AN ANALYSIS OF INDIAN FINANCIAL SYSTEM AND ITS EFFECT OVER INDIAN ECONOMY

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ABSTRACT

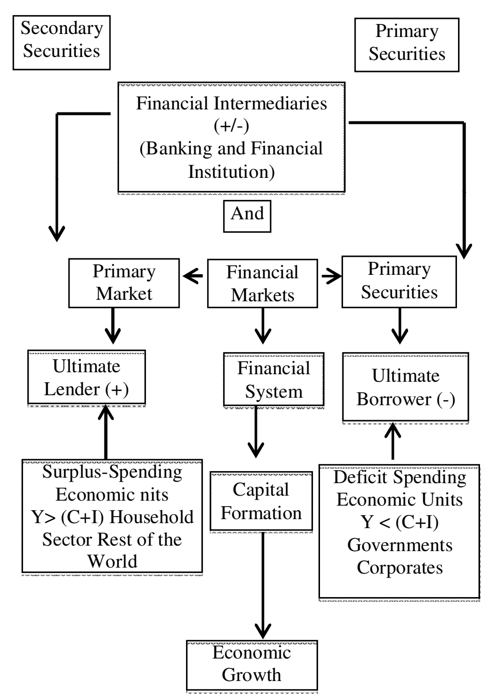
The financial system develops a link in between savings and investment through its various components like financial institutions, financial markets, financial services etc., thereby channelizing the funds or flow of funds from the ultimate lender to ultimate borrower and thereby paving ways for economic development.

The current analysis is focusing on the Indian Financial System and its role in the economic development of the nation. The saving and investment pattern and its effect of the GDP the capital formation and its importance for the economic growth and the credit creation theory that helps to understand the link of financial system to the economic growth. The current paper also focuses on the patterns of relationship between economic development and financial system. It is an attempt to understand the symbiotic relationship between the financial system and economic development.

Keywords *: Financial System, Economic Development, Symbiotic Relationship.*

Introduction:

Financial systems are crucial to the allocation of resources in a modern economy. They channel household savings to the corporate sector and allocate investment funds among firms; they allow inter temporal smoothing of consumption by households and expenditures by firms; and they enable households and firms to share risks. These functions are common to the financial systems of most developed economies. Taking about the financial system related to developing countries they are those organs by which economy progress rapidly and also provides for better development of the nationals as well as the nation.
The existence of an efficient financial system facilitates economic activity and growth. The growth of financial structure is a precondition to economic growth. In other words, markets, institutions and instruments are the prime movers of economic growth. The financial system of the country diverts its savings towards more productive usage and so it helps to increase the output of the economy.
Besides linking savings and investment the financial system helps in accelerating the rate of savings and investments by offering diversified financial services and instruments. This promotes a larger production of goods and services in the economy, leading to economic growth.
Savings and investment in the economy can also be traced to the flow of funds in the economy. The flow of funds reflects the diversified savings and investment through various credit and capital market instruments. In other words, the accounts bring out the pattern of financing economic activities and the financial interrelationship



Source: The Indian Financial System by Bharti V. Pathak chapter no.2 pg no.16. Note: + (Surplus) & - (Deficit); Where: Y= Income ;C = Consumption; I = Investment.

Figure 1 Role of Financial System in Economic Development

among various sectors of the economy. The following figure will explain this more precisely;

Literature Review:

Historical evidences of relationship between the financial system and economic growth can be traced to observations by Gurley and Shaw (1995,1960) and Goldsmith (1969) which indicates that self-financed capital investment, as economies develop, first give ways to bank-intermediate debt-finance and later to the emergence of equity markets as additional instruments for raising external finance.

McKinnon and Shaw (1973) laid theoretical grounds for relationship between financial development and economic growth. According to them, government's restrictions on banking system (such as interest rate ceilings, high reserve requirements and directed credit programmes - define as financial repression) impede the process of financial development and consequently, reduce economic growth. Hence they advocate the liberalization of financial markets and it was there work which encouraged financial liberalization in developing countries as a part of economic reforms.

Kumar and Tsetseko (1992) argued that sustainability and complementarity between banks and securities markets appear to be sensitive to the level of economic growth.

King and Levine (1993) used several measures for the level of development of financial intermediaries for a cross section of 77 countries for the period of 1960-89. They found a statistically and economically significant relationship between the measures of financial development and growth variables.

