

## Financing Indian Growth: A Case Study of Sonapat District in Haryana\*\*

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### ABSTRACT

The paper is based on UGC sponsored major research project recently completed. Major finding of the project has been that the Indian financial sector has failed to assist in the growth process of the economy. Granger causality tests on quarterly data in the framework of VAR and VEC models have been used to establish the results. These results hold at the aggregate economy level and also at the sectoral level. The reasons are to be found in the working of the financial system as experienced by the demand side of loanable funds. The field study conducted under the project has brought out that not only has the system failed to contribute to economic growth but also that its functioning is highly lopsided. Primary data collected through field survey points to a biased allocation of the available funds by the banking system and a substantial presence of the informal sources of credit in the economy. While the informal real sector is the one that primarily contributes to the growth of the Indian economy the dismal reality is that its financial needs are barely served by the mainstream financial sector. This in itself explains the failure of the financial system to contribute to economic growth. Since the finance growth linkages are found to be weak/absent, an important implication of the result is that controlling inflation in India using tight credit policies can be achieved with minimum costs to growth of the real sector.

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## 1. INTRODUCTION

It is normally presumed that financial system will always work for the benefit of society. This is, however, not always true. Too restrictive environment or regulatory framework may distort the functioning of the system. Excessive regulations keeping deposit rates low and the like can go against savings and investment. Often it is seen in the working of financial systems that weak and marginal borrowers are left behind even though they may have more promising project in hand. The twin problems of corruption and red-tapism can ruin the fabric of the system and make it a drag on growth. Thus, financial system in itself may not necessarily be conducive to economic growth. It must work in an efficient and unbiased way to promote growth and development.

The theoretical relationship between economic growth and financial development is symbiotic, mutually re-enforcing, and complex. While finance is an important ingredient in growth; it is in no way sufficient to the process of economic growth. For financial system to be effective in the growth process, the government must assure minimum conditions of both financial and political order, an effective legal

framework, and refrain from random interferences that increase uncertainty for long run investment planning.

This paper has examined the causal relation between financial development and economic growth in India in the post-reform period using secondary data from the RBI website. The results obtained have been substantiated with primary data obtained from demand and supply side of finance through field surveys. The field survey brings to light the importance of the formal financial sector vis-à-vis other sources of finance in the Indian economy and certain other important aspects of the working of the financial system in India. It tries to explain the intricacies in the working of the financial system as experienced by the demand side of loanable funds. The results of analyses are used for drawing policy implications on crucial issues.

### **1.1. Literature Review**

A host of cross-section and time series studies have examined the finance growth nexus. Different methodologies varying from ordinary least squares to vector error correction models have been used in cross country as well as country specific regressions. In economics literature, the relationship between finance and economic growth is extensively studied and highly debated issue. There is a long list of economists who stress the importance of a sound financial system for economic growth. Schumpeter (1911), Gerschenkron (1962), Boyd and Prescott (1986), Gregorio and Guidotti (1995), Fry (1988), Greenwood and Jovanovic (1990), Bencivenga and Smith (1991), King and Levine (1993), Atje and Jovanovic (1993), Levine (1996, 97), Demirgiic-Kunt and Maksimovic (1996), Allen and Gale (1997), Levine and Zervos (1998)...

Together with the above view there also exists an extremely contrasting view, - the 'demand following' or passive financial development. Well-developed financial systems are not essential for economic progress. Robinson (1952), Robert Lucas (1988), Gurley and Shaw (1967), N.Stern's (1989), Meier and Sears (1984), Goiaed and Sassi (2009): all subscribe to this view.

On the whole, mass of available studies of the twentieth century (cross sectional, panel, and time series) suggests that better functioning financial systems support faster economic growth. The body of available country studies suggests that while the financial system responds to the demands of the non-financial sector, well-functioning financial system have, in some cases during some time periods, importantly spurred economic growth.

Some noticeable changes in the importance of finance and causality patterns have been witnessed in the current century literature. Many recent studies indicate a supply leading financial development giving way to a demand following passive financial development while others warn against the dangers of excessive finance. Overall the size of financial sector as measured by bank credit as also developments in the stock market seems to be becoming unimportant in explaining the growth of the real sector.

It is seen that overtime simple OLS or GLS models have given way to VAR and co-integration analyses. These became more relevant with the coming up of the endogenous growth models. Overtime a shifting

focus from cross-section studies to time series and panel analyses is also noted. The results of country specific studies can be more closely related to the specific conditions that prevail in a country. Another important change over the past two decades is the incorporating of an independent variable to study the impact of stock market developments on the real sector. Now most of the studies employ measures to capture role of institutions as well as markets. Emphasis on quality of finance is also noted. In sharp contrast to the earlier studies, most of the recent studies are pointing that increasing finance does not promote growth; it may well work to dampen it.

