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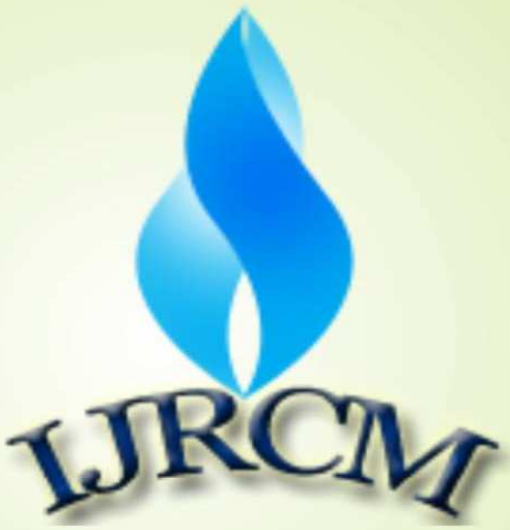

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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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EMPIRICAL ANALYSIS OF MACROECONOMIC INDICATORS AS DETERMINANTS OF GDP OF PAKISTAN BY USING ARDL APPROACH

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ABSTRACT

Purpose: *The causal and dynamic nexus of gross domestic product (GDP) growth rate and major macroeconomic variables like consumer price index (CPI), external rate of return (ERR), foreign exchange rate (FER), foreign portfolio investment (FPI) and narrow money supply (M_1) is undertaken in this study in the case of Pakistan in the short run and long run.*

Methodology and data: *Auto-regressive Distributed Lag (ARDL) model to co-integration, Unit Root Analysis and Error Correction Model (ECM) approaches are used in this study on the time series data for the period of 40 years from 1975 to 2014. Used secondary data composed form the official websites of World Development Indicators (WDI), World Bank Group (WBG), International Monetary Fund (IMF), Ministry of Finance Pakistan (MFP) and State Bank of Pakistan (SBP) primarily.*

Findings: *Inflation rate (CPI), foreign exchange rate (FER) and external rate of return (ERR) expressed a negative impact on GDP growth but other variables like foreign portfolio investment (FPI) and money supply (M_1) showed positive impact on GDP growth of Pakistan.*

Practical implications: *It is strongly recommended in the light of empirical results that government of Pakistan must control the high rate of inflation rate, foreign exchange rate and external rate of return in order to boost the economic growth. On the other side in is needed to invite the foreign portfolio investment and manage in the appropriate way the money supply will more increase the economic growth rate of Pakistan. Results of this research work are much significant and helpful for planners for the policy making, decision making and forward planning.*

KEYWORDS

GDP growth, Inflation, Interest, Exchange, Investment, M_1, ARDL and ECM.

1. INTRODUCTION

The relationship between macro-economic variables and economic growth got much attraction by a number of scholars due to its significance. Economic condition of an economy generally indicated in the form of GDP i. e., gross domestic product which represented the value of goods produced and services provided within the geographical boundaries of a state. GDP widely used to examine the economic ranking and per capita income of a country. It considered necessary to study the GDP for the economic planning and for various other economic and social decision making objectives. My selected topic is very important in the economic and non-economic life. GDP affected by a number of factors like unemployment rate, inflation rate, industrial production, stock market prices, money supply, interest rate, exchange rate, balance of trade, corporate profits, income and wages, level of new business, budget deficits, per capita income, government revenues and expenditures, infrastructure availability, means of transport and communication, human resources, educational and health facilities, investment and savings etc. Economic growth or GDP affected by a number of macroeconomic variables say exchange rate, interest rate and inflation in an economy. Economic growth indicated different environment of functional relationship with specific macroeconomic variables like exchange rate, interest rate and inflation. Numerous approaches applied to explore the relationship between GDP of a country with different economic variable by a number of researchers. But this study has selected five major variables namely inflation rate (CPI), external rate of return (ERR), foreign exchange rate (FER), foreign portfolio investment (FPI) and money supply (M_1).

According to World Economic Outlook (IMF), as in April 2014, economy of Pakistan witnessed higher and broad based economic growth rate. GDP growth percentage is 4.14% during current fiscal year. It was 3.7% during last fiscal year and was 3.84% during 2011-12.

During 2014, comparative real GDP of the World showed 3.6% growth rate. Growth rate of Euro Area was 1.2%, US was 2.8%, Japan was 1.4%, Germany was 1.7%, Canada was 2.3%, Hong Kong, Singapore and Korea showed growth rate of 3.7% while the growth rate of Vietnam was 5.6%.

ASEAN countries, Indonesia, Malaysia, Thailand and Philippines showed growth rate of 5.4%, 5.2%, 2.5% and 6.5% respectively during 2014. South Asian countries, Pakistan, India, Bangladesh and Sir Lanka showed 4.14%, 5.4%, 6.0% and 7.0% growth rate respectively.

Middle East countries, KSA, Kuwait, Iran and Egypt showed growth rate of 4.1%, 2.6%, 1.5% and 2.3% respectively.

African countries, Algeria, Morocco, Tunisia, Nigeria, Kenya and South Africa showed growth rate of 4.3%, 3.9%, 3.0%, 7.1%, 63% and 2.3% respectively.

