



Review Paper

Financial savings in mutual funds and economic growth

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Abstract

The famous Say's law of market 'Supply creates its own demand' which was very plausible in 17th and 18th century with the introduction of paper currency and non valuable metallic money, the law fails. In case of goods and services consumption + savings will always be equal to consumption + Investment in long run because goods can either be consumed or saved for future consumption or invested. With paper currency Savings need not be identical to investment as savings could be used for speculative activities. The dichotomy of savings and investment was demonstrated by Keynes in his general theory. Saving is one decision made by household and is a function of Income. Investment is a decision of investor and is a function of interest rate and marginal efficiency of capital. Thus, economic growth which is a function of investment could be impacted if more and more savings could be channelized into investment. Mobilizing savings with efficiency and channelizing in to investment depends on financial sector. Modern Economists believe that an efficient financial sector is a precondition to economic growth. Financial sector comprises of various financial institutions, markets and Instruments. In most developed countries Mutual Fund Institutions with a large number of instruments have become an important vehicle of mobilizing and channelizing savings into productive and profitable investment. In this paper the researcher has tried to analyse growth of savings and investment in India since 1991. Part I of the paper presents the overview of gross domestic savings and gross domestic investment in India since 1991. Part II of the paper analyzes different forms of financial saving in India and financial sector growth. Part III of the paper analyzes the role of Mutual Fund Industries in promoting investment. Part IV deals with main findings and conclusions.

Keywords: Financial Savings, Financial Innovations, Financial sector growth.

Introduction

Rostow analyzing the take off stage proposed that any country to reach the take off stage must enhance saving from 5% of GDP to more than 10% of the GDP. Since independence the Mahalanobis models the growth of the investment has been practiced by augmenting domestic savings with public sector Investments. Mahalanobis assumed private domestic saving in India at around 8% of Investment would be around 15% and with capital output ratio at 3:1 and annual growth of national income at 5% to reach the take off stage of Rostow. But due to various reasons the growth achieved under 1st five year plan was less than 4%. In this period the financial sector of India was very primitive. The capital sector was also not very promising. Out of the total private savings more than 60% were held by public sector banks and post offices and less than 15% was in capital market through equity participation. The greatest problem was that of channelizing savings of people bracketed in lower income and middle income group. The capital market was out of bounds for even the high middle income groups. The government of India tried to increase the participation of people in both financial market and capital market with steps like founding Unit Trust of India (1964), Nationalizing of Banks and Insurance sector (1969-1980) to create trust and transparency in the

working of financial institutions. These methods did help in greater penetration of banking institutions to mobilizing savings and in this period savings for the first time became 15% of GDP. In 1980s the real thrust was widening and deepening the financial institutions. RRBs were created Lead Bank Scheme began. Public sector banks came up with new kind of mutual funds. To enhance liquidity DFHI, STCI, commercial papers, certificate of deposits were added and hence small savers, small time savings began to increase NBFIs were also developed so in 1980s money market, financial market and capital market began to expand. It can also be seen that in this period the total growth rate of Indian economy crossed 4.5% growth rate for the whole 10% year period. Coming to the past liberalisation period the Gross Saving, Gross Investment have been above 20% and Growth rate in the period of global recession has been 6% or above.

If one glances at the table one finds that the coefficient of correlation between domestic saving and Investment is quite high. The difference between gross domestic is even higher before 2011-12 because FDI has now become 2 to 3% of GDP. Further the relation between Gross Investment and GDP growth although positive is not that straight forward. Even with high investment rate sometimes growth rate has declined while in

period of small decline in investment high growth has been achieved i.e. growth rate of GDP is also affected by external environment such as global recession and domestic political policy decisions such as demonetisation.

If the lagged effect is studied between growth in GDP and domestic investment it comes out to be positive. Yet it can be easily concluded that overall coefficient of correlation shows a positive value of greater than 0.6 between the three variables.

Table-1: GDP, GDS, and GCF from 1991 to 2018¹. The correlation between the GDS and GCF is 0.90.

