Demand for Bank Lending by the Private Business Sector: An Empirical Analysis of Pakistan

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Abstract: *These revise intention the demand for bank lending through the private business sector in Pakistan. Our study is based on the year from 1974 to 2014.in this study, the dependent variable is foreign direct investment and independent variables consist of m2 money supply, exchange rate, total reserves, deposit rate. And also apply the ADF techniques and Johansson co- integration analysis to check the results. This shows that bank lending in private sector play an important role for economic development.*

Key Words: *Foreign Direct investment, Broad money, Exchange rate, Total reserves, Deposit rate.*

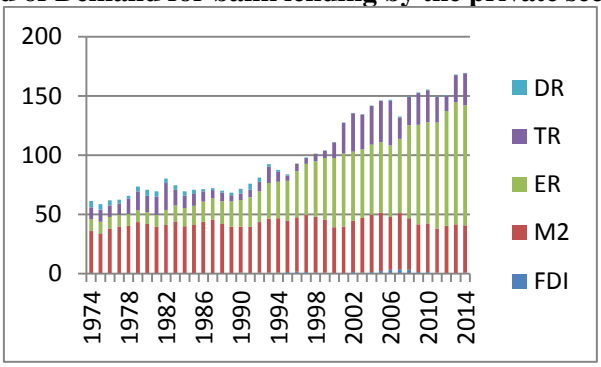
1. INTRODUCTION:

Demand for bank lending is important for private sector and bank lending also important to achieving Macroeconomics objectives private sector divided by into three sectors .private public and foreign. Private sector helps the bank to maintain their lending. Monetary policy plays an important role to maintain central bank inflation and attain macroeconomics objects by controlling price level and output.

As a result, the economy attain long run economic growth for this purpose we use the monetary policy instruments like money supply. The instruments depend of the expected money demand function and its constancy. monetry policy contain the rate of inflation money supply target is fixed consider the estimated money demand and growth of income. If banks have more reserve then they give more loans for private sector for low interest rate. Bank lending (credit) is frequently assumed to be demand-determined at the obtainable interest rates, whicheverin the market or near the banks. Therefore the rates are determinants also in the market or through the banks. The determinants of the demand for money in equilibrium consist of the determinants of the equilibrium demand for government debt, currency demand, and demand for bank advances. Theories state that if the authorities want to use credit as an instrument of monetary policy, then the expected demand for credit function must be constant and the interest rate elasticity of credit demand must be known to the authorities. In the developed countries the demand for bank recognition/advances to the business sector is investigated, literature. GDP growth in accumulation to growth of industry, past credit growth, bank business sector is investigated, literature. GDP growth in accumulation to growth of industry, past credit growth, bank dependability, relative bank size, increase ratio, employees' incentives, private and domestic bank rights, real reduction and budget deficit have significant and positive shock on growth of bank credit. Bank liquidity, though, has positive but insignificant contact.

Higher per capita income an alternative for identity back up capabilities, high real cost of responsibility insightful of fixed monetary demand for money in constancy consist of the determinants of the stability demand for directionresponsibility, money demand, and demand for reserve advances. Theories situation that if the authorities want to use credit as an instrument of monetary policy, then the expected demand for credit function must be constant and the interest rate elasticity of praise demand must be known to the authorities .this article explain how the govt central bank and commercial bank help the private sector or lending .the demand for lending by private sector help the central bank to maintain the rate of interest .if bank have more reserve then the rate of interest on lending is less. But if bank reserve less then rate of interest is high. In Pakistan the rich people get more lending benefit they get loan on low interest rate and increase their output. This will increase inflation in the economy. govt should take the step to give the loan for poor people on low rates.

Figure 1: Trend of Demand for bank lending by the private sector in Pakistan



This is show in the trend that all variables are increase than the starting years of the study.

2. LITERATURE REVIEW:

Sinha (1996) highlighted the Openness, Investment and economic growth in Asia. By using the time section data and using OLS technique and used the variables economic growth, real GDP, capital and population. The final result showed that the positively impact on openness and domestic investment. Qayyum(2002) Focused the Demand for Bank Lending throughthe Private Sector in Pakistan.Using time series data from (1960-2000) and using the ADF test. He took the variables industrial output, real rate of interest, inflation the researcher has concluded that demand for a bank credit had negatively impact on tight monetary policy.

Chernykh (2007) investigated the Determinants of Bank time-consumingperiod lending behaviorverificationsince Russia. By using the cross section data and using OLS technique and used the variables. Total assets, T-vector, GDP, Betas B. the researcher has concluded that positive impact on bank size and ratio of long term loans.

Imran(2008) examined the determinates of bank credit in Pakistan.He used the time series data from (1971-2000) andusing the ARDL econometric technique. He took the variables GDP, economic growth, inflation and exchange rate. The final result showed that long run relationship is stable and short run will be short-term. Aisen and franken (2010) examined Bank praise, during the (2008) Financial crisis. By using the time section data and using ARDL technique and used the variables, GDP growth and economic model. The final result showed that positive impact on the monetary policy.

