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Devaluation of Yuan - Chinese Currency

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Abstract: **This paper talks about the recent devaluation of the Chinese Yuan and its impact upon the Indian economy. Since second world war in 1939 when perforce Chinese economy was thrown open to the world after dethroning of the Dowager Empire, the Chinese dragon has emerged as the most powerful Communist Force in the Southeast Asian economy. This paper explores the impact of the cheaper Chinese exports on Balance and Payment of Indian economy. It discusses the various reasons for the slump in the markets because of the devaluation of yuan. In the wake of the rapid industrialization that took place in 1991, the Indian economy has emerged very very resilient and insulated to all kinds of global shocks. This paper discusses the emergence of the new arbitrage opportunities and its impact upon on the Indian economy.**

Keywords: **devaluation, Chinese, Currency, markets, Asian economy, Indian economy.**

1. INTRODUCTION

In wake of recent of recent Yuan devaluation, the investors who were having unhedged positions in Chinese Currency are bound to lose lots of money. ETFs in Chinese currency in US markets, is witnessing large short positions, which is a very very negative situation for the US investors in Chinese Economy. This move has once again proved that the assumption of the investor having the perfect market information is a myth. And it is extremely for the Wall Street to predict the moves of the Chinese Central Bank. This move is definitely a protective move aimed at insulating the Chinese manufacturing sector and provide an impetus to the Exports. This will definitely help to correct the Balance of Payment positions of the Chinese economy. But it add to the woes of the export industry world over, particularly Indian Export sector.

2. CHINESE CURRENCY MARKETS

Chinese Currency is primarily a fixed currency and is not linked to the markets, but it is pegged to the US currency. Chinese Currency as old as 3000 years and was pegged to the Silver. Chinese economy boom is mainly linked to the massive exports and fueled by the manufacturing boom and its partnership with the US economy.

Chinese currency is pegged 8.28 to the US dollar. With the coming of the ETFs (Exchange Trade Funds) and the shining Chinese economy and asymmetry in market information regarding the undervaluation of the Chinese Currency, the investors resorted to slightly off positions in US Dollars and Chinese Currency. Investors landed up putting an equal amount of investment in both these currency. The investors had overweight the Chinese Currency and underweighted the US Dollar. Investors had taken lot of unhedged positions or hedged short positions in the US Dollars market. As more and more shortings were allowed in the US Dollars, based on historical data, this mean variance has led to maximization of statistical errors and maximization of irrelvant investment portfolios in the Chinese Currency.

The recent currency devaluation has lead to the additional constraints and led to emergence of corners and creeping in of inefficiencies in the currency markets, that has led to the losses for the investors. However, if there was a constraint in terms of no shortings in the US Dollar market, it could have led to a very stable efficiency frontier as far as Chinese Yuan and US Dollar is concerned. Owing to the asymmetry in the information, there is no certainty about the value of the Chinese Currency.

Moreover, when ETFs are designed, the constraint in terms of the target return is the best possible value, as most of the fund managers optimized the returns or maximized the returns. However, if the fund managers had adopted the robust mechanism, by putting the constraint in terms of the worst possible scenario But that was not the case.

Other strategy that the fund managers had taken the mean of the particular asset that is the US Dollar and Chinese Currency But what the fund manager could have done was to adopt a shrinkage strategy by taking the Global mean and covariance of the Chinese Currency and US Dollar.

3. DOWNSIDE OF THE DEVALUATION AND WHAT IT HOLDS FOR THE CHINESE INVESTORS

The major reason for the sudden loss for the investors as a result of the devaluation of the Chinese Currency is the statistical errors.

- The use of the Historical data has led to the error of maximization of irrelevant portfolios. As investors assumed lot of leveraged positions in Chinese Currency
- The other factor is the use of parametric models. The use of nonparametric models and data crunching would have shown, how badly the Chinese regime wanted to insulate its export markets and would have helped in averting negative and short positions

4. PROBLEM OF OPTIMAL FOREIGN RESERVES

Each nation holds foreign reserves. Indian foreign reserves are comprised of Chinese Yuan. In the current scenario, the devaluation of the Chinese currency has led to huge losses. If look at the method that the Chinese economy is using for designing the optimal portfolio is the mean variance method The major problem with this method is that the Chinese economy is not using its currency to interfere in the international economy.

For deciding the optimal foreign exchange portfolio is to use of higher moments through the Value At Risk. That is use tail loss probability and conditional value of risk and expected shortfall.

- One of the major shortfall of the primitive mean variance method was the use of normative distribution which seldom happens in the real situation. In the current devaluation of the Chinese currency, we have witnessed the higher loss movements. Similar kind of thing happens in the scenario of economic crisis.
- Other shortfall is that the central banks have the perfect information and hence can substitute the expected returns for the actual returns
- There is lack of constraints should be placed on investment weights among different currencies because the management of the foreign currencies should not only satisfy needs for optimising risk and return but also complete the mission of foreign debt payments and international transaction payments.
- Moreover, inefficiency in the Chinese financial markets and non floating currency has led to the need for an unsterilized intervention in the currency market
- Chinese central market still uses the most primitive Markowitz CAPM model for designing the efficient currency frontier and the nation is restricted to a two asset model, where currency is pegged either to Gold or to the US Dollar
- Other drawback of the current approach is that there is no restriction in terms of the foreign reserve of the countries

5. EMERGENCE OF THE ARBITRAGE OPPORTUNITY

As per the CIP (Covered Interest Rate Parity) there should be change in the future exchange rate of the currencies, otherwise the Arbitrage will happen. That is exactly what has happened in the recent scenario. There is an emergence of the arbitrage opportunity in the Currency market.

6. CONCLUSION

It is extremely difficult to predict the movements of the single currency. For the central bank of any nation, mean variance is probably not the best method of deciding the amount of foreign reserves to be held. Rather it would be more beneficial if other methods such as Value added Risk and Conditional risk method could be used. Similarly for the ETFs to design the optimal portfolios, it would be more beneficial, if they could use the Value added Risk or Conditional Risk Method or nonparametric risk method.

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