Year	GDP (%)	GDS (% of GDP)	GCF (% of GDP)
1991	1.06	21.9	23.97
1992	5.48	23.34	25.33
1993	4.75	23.55	24.4
1994	6.66	24.72	27.19
1995	7.57	25.76	27.79
1996	7.55	25.11	26.04
1997	4.05	25.06	28.12
1998	6.18	24.28	26.62
1999	8.85	23.82	29.29
2000	3.84	24.31	26.68
2001	4.82	24.09	26.66
2002	3.8	25.66	27.22
2003	7.86	27.62	29.5
2004	7.92	31.24	36.09
2005	7.92	32.26	38.08
2006	8.06	34.09	38.9
2007	7.66	34.38	41.93
2008	3.09	32.78	37.85
2009	7.86	32.58	40.11
2010	8.5	34.27	40.22
2011	5.24	32.71	39.59
2012	5.46	32.86	38.35
2013	6.39	32.06	34.02
2014	7.41	31.43	34.27
2015	8	30.56	32.12
2016	8.17	30.36	30.21
2017	7.17	29.99	30.94
2018	6.81	29.38	31.31

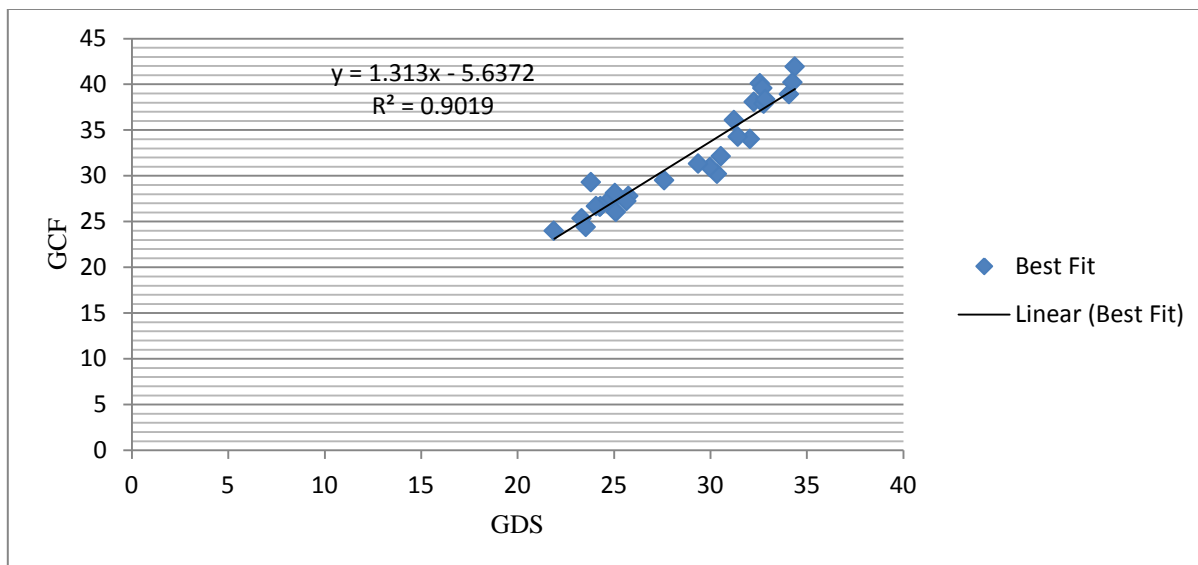


Figure-1: Best fit line.

Review of Literature

Domestic Savings in India, Trends and Issues² book is the outcome of a seminar organized by NIPFP in November 1988. Domestic saving ratio was constant during 1980s that was the major concern, thus studies were conducted to identify factors responsible for this constancy. The conclusions are drawn by the authors are following; (1) By conducting the cross sectional studies (survey results of the National Council of Applied Economic Research) result supports the normal income hypothesis. There is lag in income to consumption response. Time trend analysis confirms the positive relation between the savings and income growth. (2) Primary sectors propensity to save is lower than that of other sectors propensity to save. (3) Intersectoral terms of trade shifts in favour of agriculture have adverse effect on saving rate. Authors analyse the various methods of saving estimates in this book. Here trends of savings are explained by comparing the new series of national accounts with old series.

Indian mutual fund industry: Opportunities and challenges³ article presents an overview of the mutual fund industry in India and the reasons for its poor penetration which includes lack of objective research. It benchmarks the industry globally, and raises key issues regarding the ownership and performance of mutual funds, the sensitivity of fund flows to performance, and the importance of regulation to its growth, all of which have been largely under researched in India.

It then captures the views of leading practitioners on these and other issues, including the challenges posed by poor financial literacy, the equity culture in the country, and the weakly supportive regulatory environment.