## **1.2. Evidence on the Indian Economy**

Focusing on the studies on Indian economy, we need to note that most available studies here relate to the period before the economic reforms, or are for a period aggregating both pre and post-reform time periods. Exogeneity tests performed by Demetriades and Luintal (1996, 97) suggest that financial development and economic growth are jointly determined. Thus policies which affect financial development also affect economic growth. Bell, C and Rousseau, P.L (2000) have analyzed the Indian case in the post independence period using techniques of Vector Auto regression and Error Correction models. They found that the financial sector was instrumental not only in promoting aggregate investment and output, but also in the steady shift towards industry that has characterized India's development. Bhattacharya and Sivasubramanian (2003) examined the causal relationship between financial development and economic growth in India for the period 1970-1971 to 1998-1999, using the techniques of unit root and co-integration analyses. Their results show that for the period under consideration, M3 representing financial sector development led GDP growth. Mishra, Das and Pradhan (2009) have found evidence in support of bi-directional causality between credit market development and economic growth in India for the period 1980 to 2008.

There are a few studies that have analysed exclusively the post reform period. In Chakraborty's (2008) analysis the direction of causality for both industrial and service sectors runs from the rate of economic growth to stock market capitalization. Causality runs in both directions between bank credit and industrial growth. Pradhan (2009) has examined the causal nexus between financial development and economic growth (proxied by Index of Industrial Production) in India for 1993-2008 using a multivariate VAR model. His analysis obtains the evidence of bidirectional causality between money supply and economic growth, and bank credit and economic growth. It also finds unidirectional causality from market capitalization to economic growth.

Thus available studies on India suggest that overall in the post independence period financial development has positively contributed to economic growth. There is however no conclusive evidence on the relationship for the post reform period. In 3 out of 4 studies that have analysed the post reform period the index of industrial production is used as the indicator for economic growth. This is inappropriate as the industrial sector now accounts for less than one-fourth of the GDP. The results would therefore indicate the impact of financial development on the industrial growth rather than growth

of the economy. All studies have used indicator relating to the secondary stock markets that do not add to the flow of funds to the production sector. Moreover they seem to have important methodological and interpretation errors. Bank credit going to the entire economy has been associated with sectoral growth rates which are clearly inappropriate given the changing sectoral composition of output.

In the period subsequent to the economic reforms of the early 1990s, the institutional, financial, and other economic parameters in India have undergone substantial quantitative and qualitative changes. Moreover the latest studies on the finance growth relation across globe are pointing towards a changed scenario where increasing finance does not promote growth; rather it may work to dampen it. It is therefore of great relevance to investigate whether the positive influence from financial development to economic growth continues to exist for the cotemporary Indian economy. This is precisely the subject matter of the paper.

## **2. METHODOLOGY**

The paper has used rigorous econometric analysis substantiated by results from field surveys. The econometric analysis provides a basic direction of causal relation and short-run adjustment dynamics between financial development and economic growth. It obtains the results based on techniques of co-integration and Granger causality with the help of secondary data published by RBI. The time period used in empirical analyses is 1996 Q3 to 2010 Q1. For further insights into the issue, primary data is collected through questionnaire based survey of non-corporate borrowers, companies and financial establishments belonging to the organised formal sector as well as the informal sector like money lenders. The responses obtained from the field surveys have been subjected to basic statistical analysis like finding percentages of various response options, pie charts etc.

### **2.1. Econometric Analysis**

In context of causal relation between finance and growth there is no a priori reason to expect either variable to be exogenous. In order to take care of possible endogeneity, any single equation model is inappropriate. The possibility of all or any of the variables of the model being endogenous is captured in a vector autoregressive (VAR) model. Each variable is considered to be affected by current and past realizations of all variables including self. Most of the recent studies in this area have used the Vector auto-regression (VAR) and Vector error correction (VECM) models. For examining the issue of causality in regression analyses, Granger Causality is widely in use.

The present study has tested for Granger causality in the framework of a VAR/ VEC model. This allows for a possibility of causality in either direction and also of bi-directional causal relationship between financial development and economic growth. Y is said to Granger-cause Z if we are able to better predict Z using histories of both Y and Z than we can do only by using the history of Z. Quarterly data is used to test for granger causality and has been obtained from Data Base on Indian Economy (DBIE) on the

RBI website. The time period for the analyses is 1996Q2 to 2010Q3 (56 observations) for which consistent and comparable time-series data is available.

Quarterly rate of growth of GDP at constant prices is used as an indicator for economic growth. Some studies have used index of industrial production to represent the growth of the real sector. This is however inappropriate because industrial sector now accounts for just around one-fifth of national income. Moreover during the entire period of analyses the share of the industrial sector in national income has been varying in between 19 to 22 percent. Its contribution to the growth in GDP has been fluctuating widely between 8 to 35 percent. Thus the industrial sector has a minor share in aggregate output and its contribution to economic growth is not only small, but also it is widely fluctuating.

The study has used two indicators for financial development, one each for financial institutions and markets, which best relate their role to economic growth. Institutional credit to the commercial sector includes bank credit to the commercial sector and financial assistance by the non-banking financial institutions. Data on financial assistance by financial institutions is available only on annual basis, so only bank credit has been used in the study. Not much is lost as the importance of these institutions has substantially declined overtime and now accounts for much less than 5% of the bank credit to the commercial sector. Bank credit includes credit to the commercial sector by RBI and other banks. RBI makes funds available to the commercial sector indirectly in form of investment in shares and bonds of the financial institutions, debentures of land mortgage banks, loans and advances to FIs, SFCs, and primary dealers, internal bills purchased and discounted, and refinance to NABARD. Other banks' credit includes loans and advances to commercial sector by the commercial and co-operative banks and their investment in shares and bonds issued by the commercial sector. Advances of NBFCs and funds advanced by venture capitalists are becoming important but consistent time series data is not available, so they are not included in the analysis.