Demitriade and Hussein (1996) found little to support the view that finance is a leading sector in the process of economic development. However they found evidence that in quite a few countries, economic growth systematically causes financial development. On balance, however most of the evidence seems to favour the view that relationship between financial development and economic growth is two-way. The data provides supports to the view that reforms, where they are able to contribute to the process of financial deepening also contribute to the more general process of economic development.

Financial markets represents the deep end of financial system; the deeper the system, greater its stability and resilience. A well-developed money and government securities market helps the central bank to conduct monetary policy effectively with the use of market based instruments. Well-developed financial markets are also required for creating a balanced financial system.

The financial system plays an important role in disciplining and guiding management companies, leading to sound corporate governance practices. The domestic financial system when linked to the international financial system increases capital flow with the help of financial markets. The link reduces risk through portfolio diversification and helps in accelerating economic growth.

Therefore, taking inferences from the above discussed facts and theories the said discussion can be concluded by drawing a remark that, it is two-way symbiotic relationship in between the financial system and the economic growth. A sophisticated and sound financial system accelerates the rate of economic growth, and the financial system, in turn, develops more with higher economic growth.

Research Methodology:

The research methods used for the study of financial system and its effect over the Indian economy the correlation analysis is used to find out the relationship of the various elements and factors of a financial system to the India economy. There are many elements of a financial system but the flow of funds, the gross capital formation and gross domestic savings of the economy is considered to understand the effect of financial system over the economy. Based on these factors the following objectives as well as the hypothesis are developed for the study.

Objectives of the Study:

- To study savings and investment patterns in the Indian economy
- To study the role of savings, investment and capital formation in accelerating economic growth and its contribution to Indian GDP

Hypothesis:

- There is a positive relationship in flow of funds from the various types of financial institutions in the country.
- There is no significant relationship in between the savings and capital formation in Indian economy
- There is a negative relationship in between the savings and investments contributions to the Indian GDP.

Data Analysis and Interpretations:

The data is collected from different secondary sources and each data set has appropriate sited sources for it-self as depicted just below the data set. In this category the first data table reflects the fund flows from the surplus units (ultimate savers or lenders of funds) to the deficit units (ultimate borrowers of funds) of the economy since 1994-95 to 2007-08 as disclosed in the bulletin of the Reserve Bank of India from where the data is collected.

Year	All Financial Institution (In Percent)	All Non-Financial Institution (In Percent)
1994-95	45.5	54.5
1995-96	36.3	63.7
1996-97	45.5	54.5
1997-98	40	60
1998-99	43.1	56.9
1999-00	47.1	52.9

2000-01	37.8	62.2
2001-02	31.7	68.3
2002-03	40.8	59.2
2003-04	39.9	60.1
2004-05	42.3	57.7
2005-06	44	56
2006-07	38.7	61.3
2007-08	44.1	55.9

Source: RBI Bulletin September, 2007 and Flow of Funds Accounts of the Indian Economy, 2001-02 to 2007-08, October, 2009

Note: the resulted figure are in percentage; All Financial Institutions Include – Banking and Other Financial Institutions; All Non Financial Institutions Include – Private corporate, Government, Rest of the World and Household Sector.

Table1 Funds Flow Sector Wise:

Description of Table 1: The very first objective of this study is to analyze the patterns of investment in the economy, the data in this regard is collected from the RBI website on the fund flows in the economy during the last 15 years to check whether the ultimate savers or lenders of funds invest their money in the financial sector institutions or they would like to invest in the non financial sector as well as the table also represents that how much is the investment is done by the surplus units in both of the elements of financial system and also to find is there is any relationship in between the both of these elements.

$1H_0$: There is a positive relationship in flow of funds from the various types of financial institution in the country

$1H_0$: There is a negative relationship in the flow of funds from the various types of financial institutions in the country.