According to Pakistan Bureau of Statistics in 2014, growth rate of agricultural, industrial, commodity producing and services sector is 2.1%, 5.8%, 3.9% and 4.3% respectively in the case of Pakistan.

This study wants to find the actual relationship in the short run and in the long run between selected macroeconomic variables and GDP in the case of Pakistan.

Various other studies are considered for the support of this study. Like, Cecchetti (2000) found that there is inverse relationship between inflation and GDP. According to structuralists that inflation had positive effect on economic growth but monetarists point of view mismatched with structuralists. Manoel Bittencourt (2012) concluded that inflation has a huge effect on the growth in the four Latin American countries which faced hyper-inflation in the 1980 and early 1990s. Phillippe Bacchetta (2013) said that some survey evidence shows that there is highly positive relationship between exchange rate and macro fundamentals. He argues that this type of unstable relationship is naturally develops when structural parameters are unknown in the economy. On the other side Levy-Yeyati and Sturzenegger (2002) said that exchange rate regime affects economic growth positively. James R. Lothian (2011) stated that he studied the validity of uncovered interest rate parity by constructing ultra-long time series that span two centuries. The forward premium regressions showed positive slope estimates over the whole sample. But the estimates become negative only when the sample is dominated by the period of 1980s. Obamuyi (2009) found reasonable results regarding rate of interest and economic growth.

Foreign portfolio investment has positive impact on the economic growth of a country as stated by Durham J. B. (2004). According to Alfaro L. (2006), positive relationship between foreign portfolio investment and economic growth.

Finally, narrow money supply also has positive impact on the economic growth as estimated by Ekone A. F. and Ogunmuyiwa M. S. (2010). This positive relation also estimated by the Wachtel P. and Rousseau R. L. (2011).

The main objective of my study is to find out the impact of inflation, exchange rate, interest rate, foreign portfolio investment and money supply on the GDP of Pakistan and to find those measured which government should adopt for economic growth in the presence of discussed variables.

No doubt, some researchers already had conducted the research on such like nature but I will apply Auto-regressive Distributed Lag (ARDL) to co-integration and Error Correction Model (ECM) which will differentiate my work.

This paper is managed as follow: Section 2 summarizes the literature review and data with mathematical model is discussed in Section 3. Section 4 contains the empirical results and discussion. Finally, main finding and policy implications are argued in Section 5.

2. LITERATURE REVIEW

GDP of a country is affected by a number of economic and non-economic variables. GDP of a country has different type of relationship with different variables. A lot of studies are available on the impact of inflation, interest rate and exchange rate on GDP. It is impossible to review all the studies but some of them are reviews as under.

2.1. INFLATION RATE (CPI) AND ECONOMIC HEALTH

Inflation expresses crucial role in an economy and it exists in all the economies at varied rate. Stability of inflation is necessary for the implementation of macroeconomic policies. In developing countries including Pakistan high population growth, rising food prices, urbanization and more money supply are the causes of inflation. Economy of Pakistan expresses overall a negative relationship between GDP growth and rate of inflation. Rate of inflation was 8.0% during fiscal year 2014 against 7.4% of last year. It was 11.0%, 13.7%, 10.1% and 17.0% during the years of 2012, 2011, 2010 and 2009.

According to central banks of respective countries rate of CPI inflation in Pakistan, India, Bangladesh and Sri Lanka is 8.7%, 10.1% 7.6% and 5.4% during 2014.

Cuaresma J. C. and Maria S. (2014) studied the impact of inflation on long run growth of a group of fourteen European Union countries. Their study showed a complex nature of relationship between these two. There estimations showed positive relationship when rate of inflation is less than 1.6%. According to both researchers previous work done by various other researchers showed linear nexus.

Pattanaik S. S. et al. (2013) stated that monetary policy strongly affected the economic growth and investment activities in the economy. They stated that tight monetary policy showed a rise in interest rate since mid of 2011, it considered the major factor of slowness in economic growth and investment events of previous countless years. They stated that since 26th July of 2011, the rate of inflation was more that of 8%. They said that it was not clear view that nominal or real interest rate was responsible for economic growth and investment or not. But theoretical and empirical study found that investment and economic growth were strongly affected by the nominal and real rates of interest. Further, researchers concluded that real rate of interest was responsible for change in real macroeconomic indicators like investment and growth and nominal rate of interest many be not representative of correct position of monetary policy.

Li M. (2011) expressed the relationship between inflation and economic progress of ninety backward and twenty eight advanced nations by considering the period of 1961 to 2004 and showed nonlinear relationship between inflation and economic growth. His more results showed different forms of nonlinear relationship between inflation and economic growth in advanced and backward countries. The observed data suggested two thresholds in case of developing economics. Researcher further said that effects of inflation on economic growth were significant and positive when the rate of inflation lower than first threshold, the effects of inflation were significant and strongly negative at moderate rate of inflation which were in between of two threshold levels, finally at highest rates of inflation, the impact of marginal inflation on economic growth diminishes fast but remained significant and negative. On the second side in case of advanced countries one threshold is detected and was significant. According to nonlinear mechanism the negative effect of inflation on economic growth reduced as the rate of inflation rose.