For the markets, the indicator(s) used in various studies relate to size (MCR -Market Capitalization ratio) and/or liquidity (turnover ratio or the traded value ratio) of the secondary market. In the context of contribution to economic growth the ideal measure should relate to the resources raised from the primary market as only such resources put additional funds in the hands of productive units. New capital issues by non-government public limited companies is used as a measure of funds mobilized in the primary market. It does not include bonus issues.

Overall the study has used two indicators for financial development: bank credit to the commercial sector and new capital issues to non-governmental public enterprises; both expressed as a percentage to GDP.

Data on GDP is available on a quarterly basis. The rate of growth has been obtained as  $(GDP_t - GDP_{t-1})/GDP_{t-1}$ , taking increment on a quarterly basis; and expressed as percentage. Data on bank credit is available as the amount outstanding on a monthly basis. This monthly stock variable has been converted to flow for a quarter by differencing with a lag of three months. The data on bank credit to the individual sectors has been treated in the same way. Primary market data is also available on a monthly basis and

has been converted to quarterly by adding up for the corresponding three months. Both financial development variables have been expressed as percentage of the gross domestic product.

In VAR models it is possible to perform hypothesis tests on an individual equation when some regressors are stationary and others non-stationary. F tests and t-tests can be performed with regard to stationary variables. Where non-stationary variables are involved in analyses one needs to examine the possibility of co-integration before differencing or de-trending the series. Causality in a co-integrated system also needs to be re-interpreted. In a co-integrated system  $\{Y_t\}$  does not Granger cause  $\{Z_t\}$  if lagged values of  $\Delta Y_{t-1}$  do not enter the  $\Delta Z_t$  equation and if  $\{Z_t\}$  does not respond to the deviation from long run equilibrium.

As causality tests can be conducted only with regard to stationary variables, all variables have been examined for stationarity. Since the tests for stationarity have low power, multiple tests are used i.e. Augmented Dickey–Fuller (ADF), Phillips-Perron (PP) and KPSS. As all variables are found to be integrated of order one, Co-integration analyses has been used to examine the presence or otherwise, of long-run equilibrium relationship between growth and finance indicators. The Johansen tests ( $\lambda_{\max}$  and  $\lambda_{\text{trace}}$ ) confirm the presence of co-integration. A VEC model is therefore estimated to perform the tests on granger causality.

## **2.2. The Field Survey**

In order to complete and compliment the econometric analyses on secondary data, field surveys have been conducted for collection of primary data from demand and supply side of finance on some important aspects of the functioning of financial system and its relationship with economic growth. The survey has been conducted in the states of Delhi, Haryana, Bihar, and Rajasthan –for different income categories. Information from over 3000 respondents belonging to different segments of the real economy has been gathered. A bilingual questionnaire was prepared for the unincorporated sector. The focus of analyses has been on the extent of reliance on formal versus informal sources of finance, problems faced in obtaining institutional finance, examining bias of the banks based on income levels or other factors and reasons for going to money lenders.

Most comprehensive surveys have been conducted relating to the unincorporated sector for two main reasons. One is that the corporate sector is by and large covered under the secondary data analyses as it is expected to be obtaining finances mainly from the institutional sources. Second and more important reason is that the growth of the Indian economy is actually driven by the informal sector. According to the Report of the Committee on Unorganized Sector Statistics, National Statistical Commission, Government of India, February 2012, the unorganized or informal sector constitutes more than 90 per cent of workforce and about 50 per cent of the national product. The high levels of growth of the Indian economy during the past two decades have been accompanied by increasing informalisation. The analysis of the unincorporated sector is thus highly significant in understanding any aspect related to economic growth.

On supply side of finance a survey was attempted for the banks but the response rate was very poor. They were reluctant to share information. Few personal interviews could be conducted. Information on money lenders has been obtained for the states of Haryana, Rajasthan, and Chennai where they are very common and also open about their business even if they are not formally registered. In case of money lenders the focus is on understanding their working and importance in our financial system and to judge to what extent and in what way their business has been affected with the spread of banking system. A relevant issue for this study is to find to what extent money lenders are engaged in providing finance for productive activities.

Although most extensive survey has been conducted in NCR, results for Sonapat are presented here because supply side responses, especially from money lenders could be obtained largely in Sonapat. Although informal money lending is prevalent in major cities and towns of the country it is difficult to find money lenders available for interviews and survey. On demand side the broad pattern of responses was similar across states. Analyses have been conducted on the aggregate sample as also for different income categories.

### 3.1 Results of Econometric Analyses

The variables for the analysis are quarterly rate of growth of real GDP at 1999 prices (EG), bank credit to the commercial sector as percentage of GDP (BCR) and new capital issues to non-governmental public enterprises as percentage of GDP (CIR). All these are found to be integrated of order one. A co-integration analysis has therefore been carried out. Both the LR tests i.e.  $\lambda_{\max}$  (Lambda-max test) and  $\lambda_{\text{trace}}$  (lambda trace test) confirm the presence of a single co-integrating vector. This suggests the existence of long run equilibrium relationship between the three variables.

