article/uk-health-coronavirusegypt-currency-ana/egyptian-pounds-initialcoronavirus-immunity-seen-waningidUSKCN22A28F.
- [5] "Natural GAS1990-2021 Data: 2022-2023 Forecast: PRICE: Quote: CHART: HISTORICAL." Natural Gas | 1990-2021 Data
 | 2022-2023 Forecast | Price | Quote | Chart | Historical, trading economics.com/commodity/natural-gas.
- [6] Anter, Mohamed, and Sara El Nagy. "The Effect of the Egyptian Pound Exchange Rate Change on the International Tourist Demand to Egypt." International Journal of Heritage, Tourism and Hospitality, vol. 12, no. 2, 2018, pp. 160–181., doi:10.21608/ijhth.2019.31987.
- [7] "Egypt Foreign-exchange reserves1992-2021 Data: 2022-2023 Forecast: Calendar." Egypt Foreign-exchange reserves | 1992-2021 Data | 2022-2023 Forecast | Calendar, trading economics.com/egypt/foreign-exchange-reserves.
- [8] Knell, Y. (2020, July 14). Egypt desperate to revive Coronavirus-hit tourism industry. BBC News. Retrieved September 26, 2021, from https://www.bbc.com/news/world-middle-east-53402983.
- [9] United States- Economic Forecasts 2021-2022
 Outlook, tradingeconomics.com/unitedstates/forecast.
- [10] Egypt Economic Forecasts 2021-2022 Outlook, tradingeconomics.com / egypt / forecast.