An empirical study on Indian mutual funds and their performance evaluation prior to recession⁴ study is to judge and

evaluate the performance and growth pattern of selected mutual fund schemes in public and private sector. For conducting the analysis, trusted and preferred Tax fund- Growth option Mutual Fund schemes over period of 1 year (2007-2008) are taken. After having analyzed it was found that Deutsche was the best performing fund giving the highest annualized return of 37%. Other funds like ABN AMRO, Canara and DB, Cholamandalam being laggards in respect of returns as they had a high Beta making them quite sensitive and hence reducing their annualized returns.

Qamruzzaman Md.⁵ attempts to measure the growth oriented Mutual Fund are earning higher returns than market Portfolio, to find out those mutual fund schemes offering the advantages of diversification. And to analyze the excess return per unit of risk evidenced by mutual fund of public sector and private sector. For analyzing the study growth schemes in Bangladesh for the period January '12 to June '13 is taken. 32 mutual funds are used for the study out of 42 currently traded in the market. This study concluded that, over the research period selected mutual funds shows positive monthly return and upward trend in comparison to market return. Different risk return measures shows similar performance indication with exception of few mutual funds scheme due to market return in inconsistent with return from mutual funds i.e., negative market return.

Choudhary Vikas, and Chawla Sehgal Preeti⁶ examines the performance of the growth oriented equity diversified schemes on the basis of return and risk evaluation. And compare the performance among different diversified equity mutual funds in India. The period of the study is for 8 Years (2005-2013). A sample of 8 mutual fund schemes comprising of all equity diversified funds is taken. Data are also collected from secondary sources to show the current performance trends of the Indian mutual fund industry.

The analysis depicts that majority of funds selected for study have outperformed under Sharpe Ratio as well as Treynor Ratio. All the funds have beta less than one and positive which imply that they were less risky than the market portfolio and in terms of coefficient of determination (R²), all eight funds are near to one which indicates higher diversification of portfolio.

Pal Shilpi and Chandani, Arti⁷ evaluating the performance of a few selected income or debt mutual funds schemes of India on the basis of their daily NAV. Time period for the given study is taken from Oct, 2007 to Oct, 2012. Data are collected from secondary sources it includes company and other mutual fund websites. Sampling has been done on the basis of CRISIL Ranking. That means, the company selected for this study have top CRISIL ranks.

Zabiulla⁸ examine the stock-selection and market-timing strategies of equity mutual fund managers in India; and to analyses the impact of asset size and market capitalization of equity funds on stock-selection and market-timing performance of fund managers. The study is conducted from April 2007 to March 2010. The sample is based on two characteristics viz., asset size and market capitalization of the fund as on 31st March, 2010. On the basis of asset size, the funds are classified into small size funds, medium size funds and large size funds. This grouping resulted in 86 small size funds, 63 medium size funds, and 71 large size funds. The study finds that fund managers exhibit poor stock-selection skills and do not seem to exhibit any distinguishable ability in timing. It signals that they are unsuccessful in determining the right time to enter/exit the market.

Kaur Rupeet⁹ explore the performance of open ended debt mutual fund in India. For this purpose a sample of 23 schemes are identified on the basis of weekly returns compared to benchmark returns. Different statistical tools average, standard deviation, beta, coefficient of determination, risk adjusted performance measures are applied by researcher.

Growth of Mutual Fund Industry

Economic theory suggests that the house hold sector is the biggest source of all kind of capital formation. Their savings are classified into two groups Financial and real. Financial savings include currency, bank deposits, non bank deposits, Insurance, Shares and debentures, and investments in mutual funds while capital formation in real assets include investment in houses and other landed properties, as well as gold. Traditionally Indian families believed in saving in the form of gold, landed properties and currency. All of them are held for security and convenience and the only return to them is in the form of value appreciation. As the rate of inflation before independence and even up to 1960s was negligible this kind of holding was quite useful. In urban centers banks have started very limited formats of savings so bank deposits were not attractive enough. With the formation of SBI in 1955 and beginning of Innovative banking urban