Test of Hypothesis **-table 2**

Funds Flow Sector Wise		
Year	**All Financial Institution**	**All Non-Financial Institution**
	X	Y
1994-95	45.5	54.5
1995-96	36.3	63.7
1996-97	45.5	54.5
1997-98	40	60
1998-99	43.1	56.9
1999-00	47.1	52.9
2000-01	37.8	62.2
2001-02	31.7	68.3
2002-03	40.8	59.2
2003-04	39.9	60.1
2004-05	42.3	57.7
2005-06	44	56
2006-07	38.7	61.3
2007-08	44.1	55.9
SUM	**576.8**	**823.2**
MEAN	**76.90666667**	**109.76**
STANDARD DEVIATION	**4.189914631**	**4.189914631**
CORRELATION COEEFICIENT	**-1**	
COVARIANCE	**-17.55538462**	

Source: RBI Bulletin September, 2007 and Flow of Funds Accounts of the Indian Economy, 2001-02 to 2007-08, October, 2009: Results Computed from MS Excel

The financial and non financial institution in a country are main source for channelizing the funds from the ultimate savers to ultimate borrowers and thereby facilitating the flow of money resources to the economy and accelerating growth and development in almost all the elements of economic development. As the development in various sorts require money or funds in usual flow which can be achieved by maintain the various financial and non financial institutions that can in turn help in channelizing the funds from the surplus units to the deficit units of the economy. They are also very help full in understanding the saving and investment pattern of the economy as it truly reflects the demand of the ultimate savers for investing their money, this table shows the same pattern of investments and savings in the country for over 15 years.

Description of table 2: the table 2 shows that there is a negative correlation in between the flow of funds by the financial and non financial institution, which shows that both of the institutions is having a negative relationship which means that the pattern of fund flow generation is absolutely diversified in both of them that is an increase in the fund low of one will result in a decrease fund flow from the other source. There is a perfect negative correlation in both of them as one can see that in the year 1997-98 when the funds flow generated by the financial institution is 40 per cent the non financial institutions gave a fund flow of 60 per cent as well as in the year 2006-07 the financial the fund flow are 38.7 per cent and the funds flow from the non financial institutions is 61.3 per cent. This also represents that the investors would like to invest more in the non financial institutions and there is a negative correlation in between both of the types of financial elements of channelizing money.

As the correlation is negative the Null Hypothesis is rejected and alternate hypothesis is accepted.

Savings and Capital Formation:

Savings are very much crucial to the capital formation in any economy as without appropriate amount of savings no capitalization is possible in the economy the table 3 represents the amount of gross domestic savings and the gross capital formation in the economy for the last 18 years, generated or computed from the Economic Survey of India 2008-09.

Year	Gross Domestic Savings	Fixed Capital Formation
1990-91	130010	131145
1991-92	141089	144486
1992-93	159682	168866
1993-94	189933	185401
1994-95	247462	224423
1995-96	291002	291174
1996-97	313068	318948
1997-98	363506	351713
1998-99	389747	398511
1999-00	484256	456416
2000-01	499033	477818
2001-02	534885	538180
2002-03	646521	585010
2003-04	820685	687890
2004-05	997873	895980
2005-06	1228026	1112602
2006-07	1475108	1343843
2007-08	1779614	1605440

Source: Economic Survey 2008-09

Table 3 Gross Domestic Savings and Capital Formation

Description of Table 3:

The table 3 represents the gross domestic saving vis a vis the gross capital formation in the economy for the last 18 years that shows that there is a consecutive growth in the gross savings and in the capital formation in the country.

$2H_0$: there is no significant relationship in between savings and capital formation in the economy

$2H_1$: there is a significant relationship in between savings and capital formation in the economy

The above hypothesis can be tested by applying correlation analyses. Table 4 represents the correlation and covariance of the two elements i.e. gross domestic savings and capital formation as well as the revenue generated by both of these elements.

Table 4 Test of Hypothesis

Year	Gross Domestic Savings (X)	Fixed Capital Formation (Y)
1990-91	130010	131145
1991-92	141089	144486
1992-93	159682	168866
1993-94	189933	185401
1994-95	247462	224423
1995-96	291002	291174
1996-97	313068	318948
1997-98	363506	351713
1998-99	389747	398511
1999-00	484256	456416
2000-01	499033	477818
2001-02	534885	538180
2002-03	646521	585010
2003-04	820685	687890
2004-05	997873	895980
2005-06	1228026	1112602
2006-07	1475108	1343843
2007-08	1779614	1605440
SUM	**10691500**	**9917846**
MEAN	**593972.2222**	**550991.4444**
STANDARD DEVIATION	**484089.1458**	**428500.3042**
CORRELATION COEFFICIENT	**0.998718109**	
COVARIANCE	**2.072**	

Source: Economic Survey 2008-09; Results Computed from MS Excel 2010

Description of table 4: the above table is the analysis of the gross capital formation and the gross domestic savings in the country for the last 18 years which shows that there is a positive relationship in between the gross savings and capital formation in the economy. The result of the correlation analysis is 0.99 which means that both of the elements in test moves in the same direction that is if the rate of gross domestic savings it will accelerate the gross capital formation and vice versa. It means if one increase other will also increase and a decrease in one will result a corresponding decrease in another.

