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Effectiveness Of Monetary Policy For The Sustainable Development Of Nepal's Economy

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This paper examines the current status of "Monetary policy for sustainable development of Nepal's Economy". Nepalese economy have been facing unexpected and frequent high inflation, volatility of interest rate, liquidity issues, stagnant equity market, unemployment and foreign immigration, incremental trade deficit and growth rate. Therefore, this paper estimates the major financial and macroeconomic components and their effect to the sustainable economic development in Nepal based on the data of the period 2001/2–2016/17. The novel outcome of the analysis is that it probes possible nonlinearity of the hypothesized impact of dual component on economic growth using alternative specifications. The results suggest that there exists a threshold effect of Financial Component like Dsaving (Domestic Saving) - Dcredit (Domestic Credit) ,WorkerRMT (REMMITANCE)- intRate (interest rates) and DspINCOME (Disposable Income) - Part I and Macro-economic component like (GDP, CPI, Inflation, Interest rates, BOP and Investments - part II in the Nepalese Economy, probably covers major factors which constitute the effectiveness of Monetary policy of Nepal since it has come into effect (inception year) 2001/02 ,therefore study covers the period from 2001-2002 to 20015-16 for quantitative analysis purposes. The starting period 2001/02 is chosen because of two reasons: (a) the main study objective, effectiveness of Nepalese monitory policy since it has come into the affect in the year 2001. (b) The major performance and changes in financial system took place and adequate availability of a data is the other reason too. The empirical results show that domestic savings exerted positive influence on both the economic activity and monetary account of the balance of payments even in the disturbed period (FY 2001 to FY 2016). At the same time, it appears that M1 and M2 could not play any meaningful role. The credit policy seems to be more effective and important in Nepal at present. As the credit policy affects the cost, availability and allocation of credit,The liquidity ratio of the commercial banks always remained higher side of total deposits after FY 2001/02, one or two percent increase in the Compulsory Reserve Requirement (CRR) does not decrease or stop the increment in credit. The ratio of Agricultural Output to GDP has dampening effect on price rise, whereas the Wholesale Prices of India (WPI) has significant influence on price rise in Nepal. There is no way to shield or reduce the effect of WPI on the Consumer Price Index (CPI) in Nepal. Rise in CPI can be dampened by increasing the agricultural production .Though there is positive expectation and probabilities of normal distribution and growth of macroeconomic indicators ,The Graphical representation and analysis clearly state the immediate need of drafting sustainable monetary policy as the there is unexpected deviation and irrational relationship among variables. It has also raised serious concern about efficient implementation and execution mechanism of regularity authority towards achieving development mission of the country. Whereas from the perspective of Monetary instrument and their interaction , it is concluded that so far inflation has no adversely affect on the economy of Nepal which is a result of controlled or effective supply of money (M2) by NRB. This study reveals the impact of money supply (M2) on the GDP of Nepal , whereby we have seen inflation rate is hovering towards double digits. We have considered few of the macro indicators they are interest rate,CPI , inflation rate, investment

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and consumption because money supply is affected either one of them. By using regression model, it is proved that almost all the variable have significant relation with GDP of Nepal.

Keywords: *NRB Monetary Policy, Sustainable Development, Financial inclusion, Inflation , Money Supply ,SDGs (Sustainable Development Goals), Micro-finance, Socio-economic transformation, Financial Inclusion.*

1. Introduction

The overall growth of an economy is dependent on the efficiency and soundness of its banking system and financial market functioning. The recent steps of monetary policy and guidelines to banking systems are positive steps in support of the economic development of country. A well regulated banking system serves as an important medium for pursuing economic growth by mobilization of small savings of household and institutions and putting them to productive use. The fundamental objective of monetary policy management in Nepal is the attainment of high and sustainable economic growth accompanied with low level of inflation. As stipulated in the amended Nepal Rastra Bank (NRB) Act, 2016, NRB is entrusted with multiple objectives of ensuring price and financial stability and favorable balance of payments for sustainable development of the economy. Accordingly, NRB formulates necessary monetary, foreign exchange and financial sector policies focusing to control inflation, and to maintain financial and external stability. In its annual monetary policy statement, NRB also publishes the projected inflation figure for the coming fiscal year to anchor the inflation expectations at the targeted level. In the last five years, the average inflation rate remained 8.8 percent in Nepal, which is higher than the projected inflation by 1.3 percentage point. The average annual economic growth rate for last five years was 3.4 percent. High inflation distorts the optimal allocation of resources and retards growth, weakens the external competitiveness, and lowers the domestic financial savings among others (RBI, 2014). It also exacerbates the inflation expectations and creating inflationary spiral in the economy. There is a widespread consensus that the economists and policymakers want to maintain inflation low, they have not typically aimed for zero inflation (Billi & Kahn, 2008). Nepalese economy has been facing unexpected and frequent high inflation, volatility of interest rate, liquidity issues, stagnant equity market, increasing unemployment and foreign immigration, incremental trade deficit and growth rate. Nepal maintains a pegged exchange rate regime with India, and around two-third of its total trade takes place with India. Thus, Nepal's inflation is significantly influenced by inflation in India. Several empirical studies have shown that Nepal's inflation is largely determined by Indian inflation (Nepal Rastra Bank, 2007; Ginting, 2007; International Monetary Fund, 2011). In this context, the sustainability of the peg crucially depends on the keeping the inflation rate close to that of India. However this study would focus on two endogenous factor Financial component and Macroeconomic component and their impact on sustainable economic development of Nepal to achieve optimum result of the below stated two objectives.

2. Objectives, Data and Methodology and Remarks

The study of first objective helps to articulate factors affecting stability, growth and performance of financial market for the effective execution of monetary policy by the concerned regulatory authority in the Country. The study has examined the current circumstances of monetary policy, assesses the critical issues, and provides policy implications to the concerned authorities that may help to build-up an efficient monetary policy and inclusive financial system in the country and promote undeveloped financial industry. The overall objective of the study is to examine the implication of monetary policy on socio-economic transformation of the people and confirming

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that whether monetary policy have played a significant role for the socio-economic transformation and establishing a stable financial system development for effective delivery of monetary policy or not.

Therefore firstly we examine what has been the interrelationship between baking sector growth and GDP growth rate . Further what has been the impact on GDP and other macroeconomic variables of the economy be analyzed. *More precisely the objectives of study are set as:*

To articulate implicit and explicit parameters affecting stability, growth and performance of financial market & institutions in Nepal &To examine the impact of monetary policy of Nepal with regard to the Macroeconomic indicators and output like GDP, money supply (M1/M2) , attaining price stability, balance of payment stability increased income and consumption for the development of efficient financial industry and sustainable development of Economy.