depositors also started opting for bank deposits but capital markets were largely private or partnership oriented. Public sector units got a boost in 2nd five year plan and private sector development into limited companies also started moving ahead with industrial policy 1956 by 1960s. Bank deposits were nearly 40% total financial savings of the household while capital sector accounted for less than 10%. With nationalisation of banks and their penetration in to rural area the share of banks bank deposits in financial savings increased and reaches on all time high by 1980. Meanwhile Government of India created Unit trust of India the first mutual fund unit and as it had government backing many investors were attracted by it but the shares of capital market in financial saving remained quite low. It was in 1980s when financial sector reforms began and new instruments and institution began creeping up all around. Commercial papers, certificate of deposits, Home Deposits, and continuous branch expansion of banks and non-banks in semi urban/ semi-rural areas made bank/non-bank deposits more approachable but capital market was still working through sponsored capital and owner's capital. BSE, NSE and other exchanges have become stronger but common public was not interested in the market because of the stories of risk and also lack of transparency.

It was 1990 when government of India opened new vistas for investment and banking and financial institutions were given more autonomy, freedom and choices. Financial institutions Public sector banks and even private sector banks entered in to new fields. Mutual Fund Industry was one which had the revolutions. High middle income groups, middle income groups as well as low income groups were given options to invest indirectly in to capital market. SEBI was created to look after their interest. Foreign investors', NRIs' also began to investments either directly (FDI) or through portfolios through ADR and GDR. But for the first decade of innovations i.e. 1995-2004 the movement of general public was slow towards mutual fund industry and their cautious approach forced them to remain faithful to banks, non-banks and insurance institutions. But with technological advances, greater transparency and most importantly greater variety (diversification) the movement from bank deposits to. Currency holding towards mutual fund is clearly evident (Table-2). By 2017-18 Mutual fund industries share in Financial saving has crossed 18% and by 2025 it is likely to cross 25%.

Mutual funds as mentioned in Table-2 above have proved to be greater financial innovation in the context of India in channelizing savings for capital market. In India the listing of mutual fund can be traced from 1869 but the real growth began with the recommendations of Shroff committee but finally it was T.T. Krishnamachari who recommended formation of UTI in 1963 and finally started UTI when he became the finance minister by a parliament Act. Till 1981 UTI was the only company dealing with Mutual Funds. In 1987 public sector units also started their mutual funds. Private sector was allowed to open their funds in 1993. After the establishment of SEBI the mutual funds regulations became operative.

Table-2: Savings in Different forms (in crore)¹⁰.

Years	Currency	Bank Deposits	Non-Bank Deposits	Life Insurance	Provident and pension fund	Shares & Debenture	Gross mobilization of mutual funds
1990-91	6251	18777	1286	5599	11155	4972	11110.38
2004-05	36977	175045	83	67986	55794	8113	793020.56
2017-18	470414	475374	20899	327233	349654	150948	3633845205

