MONETARY APPROACH TO BALANCE OF PAYMENTS IN NEPAL: AN ANALYSIS (FY 1990/91 - FY 2015/16)

A Thesis

Submitted to the Department of Economics, Prithvi Narayan Campus

Faculty of Humanities and Social Sciences, Tribhuvan University,

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MASTER OF ARTS

IN

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Analysis (FY 1990/91 to 2015/16)" has been prepared by Mr.Udaya Raj Adhikari

under my supervision. Ihereby recommend this it for approval by the thesis evaluation

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ABSTRACT

This study examines the monetary approach to the Nepal balance of payments for the period FY 1990/91– FY 2015/16. Through the reserve flow equation, it tests whether different monetary variables played a significant role as a disturbance by using simple linear regression model. The main objective of this study is to find whether the monetary variables that is money supply, income, price, interest and domestic credit are responsible to produce fluctuations in BOP of Nepal or not. To achieve this objective, the study applies simple regression model for time series data.

For the balance of payments, the average mean is 32.61 and standard deviation is 53.63. The largest and the smallest value are 1877.80 and -3.34 respectively. For all the variables, mean is highest for the money supply and standard deviation is the lowest for interest rate. There is a positive correlation of the balance of payments with net domestic assets, money supply, inflation rate and real GDP. However, there is a negative correlation of the balance of payments with rate of interest rate. The correlation is very high between the balance of payments and the domestic credit.

The summary of the regression result in above table shows that, in the short run when the value of explanatory variable that is money supply, inflation rate, Real GDP, interest rate and net domestic assets are held constant at zero value, the average value of balance of payments is 63.079 units. It can be said that the estimated coefficients have all expected sign. The coefficient of the money supply is - 0.026 implying that one percent increase in money supply decreases the balance of payments by 2.6 percent. Similarly, one percent increase in inflation and real GDP will also decrease balance of payments by 0.886 percent and 2.032 percent respectively. Likewise, one percent increase in interest rate and net domestic assets will increase balance of payments by 64 percent and 27.1 percent.

The't' value of the coefficient of money supply is - 0.0271, which is significant, that is if money supply increases, balance of payments is decreased. Again, the't' value of coefficient of inflation and real GDP are - 0.690 and -1.231, which are significant, that is if both inflation and real GDP are increased respectively, balance of payments will decreased. Likewise, the't' value of coefficient of interest rate is 0.196, which is insignificant, that is if interest rate increases, balance of payments is increased. Again, the't' value of coefficient of net domestic assets is 1.680, which is insignificant, that is if net domestic assets increases, balance of payments is also increased. There is almost 88 % of the variation in the balance of payments (BOP) in Nepal is explained by, money supply, interest rate inflation, net domestic assets and real GDP.On the other hand, there is a statistically significant evidence of positive autocorrelation.

The empirical results showed that monetary variables do not play an overwhelming role in determining Nepal's balance of payments. The significant relationships were found among money supply, real GDP, inflation and balance of payments, which reflected a strong negative relationship, while reflected a strongly positive relationship among interest rate and net domestic assets and balance of payments as posited by the monetary approach to balance of payments. The results evidently showed that, although some variables suggested by the monetary approach play significant roles in the disturbance, but the balance of payments is not a purely monetary phenomenon. Therefore, disequilibrium in the Balance of paymentscannot be corrected only through monetary actions by the authorities. Some other measure should also be kept under consideration like increase in exports, improving quality of products, sustained growth in industrial and agriculture sectors and decrease in imports.

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LIST OF ABBREVIATIONS

BOP = Balance of Payments

CPI = Consumer Price Index

CBS = Central Bureau of Statistics

DW = Durbin Watson statistic

FY = Fiscal Year

IMF = International Monetary Fund

INF = Rate of Inflation

INT = Interest rate

LDC = Least Developing Countries

MOF = Ministry of finance

MS = Money Supply

MD = Money Demand

MABP = Monetary Approach to Balance of payments

M1 = Narrow Money Supply

M2 = Broad Money Supply

MOF = Ministry of Finance

NFA = Net Foreign Assets

NPC = National Planning Commission

NDA = Net Domestic Assets

NRB = Nepal Rastra Bank

P = Price Level

SEE = Standard Error of Estimates