In Nepal fiscal year starts from mid July to mid July of the next year. The Bikram Sambat (BS) calendar is used for official purpose; it is 14 Th or 15 Th of April to 13th to 14 Th April next year of the Gregorian calendar. For the purpose of study data from Nepal Rastra Bank (NRB) and International Monetary Fund (IMF) on Nepalese Banks and Nepalese Banks Associations (NBA), Central Department of Statistic (CDS) & private Information Source Survey of Banking, Center for Monitoring of Nepalese Economy (CMNE) Report on Nepalese Economy and Banking ADB and World Bank are taken.

3. Methods and Models

The regression analysis carried out in a Simultaneous Equation Model (SME)'developed by me shall show case the direct impact of growth in banking industry to the economy shall be demonstrated in the chapter on empirical results, the exactly indentified equation is our model , which is solved with Ordinary Least Square Model (OLS)and provide solution for identified equation, is found through Two Stage Least Squire (TSLS) model.

For the purpose of estimating the inter linkage and interrelationship among variables for the measurement of economic growth we tried to formulate a quantitative model which would facilitate the planners in devising the development policy with precision.

a) Data Collection Technique & Sample Size

This Impact study on Nepalese economy provides valuable insights to the factors affecting Money supply (M2) movement and its impact on GDP of Nepal. The secondary data from the period of 2001 to 2016 for 15 years have been used. Impact of monetary policy has been studied from two perspective i, e. Perspective of Financial Sector Development and its impact to the sustainable economic development and Perspective of Monetary Instrument and their Impact on sustainable economic development .In which following variables **Dsavings** (Domestic Saving), **Dcredit** (Domestic Credit), **WorkerRMT** (REMMITANCE, **intRate** (interest rates) and **DspINCOME** (Disposable Income) are selected under study

b) Statistical Test

The SPSS software is used to analyze the data by using Regression Model to find out the impact of money supply (M2) on the GDP of Nepal.

c) Characteristics of Variables

i. Dependent Variable GDP is the dependent variable. GDP is the total market value of all final goods and services which produced in a country in a given year are equal to total consumer, investment and government spending, plus the value of exports, minus the value of imports.

ii. Independent Variable

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Domestic Savings – is an aggregate residual amount of public and firms after consumption. Increase of savings in Bank accounts or stable saving in financial system leads to low demand and cheaply amiability of money in the market is presumed to be oversupply of Money in the economy.
Domestic credits- The term "domestic credit" refers to lending or credit that a country or territory's central bank makes available to borrowers within the same territory. This may include commercial banks and government.
Workers Remittance- A remittance is a transfer of money, often by a foreign worker to an individual in their home country. Money sent home by migrants competes with international aid as one of the largest financial inflows to developing countries. Workers' remittances are a significant part of international Inward capital flow take major stake of Money Supply, especially with regard to labor-exporting countries like Nepal has become Workers remittance dependent.
Interest Rate-The amount charged, formulate as a percentage of principal, by a lender to a borrower for the use of assets.
Disposable Income- is total personal income minus personal current taxes.
Or personal income minus personal current taxes equals disposable personal income. Or Subtracting personal outlays (which includes the major category of personal consumption expenditure yields personal (or, private) savings), hence the income left after paying away all the taxes is referred to as disposable income. Increased income leads to increased consumption and saving finally increase in demand and any shortage or scarcity will have inflationary effect and vice versa in the economy.

c) Analytical Results

The data were analyzed by using regression model to find out the relationship between variables with respect to GDP of Nepal.(Table no: 1) The value of mean show the average values, standard deviation shows the variability in the values and N represents number of years in the model.

For the detail study of linearity , stationary and residual error test, the following models and methods have been used to derive results they are Mean , Median , Mode , ACGR , Correlation Coefficient , T- test comparison , Simultaneous Equation Model, Durbin Watson Test, Random Walk Model, Dicky Fuller Unit Test have been used

The Basic casual relationships and assumptions are taken follows:

$(Y) = f(C, I)$ ……..1

$(S) = f(Y, C, R)$……2

$(CR) = f(D)$……,.3

$(C) = f(Y)$…….4

Where D= Deposits =Savings, C = consumptions, I = Investment Cr= Credit, Y = Income, R = Interest rate)

The structural growth model equations would be as follows-

$Y = C+S = C+I$ (where, S = I , savings are equal to investments in an economy at equilibrium.) Independent variables like Deposit (Dt) and credit created by banks (CRt) are endogenous.

$Dt= \alpha o + \alpha 1Yt + \alpha 2Rt + U_1$.....5

$Crt=\beta 0+ \beta 1Dt+Ut$……6

Further , It is assumed that

$St= Dt$ ……7

It implies that the savings of public get transformed in to bank deposit and increase interest rate encourage savers to save more while lower interstate discourage both savings and bank deposits. The bank deposits are the base credit creation. Greater the deposit greater the credit creation .

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There fore,

$CRt = \beta o + \beta 1 (\alpha o + \alpha 1 Yt + \alpha\ 2Yt + \alpha\ 2Rt + Ut) + U2$…….8

Or $CRt = \pi 0 + \pi 1 Yt + \pi 2 Rt + V$ ……9

The structural coefficients denoted by π (PI) ……..10

$\pi 0 = \beta 0 + \beta 1 \alpha 0$ i:e, $\pi 1 = \beta 1 \alpha 1$ i:e, $\pi 2 = \beta 1 \alpha 2$……..11

3.1 Harvey Model

It tests the assumption that successive values of time series equal the preceding values:

$Y0 = Y1 = Y2 = \ldots\ldots\ldots = Y_T$ ……12

The Model is as follows:

$Yt - \mu + \beta (Y_{t-1} - \mu)$ ……13

It means Yt = Yt-1 if β =1.But for purpose of estimation, the model is specified as follows:

$Yt = \beta$ yt-1 + Ut……14

Where $Yt = \beta$ y t-1 + Ut……15

Where $Yt = Y - \overline{Y} = Y - \mu$, $\overline{Y}$ and $-\mu$, are Mean of Y (GDP OR INCOME) in the time series.