A VECM is therefore estimated in variables EG, BCR, and CIR. Table 1 presents the results from the estimates of the error correction model and summary results of granger causality tests. Details of granger causality testing are presented subsequently.

**Table 1:** Results from Error Correction Model

Variable	EG	BCR	CIR		Eq.	ECT
Equation						
1. EG	--	-0.018 (0.289)	+0.841 (0.343)		1	0.679 [0.079]
2. BCR	+5.949 (0.002)	--	--		2	-4.12 [0.007]
3. CIR	+0.527 (0.0000)	--	--		3	-0.45 [0.0001]

The equations 1, 2, and 3 refer to the equation with the dependent variable being EG, BCR, and CIR respectively. The +/- sign in the centre part of the table gives the direction of the sum of regression

coefficients for all lags of the variable. The significance level (p-value) for Granger non-causality test is given in the parentheses below the estimated magnitudes. The right hand side panel reports the coefficient of ECT with the p-value in the parentheses.

The second row of the table shows that neither bank credit nor capital issues have been statistically significant in determining economic growth. On reverse causality both the financial development indicators are significantly affected by EG in the positive direction. This can be seen across the second column. The magnitude of the impact is much higher for bank credit ratio than the capital issues ratio. This implies that growth of the economy leads to a substantial increase in the demand for bank credit and to a small extent the amount of fresh capital that the non-governmental companies are able to raise from the primary market.

For the short-run dynamics, the coefficient of ECT relating to EG is insignificant indicating no adjustment to the equilibrium by growth of the real sector. The coefficient of ECT in the equations corresponding to both the financial development variables is negative and statistically significant implying a positive response of growth in bank credit and new capital issues to the fluctuations below the long-run equilibrium position. It is this negative relation that takes the economy out of the temporary dis-equilibrium phase.

The tests of granger causality suggest that economic growth has a statistically significant positive effect on both bank credit ratio and the capital issue ratio in the economy. These financial development variables however have no statistically significant impact on economic growth.

### 3.1.2 Tests of Granger Non-Causality

The tables 2 to 4 below gives the details of the tests of granger non causality used to establish that Indian financial system does not support economic growth. Table 2 gives the parameter estimates of the coefficients of different lags of the variable BCR and error correction term in the equation for EG. Their t-ratio and p-value is also indicated. A test of joint significance is performed. Null Hypothesis that BCR does not granger cause EG is accepted at both 5% and 10% significance levels. In the same manner table 3 shows that CIR does not granger cause EG and table 4 shows that BCR and CIR jointly do not granger cause EG. It is thus clear from these three tables that neither of the financial development variables has any significant effect on the growth of the economy.

**Table 2:** Test of the null hypothesis that the following parameters are jointly zero:

Parameter*	ML-estimate	t-value [p-value]
A(1,2,1)	-0.027689	-0.69 [0.48826]
A(1,2,2)	-0.016731	-0.28 [0.78266]
A(1,2,3)	0.026295	0.46 [0.64283]
a(1)	0.678926	1.76 [0.07922]

\*this column gives the coefficients of different lags of the variable BCR and the error correction term of the equation for EG.

Null Hypothesis: BCR does not granger cause EG

Alternative Hypothesis: BCR granger causes EG

Wald test statistic: 4.98

Asymptotic null distribution: Chi-square(4)

p-value = 0.28934

Significance levels	10%	5%
Critical values	7.78	9.49
<b>Conclusions</b>	<b>accept</b>	<b>accept</b>

**Table 3:** Test of the null hypothesis that the following parameters are jointly zero:

Parameter*	ML-estimate	t-value [p-value]
A(1,3,1)	0.446030	1.01 [0.31269]
A(1,3,2)	0.264740	0.37 [0.71067]
A(1,3,3)	0.130483	0.20 [0.84057]
a(1)	0.678926	1.76 [0.07922]

\*this column gives the coefficients of different lags of the variable CIR and the error correction term of the equation for EG.

Null Hypothesis: CIR does not granger cause EG

Alternative Hypothesis: CIR granger causes EG

Wald test: 4.49

Asymptotic null distribution: Chi-square(4)

p-value = 0.34314

Significance levels	10%	5%
Critical values	7.78	9.49
<b>Conclusions</b>	<b>accept</b>	<b>Accept</b>

**Table 4:** Test of the null hypothesis that the following parameters are jointly zero:

Parameter*	ML-estimate	t-value [p-value]
A(1,2,1)	-0.027689	-0.69 [0.48826]
A(1,3,1)	0.446030	1.01 [0.31269]
A(1,2,2)	-0.016731	-0.28 [0.78266]
A(1,3,2)	0.264740	0.37 [0.71067]

A(1,2,3)	0.026295	0.46 [0.64283]
A(1,3,3)	0.130483	0.20 [0.84057]
a(1)	0.678926	1.76 [0.07922]

\*this column gives the coefficients of different lags of the variables BCR and CIR and the error correction term of the equation for EG.