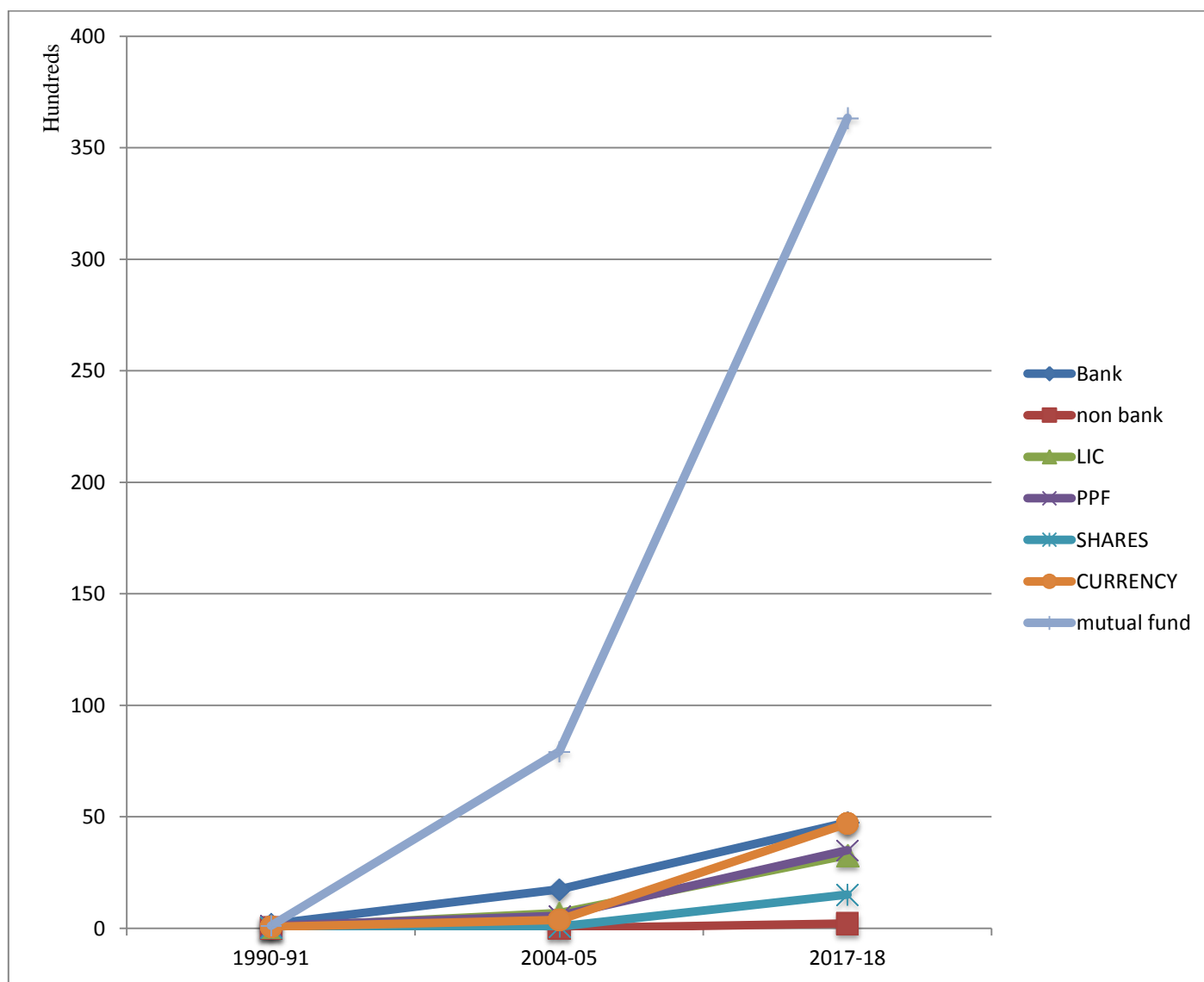


Figure-2: Savings in different Financial Instruments¹⁰.

Firm meager net worth of Rs 12 crores in 1964 by 2004 the total net investment rose to Rs 47872.7 crores in 2004 and total assets with mutual fund industry became 149600 crore. But it was only after 2004 that mutual fund industry has become a major force in capital sector investment (Table-3). During 2003-04 and 2013-14 the total asset became whopping 1082757 crore with a CAGR of more than 18%. This seems more credible because during these

years the period of global melt down 2008-09 and recovery 2010-11 and 2011-12 are included. After the recovery was complete since 2014 to 2017 the net worth and total assets have doubled with in a period of 4 years with a CAGR of more than 20%. The grand success of mutual fund industry is due to many reasons need serious analysis.

Reasons of Growth of Mutual Fund Industry Theoretical Background

The reasons of growth of mutual fund are manifold. One is consistent growth in National Income and per capita income during 1990s (5.61%), 2000-01 (6.71%), 2011-18 (6.4%). It is true that consumption suggests that MPC is always less than one. Two, Population dividend during 2010-17 the dependence ratio of population declined as more than 63% of the population came under working group. Third, with falling inflation rate the deposit rates of Indian banking also fell down from a high of 12% (for a five year fixed deposits) to around 7%. Although the real interest rate have become positive but due to money illusion bank deposits are not so much attractive. Fourth, Investment in gold became unattractive due to stable prices of gold between 2006 and 2014 giving a return of around 2% per annum. Fifth, Return on Real Estate which was most attractive during the 2 decades of last 20th century and 21st century became difficult due to various reasons i.e. government regulations of registry malpractices of buildings and legal disputes. But the most important reason was greater innovation, diversification and transparency of mutual fund industry. Infact the financial sector serves the channel of mobilizing savings generated in household sector but the main problem is its efficiency. Banks were successful in mobilizing savings as bank deposits through their innovations i.e. the facilities they provide to customers. Customers are different kinds and have different capabilities to save as well as difficult needs to satisfy. So small savings of customers generally did not so to bank till they started Recurring deposit schemes, home deposit schemes, personalized banking schemes etc. Banks also gave optimism in later days the Tailor service (To save the time of regular customers) and as the technology advanced facilities like Travellers cheque, Credit and debit cards, digital payments, RTGS, etc so that a customer now can almost handle all payments and deposits from the comfort of home and earn low but positive rate of interest.