H_{1a} = There is statically significant impact of inflation (CPI) on economic growth

2.2. EXTERNAL RATE OF RETURN AND ECONOMIC HEALTH

Interest rate is reported by the State Bank of Pakistan in the case of Pakistan. The interest rate last record was 8.5% in Pakistan. The average interest rate in Pakistan is 12.48% during the period of 1992-2014. The highest rate was 20% in October 1996 and it was lowest in November 2002. Interest rate in Pakistan was 10% in 2009, 12.5% in 2010, 14.0% in 2011, 12.0% in 2012, 9.0% in 2013 and it was 8.5% in the year of 2014.

According to Trading Economics, during February 2015, interest rate in Australia was 2.25%, Brazil 12.25%, Canada 0.75%, China 5.6%, Euro Area, France, Italy, Netherlands, Spain & Germany 0.05%, India 7.75%, Indonesia 7.5%, Japan 0.0%, Mexico 3.0%, Russia 15.0%, South Korea 2.0%, Turkey 7.5%, UK 0.5% and US it was 0.25%.

Menyah K., Nazlioglu S. and Wolde-Rufael Y. (2014) tried to explain the causal relationship between financial development and GDP of twenty one countries of Africa. Their worked showed insignificant impact of financial development and trade liberalization on GDP growth. They used panel bootstrapped approach to Granger causality.

Sharma V. and Rajavat Y. S. (2013) tried to verify the relationship of GDP with interest rate and money supply in India by applying Johansen Co-integration test. They based on the data of twenty four years tried to find the direct and indirect impact of certain variables on GDP of India.

Arora H., Dhawan C., Daga D., Singhvi N. and Singhal S. (2013) conducted a research that value of real GDP must be considered by policy makers while making decisions about the future of any economy. They estimated the quarterly based data of more than 30 observations during the 2004 to 2013. They explained that there exists positive association of rate of interest and rate of inflation with the GDP at fixed price based in India during the observed period.

Hye Q. M. A. and Wizarat S. (2013) considered the data from 1971 to 2007 and had found the association between financial liberalization index and economic growth of Pakistan. They used nit root test and auto-regressive distribution lag tests to calculate the integration and coefficients in the short run and long run respectively. Their empirical results showed positive relationship between financial liberalization index and economic growth. Additionally expressed that financial liberalization index insignificant in the long run and real interest rate affected the economic growth negatively and significantly. They finally concluded that gross domestic product will be reduced by rupees 1.03 million as a result of 1 unit increase in real interest rate. They recommended that state bank of Pakistan and government of Pakistan should pursue financial liberalization for the stable economic growth of Pakistan.

H_{1b} = There is statically significant impact of external rate of return on economic growth.

2.3. FOREIGN EXCHANGE RATE AND ECONOMIC HEALTH

According to State Bank of Pakistan, Pakistani Rupee showed and appreciation of 1.1% in July-March of fiscal year 2014 as compared to depreciation of 3.8% during the same period of the last year. The exchange rate was Rs. 98.77 by end June of fiscal year 2014 against the Rs. 99.66 per US$ at end of June 2013. During July-September of fiscal year 2014, exchange rate came under severe pressure because of US$ 1.8 billion of external debt servicing, more deficit in current account and heavy purchase of forex by the Central Bank of Pakistan. Real effective exchange rate increased by 2.8% in July-March of fiscal year 2014 as compared to an appreciation of 0.4% in the same period of the last year.

In (2014) Pavlic I. et al. conducted a research about the interrelationship between real effective exchange rate and economic growth. They concluded that there existed causality between openness of the economy & real effective exchange rate and economic growth in the short run. They reviewed the data for the period of 1996 to 2013 of Croatia. They tried to check stability of the long run equilibrium of economic growth with tourist arrivals, openness of the economy and real effective exchange rate. They used Johansen Maximum Likelihood co-integration technique and vector error correction model technique.

Rapetti M. (2013) made empirical research to fine the relationship between real exchange rate and economic growth. Researcher applied various econometric techniques to a set of large cross-country data. It documented positive association of real exchange rate with economic growth but factors behind this association were not very much clear. Researcher analyzed that mechanism and supported it with the empirical findings. A lot of research work done by several researchers on these discussed variables but that work was on primary level in accordance with theoretical examination and empirical evidences.

Qaiser Aman Q. et al. (2013) explored that relationship between exchange rate and economic growth was not very much clear. Both evidences and theories showed diverging behavior of impact of exchange rate on economic growth. The most of the researchers explained inverse relationship between exchange rate and economic growth in term of foreign direct investment, investment and exports. All the researchers of this research paper explored the relationship between exchange rate and economic growth in Pakistan for the period of 1976-2010. Their results showed exchange rate in case of Pakistan had improved investment flow, foreign investment and import substitute industry. Exchange rate affected positively economic growth in view of that.

Elwell C. K. (2012) represented that dollar depreciation since 2002 reduced a sign of economic problems like low economic recovery, more public debt a fall in global ranking. On the other side there was possibility of adjustment in economic framework. Depreciation of currency affected various aspects of US economy say more net exports, fall in foreign purchasing power, rise in prices and increase in external rate of return. That also may be caused fall in foreign debts. As said by Craig that exchange rate is not change by legislative policy, it may be affected by the decisions made by Congress and Federal Reserve while deciding jobs opportunities, debt limits and budget deficits. His results showed that depreciation of dollar had favourable effects on the economy of US and various other economies.