Null Hypothesis: BCR and CIR together do not granger cause EG

Alternative Hypothesis: BCR and CIR together granger cause EG

Wald test: 5.92

Asymptotic null distribution: Chi-square (7)

p-value = 0.54947

Significance levels	10%	5%
Critical values	12.02	14.07
<b>Conclusions</b>	<b>accept</b>	<b>Accept</b>

Tables 5 and 6 respectively show that bank credit ratio and capital issues ratio are positively affected by the growth of the economy. Parameter estimates for all lags of economic growth are positive in both tables and the null hypothesis of granger causality is rejected in both.

**Table 5:** Test of the null hypothesis that the following parameters are jointly zero:

<b>Parameter*</b>	<b>ML-estimate</b>	<b>t-value [p-value]</b>
A(2,1,1)	1.091676	2.57 [0.01023]
A(2,1,2)	2.205841	3.29 [0.00101]
A(2,1,3)	2.651956	2.87 [0.00408]
a(2)	-4.119711	-3.39 [0.00069]

\*this column gives the coefficients of different lags of the variable EG and the error correction term of the equation for BCR.

Null Hypothesis: EG does not granger cause BCR

Alternative Hypothesis: EG granger causes BCR

Wald test: 17.10

Asymptotic null distribution: Chi-square (4)

p-value = 0.00184

Significance levels	10%	5%
Critical values	7.78	9.49
<b>Conclusions</b>	<b>reject</b>	<b>Reject</b>

**Table 6:** Test of the null hypothesis that the following parameters are jointly zero:

Parameter*	ML-estimate	t-value [p-value]
A(3,1,1)	0.042775	1.06 [0.29039]
A(3,1,2)	0.207822	3.26 [0.00113]
A(3,1,3)	0.276921	3.15 [0.00163]
a(3)	-0.450687	-3.90 [0.00010]

\*this column gives the coefficients of different lags of the variable EG and error correction term of the equation for CIR.

Null Hypothesis: EG does not granger cause CIR

Alternative Hypothesis: EG granger causes CIR

Wald test: 27.47

Asymptotic null distribution: Chi-square(4)

p-value = 0.00002

Significance	10%	5%
Critical values	7.78	9.49
<b>Conclusions</b>	<b>reject</b>	<b>Reject</b>

**3.1.3 Infrastructure**

Infrastructure is one of the crucial sectors in any economy and growth of various other sectors is critically dependent on the availability of infrastructural facilities. Very limited data is however available on the extent of finance that goes to infrastructure. So, a simple correlation was obtained between ratio of incremental credit going to the infrastructural sector to GDP and rate of growth of real GDP i.e., economic growth. The correlation of economic growth with finance to other sectors was also obtained for comparison. Table 2 shows these magnitudes. It is clearly seen that correlation with economic growth is highest in case of credit going to the infrastructural sector. This does not necessarily imply causation in either direction but there are reasons to believe that increase in credit going to infrastructural industries could possibly promote growth in the economy.

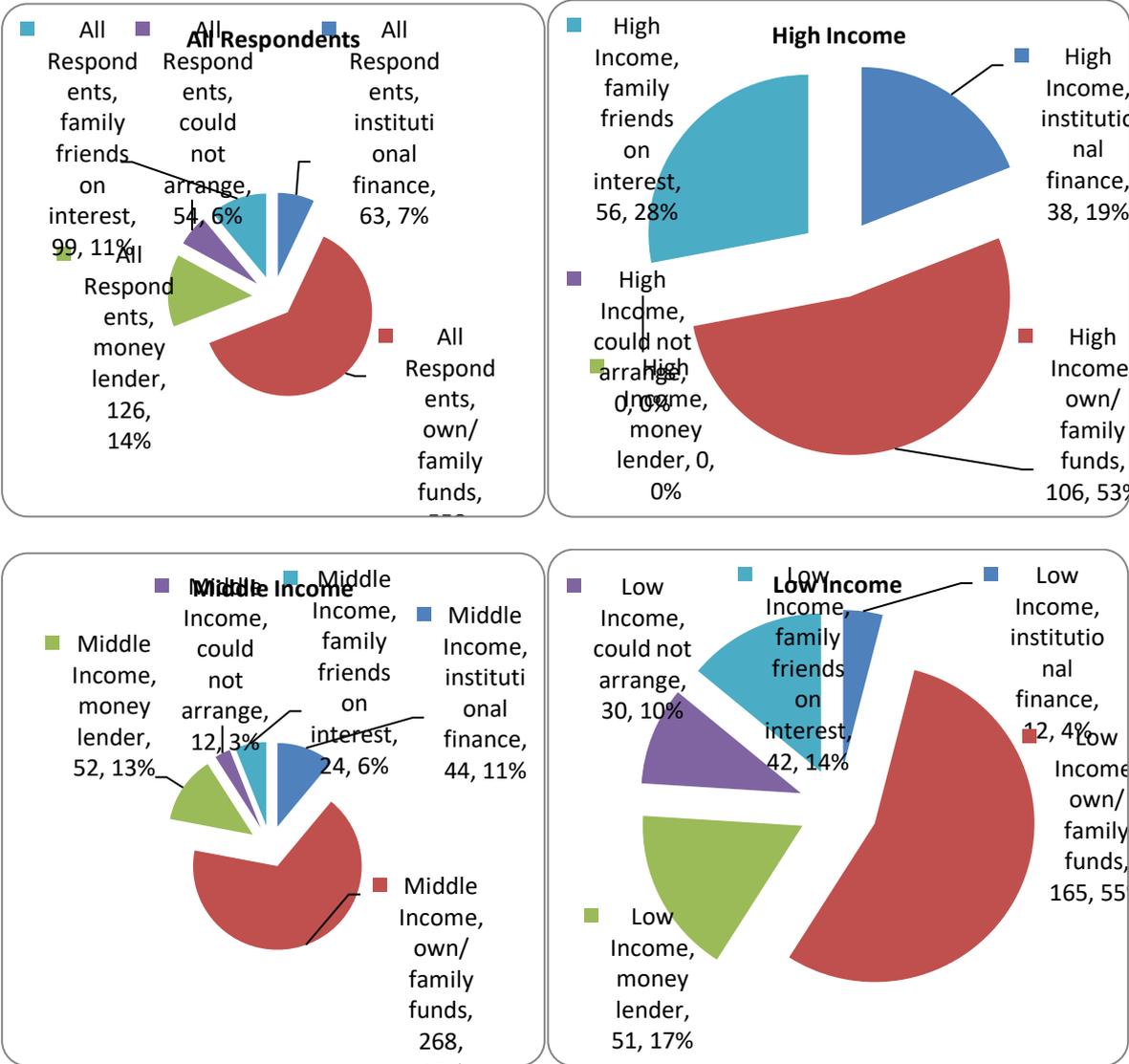
**Table 7:** Simple Correlation of Selected Variables