Sooner or later non banking corporation also started various new products for medium and long term to mobilize savings from higher middle class income who could remain invested for a long period. Most of the RRBs have already merged. NBFCs were supposed to be more risky but their returns were higher and so many people first began moving towards them but a high failure rate in early 90s forced Indian customers to stay with low but safe investment of banks and post offices.

Mutual funds in India as mentioned earlier began as a government initiative (UTI) and the fund manager were very conservative hence it was supposedly safe option but returns were only marginally higher in comparison to bank fixed deposits. The greatest problem (more mental than real) was of a lock in period when public sector and private sector mutual fund joined in the fray in early 1990s. Common investor did not turn to them for various reasons such as lack of transparency (Entry Exit Loads), style of Investment (mostly in Equities and debentures), risk involvement etc. With the entry of SEBI as a

regulator investors started sharing more faith but with various attractive government schemes like N saving scheme certificate, Kissan Vikas Patra, Tax etc. more money flow towards Government and high FD rates kept commercial bank as the main stay for depositors.

In the early 21st century i.e. after 2004 the mutual fund industry had consolidated as one of the attractive option for investors. Investment options in debt funds, money market mutual funds, and balanced funds on specialized sectoral funds, open ended schemes with zero lock in period and more specifically the education in long term capital gains tax made mutual funds available to common persons. The Systematic Investment Plan worked as wonder for organised sector workers. More over the technological advancement i.e. being every information from Entry load, Exit load to the portfolios in which money is being invested, regular update made available to each customers as to what is the NAV and current value of the investment along with all details at customers mobile or laptop has attracted the attention of most youths using this technology to move their savings away from traditional places such as bonds, NBFCs, and post offices as it's only a matter of time when Mutual Funds would become the most important source of financial savings. Yet banks will not become unimportant because of the services they provide, the penetration they have and the mind-set of the traditional investors.

Table-3: AUM of Mutual Fund Industry¹¹.

Year	AUM (crore)
2004-05	149600
2005-06	231862
2006-07	326292
2007-08	505152
2008-09	417300
2009-10	613979
2010-11	592250
2011-12	587217
2012-13	701443
2013-14	945320
2014-15	1082757
2015-16	1232824
2016-17	1754619
2017-18	2136036
2018-19	2379584
2019-20	2226203

So to increase the awareness regarding mutual funds, it has to perform actions that are done by banks. Mutual fund industry must work on transparency and it has to be convenient for people so that they can understand its operation. Mutual fund industry penetration must be increased to urban and semi urban areas by

technology. And their agents should present there to solve the query of people. More payments banks unit should be established. Entry load and commission must reduce and should revise charges. By merging the mutual funds universal units must be established.