4 Simultaneous Equations Model

This Simultaneous Equation Model analyzes the quantitative linkages with respect to impact of economic growth on the development of banking in Nepal. The relation between economy and other sectors of the economy are bi-directional though these relations are characterized by lead-lag structure. The quantitative relationship is studied among the 'number of banks and their branches' opened for 'savings' there by increased Domestic credits and Gross Domestic Product (GDP)' during the period 2001-2016 and analyzed which may give an insight to policy makers while conceiving any development plan.

The role of finance has been investigated quite extensively since the time of Schumpeter (1912) who considered financial development as a source of economic growth. Robinson (1952) suggested that the financial sector simply 'responds' to the need of financial intermediation created by the expansion of the real sector of the economy. These conflicting views are 'supply-leading' and 'demand-following' models of inter-linkage between financial development and economic growth. Schumpeter argued in favor of 'supply-leading' hypothesis whereas Robinson vouched for 'demand-following' model.

Nepal being a geographically and economically diversified subcontinent, this thesis considers the 'causation' between these two factors as bi-direction and a mixture of both. We have experienced both kinds of model post NRB has become independent monetary regulatory Authority. The aggregation of financial/banking services after the existence of Central Bank in the state has never led to panic or financial crisis, it was lagging behind in purchasing power and education of masses, government run special schemes and promotion of financial services (especially privatization of banking and cooperatives in those areas) brought about a revolutionary change. The growth in deposits of banks leads to economic growth in country via credit with a time lag.

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Empirical Results: are presented systematically: first we examine the Test of Stationary and estimates of growth curve. The following are OLS estimates of the Harvey Model in case of individual series of GDP or Yt

Yt = 1.15 yt -1: R2 = 0.993 :

F =265.26>F * + 8.66E -6 with 't' value as 2.14.

Result of Harvey Model show that model that model first the data well: coefficient of determination has very high value and coefficient value of regression coefficient exceeds '1' significantly: **(1.15-1)/Standard Error (S.E.)**

- 1.15-1.00/0.057
- t= 2.14. so the 't' also statistically significant (compared to stipulated value of 1.96). So, **GDP or Yt** is shown to be non-stationary.

Two Stage Least Square (TSLS) estimate of function of CRt :

The following is the TSLS estimate of the function of:

CRt = -1497.63+0.7781 D^t : R2 = 0.9987: F= 1760.625>F*=5.66E-21

With 't' value of intercept being -3.3162 and that of being 41.9598.

The model fits the data well. Though the value of R2 implies 99.87% of change in is explained by this function yet very definite meaning cannot be imputed to R2 (Coefficient of Determination) in case of two Stage Least Square (TSLS) estimates (Cf.K.E Wallis 1971). The reason foe this inference of Wallis seems to be the fact that the independent variable (like in this function estimated by TSLS) carries the correlation of deposits with rate of interest and income : it is difficult to eliminate this part from the coefficient of determination of this function. As in case of function of deposit, the function of Credit Creation also has a negative value of intercept. In my view the negatively significant intercept indicates the inverse influence of such policy variables as Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR).

Since these ratios don't change frequently, we have not incorporated the same as included factors. But the coefficients attached to deposit are highly significant statistically. This implies that Marginal Propensity of bank to credit creation is highly responsive to deposits. Corresponding to I unit of deposit the credit created increases by 0.167 units.

Result

We studied four variables per Capita GDP (Yt),. Credit (CRt), Deposit (Dt) and Rate of Interest (Rt) andtheir interrealtion. The problem was solved by introduction of identity equation

S= I (By assuming Savings as equal to Investment in economy at aggregate level). The study is based on a simple simultaneous equation model which comprises of four variables out of which two are endogenous/dependent and are exogenous/pre-determined/independent. Current income and current interest are identified as exogenous variables.

Deposits are assumed to depend partly upon income and current interest rates.It means deposits are not assumed not assumed to be interest neutral . Two variables, Deposit (Dt) and Credit created by banks (CRt) are treated as endogenous. The other two viz., Income (Yt) and rate of interest (Rt) are exogenous variables. Thus we have a consistent framework of structural equation which yield exact value of economic variables when we apply OLS method. The OLS and TSLS estimates of deposits and credits functions are estimated above in

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D^t =-7063.07+260.26 Rt+0.7907 Yt ….……Eguation 17

Also CRT = -1491.63+0.7780 Dt ….……Eguation 18

The values of 'r', 'R2' and 't' values of values of these functions are as follows

(a) For Deposits equation (17)

'r' = 0.9974: 'R2 =0.9949: 't' =41.95 for estimated deposits

Both the functions fit the data well as is evident from the explanatory power and significance of the regression.

Both interest rate and GDP affect deposits positively and significantly. Corresponding to increase in interest rate by one percentage point, deposits rise by an amount of Rs.186.6 Crore at any given level of income. But an increase of Rs 1 Crore in GDP raises deposits by Rs.0.095 Crore at given interest rate.As against this, an increase of Rs 1 Crore in deposits leads to creation of additional credits of Rs 0.167 Crore. This highlights the fact ▪ Financial Institution and Intermediary (FII) utilize 80.6% of the deposits mobilized by them for creation of credit. Thus only 16% of total deposits appear to suffice the liquidity requirement.

5.7 Ordinary Least Square (OLS) estimates of (Deposits) Dt Function—Intercept captures the influence of variables which are excluded from the regression model. The influence of excluded variable is not zero (Consumption in this case). The negative sign refers to inverse influence of Consumption expenditure on savings/deposits. This interpretation is based on stipulation by J. M. Keynes that

Y= C+S. So, S= Y-C ….……Eguation 19

Thus greater the value of C, lesser shall be the value of 'S' and consequently Dt. This holds true both at micro and levels.

In view of the results of Dickey-Fuller Test and Harvey Model for stationary of time series, we are prompted to use. Engle-Granger Test of unity root of residuals on the assumption that, even if individual series are non-stationary, their linear combination in a regression function can be found to be stationary.

Dt-D^t = error = Ut ….……Eguation 20

We take difference of these "error" values and engle –

Granger attest to evaluate stationary of function –

Deposits with relation as

Ut = Et ….……Eguation 21

Where ,

Et is unexplained change in time series 'Ut' over a unit change in time period. (By applying Engle Granger Test on error differences of Dt and (found as per equation 21 above) and similarly for CRt and we have:

(a) For Deposits

= - 0.2882Ut-1; R2 =0.1813; F=4.65> F* =0.043; 't' = (-2.16)

(b) For Credits

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= - 0.1759Ut-1; R2 = 0.1997; F=5.23> F* = 0.033; 't' = (-2.29)

The Linear equation of Deposits and Credit Creation is thus proved to be stationary as value of 't' statistics is -2. 16 and -2.29 for Deposits and Credit respectively. This absolute value is much greater than the critical value at 95% confidence interval. The residuals of both functions emerge as stationary. Hence, the regression functions of deposits and credits may be treated as genuine.