As the correlation is positive the null hypothesis is rejected and the alternate hypothesis is accepted

Contribution of Savings and Investments to GDP:

Financial system is composed of many elements the one of which is financial institutions and markets which are the major source of savings and investment, capital formation in the economy and thereby promoting the economic development or growth which can only be traced by analyzing the contribution of savings and investment in the economic GDP of India, the following table represents the contribution of savings and investments ratio to the India GDP and also depicts the pattern of savings and investment in the country during the last 6 years.

Table 5 Ratio of Savings and Investment to GDP

Year	Ratio of Savings to GDP	Ratio of Investment to GDP
2004-05	32.4	32.8
2005-06	33.5	34.7
2006-07	34.6	35.7
2007-08	36.9	38.1
2008-09	32.2	34.5
2009-10	33.7	36.5

Source: Computed from the report of CSO

3H$_0$: There is a negative relationship in between the savings and investments contributions to the Indian GDP.

3H$_1$: There is a negative relationship in between the savings and investments contributions to the Indian GDP.

The above hypothesis also conferred on analyzing the relationship of the savings and investment ratio to GDP that is, to analyse that what is the contribution of savings and investments to the GDP which in turn accelerate economic growth and to analyse the patterns of the savings as well as investment and its contribution to the economy.

Description of table 6:

The correlation in between the two variables is positive in that case I can say that the relationship in between the ratio of savings and investments to GDP is positive that is the savings and investment contribution to GDP moves in the same direction which means if the savings contribution to GDP will rise it will result in a consecutive rise in the ratio of investment to GDP and vice versa. The savings and investments moves in the same direction when it comes to contribution to GDP.

As the correlation is positive the null hypothesis is rejected and alternate hypothesis is accepted.

Test of Hypothesis Table 6

Ratio of Savings and Investment to GDP

Year	Ratio of Savings to GDP (X)	Ratio of Investment to GDP (Y)
2004-05	32.4	32.8
2005-06	33.5	34.7
2006-07	34.6	35.7
2007-08	36.9	38.1
2008-09	32.2	34.5
2009-10	33.7	36.5
SUM	**203.3**	**212.3**
MEAN	**58.08571429**	**60.65714286**
STANDARD DEVIATION	**1.722111108**	**1.824737424**
CORRELATION COEEFICIENT	**0.878203332**	
COVARIANCE	**2.759666667**	

Source: Computed from the report of CSO; Results Computed from MS Excel 2010

Findings and Conclusion:

The financial system of a country usually helps in developing its economic system by bridging the gap and proving a linkage in between the surplus and deficit units of the economy. This can be seen in the table 1 where the funds flow generation is depicted in percentage by the financial as well as non financial institutions. In that table from where the hypothesis 1 is tested and the result show that there is a negative correlation in the funds flow of the both types of institutions. The negative relationship means that both of the variables moves in the opposite directions. Therefore the results here portrays the picture of the pattern of investment by the ultimate savers and there demand by the ultimate borrowers which shows that if the demand for the non financial securities increases the demand for the financial institution securities decreases and vice versa, on the other hand it will also depicts that a well organized financial system which enables the growth, development and enhancement of variety of financial and non financial institutions will be able to channelize money very easily and there by promoting economic growth and development.

Financial institutions can be able to channelize the funds in a more organized and productive ways, in same reference the savings and investment promotes for economic development by their contribution to GDP. A well developed financial system is a prerequisite for achieving higher savings and investment rates in an economy as the well organized and developed financial system only can assure proper channelization and productive use of the funds of the public, that in turns promote savings and investments among the public. These financial system in these cases involves the development of various types of financial and non financial institutions which are in better reach and ease of the general public. The more savings and investments promotes economic growth that can be easily depicted in the table 6 where there is positive relationship in between the savings and investments contribution to GDP which shows that an increase in rate of savings to GDP will led to an increase in the rate of investment to GDP and the two moves in the same direction. This shows that a financial system is must for economic development and growth.

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