H_{1c} = There is statically significant impact of foreign exchange rate on economic growth.

2.4. FOREIGN PORTFOLIO INVESTMENT AND ECONOMIC HEALTH

Durham J. B. (2004) in his absorptive capacity and the effects of foreign direct investment (FDI) and equity foreign portfolio investment on economic growth conducted a powerful study which examine the effects of FDI and equity foreign portfolio investment (EFPI) using the data of 80 countries for the time period of 1979 to 1998. He used extreme bound analysis of significant results. His results show that effect of FDI and EFPI has positive and significant impact over the financial and institutional development of a country which leads to the economic growth of that country.

Alfaro L. (2006) tried to re-estimate the impact of foreign direct investment on economic growth promotion with the help of effects of financial markets on linkages. His study finds the positive impact of portfolio foreign investment on productive externalities of the host country by foreign multinational corporations in the existence of human capital. Foreign investment is crucial for economic growth but the role of financial market is also very important for the invitation of foreign investment.

According to Shi J. (2015) had re-estimated the empirical analysis of FDI and economic growth in Gansu China which was based on the time series data from 1986 to 2010. Research, in this paper, estimated the causal relationship between foreign direct investment and economic growth in a province of China by considering data of 1986 to 2010. He applied ADF unit root test, con-integration tests, ECM and Granger causality tests. This paper found positive and significant impact of foreign investment on economic growth of a country.

Azam M. (2015) investigated the impacts of human capital and foreign investment on economic growth in the case of ten countries of Commonwealth of Independent States. A linear regression model, fixed and random effect models are applied on the panel data for the empirical investigation for the time period of 1993 to 2011. The results of this study supported and confirmed the positive nexus of human capital and foreign investment on the economic health of a country.

H_{1d} = There is statically significant impact of foreign portfolio investment on economic growth.

2.5. NARROW MONEY SUPPLY AND ECONOMIC HEALTH

The research study of Ekone A. F. and Ogunmuyiwa M. S. (2010) concluded the connection between money supply and economic growth in the case of Nigeria. They applied OLSE causality test and ECM to the time series data from 1980 to 2006 to find out the empirical results. Their results showed positive relationship between money supply and economic growth of a country.

Liu L. and Calderon C. (2003) had estimated the relationship between financial development and economic growth. They had applied the Geweke Decomposition Test on the data raged from the 1960 to 1994 in the case of 109 developing and industrial countries. Their results showed that normally growth in financial market leads to the economic growth of a county and coexistence of Granger Causality between money supply and economic health of a country. Finally, they said that financial development leads to more rapid capital formation and productivity growth which make more improvement in the economic growth of a country.

Ndirangu L. and Nyamongo E. M. (2015) investigated the effect of financial innovation on monetary policy on the economy of Kenya during the 1998 to 2013. They applied ARDL approach to cointegration. Their test of cointegration and ECM and stability test using cumulative sum of squares showed stable relationship. Their findings show positive relationship between money supply and economic growth of Kenya.

Wachtel P. and Rousseau R. L. (2011) tried to find the relationship between financial instrument and economic growth of a country by considering the data for the period of 1960 to 1989. They also find the significant relationship between financial tools and money supply with economic growth.

Caporale G. M. et. al. (2015) estimated the impact of financial development on economic growth in the case of ten new member of European Union for the time period of 1994 to 2007. Accordingly, credit market has positive impact on the economic growth of these countries. But they suggests that money market of these countries is needed to improve more to develop the economic growth of these countries. Finally, they said that more efficient banking sector is found to have accelerated the economic growth of an economy.

Shan J. Z. et. al. (2001) estimated the impact of financial development on the economic growth of a country. They estimated the model of nice OECD countries and China by applying VAR model. They also showed superiority of time series approach to cross sectional approach. Their findings showed interdependence between financial development and economic growth. Finally, they said that there exits positive but little supportive relationship between money supply and economic health of a country.

H_{1e} = There is statically significant impact of narrow money supply on economic growth.

3. METHOD

There exists cause and effect relationship between dependent variable GDP and independent variables inflation rate, interest rate, exchange rate, foreign portfolio investment and money supply. This study applies ARDL approach to co-integration after the practice recommended by Pesaran and Shin (1999). This approach is selected due to various plus point than other co-integration approaches. It is applicable regardless of stationary of variables of the model and it provide long run estimation which are not available in other alternative co-integration approaches. Another plus point of this approach is that it can adjust more variable than other Vector Autoregressive (VAR) models.

Unit root test is applied to avoid the possibility of spurious regression. On the other hand some other tests are also applied to detect the serial correlation, conflict to normality and heteroscadasticity.

The ARDL approach to co-integration is applied which is based on tree stages if data is found I(0) or I(1). Long run connections and significance of lagged variables in an error correction mechanism regression is tested in the first step. Then to create the error correction equation the first lag of the levels of each variable are added to the equation. After it significance of all the lagged variables are estimated by performing F-test. Optimal lag length is chosen, in the second stage, according to the Akaike Information or Schwartz Bayesian in the second stage to estimate the ARDL. Finally, the restricted version of the equation is solved for the long run solution.