Variables as ratio to GDP	Simple correlation of the variable with economic growth
New capital issues	-0.04993
Credit to service sector	0.673462
Credit to priority sector	0.549855
Credit to medium and large industries	0.472261
Credit to infrastructure	0.705636

The econometric analysis therefore concludes that Indian economy in the post reform period for sure is not a case of finance led growth. Growth of the industrial sector rather has led to an increased demand for finance i.e., a demand following pattern of financial development.

**3.2 Results of Field Survey**

A total of 808 responses were obtained out of nearly 1000 establishments approached. The results on sources of finance are summarised in the fig.1 below.



**Fig.1. Distribution of Sources of Funds**

It has been found from the analyses of primary data that nearly two-thirds of the respondents are obtaining finance from their own funds including friends and relatives. People are generally reluctant to approach any external source for requirement of finance and try to operate at a level that they can manage with their own funds. A small percentage is dependent on institutional finance while money lending has been meeting double the requirements of finance in relation to the banks. A few respondents quoted

having sold some jewellery or landed property to finance business. There has also been a small percentage that could not obtain the funds required and had to drop the expansion plans. The broad position is nearly the same for the income groups other than the high income category although the exact percentages are different.

Of those who did not use institutional finance more than 95% never approached the financial institutions; only in a very small percentage of cases the finance was denied to them. The quoted reason for denial has been incomplete documents or insufficient or no security. Of those who chose not to approach the formal sources of finance nearly two-thirds had own funds and were content with the level that was compatible with their financing capacity. For others, the reasons ranged from the loan process being too lengthy to heavy documentation, lots of formalities, lack of security, explicit or implicit demands for bribe or other favours etc. Nearly 6% of the respondents gave up after applying for the loan for a mix of above stated reasons.

The survey also enquired about how easy or difficult people find obtaining the institutional finance and addressed the issue of difficulties faced in obtaining the funds. Nearly 40% respondents had no idea. This clearly indicates ignorance with regard to the banking facilities available and that a large proportion of business people have not even bothered to see if they could obtain finance. The low income category has nearly 60% of the respondents quoting 'do not know' as the response. The people at low income levels in both rural and urban areas are frequently less educated, have little or no knowledge of banking facilities and no time or aptitude for approaching the financial institutions. They are simply not bothered to find out if and in what manner can bank finance be obtained. They prefer using their own funds to the extent available or approach the local money lender.

Another important aspect of bank finance that comes out from the survey is that more than two-thirds of the respondents feel that lending institutions favour those who have contacts or are ready to bribe or do unofficial favours and also those belonging to high income levels in urban areas and to particular caste or occupation in rural areas. A very insignificant proportion feels that credit is provided on merit of the case. Opinion of nearly half the respondents is based on their own experience or the experience of those known to them and the rest half is based on their perceptions.

Respondents who are from low income level need to make many visits to the financial institutions before they could get loan, whereas high income respondents who already have established businesses can easily arrange funds for their new projects, based upon their credit rating in past. They also can arrange short term and small amount loans through bank overdraft, trade credit and bill discounting facilities.

The supply side of finance

A survey was attempted for the banks but the response rate was very poor. They were reluctant to share information. Few personal interviews could be conducted. The responding managers admitted that normally it takes minimum of two to three months for a loan amount to finally reach the borrower. Rejection of a loan application is not explicitly communicated to the applicants. Some of the bank

officials approached through personal contacts admitted that bribe, unofficial favours and personal contacts with the high officials of the banks greatly speeds up the process of loan disbursal.

As for allocation of funds, the banks are highly concerned about the repaying ability of the potential borrowers. Big loans are easily and quickly provided to existing customers of a good credit rating even if their reported incomes are low. The banks have a marked preference for big loans as it reduces their transaction costs and efforts. This is particularly true for the public sector banks. They do not explicitly deny a small loan but deliberately follow delaying tactics and keep calling the customer repeatedly to discourage them. A few private banks showed preference to tap up this left out market for small loans, but this does not help much. Most of the people are unable to provide income proof or the required security.