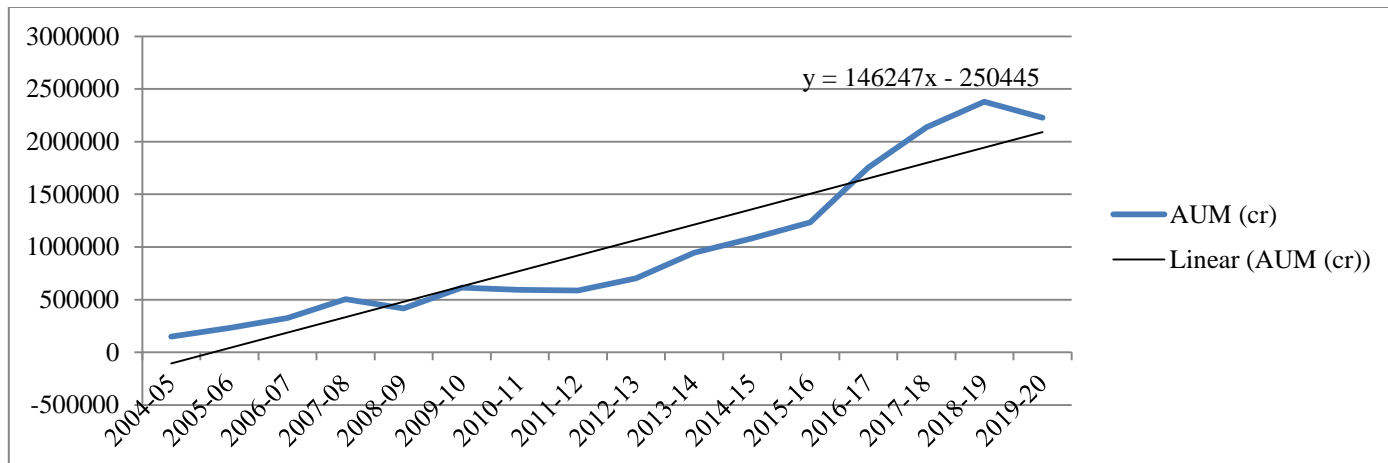


Figure-3: AUM of Mutual Fund Industry¹¹.

Table-4: Net Resources Mobilized by Public, Private Mutual Funds (in Billion) and GDP%¹².

Year	Total pvt	Total pub	Pvt + Pub	GDP	GDS (% of GDP)
2004-05	80.71	-26.78	53.93	7.9	31.24
2005-06	407.06	74.77	481.83	7.9	32.26
2006-07	793.3	72.59	865.89	8.1	34.09
2007-08	1586.74	97.74	1684.48	7.7	34.38
2008-09	-242.05	104.44	-137.61	3.1	32.78
2009-10	783.51	147.26	930.77	7.9	32.58
2010-11	-486	-156.83	-642.83	8.5	34.27
2011-12	-454.16	-27.09	-481.25	5.2	32.71
2012-13	764.86	79.26	844.12	5.5	32.86
2013-14	545.8	57.08	602.88	6.4	32.06
2014-15	1018.53	-21.42	997.11	7.4	31.43
2015-16	1310.05	288.09	1598.14	8	30.56
2016-17	3434.17	489.83	3924	8.2	30.36
2017-18	2722.25	392.15	3114.4	7.2	29.99
CAGR			0.366166	-0.92989	0.004

Correlation B/w GDP and Total Mutual Fund Mobilization is 0.33.

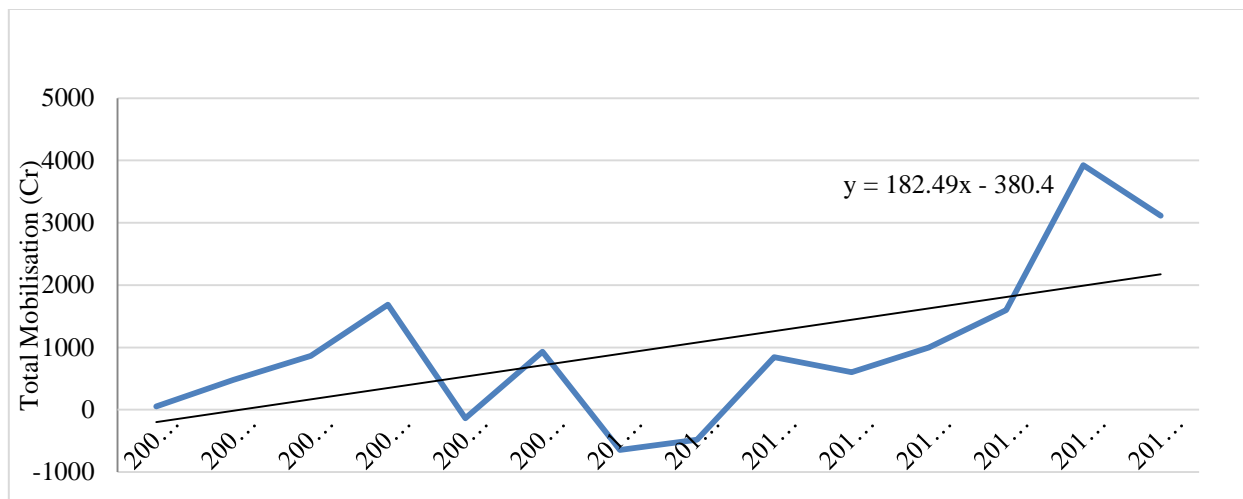


Figure-4: Trend Line of Total Mutual funds mobilization from 2004-05 to 2017-18¹².