The following model is applied to express the nexus between the dependent and independent variables:

$$\text{Ln GDP}_t = \alpha_0 + \alpha_1 CPI_t + \alpha_2 INT_t + \alpha_3 EXC_t + \alpha_4 FPI_t + \alpha_5 M1_t + \mu_t$$

Where

GDP	=	Gross Domestic Product
CPI	=	Consumer Price Index
ERR	=	External Rate of Return
FER	=	Foreign Exchange Rate
FPI	=	Foreign Portfolio Investment
M_1	=	Narrow Money Supply

An ARDL expression of above equation is give as under:

$$\text{Ln GDP}_t = \alpha_0 + \text{Ln GDP}_{t-1} + \alpha_1 \text{Ln CPI}_{t-1} + \alpha_2 \text{Ln INT}_{t-1} + \alpha_3 \text{Ln EXC}_{t-1} + \alpha_4 \text{Ln FPI}_{t-1} + \alpha_5 \text{Ln M1}_{t-1} + \mu_t$$

The third stage, a general error correction of equation is give as under:Δ

$$\Delta \text{Ln GDP}_t = \alpha_0 + \Delta \text{Ln GDP}_{t-1} + \alpha_1 \Delta \text{Ln CPI}_{t-1} + \alpha_2 \Delta \text{Ln INT}_{t-1} + \alpha_3 \Delta \text{Ln EXC}_{t-1} + \alpha_4 \Delta \text{Ln FPI}_{t-1} + \alpha_5 \Delta \text{Ln M1}_{t-1} + \text{ECM} + \mu_t$$

It is expected that some of the independent variables must show negative and some must show positive signs.

At last, cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) tests are applied to explain the stability of short run and long run coefficients.

3.1. SOURCE OF DATA

Present research work searches the causal relationship between the GDP and some major macroeconomic variables in the long run in the case of Pakistan during the period of 40 years from 1975 to 2014. An outline of the variables is explained below:

Gross Domestic Product (GDP). Gross domestic product refers to the value of final goods produced and services provided within the geographical boundaries of a country during one year. It is the dependent variable of this model.

Consumer Price Index (CPI). Consumer price index is used as a proxy for inflation rate. Inflation is a situation in which there is sustained increase in general price level of goods and services in an economy or a situation when aggregate demand is greater than aggregate supply. The relationship between inflation and economic growth of a county had discussed by a number of researchers in their research work. This relationship got much important in 1950s. Various researchers showed various directions of relationship between these variables and GDP at international and national level in case of developed countries and developing counties. Inflation has negative impact on GDP growth.

External Rate of Return (ERR). External rate of return or Interest rate is the amount charged by principal, lender or creditor from the borrower or debtor for the use of assets especially money. Interest rate has negative impact on GDP growth.

Foreign Exchange Rate (FER). Exchange rate is the rate of exchange between two currencies, normally of domestic currency in term of foreign or internationally acceptable currency. Exchange rate is also known as forex rate. It is presumed that low exchange rate has positive impact on GDP growth.

Foreign Portfolio Investment (FPI). Foreign portfolio investment, in economics, refers to the inflow of funds from foreign countries where foreigners purchases in the stock of country, bound markets or may be sometimes for speculation. It is supposed here that foreign portfolio investment has positive influence on GDP growth of a country.

Narrow Money (M_1). Narrow money is used as a proxy for the money supply. More money supply helps to increase the liquidity which sets an upward movement in prices, economic activities and profits. Here, it is assumed that there is positive relationship between the money supply and GDP of a country.

4. EMPIRICAL RESULTS

Results of unit root test are shown in the Table A, to determine the order of integration among time series data. This study has applied Augmented Dickey Fuller and Phillips Perron tests at level and first difference under the supposition of constant and trend.

TABLE A: UNIT ROOT ANALYSIS

Variables	ADF (ρ) value (at level)	ADF (ρ) value (1st difference)	PP (ρ) value (level)	PP (ρ) value (1st difference)
Ln GDP	0.9252	3.5039	0.9450	6.0037
Ln CPI	2.9032	-8.423	2.4532	-8.5621
Ln INT	0.9796	4.2994	1.0024	4.3994
Ln EXC	0.8539	4.1129	0.9675	6.1622
Ln FPI	0.4721	-3.6521	-0.4650	-10.8700
Ln M_1	-1.8856	-10.245	-1.9492	-10.2284
5% critic. value	-3.4477	-3.4480	-3.4477	-3.4480

Above results of the table show the variables are stationary at first differences of logarithmic transformations instead of stationary at level. So, series are integrated of order one I(1). All the results are robust according to the supposition of constant trend and no trend. In the presence of I(2) variables the computed F-stat provided by Pesaran, et al, (2001) becomes invalid. the variables are I(0) or I(1), this testing is necessary to avoid the possibility of spurious regression as Outtara (2004) reports that bounds test is based on this assumption.

Now ARDL approach is ready to apply to test the causal nexus among the macro economic variables. Lags number are determined by using most common equations like Akaike Information Criterion, Schwarz Bayesian Criterion and Hannan-Quinn, Log Likelihood. Criteria and test values are given in Table B (a) and Table B (b).