Empirical Estimates

Table no: 1

FY	GDP	M2	NFA	Dcredit(CRt)	Pvtcrdit	Dsavings (Dt)	IntRate(Rt)	DspINCOME	Workers RMT
2001/02	459443	245911.2	88419	207323	133315.3	51501.5	6	508814.5	47536.3
2002/03	492231	277306.1	91407	228443.8	150956.9	43599.4	5.75	527023.8	54203.3
2003/04	536749	300440	108804	251089	172516.5	42140.6	5.55	567088.1	58587.6
2004/05	589412	346824.1	107742	285157.5	197016.9	63063.8	5.5	619953.8	65541.2
2005/06	654084	395518.2	139439	327634.4	243570.4	68110.4	5.5	688752.6	97688.5
2006/07	727827	495377.1	139439	365225.1	273477.4	58756.9	5	785185.3	100144.8
2007/08	815658	630521.2	131910	442282.3	339834.2	71452.5	5	864250.8	142682.7
2008/09	988272	719599.1	171455	560670.7	438354.4	80188.3	5	1006421.5	209698.5
2009/10	1192774	788281.4	227666	654666.4	500650.6	93230	5	1249508	231725.3
2010/11	1366954	921320.1	216356	734968.7	559011.3	136589	5	1484539	253551.6
2011/12	1527344	1130302.3	221266	910224.9	727322.4	190923	6	1682362	359554.4
2012/13	1695011	1315376.3	383772	994691.5	809825.8	167805	8	1962407	434581.7
2013/14	1964540	1565967.2	468238	1165866.3	973026.1	178882.2	8	2205790.5	543294.1
2014/15	2130150	1877801.5	599220	1314305	1150824.6	234227.4	7	2628791.6	617278.8
2015/16	2247427	2244578.6	747287.4	1527345.6	1373944.9	186423.9	7	2864669.1	665064.3

6.Hypothesis – Part I

The hypothesis conceived in the study relate to the first objective impact of financial development to the sustainable economic development all the hypothesis under this approaches are alternative to each other. The assumption are as follows.

Ho *The growth or Increase in Bank's credits (DCredit) have no significant role to the sustainable economic development.*
H1 *Increase in Bank's credit plays significant role forth sustainable economic development*
Ho *Increase in Bank's savings (Dsaving) has no significant role to the sustainable economic development.*
H2 *Increase in Bank's savings (Dsaving)has significant role forth sustainable economic development*
Ho *Increase in interest rate has no significant role for the sustainable economic development*
H3 *Increasing interest rate has significant role for the sustainable economic development*
Ho *Increase in Disposable Income has no significant role for the sustainable economic development*
H4 *Increasing interest rate and Disposable Income has significant role for the sustainable economic development*
Ho *Increase in workers remittance has no significant role for the sustainable economic development*
H5 *Increasing workers remittance has significant role for the sustainable economic development*

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6.0 Hypothesis Testing (SPSS RESULT) - Liner Regression Model

The said time series data is first of all checked for stationary to be sure that the results obtained in our empirical analysis are not spurious. After checking the stationary we applied regression analysis upon different parameters to establish our result.

Table no: 2

Descriptive Statistics

	Mean	Std. Deviation	N
GDP	1159191.7333	625502.09746	15
Dsavings	111126.2600	64515.34040	15
Dcredit	664659.6133	428432.09803	15
WorkersRMT	258742.2067	215017.36087	15
IntRate	5.9533	1.06007	15
DsplNCOME	1309703.8400	792478.97390	15

Table no: 3

Correlations

		GDP	Dsavings	Dcredit	WorkersRMT	IntRate	DsplNCOME
Pearson Correlation	GDP	1.000	.957	.995	.991	.693	.994
	Dsavings	.957	1.000	.943	.943	.685	.948
	Dcredit	.995	.943	1.000	.995	.691	.997
	WorkersRMT	.991	.943	.995	1.000	.740	.995
	IntRate	.693	.685	.691	.740	1.000	.707
	DsplNCOME	.994	.948	.997	.995	.707	1.000
Sig. (1-tailed)	GDP	.	.000	.000	.000	.002	.000
	Dsavings	.000	.	.000	.000	.002	.000
	Dcredit	.000	.000	.	.000	.002	.000
	WorkersRMT	.000	.000	.000	.	.001	.000
	IntRate	.002	.002	.002	.001	.	.002
	DsplNCOME	.000	.000	.000	.000	.002	.
N	GDP	15	15	15	15	15	15
	Dsavings	15	15	15	15	15	15
	Dcredit	15	15	15	15	15	15
	WorkersRMT	15	15	15	15	15	15
	IntRate	15	15	15	15	15	15
	DsplNCOME	15	15	15	15	15	15

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Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	DspINCOME, IntRate, Dsavings, WorkersRMT, Dcredit[b]	.	Enter

a. Dependent Variable: GDP

b. All requested variables entered.

Table no: 4

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.997[a]	.993	.990	63979.89271	.993	265.826	5	9	.000	1.461

a. Predictors: (Constant), DspINCOME, IntRate, Dsavings, WorkersRMT, Dcredit

b. Dependent Variable: GDP

Table no: 5

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5440699394904.701	5	1088139878980.940	265.826	.000[b]
	Residual	36840840036.234	9	4093426670.693		
	Total	5477540234940.935	14			

a. Dependent Variable: GDP

b. Predictors: (Constant), DspINCOME, IntRate, Dsavings, WorkersRMT, Dcredit

Table no: 6

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	159418.542	229355.683		.695	.505	-359420.058	678257.143					
	Dsavings	1.621	.841	.167	1.927	.086	-.282	3.523	.957	.540	.053	.099	10.066
	Dcredit	1.131	.735	.775	1.540	.158	-.531	2.793	.995	.457	.042	.003	338.756
	WorkersRMT	-.074	1.186	-.025	-.062	.952	-2.756	2.609	.991	-.021	-.002	.004	222.282