Guo and Stepenyan (2011) analyzed Determinants of Bank credit in up-and-coming market. By using cross section data and using ARDL technique and used the variables, inflation, credit growth and nominal credit. The final result showed that loose monetary condition rather domestic and banking sector. Hussein and Junaid (2012) discussed a container of commercial banks of Pakistan.Using time series data from (2001-2010) andusing the ARDLtechniques and used the variables GDP growth, credit growth and inflation. The final result showed that Bank liquidity hasoptimisticcrash on growth of bank praise. Pouvelle (2012) examined the Bank credit, Asset, Prices and Financial Stability. By using the panel data and using Johnson technique and used the variables, stock price, stock exchange, bond, capital regulation and deposit growth. The final result showed that play a large role of tighter credit.

Hassan et.al (2013) analyzed modeling the demand for bank loans through private business sector in Pakistan. Using the time series data from (1979-1983) and using the ARDLtechnique and used variable rate of interest and inflation. The demand for bank loan through Private business was to managepraise of economy to Central Bank. Taiwo and Adesola (2013) highlighted the exchange rate volatility and band performance in Nigeria. They used cross section data from the time series data from (1960-2000) and used the SAP techniques. They took the variables exchange rate, Govt. expenditure and GDP. The final result showed that to recover the exchange rate the banking division of the economy.

3. DATA MODEL AND METHODOLOGY:

This section used annual time series data for the period 1974-2014.

Table 1: Description of the variables

Variables	Description of variables	Unit of measurement	Expected sign	Source
FDI	Foreign direct investment	Million Rupees	Dependent variable	State bank of pakistan
M2	Broad money	% of gdp	Negative	World development Indicator
ER	Exchange rate	Million Rupees	Negative	State bank of Pakistan
TR	Total Reserves	Million Rupees	Positive	State Bank of Pakistan
DR	Deposit Rate	Million Rupees	Negative	State Bank of Pakistan

Model specification:

The foreign direct investment is dependent variable.

Fdi=M2+Er+Tr+Dr

M2= Broad Money

Er= Exchange rate

Tr= Total reserves

Dr= Deposit Rate

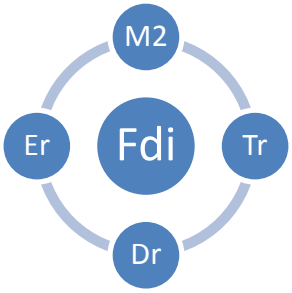


Fig.1

Foreign Direct Investment:
Countrolling authority of one country business enterprise with the purpose of thing based within an other country.

Broad money (M2):
M2 is used as broad money or money supply.

Exchange rate(ER):
Exchange rate is current market price used for which one currency can be exchange intended for another currency.

Total reserves (TR):
Total reserves is use as the variable of bank sector and the unit of measurement of this variable is million rupees.

Deposit rate(DR):
People are save more income and spend less quantity of income for the sake to get more return on bank`s deposits with the enhance in interest.

Unit Root Test:
The unit root test consist many methods but in this study two methods of unit root test is use ADF and Phillips perron test. . These methods give the information about stationarity and non-stationarity of variables.
H_O=All variables are non stationary
H_1= All variables are stationary

Table 2: ADF and P-P Tests

Variables	ADF Test Results		P-P Test Results		Conclusion
	Level	1st Difference	Level	1st Difference	
FDI					I(1)
Level	-	-5.48*	-	-4.03*	
T&I	-	-4.70*	-	-3.96*	
None	-	-4.23*	-	-4.09*	
M2				-6.18	I(1)
Level		-5.96*		-8.12*	
T&I		-6.07*		-6.26*	
None		-6.02*			
ER					I(1)
Level	-	-4.28*	-	-4.24*	
T&I	-	-5.47*	-	-4.40*	
None	-	1.41	-	-3.14*	
TR					I(1)
Level	-	-6.266*	-	-6.28*	
T&I	-	-6.19*	-	-6.20*	
None	-	-6.31*	-	-6.32*	
DR					I(1)
Level	-	-4.72*	-	-5.00*	
T&I	-	-4.66*	-	-4.27*	
None	-	-4.72*	-	-4.72*	

Author`s Calculation E-views 9.5
This is shown in the table that all variables are stationary so we reject the null hypothesis. All variables are significance at 1 percent level and also stationary at first difference .

Johenson Cointegation

When the variables are stationary at first difference then we apply the johenson cointegration analysis.

The johansen juselisus cointegration method of analysis can be expressed as:

$\Delta y_t = a_0 + \Sigma^{p}_{t=1} T_k \Delta y_{t-k} + \pi y_{t-1} + £_t$

Y_t is a vector of five variables and $£_t$ is error term. K is lag length π is the fifth order impact matrix. This matrix provide the information about long run relationship among variables. The rank of statistics are the two techniques to check the cointegration between variables.

H_0= There is no cointegration exist.

$H_{1=}$ There is cointegration exist.