TABLE B (a): STATISTICS FOR SELECTING THE LAG ORDER

	AIC	SBC	LL
Lag 1	127.2179	114.6742	136.2179
Lag 2	125.6181	113.1121	134.6181
Lag 3	128.7087	113.4699	139.7087

TABLE B (b): DIAGNOSTIC TESTS

Item	Test applied	CHSQ(X^2)	Prob
Serial correlation	Lagrange multiplier test	18.74	0.095
Normality	Test of Skewness and Kurtosis	2.88	0.236
Functional form	Ramsey's RESET test	0.59	0.443
Hetoroscedisiticity	White test	4.68	0.03

According to above table, results indicate the autocorrelation, conflict to normal distribution has not been observed as econometric problems.

TABLE C: DESCRIPTIVE STATISTICS

	GDP	CPI	ERR	FER	FPI	M_1
Mean	4.940750	8.754750	0.144250	142.1380	7.905412	5.87014
Median	4.850000	8.935000	0.500000	117.9700	8.21546	6.154329
Maximum	10.22000	20.29000	4.930000	237.0700	11.98432	12.54391
Minimum	1.010000	2.910000	-5.600000	97.09000	2.78324	1.0983
Std. Dev.	2.069393	3.645074	2.711317	49.35515	2.89712	4.210932
Skewness	0.309083	0.599269	-0.334098	0.831989	0.678213	0.456129
Kurtosis	2.686107	3.824893	2.730193	1.968656	2.785421	2.509431
Jarque-Bera	0.801096	3.528238	0.865472	6.387486	1.456123	2.98764
Probability	0.669953	0.171338	0.648732	0.041018	0.543194	0.298341
Sum	197.6300	350.1900	5.770000	5685.520	213.8763	187.0782
Sum Sq. Dev.	167.0131	518.1760	286.6984	95001.31	432.893	365.9242
Observations	40	40	40	40	40	40

TABLE D: CORRELATIONS

	GDP	CPI	ERR	FER	FPI	M_1
GDP	1.00000	-0.18165	-0.28417	-0.44011	0.65633	0.51893
CPI	-0.18165	1.00000	-0.55217	-0.07395	-0.64531	-0.43256
ERR	-0.28417	-0.55217	1.00000	-0.01122	-0.54361	-0.54325
FER	-0.44011	-0.07395	-0.01122	1.00000	-0.45673	-0.56432
FPI	0.65633	-0.64531	-0.54361	-0.45673	1.00000	0.78621
M_1	0.51893	-0.43256	-0.54325	-0.56432	0.78621	1.00000

According to Table D, correlation analysis is needed to check the relationship between GDP growth and independent macroeconomic variables. But correlation is not a strong and reliable measure to identify the cause and effect nexus. Most of the independent variables like inflation rate, exchange rate and interest rate showed negative relationship with GDP growth but foreign portfolio investment and money supply showed positive relationship with GDP growth rate.

TABLE E (a): ARDL (1, 0, 0, 0, 0, 0, 1, 0) SELECTED BASED ON SBC

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Ln GDP	4.758624	1.157498	4.111127	0.0002
Ln CPI	-0.253662	0.087081	-2.912954	0.0061
Ln ERR	-0.408737	0.116757	-3.500741	0.5013
Ln FER	-0.01732	0.005362	-3.229985	0.3026
Ln FPI	0.6912	0.3554	2.3781	0.0236
Ln M_1	0.5772	0.1154	4.4521	0.03127

Table E (a), shows the findings by using ARDL model which is based on Schwarz Bayesian Criterion. Accordingly, inflation rate of consumer price index, foreign portfolio investment and narrow money supply has significant impact on the economic growth. But the impact of external rate of return and foreign exchange rate is insignificant.

TABLE E (b): SUMMERY STATISTICS

R-squared	0.51515	Mean dependent var	4.94075
Adjusted R-squared	0.466412	S.D. dependent var	2.069393
S.E. of regression	1.6472	Akaike info criterion	3.93067
Sum squared resid	97.67764	Schwarz criterion	4.099558
Log likelihood	-74.61341	Hannan-Quinn criter.	3.991735
F-statistic	8.518072	Durbin-Watson stat	2.156366
Prob(F-statistic)	0.000209		

Calculated F-statistic, according to bounds testing approach for cointegration, is 8.5 which is significant at 1% level of significant. So, the null hypothesis of no cointegration cannot be accepted and there exists cointegration relationship among the variables in this model. According to results, macroeconomic variables explain gross domestic product significantly. The value of adjusted R-square is 0.47 which expresses a high degree of correlation among macroeconomic variables. Finally, Prob (F-statistic) is also significant at 1% which means overall goodness of fit of model.
Table (given below) shows, by using ARDL approach, the long term coefficients.