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	IntRate	-859.388	32695.404	-.001	-.026	.980	-74821.530	73102.754	.693	-.009	-.001	.243	4.108
	DsplNCOME	.070	.335	.089	.210	.839	-.688	.828	.994	.070	.006	.004	241.300
a. Dependent Variable: GDP													

Table no: 7

Coefficient Correlations[a]

Model			DsplNCOME	IntRate	Dsavings	WorkersRMT	Dcredit
1	Correlations	DsplNCOME	1.000	-.121	-.283	-.153	-.663
		IntRate	-.121	1.000	-.002	-.687	.580
		Dsavings	-.283	-.002	1.000	-.034	.104
		WorkersRMT	-.153	-.687	-.034	1.000	-.620
		Dcredit	-.663	.580	.104	-.620	1.000
	Covariances	DsplNCOME	.112	-1329.765	-.080	-.061	-.163
		IntRate	-1329.765	1068989419.505	-53.664	-26645.138	13939.877
		Dsavings	-.080	-53.664	.707	-.034	.064
		WorkersRMT	-.061	-26645.138	-.034	1.406	-.540
		Dcredit	-.163	13939.877	.064	-.540	.540

a. Dependent Variable: GDP

Table no: 8

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Dsavings	Dcredit	WorkersRMT	IntRate	DsplNCOME
1	1	5.617	1.000	.00	.00	.00	.00	.00	.00
	2	.351	4.001	.01	.00	.00	.00	.00	.00
	3	.020	16.585	.00	.92	.00	.01	.01	.00
	4	.010	23.777	.15	.02	.01	.01	.36	.00
	5	.001	73.797	.55	.03	.01	.67	.27	.46
	6	.001	105.528	.30	.03	.98	.31	.36	.53

a. Dependent Variable: GDP

(1) Result of Regression Model

The regression shows that Rate of Interest (Rt) is not only statistically significant but it influences Deposits (Dt) greatly. Corresponding to an increase of 1 unit in rate of interest, Deposits tend to rise by Rs 186.6 million. This finding runs counter to general belief that savings, and hence, Deposits are neutral to rate of interest. This understanding is based on premise that once consumption decision has been taken, savings emerge as 'residual' factor automatically. This premise may probably hold true for high income groups at the given point in time and in a dynamic state of growth when per capita income tends to rise consistently. In fact, there is substitution of current consumption for saving at low income levels and saving behaves as residual. But current

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consumption is substituted by saving which increase in income. This may be highlighted by the inter temporal behavior of the ratio of consumption to saving which tends to decline through time (see Ritu Sharma, 2013)

It is then only a matter of further decision to allocate given amount of savings in different options as investment which is generally guided by considerations of returns, safety and security. Only such persons invest in stock market who is not risk averters but majority of Nepleases are risk averters. They give greater preference to safety, security and fixed and returns. This makes bank deposits as most favored option.
However, income also influences savings and deposits significantly. But this influence is much lower than that of rate of interest, which is fixed and secure return option for investors. Considerations of safety and security of fixed return may dilute the influence of interest rate on deposits. But it is incontrovertible that the rise in interest rate does influence deposits: it acts as a barrier to diversion of saving to such option as NEPSEs and mutual funds. Even if liquidity. As against this, depositors can withdraw part or whole of the term deposits also make bank deposits relatively more attractive. If Income Tax concessions are granted to depositors, banks will compete better with Stocks investment and mutual fund companies.
In the regression equation (18) above, corresponding to an increase of 1 unit in income, deposits increase by 0.084 units. This result is to be understood in the sense that income exercise decisive influence on the decision to save and the choice of investment option. Since low and middle income groups are mostly risk averters. The proportion of income saved is mostly invested in bank deposits. But 0.084 as a response of deposit to increase in income. Thus Marginal Propensity to save (MPS) is 9 times more than Marginal propensity to Consume (MPC). The function explains 99.5 percent of total change in annual deposits in Nepalese economy.

8. Result of Hypothesis – Part I

H1 *The significant value of Bank's credits (Dcredit) is 0.000, which is less than 0.05. We reject the null hypothesis. This means that Bank's credits has a significant relation with GDP of Nepal. Increase in Bank's credit play significant role for the sustainable economic development and has positive relation with the Money Supply in the Economy.*

H2 *The significant value of Bank's savings(DSavings) is 0.000, which is less than 0.05. We reject the null hypothesis. This means that Bank's savings or credits has a significant relation with GDP of Nepal. Increase in Bank's savings(Dsaving) play significant role for the sustainable economic development and has positive relation with the Money Supply in the Economy.*

H3 *The significant value of interest rate (IntRate)is 0.000, which is less than 0.05. We reject the null hypothesis. This means that interest rate has a significant relation with GDP of Nepal. Increasing interest rate has significant role for the sustainable economic development has positive relation with the Money Supply in the Economy.*

H4 *The significant value of disposable income(DspINCOME) is 0.000, which is less than 0.05. We reject the null hypothesis. Increasing disposable income has significant role for the sustainable economic development has positive relation with the Money Supply in the Economy. Though increase money supply has only short term increase in the disposable income indicate the growth and development of economy.*

H5*The significant value of workers remittance is 0.000, which is less than 0.05. We reject the null hypothesis. Increasing workers remittance has significant role for the sustainable economic development and has positive relationship with growth and development of the economy and creates positive impact on Money supply to the economy*

PART II

The objective of the study(Part II) is to examine the implication of monetary policy for the socio-economic transformation of the people and confirming that whether monetary policy have played a significant role for the socio-economic transformation while establishing a stable financial system development in the Neplease economy for effective delivery of monetary policy in Nepal.

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To examine the impact of monetary policy of Nepal with regard to the Macroeconomic indicators and output like GDP, money supply (M1/M2), attaining price stability, balance of payment stability increased income and consumption for the development of efficient financial industry and sustainable development of Economy we considered ..

d) Data Collection Technique & Sample Size

This Impact study on Nepalese economy provides valuable insights to the factors affecting Money supply (M2) movement and its impact on GDP of Nepal. As already discussed in the chapter III secondary data from the period of 2001 to 2016 for 15 years have been used. Impact of monetary policy has been studied from two perspective i.e. Perspective of financial sector development and its impact to the sustainable economic development and perspective of monetary instrument and their impact on sustainable economic development .In which following variables GDP, CPI, inflation, interest rates, BOP and investments are selected under study

e) Statistical Test

The SPSS software is used to analyze the data by using Regression Model to find out the impact of money supply (M2) on the GDP of Nepal.

c) Characteristics of Variables

I . Dependent Variable: GDP is the dependent variable. GDP is the total market value of all final goods and services which produced in a country in a given year are equal to total consumer, investment and government spending, plus the value of exports, minus the value of imports.