The low income borrowers face a number of practical problems. An initial capital that is required creates a stumbling block in many cases. A number of special assistance programs are launched for the underprivileged but practicality aspects are ignored and a much smaller amount than planned reaches the ultimate borrowers. Unofficial payments get involved at a number of places.

Of all the money lenders surveyed in Sonapat nearly 90% are not registered as moneylenders and are operating unofficially. Nearly 60% of these are engaged in some other productive activity and money lending is like a side business for extra earning. People belonging to traditionally moneylenders' families have taken up jobs but also continue with their traditional occupation.

It has been surprisingly found that even unregistered money lenders enter into formal contracts with the borrowers. Irrespective of the nature of agreement the approval and disbursal of loan is made within 1-2 days in more than 95% cases. The transactions are pre-dominantly in cash. Nearly one-third of total loans made have been productive loans and a somewhat smaller percentage in the nature of home loans. Maximum loans are originally short term, but some of them effectively become long term in practice. This clearly indicates that informal lending does not relate only to personal loans relating to conspicuous consumption, marriages, and other functions and ceremonies as is widely believed but also goes towards financing productive activities.

Over the years a decline in the activity of money lending has been noted due to increased competition from banks and increasing awareness among people. Yet nearly a third of the respondents reported an increase in their business. The local money lenders are at the easy reach of people and have minimum formalities. The transaction is normally materialized in 1-2 visits without many hassles and delays and the terms and conditions are also flexible. Even though maximum loans are supported by landed security or jewellery, unsecured loans are also made on a case-to-case basis. Due to these advantages of dealing with moneylenders and cumbersome and time taking banking procedures together with inherent bias in dealings, the business of money lending is still flourishing in India.

#### **4. DISCUSSION**

The response from the field survey supports the econometric finding that financial development as represented by the growth of bank credit and new capital issues by the non-government public limited companies no longer supports economic growth in India. It is apparent that finance available in the system is not being properly directed as to promote economic growth. Access to capital market is present only for the corporate sector. Unless the financial sector is transformed as to meet the requirements of external finance, growth efforts are surely going to be hampered.

Contrary to the popular belief that banking system has spread its wings in every corner of the city and is serving the needs of one and all, the harsh reality that has come out of the survey is that the system is not transparent and is highly biased toward the rich and influential. Leave aside rural areas, even high percentages of people in urban areas have limited knowledge about banking facilities and procedures. Lower and middle classes often shy away due to complex and lengthy procedures. A visit to a bank for many means a day off from their job or keeping the shop closed for at least half a day. Nearly half the respondents did not try to obtain institutional finance due to their low declared incomes even though they had the repaying capacity.

The system does disburse finance to promising and creditworthy industries but leaves much to the desired.

## **5. CONCLUSION**

Subject to various limitations of data and otherwise the present study has been able to obtain important insights into the causal relationship between financial development and economic growth. The financial sector has been found not to be affecting the country's growth process. This result is fundamental as it makes the task of controlling inflation without affecting economic growth a whole lot easier.

Another important implication of the results obtained is that it brings out that the Indian financial system is not serving its goal of contribution to growth. Major reorganization and reorientation of the system is required. Loan procedures need to be substantially simplified and more transparency should be induced within the system. Financial inclusion is far from being achieved. One needs to go behind the veil of numbers and see what is actually happening in the society. People need to be made more aware of the facilities available for finance and their advantages. In order bring the society out of the clutches of money lenders, efforts at both ends, i.e., the potential borrower and the lender is needed.

The findings of the paper can be instrumental in tackling the problem of rampant inflation in India without having an adverse impact on growth. At the same time a substantial improvement in banking practices can be achieved with minimal efforts.

Any statistical study is often constrained by the non-availability of the data relevant to the analyses. The present study also faced such constraints. Its major limitations lie in the non-availability of consistent and reliable data on a number of parameters like venture capital, non-banking finance companies, unregulated credit markets, etc. Another limitation relates to the inferences that can be drawn from

different econometric methodologies. The VAR model used in the analyses, although capable of incorporating the endogeneity of the variables and the lags, does not indicate the exact magnitudes of various relationships. Simple OLS or GLS techniques that may give such magnitudes will not be able to give otherwise satisfactory results due to endogeneity of the explanatory variables. One of the two things has to be sacrificed. Moreover most of the test results are valid asymptotically. Their reliability in small samples is open to question.

Some of the problems relating to lags in available data have been partly overcome by collecting primary data through field surveys. This too, however, has its share of problems. Results would greatly depend on the honesty of people in conducting the surveys and effectively communicating the questionnaires to the respondents. Their own understanding of the questionnaires becomes crucial in this context. To care of this problem to the extent possible majority of surveyors included students of economics. From the side of respondents, high reluctance was faced in some of the categories like the banks in responding to the questions. The indigenous businessmen and, surprisingly, moneylenders were in general more forthcoming with the answers.

The limitations pointed above are not peculiar to this study but are true for any statistical study. The only way to take care of these limitations is to interpret the results with due care keeping in mind these limitations.