TABLE F: ESTIMATED LONG RUN COEFFICIENTS FOR SELECTED ARDL MODEL

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN CPI	-0.7349	0.0869	-0.6241	0.5215
LN ERR	-0.8086	0.0983	-1.4776	0.0146
LN FER	-1.2129	0.5108	2.1901	0.0000
LN FPI	0.8721	0.4573	4.7831	0.4123
LN M_1	1.6735	0.2614	3.1439	0.0000

Coefficients of Table F, like inflation rate, external rate of return and foreign exchange rate has negative impact on the gross domestic product of Pakistan. While, foreign portfolio investment and money supply showed positive impact on the economic growth. Accordingly, 1% increase in inflation rate will decrease the economic growth by 0.735%. Similarly, 1% increase in external rate of return and foreign exchange rate also will decrease the gross domestic product by 0.809% and 1.213% respectively. But, 1% increase in foreign portfolio investment and money supply will increase in economic growth by 0.872% and 1.674% respectively.
The Error Correction Representation of long run relationship is expressed in above table. According to Error Correction Model which is based upon ARDL approach represented that there is statistically significant impact of interest rate, exchange rate and narrow money supply on gross domestic product in the long run. On the other hand other variables have insignificant relationships with GDP.

TABLE G: ERROR CORRECTION REPRESENTATION FOR THE SELECTED ARDL MODEL

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Δ Ln GDP	-0.3931	0.0453	-0.6134	0.612
Δ Ln CPI	-0.3651	0.3941	0.8318	0.399
Δ Ln INT	-0.7521	0.269	-0.4112	0.003
Δ Ln EXC	-0.5167	0.2587	2.0981	0.013
Δ Ln FPI	0.8718	0.4244	2.1871	0.023
Δ Ln M1	0.4987	0.1243	4.7215	0.001
ECM(-1)	-0.4235	0.0692	-4.987	0.000
R^2	0.4312			
Adjusted R^2	0.4154			
AIC	127.98			
BIC	115.14			
F-Statistics	1276			
F-Significance	0.0000			
D.W. Statistics	1.9813			

The error correction variables ECM(-1) has been found negative and statically significant. A quite fast adjustment process is suggested by the coefficient of the ECM term and 42.35% of last year's disequilibrium in GDP growth will be corrected in the present year. R^2 interpret that 43.12% of GDP is explained by the endogenous variables and remains is explained by exogenous variables. Statistical comparison of equation is based on AIC and BIC. The value of Durbin Watson Statistics is close to 2, i. e., 1.98, including one lag, which indicates that the errors are serially uncorrelated against the alternative that they follow a first order autoregressive process.
ECM = Ln GDP + 0.3651*Ln CPI – 0.7521*Ln INT + 0.5167*Ln EXC + 0.8718*Ln FPI + 0.4987*Ln M_1

5. CONCLUSION AND RECOMMENDATIONS

This study examines the relationship among the inflation rate, interest rate, exchange rate, foreign portfolio investment, money supply and economic growth rate for the period of 40 years from 1975 to 2014. The more powerful approach ARDL has been used in order to explore the short run as well as long run relationships irrespective of whether the underlying repressors are I(0) or I(1). Secondary date has been tested by applying LM test, Ramsey Rest test, whit test, Skewness, ADF test, Phillip Parren test and kurtosis test to check the problem like serial correlation, functional form, unit root, normality and heteroscdasticity.

Any econometric problem like autocorrelation and conflict to normal distribution has not been observed. All the variables are not stationary at level but the first difference as shown by unit root test. On the other hand the first difference of the logarithmic transformation of the series are stationary. Presence of heteroscadasticity presented by using white test.

Long run results of ARDL coefficients showed that inflation rate, interest rate and exchange rate are inversely related to growth rate. While ARDL model showed positive impact of foreign portfolio investment and narrow money supply in the long run.

The error correction model which is based on auto regressive distributed lag model shows the short run variations in the variables. Accordingly, there exists statistically significant relationship between external rate of return, foreign exchange rate, foreign portfolio investment and narrow money supply. The error correction variables ECM(-1) has been found negative and statically significant. A quite fast adjustment process is suggested by the coefficient of the ECM term and 42.35% of last year's disequilibrium in GDP growth will be corrected in the present year. Short run and long run coefficients in the ARDL error correction model are drawn by the plots of CUSUM and CUSUMSQ to check the stability of short run and long run. These plots express that both CUSUM and CUSUMSQ are within the critical bounds of 5%. So, it shows that model is structurally stable.

This study is more important for managerial policy making, decision making and forward planning about the economic growth of Pakistan. It also assists the investors to make feasibility of investment on the basses of functions in the foreign exchange rate, money supply and external rate of return. They can forecast the future direction of GDP growth in order to optimum utilization of their resource. No doubt, monetary policy is very important for the economy, this study also provides a lot of information for the State Bank of Pakistan to plan and implement the monetary policy successfully.