II Independent Variables:

Interest Rate
The amount charged, formulate as a percentage of principal, by a lender to a borrower for the use of assets.
CPI
It measures the level of prices in the economy. It comprise transport, food, medical, education, fuel, house rent etc.
Inflation Rate
The rate at which the ordinary level of prices for goods and services is rising and afterwards, purchasing power is falling.
BOP
Money supply leads to increase in demand which cause shortage of goods and services finally import and this leads to trade difference where as X=I at equilibrium economy. and
Investments
Investments are future savings for prosperity. Generally Investment and saving should be equal in the equilibrium however the volatility of saving causes volatile investment.

Table 9 (Part II)

FY	Nominal GDP(P)	r(int)%	CPI	BOP	Consumption *	TotalInvestment *	Popltion mill
2001/02	459,443	6	38.3	47536.3	390017.1	98648.7	24.75
2002/03	492,231	5.75	40.1	54203.3	415843.2	93019.5	25.3
2003/04	536,749	5.55	41.7	58587.6	450090.2	105383.2	25.87
2004/05	589,412	5.5	43.6	65541.2	473685.2	131670.5	25.87
2005/06	654,084	5.5	47.1	97688.5	521301.2	155906.7	25.18
2006/07	727,827	5	49.8	100144.8	595327.2	175632.8	25.53
2007/08	815,658	5	53.2	142682.7	656374.4	208778.5	25.89
2008/09	988,272	5	59.9	209698.5	735469.9	247272.0	26.25
2009/10	1,192,774	5	65.6	231725.3	895042.0	313029.0	26.46
2010/11	1,366,954	5	71.9	253551.6	1056185.0	457395.0	26.85
2011/12	1,527,344	6	77.8	359554.4	1176030.0	519268.0	27.33

2012/13	1,695,011	8	85.5	434581.7	1359539.0	526889.0	27.58
2013/14	1,964,540	8	93.3	543294.1	1516128.9	632601.2	27.95
2014/15	2,130,150	7	100.0	617278.8	1730312.2	808757.9	28.33
2015/16	2,247,427	7	109.9	665064.3	1934046.2	822303.1	28.74
2016/17	2,599,234	7	114.8	695452.4	2130519.7	763556.3	29.1
**Real GDP expressed at 2000/01 prices*							
Source: Central Bureau of Statistics							

d) Analytical Results

The data were analyzed by using Regression Model to find out the relationship between variables with respect to GDP of Nepal.(Table no: 9 for Part II) The value of mean show the average values, standard deviation shows the variability in the values and N represents number of years in the model.

Table no : 10

Descriptive Statistics

	Mean	Std. Deviation	N
NepalLGDP	1159191.7333	625502.09746	15
Inflation	7.5267	2.71674	15
IntRate	5.9533	1.06007	15
CPI	65.1800	23.48848	15
BOP	52743.3067	63903.71465	15
Investment	353103.6733	256540.74821	15
Consumption	927026.1133	509932.13323	15

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	1.000[a]	1.000	.999	17311.81712	1.000	3044.801	6	8	.000	1.814

a. Predictors: (Constant), consumtion, Inflation, IntRate, BOP, Investment, CPI

b. Dependent Variable: NepalLGDP

Table no : 11

Correlations

		NepalLGDP	Inflation	IntRate	CPI	BOP	Investment	Consumption
Pearson Correlation	NepalLGDP	1.000	.610	.693	.998	.872	.992	.995
	Inflation	.610	1.000	.167	.621	.412	.544	.570
	IntRate	.693	.167	1.000	.684	.694	.678	.703
	CPI	.998	.621	.684	1.000	.880	.991	.998
	BOP	.872	.412	.694	.880	1.000	.889	.888
	Investment	.992	.544	.678	.991	.889	1.000	.994
	Consumtion	.995	.570	.703	.998	.888	.994	1.000
Sig. (1-tailed)	NepalLGDP	.	.008	.002	.000	.000	.000	.000
	Inflation	.008	.	.276	.007	.063	.018	.013
	IntRate	.002	.276	.	.002	.002	.003	.002
	CPI	.000	.007	.002	.	.000	.000	.000
	BOP	.000	.063	.002	.000	.	.000	.000
	Investment	.000	.018	.003	.000	.000	.	.000
	Consumption	.000	.013	.002	.000	.000	.000	.
N	NepalLGDP	15	15	15	15	15	15	15
	Inflation	15	15	15	15	15	15	15
	IntRate	15	15	15	15	15	15	15
	CPI	15	15	15	15	15	15	15
	BOP	15	15	15	15	15	15	15
	Investment	15	15	15	15	15	15	15
	Consumption	15	15	15	15	15	15	15

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Table 12

Variables Entered/Removed[a]			
	Variables Entered	Variables Removed	Method
1	consumtion, Inflation, IntRate, BOP, Investment, CPI[b]	.	Enter

Table no : 13

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-1231072	147115		-8.368	0	-2E+06	-891824					
	Inflation	-19628.1	5756.139	-0.085	-3.41	0.009	-32902	-6354.47	0.61	-0.77	-0.025	0.088	11.424
	IntRate	26163.12	7573.91	0.044	3.454	0.009	8697.65	43628.59	0.693	0.774	0.026	0.332	3.011
	CPI	57753.65	7335.178	2.169	7.874	0	40838.7	74668.6	0.998	0.941	0.058	0.001	1386.673
	BOP	-0.603	0.166	-0.062	-3.632	0.007	-0.986	-0.22	0.872	-0.789	-0.027	0.19	5.256
	Investment	0.942	0.197	0.386	4.791	0.001	0.488	1.395	0.992	0.861	0.035	0.008	118.741
	Consumtion	-1.815	0.318	-1.48	-5.712	0	-2.548	-1.082	0.995	-0.896	-0.042	0.001	1226.996

a. Dependent Variable: NepalLGDP

Table no : 14

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	Inflation	IntRate	CPI	BOP	Investment	Consumtion
1	1	6.361	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.508	3.540	.00	.00	.00	.00	.10	.00	.00
	3	.077	9.110	.00	.05	.03	.00	.17	.00	.00
	4	.047	11.660	.00	.06	.00	.00	.68	.01	.00
	5	.007	30.753	.06	.03	.69	.00	.04	.01	.00
	6	.001	72.335	.01	.08	.27	.01	.00	.97	.06
	7	5.248E-005	348.138	.93	.76	.00	.99	.01	.01	.94

a. Dependent Variable: NepalLGDP

a) Hypothesis Testing and Results- Part II

Based on the analysis of Tables 2 the following result are interpreted as under

H0: There is no significant relation between inflation rate and GDP.