One can carry on similar analysis further into many related areas. Increasing emphasis on qualitative indicators can be incorporated in such models to get further insights into the investigated relationship. Inter-regional or international comparisons can be made. The present analyses can be modified and extended in a number of ways to derive meaningful results in the interest of economic and social welfare of the country.

## **REFERENCES**

- Allen, F. and Gale, D. (1997), "Financial markets, intermediaries, and intertemporal smoothing", *Journal of Political Economy*, Vol.105 No.3, pp. 523-546.
- Atje, R. and Jovanovic, B. (1993), "Stock markets and development", *European Economic Review*, Vol.37 No. 2, pp. 634-640.
- Bell, C. and Rousseau, P.L. (2000), "Post-independent India: A case of finance led industrialization? " Working Papers 0019, Department of Economics, Vanderbilt University, USA.
- Bencivenga, V.R. and Smith, B.D. (1991), "Financial intermediation and endogenous growth", *Review of Economic Studies*, Vol.58, pp. 195-209.

- Bhattacharya, P.C. and Sivasubramanian, M.N. (2003), "Financial development and economic growth in India: 1970-71 to 1998-99", *Applied Financial Economics*, Vol.13, pp. 905-909.
- Boyd, J.H. and Prescott, E.C. (1986), "Financial intermediary coalitions", *Journal of Economic Theory*, Vol.38, pp. 211-232.
- Chakraborty, I. (2008), "Does financial development cause economic growth? The case of India", *South Asia Economic Journal*, Vol. 9 No.1, pp. 109-139.
- Demetriades, P. and Luintel, K. (1996), "Financial development, economic growth and banking sector controls: evidence from India", *Economic Journal*, Vol.106, pp. 359-374.
- Demetriades, P. and Luintel, K. (1997), "Direct costs of financial repression: evidence from India", *Review of Economics and Statistics*, Vol.79, pp. 311-320.
- Demirgüç-Kunt, A. and Maksimovic, V. (1996), "Stock market development and firm financing Choices", *World Bank Economic Review*, Vol.10, pp. 341-370.
- Engle, R.F. and Granger, C.W.J. (1987), "Co-integration and error correction: representation, estimation, and testing", *Econometrica*, Vol.55, pp. 251-276.
- Fry, M. J., (1988), *Money, Interest and Banking in Economic Development*, the Johns Hopkins University Press, Baltimore, MD.
- Gerschenkron, A.(1962), *Economic Backwardness in Historical Perspective: A Book of Essays*, MA Harvard University Press , Cambridge.
- Goaied, M. and Sassi, S. (2009), "Financial development and economic growth in the Mena region: what about Islamic banking development?" Working papers, LEFA-IHEC, Carthage.
- Greenwood, J. and Jovanovic, B. (1990), "Financial development, growth and distribution of income", *Journal of political Economy*, Vol.98 No.5, pp. 1076-1108.
- Gregorio, J.D. and Guidotti, P.E. (1995), "Financial development and economic growth", *World Development* Vol.23 No.3, pp. 433-448.
- Gurley, J.G. (1967), "Financial structures in developing economies", in: Krivine, D. (Ed.) *Fiscal and Monetary Problems in Developing States*, Praeger Publishers, New York , pp.161-171.

- Johansen, S. (1991), "Estimation and hypotheses testing of co-integration vectors in Gaussian vector autoregressive models", *Econometrica*, Vol.59, pp. 1551-1580.
- King, R.G. and Levine, R. (1993), "Finance and growth: Schumpeter might be right", *Quarterly Journal of Economics*, Vol.108, pp. 717-737.
- Levine, R. and Zevros, S. (1998), "Stock markets, banks and economic growth", *American Economic Review*, Vol.88 No. 3, pp. 537-558.
- Levine, R. (1996), "Stock markets: A spur to economic growth", *Finance and Development*, Vol.33 No.1, pp. 7-10.
- Levine, R. (1997), "Financial development and economic growth: views and agenda", *Journal of Economic Literature*, Vol.35, pp. 688-726.
- Lucas, R.E. (1998), "On the mechanics of economic development", *Journal of Monetary Economics*, Vol. 22 No.1, pp. 23-42.
- Meier, G. M. and Seers, D. (1984), *Pioneers in Development*, Oxford University Press, New York.
- Mishra, P. K., Das K. B. and Pradhan B. B. (2009), "Credit market development and economic growth in India", *Middle Eastern Finance and Economics*, Vol.1No.5, pp. 92-106.
- Philips, P.C.B. and Perron, P. (1988), "Testing for a unit root in time series regression", *Biometrika*, Vol. 75, pp. 335-346.
- Pradhan, R.P. (2009), "The nexus between financial development and economic growth in India: evidence from multivariate var model", *International Journal of Research and Reviews in Applied Sciences*, Vol.1 No. 2, pp. 141-151.
- Robinson, J. (1952), *The Generalization of the General Theory: The Rate of Interest and other Essays*, McMillan, London.
- Schumpeter, J.A. (1911), *The Theory of Economic Development*, Harvard University Press, Cambridge, MA.
- Stern, N. (1989), "The economics of development: a survey", *Economic Journal*, Vol. 99, pp. 597-685.