Table 3: Cointegration Test Satistics

Hypothesized No. of CE(S)	Eigen value	Trace Statistics	0.05 Critical value	Max-Eigen Staistics	0.05 Critical Value	Prob.**
None*	0.6059	80.5374	69.8188	36.3165	69.8188	0.0055
At most 1	0.3951	44.2209	47.8561	19.6103	47.8561	0.1054
At most 2	0.3325	24.6106	29.7970	15.7649	29.7970	0.1758
At most 3	0.1371	8.8456	15.4947	5.7515	15.4947	0.3798

Source: Author`s Calculation

Note: Trace and Max-eigen statistics indicate 1 cointegration equation.

*denote rejection of null hypothesis at the 0.05 level.

**Mackinnon-Haug- Michelis (1999) p-values.

The confirmation of one cointegration vector between the variables and shows longrun relationship in foreign direct investment, Broad money, exchange rate, total reserves and deposit rate. The table of cointegration shows that the values of trace statistics is greater than the values of 0.05 critical values. The values of Max-eigen statistics is also greater than the column of 0.05 critical values. The probability values of both statistics tests are the same which shows at none the probability value is significant.

Table 4: Normalized cointegration coefficients

FDI	M2	ER	TR	DR
1.0000	-0.5856	-0.0514	0.0087	-0.5851
Std. Error	0.0924	0.0194	0.032	0.2771
T-values	-6.3376	-2.6494	0.2714	-2.1115

Source: Author`s Calculation E-views 9.5

The table of normalized cointegration coefficients shows that all variables are statistically significant except total reserves. The table also shows that the m2, exchange rate, deposite rate has negative association with dependent variable.

Table 5: Granger Causality Test

Null Hypothesis	F-Statistics	Prob.
M2 does not granger cause FDI	2.47749	0.0990
FDI does not granger cause M2	0.5036	0.6087
ER does not granger cause FDI	4.099	0.0254
FDI does not granger cause ER	5.542	0.0083
TR does not granger cause FDI	3.3425	0.0473
FDI does not granger cause TR	0.3817	0.6855
DR does not granger cause FDI	2.0536	0.1439
FDI does not granger cause DR	0.5763	0.5674
ER does not granger cause M2	0.3892	0.6805
M2 does not granger cause ER	1.4823	0.2414
TR does not granger cause M2	1.8998	0.1651
M2 does not granger cause TR	0.0747	0.9282
DR does not granger cause M2	1.8410	0.1741
M2 does not granger cause DR	0.4509	0.6408
TR does not granger cause ER	29.6380	4.008
ER does not granger cause TR	1.9397	0.1593
DR does not granger cause ER	0.15667	0.8556

ER does not granger cause DR	1.9774	0.1540
DR does not granger cause TR	0.9392	0.4008
TR does not granger cause DR	0.1741	0.8409

Author`s Calculation E-views 9.5

This is shows in the table that all the variables are unidirectional relationship. When Total reserves does not granger cause its probability is significant. But the probability of others is in significant.

5. CONCLUSION:

The Bank lending in private sector plays an important role in economic development. The study used the variables foreign direct invest, broad money, exchange rate, total reserves and deposit rate to check the performance of foreign investment which shows the performance of business sector. The study show that all variables negatively related with foreign direct investment but total reserves show positive relationship with dependent variable this is a sign to show that the condition of business sector of Pakistan is better than previous years.

REFERENCES:

1. Akinlo, A. E., & ONI, L. O. (2015) Determinants of bank credit growth in Nigeria 1980-2010. Europeon Journal of sustainable development, 4(1), 23-30
2. Assefa, M. (2014). Determinants of growth in Bank Credit to the Private Sector in Ethiopia: A Supply side Approach. Research Journal of Finance and accounting, 5(17), 90-102
3. Awan, A.G.(2009) .Comparison of Islamic and conventional banking in Pakistan. Proceedings 2nd CBRC, Lahore, Pakistan, 1-36
4. Chenykh, L., & Theodossiou, A.K. (2011) Determinants of bank long-term lending behavior. Evidence from Russia. Multiational Finance Journal, 14(3|4), 193-216.
5. Hussaun, I., & Junaid, N. Credit Growth Divers: A Case of Commercial Banks of Pakistan.
6. Imran, K, & Nishat, M. (2011) Determinants of bank credit in Pakistan. In proceedings of second international conference on Business Management, Institute of business administration, Karachi, Pakistan(pp 1-32).
7. Paul B. P. (2014). How to finance investment in Bangladesh: finding longrun factors in a bound test method. *Journal of finance and banking, 1(102), 13-24.*
8. Qayyum, A. (2002). Demand for banking lending by the private business sector in Pakistan. *The Pakistan development review, 149-159*
9. Sinha, D., &Sinha, T. (2002). Openness, investment and economic growthin Asia. Indian Economic Journal,49(4), 90-95.
10. Taiwo, O., Adesola, O. A. (2013) Exchange rate volatility and bank performance in Nigeria. Asian Economic and Financial Review 3(2), 178-185