H1: There is a significant relation between inflation rate and GDP.

- Result

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The significant value of inflation rate is 0.008, which is less than 0.05. We reject the null hypothesis. This means that the inflation rate has significant relation with GDP of Nepal

Ho: There is no significant relation between Interest rate and GDP.
H2: There is a significant relation between Interest rate and GDP.

- Result

The significant value of interest rate is 0.000, which is less than 0.05. We reject the null hypothesis. This means that interest rate has a significant relation with GDP of Nepal.

Ho: There is no significant relation between CPI and GDP.
H3: There is a significant relation between CPI and GDP

- Result

The significant value of CPI is 0.000, which is less than 0.05. We reject the null hypothesis. This means that CPI has a significant relation with GDP of Nepal.

Ho: There is no significant relation between BOP and GDP.
H4: There is a significant relation between BOP and GDP.

- Result

The significant value of BOP is 0.000, which is less than 0.05. We reject the null hypothesis. This means that BOP has a significant relation with GDP of Nepal.

Ho: There is no significant relation between Investment and GDP.
H5: There is a significant relation between Investment and GDP.

- Result

The significant value of Investment is 0.000, which is less than 0.05. We reject the null hypothesis. This means that Investment has a significant relation with GDP of Nepal.

Ho: There is no significant relation between Consumption and GDP.
H6: There is a significant relation between Consumption and GDP.

- Result

The significant value of Consumption is 0.000, which is less than 0.05. We reject the null hypothesis. This means that Consumption has a significant relation with GDP of Nepal.

4. Concluding Remarks

Empirical study is done for the whole period, from FY 2001/02 to 2015/16. The current period is not a liberal or transitional period this study is conducted at the end and beginning of the Aggressive economy, the policy prescriptions are required to be different to suit to accommodate provincial multistate economic situation.

Since there is positive impact of financial development to attain the sustainable economic development. The monetary policy should definitely focus on establishing a sound financial system development- Part 1 and macroeconomic and external factors targeting- Part II . Probably the dual

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approach of study would be helpful to analyze cause and effect of monetary policy for the sustainable economic development.

Though it has limitation and scope of further research, from the perspective of monetary instrument and their interaction it is concluded that's so far inflation has no adversely affect on the economy of Nepal which is a result of controlled or effective supply of money (M2) by NRB. This study reveals the impact of money supply (M2) on the GDP of Nepal whereby we have seen inflation rate is hovering towards double digits. We have considered few of the macro indicators they are interest rate, CPI , inflation rate, investment and consumption because money supply is affected either one of them. By using regression model, it is proved that almost all the variable have significant relation with GDP of Nepal. It is also noticed that change in change in intrest rate has also not caused for the increase or decrease of Inflation has significant relation with the GDP of Nepal. Thus, money supply needs similar efficient and little aggressive control to boost the economy in the days to come.

References

Pablo Duarte and Gunther Schnabl (2014) , Macro-economic Policy Making ,exchange rate Adjustment and Current Account Imbalances in Emerging Markets: *Review of Development Economics 19(3), 531-544, 2015*

Ulrich Bindseil and Adalbert Winkler (2013) *analyze Dual Liquidity Crises-A Financial Account Framework.Review of Development Economics 21(1), 151-163, 2013*

Birendra Bahadur Budha (2012) *"Demand For Money supply in Nepal : An ARDL Approach NRB Working Paper series, NRB-WP-12, 2012.*

Mukesh Khanal (2011) *"Monetary Neutrality in the Nepalese Economy during 1975-2008" NRB Working Series Paper Institute for Integrated Development Studies (IIDS), Kathmandu*

Nephil Matangi Maskay, Mr. Rajendra Pandit 2010 *"Macro-Financial Link and Monetary Policy Management: The Case of Nepal :NRB Web pages*

DK Adhikary, R Pant, BR Dhungana - 2007 - South Asian Network of Economic

"Study of Financial Sector Reform in Nepal" (Overall Impact and Public Ownership of Financial Institutions)

Ramesh Aryal *Report on monitory Policy of Nepal*

Prem K. Khanal, Dr. Dandapani Paudel, Dr. Durga P. Paudyal(2010) *fiscal policies, monetary policies, export aspects, the role of the private sector and economic growth* ***of*** *Nepal.*

Ankita and Vinod Mishra(2009) "*P*re-Condition For Inflation Taregeting in an emerging economy- The case of India". Global Economy journal

International Monetary Fund (IMF), (2001), *Financial Soundness Indicators; Policy Paper*, p 1-33, Monetary and Exchange affairs Department and Statistics Department, International Monetary Fund (IMF), Washington.

Manjunatha, B. G., and Mahendra Kumar, S., (2007), *Liquidity Risk in a Stress Scenario: An Empirical Analysis of Major Indian Banks*, p 121-126, Compendium of Conference Papers, BANCON 2007, Indian Banks Association, Mumbai, November 2007.

Mohan, Rakesh., (2006), *Central Banks and Risk Management: Pursuing Financial Stability*, p 1-18, November 21, 2006, www.rbi.org.in/speeches, Reserve bank of India (RBI), Mumbai, India.

Monetary Authority of Singapore (MAS), Singapore, (2003), *Technical Paper on Credit Stress Testing*: *MAS Information Paper*, p 1-40, www.mas.gov.sg. Monetary Authority of Singapore, Singapore.

Rajan, Raghuram G., (2005), *Has Financial Development made the world riskier?* NBER (National Bureau of Economic Research) Working Paper No. 11728, http://www.nber.org/papers/w11728, NBER, Cambridge, USA.

Reserve Bank of India, (2007), *Guidelines to banks on Stress Testing*, Dated: June 26, 2007, www.rbi.org.in RBI, Mumbai, India.

Schinasi, Garry J., (2004), *Defining Financial Stability*, p 1-18, IMF Working Paper no WP/04/187, October 2004, International Capital Markets Department, International Monetary Fund (IMF), Washington.