REFERENCES

1. Abdul Qayyum (2006), "Money, Inflation and Growth in Pakistan", *The Pakistan development Review* 45: 2, 2006, pp. 203-212.
2. Alfaro, L. (2006). How Does Foreign Direct Investment Promote Economic Growth? Exploring the Effects of Financial Markets on Linkages. *The National Vureau of Economic Research.*
3. Arby, Muhammad Farooq and Hanif, Muhammad Nadeem (2010): Monetary and fiscal policies coordination - Pakistan's experience. Published in: *SBP Research Bulletin,* Vol. 6, No. 1 (May 2010): pp. 3-13.
4. Caporale, G. M. (2015). Financial Development and Economic Growth: Evidence from 10 New European Union Members. *International Journal of Finance & Economics,* 48-60.
5. Craig K. Elwell (2012), "The Depreciating Dollar: Economic Effects and Policy Response", *Congressional Research Service Report for Congress.* Federal Publication.
6. Dani Rodrik, 2008. "The Real Exchange Rate and Economic Growth," *Brookings Papers on Economic Activity,* Economic Studies Program, The Brookings Institution, vol. 39(2 (Fall), pages 365-439.
7. Discussion Paper Series 1: *Economic Studies* 2000, 03, Deutsche Bundesbank, Research Centre.
8. Durham, J. B. (2004). Absorptive capacity and the effects of foreign direct investment and equity foreign portfolio investment on economic growth. *European Economic Review,* 285-306.
9. Hasan A. and Nasir Z. M. (2008). Macroeconomic Fators and Equity Prices: An empirical Investigation by Using ARDL Approach. *The Pakistan Development Review,* 501-513.
10. Ekone, M. S. (2010). Money Supply - Economic Growth Nexus in Nigeria. *Journal of Social Sciences,* 199-204.
11. Hasanov, Fakhri (2011): Relationship between inflation and economic growth in Azerbaijani economy: is there any threshold effect? Published in: *Asian Journal of Business and Management Sciences,* Vol. 1, No. No1 (June 2011): pp. 1-11.
12. HimanshuArora, ChittreshDhawan, Deep Daga, Nikhil Singhvi and Swati Singhal (2013), *"Impact of Inflation and Interest Rates on GDP,* India",
13. Huchet-Bourdon, M. and J. Korinek (2012), "Trade Effects of Exchange Rates and their Volatility: Chile and New Zealand", *OECD Trade Policy Working Papers, No. 136, OECD Publishing.*
14. Ivana Pavlic, Tonci Svilokos and Meri Suman Tolic (2014), "Tourism, Real Effective Exchange rate and Economic Growth: Empirical Evidence for Croatia", *International Journal of Tourism Research*
15. Jay C. Shambaugh and Julian di Giovanni, "The impact of foreign interest rates on the economy: The role of the exchange rate regime*", Journal of International Economics* 74 (2008) 341–361.
16. Jing, S. (2015). Empirical analysis of FDI and Economic growth in Gansu China: based on time-series data from 1986 to 2010. *International Conference on EMCS,* 87-91.
17. Jordan Z. Shan, A. G. (2001). Financial Development and Economic Growth: An Egg-and-Chicken Problem? *Review of International Economics,* 443-454.
18. Kanakaraj (2008), Stock Prices, Micro Reasons and Macro Economy in India: What Do Data Say between 1997-2007? *Social Science Electronic Publishing, Inc.*
19. Kenneth S. Rogoff, Aasim M. Husain, Ashoka Mody, Robin Brooks and Nienke Oomes (2004), "Evolution and Performance of Exchange Rate Regimes", *Occasional Paper 229, International Monetary Fund, Washington DC 2004.*
20. Martin Rapetti, Peter Skott and Arslam Razmi (2011), "The Real Exchange Rate and Economic Growth: are Developing Countries Different?" *International Review of Applied Economics,* Taylor & Francis Journals, vol. 26(6), pages 735-753.
21. Michael Bleaney and Manuela Francisco (2007), "Exchange Rate Regimes, Inflation and Growth in Developing Countries – An Assessment", The B.E. *Journal of Macroeconomics,* Volume 7, Issue 1, Article 18, Published by The Berkeley Electronic Press, 2007.
22. Ndirangu, E. M. (2015). Financial Innovations and Their Implications for Monetary Policy in Kenya. *Journal of African Economies,* 46-71.
23. Obamuyi and Olorunfemi (2011), "Financial reforms, interest rate behavior and economic growth in Nigeria", *Journal of Applied Finance & Banking,* vol.1, no.4, 2011, 39-55, International Scientific Press, 2011.
24. Qaiser Aman, Irfan Ullah, Muhammad Imran Khan, Saif ud Din Khan (2013), Linkages between exchange rate and economic growth in Pakistan (an econometric approach) *"European Journal of Law of Economics (May 2013)"*
25. Robert C. Johnson and Rudolfs Bems (2012), "Value-Added Exchange Rates", *Working Paper 18498,* NATIONAL BUREAU OF ECONOMIC RESEARCH, 1050 Massachusetts Avenue, Cambridge, MA 02138, October 2012
26. Roberto Frenkel & Martin Rapetti, 2008. "Five years of competitive and stable real exchange rate in Argentina, 2002-2007," *International Review of Applied Economics,* Taylor & Francis Journals, vol. 22(2), pages 215-226.
27. Rousseau, P. W. (2011). WHAT IS HAPPENING TO THE IMPACT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH? *Economic Inquiry,* 276-288.
28. Uddin, Gazi Salah & Sjö, Bo & Shahbaz, Muhammad, 2013. "The causal nexus between financial development and economic growth in Kenya," *Economic Modelling,* Elsevier, vol. 35(C), pages 701-707.
29. Vikas Sharma and Yogendra Singh Rajavat (2013), *"International Journal of Entrepreneurship & Business Environment Perspectives"*, Vol 2, No 4 (2013).
30. Wachtel, P. L. (2011). WHAT IS HAPPENING TO THE IMPACT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH? Economic Inquiry, 276-288.

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