ISSN:0971-1260
Vol-22- Issue-14-December-2019

State Bank of Nepal (2005), *Guidelines on Stress Testing*, p 1-18, Banking Supervision Department, State Bank of Nepal, Islamabad.

Acharya, M. (1995). Twenty *years of women in development in Nepal*: An overview.

Economic Journal of Nepal, Kathmandu, Nepal, 18(4): 151-172.

Adam, E. E., & Adam, E. M. (2011). *Language as vehicle of socio-economic development advocating:* The use of legal language for the attainment of millennium development goals. Arabian Journal of Business and Management Review, 1-10.

Aghion, P., & Bolton, P. (1997*).* *A theory of trickle-down growth and development*.

Alam, S. (2013). *The impact of credit and non-credit aspect on self-employment profit*: A comparison of micro-credit programmes and commercial lenders in rural Bangladesh. The Journal of Developing Areas, 47 (1): 23-45.

Allen, F., Demirguc-Kunt, & et al. (2012). T*he foundations of financial inclusion: Understanding ownership and use of formal accounts*. The World Bank, Policy Research Working Paper, WPS 6290, 1-59.

Banerjee, A., & Newman, A. (1993). *Occupational choice and the process of development. Journal of Political Economy*, 101(2): 274-98.

Bashyal, R. (2005). *Impact of micro-credit programmes on poverty alleviation in Nepal*: A case study of Rupandehi district. Unpublished Ph.D. Dissertation, Central Department of Economics, Tribhuvan University, Kathmandu, Nepal.

Bashyal, R. (2006). *Role of micro-finance in attaining millennium development goals*.

The Economic Journal of Nepal, Central Department of Economics, Tribhuvan

University, 29(4): 231-238.

Berhane, G., & Gardebroek, C. (2011). *Does micro-finance reduce rural poverty*?

Dhungana, B. R. (2013). *Accessibility of micro-finance services through Grameen Bikas Banks: A case of Nepal. HermenuticS*: A Biannual Refereed International

Dzisi, S., & Obeng, F. (2013). *Micro-finance and the socio-economic well-being of women entrepreneurs in Ghana*. International Journal of Business and Social Research, (11): 45-62.

Imai, K. S., & Azam, M. S. (2012). *Does micro-finance reduce poverty in Bangladesh*?

Yunus, M. (2004). *Expanding micro-credit outreach to reach the millennium development goals:* Some issues for attention, paper presented at an international seminar, 'Attacking Poverty with Micro-credit', Dhaka 8-9 January 2003.

Yunus, M. (2007*).* *Banker to the poor:* Micro-lending and the battle against world poverty. New York: Public Affairs.

Berg, Andrew, L. Charry, R. Portillo and J. Vlcek. 2013. *"The Monetary Policy Mechanism in the Tropics: A Narrative Approach."* IMF Working paper WP/13/197.

Friedmand, B. M. and K. N Kuttner. 2010. *"Implementation of Monetary Policy: How Do Central Banks Set Interest Rates?"* In B. M. Friedman and M. Woodford, eds., Handbook of Monetary Economics, Vol. 3 Amsterdam: North-Holland.

Ginting, Edimon. 2004. *"Is Inflation in India an Attractor of Inflation in Nepal?"* IMF Working Paper WP/07/269.

International Monetary Fund. 2015. International Financial Statistics. Washington D.C., USA: International Monetary Fund.

Khatiwada, Y. R. 2005. "Monetary Policy." *In Nepal Rastra Bank in 50 Years. Kathmandu:* Nepal Rastra Bank.

Kuttner, K. N. 2015. Macroeconomics. Available at https://www.sugarsync.com/pf/D6414205753559_792120.

Kuttner, K. N. and P. C. Mosser. 2002. *"The Monetary Transmission Mechanism: Some Answers and Further Questions."* FRB Economic Policy Review 8(1): 15-26.

ISSN:0971-1260
Vol-22- Issue-14-December-2019

Mishra, P., Monetial P. J., and A. Spilimbergo. 2010. "*Monetary Transmission in Low Income Countries*." IMF Working Paper WP/10/223.

Nepal Rastra Bank. 1981. *NRB in 25 years*. Kathmandu: Nepal Rastra Bank.

Nepal Rastra Bank. 1990. *Economic Report. Kathmandu:* Nepal Rastra Bank.

Nepal Rastra Bank.. *Economic Report. Kathmandu:* Nepal Rastra Bank.

Nepal Rastra Bank. 1996. *Forty Years of Nepal Rastra Bank. Kathmandu*: Nepal Rastra

Nepal Rastra Bank. 2002. *Nepal Rastra Bank Act* 2002. Kathmandu

Nepal Rastra Bank. 2007. *Inflation in Nepal. Kathmandu:* Nepal Rastra Bank.

Nepal Rastra Bank. 2012. *Monetary Policy for Fiscal Year 2012/13*. Kathmandu: Nepal

Nepal Rastra Bank. 2014. *Monetary Policy for Fiscal Year 2014/15*. Kathmandu: Nepal

Nepal Rastra Bank. *Current Macroeconomic Situations (Various Issues)*. Kathamndu: Nepal

Nepal Rastra Bank. 2011. *NRB Strategic Plan (2012-2016)*. Kathmandu: Nepal Rastra Bank.

Nepal Rastra Bank. 2010. *Monetary Policy Transmission in Nepal* NRBWP29 26

Nepal Rastra Bank.*Quarterly Economic Bulletin (Various Issues)*. Kathmandu: Nepal Rastra Bank.

Nepal, A. and M. Nepal. 2010. "*Inflation Transmission between Nepal and India under Fixed Exchange Rate.*" The Economic Journal of Nepal 33(2): 77-87.

.**Reserve Bank of India.** *Database on Indian Economy. Mumbai:* Reserve Bank of India.

Romer, C. D. and D. H. Romer. 1989. "*Does Monetary Policy Matter?* A New Test in the Spirit of Friendman and Schwartz."

NBER Macroeconomics Annual 1989 (4): 121-184. Thapa, N. B. 2005. "*Interest Rates*," In Nepal Rastra Bank in Fifty Years. Kathmandu: Nepal Rastra Bank.

Nepal Rastra Bank..2007. "*Monetary Policy Environment and the Current Monetary Policy Framework in Nepa*l." The Economic Journal of Nepal 30(3): 125-146.

Veyrune, Romain. 2007. "Fixed Exchange Rate and the Autonomy of Monetary Policy: The Franc zone case." IMF Working Paper WP/07/34 .

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