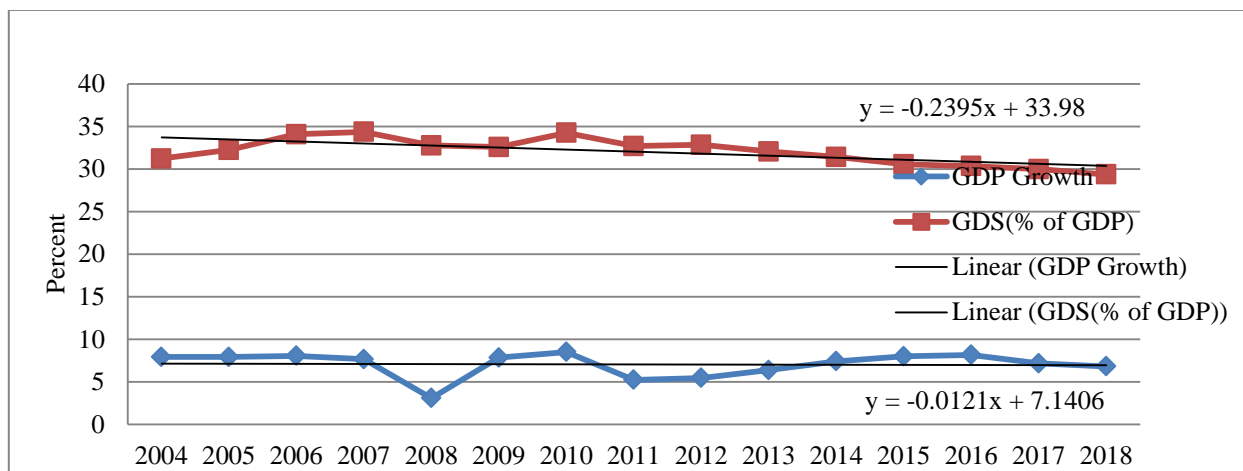


Figure-5: Trend Line of GDP and GDS from 2004-05 to 2017-18¹².

Findings: In Indian economy the overall growth in GDP in whole of 21st century is hovering round 7% and Gross Domestic Savings 32% while Gross Domestic Investment is around 35%. It can be concluded that in the whole period of about two decade capital output ratio seems to be 5:1. As against this, China for nearly 25 years maintained a growth rate of GDP in two digit level (1990-2015). This is a bench mark India needs to achieve further given that India is at an optimum stage of population dividend. Thus achieving greater Investment along with lowering of capital output ratio by around. India should achieve not only higher gross value addition but also greater employment and take fuller advantage of population dividend.

To achieve higher Gross domestic investment there are two alternatives (1) enhancement in Gross Domestic Savings (2) higher foreign investment. The second is not completely in the hands of the planner and people of India. The first is and the data (Table-1) shows that between 2007-2010 the gross domestic savings were around 35% of GDP. The bench mark economies China and Japan have shown that Gross Domestic Savings upto

40% can be achieved. The question is that what makes it difficult to achieve in Indian Economy. At the top of the problem is high level of poverty. Nearly 25% population is below poverty line and nearly 60% population is marginally ahead of poverty line. Thus 85% population does not add anything in Gross domestic savings. The rest 15% comprises of low middle class, middle class, upper middle class and of course elite (1.1%). The low middle class and middle class by default park their savings in Banks and Post offices. The upper middle class divides its savings in physical (landed property, precious metals) and financial savings (Deposits, Insurance, Mutual Funds and capital Market) and the elite generally end up its savings in landed property and capital market. From 2007-2010 when Gross domestic savings were the highest there seems to greater transfer of savings from financial sector to physical sector due to variety reasons but the most important thing crash of Sensex leading to many investors move away from share market or Mutual funds to sovereign Gold market and property and durable consumer goods.

Another important reason was that middle class who is the backbone of household savings also moved away from financial savings (Deposits from Banks and Post offices posting negative real returns as deposits rate became lower to Inflation rates) to landed property and purchase of consumer durables. That is why domestic savings declined to nearly 30% of GDP. Green offshoots are seen with increase in gross domestic savings as Inflation and gold prices have stabilized and real estate is no more a very attractive proposition because of Government policies. But even today the deposit rates in post offices and banks are too low although positive. The question is can Mutual Fund Industry mobilize more savings.

Table-4 shows the Net Resources Mobilized by Public, Private Mutual Funds and GDP from 2004-05 to 2017-18. Figure-4 depicts the Trend Line of Total Mutual funds mobilization from 2004-05 to 2017-18. Figure-5 shows GDP and GDS trend line from 2004-05 to 2017-18. CAGR values of total mutual fund mobilization and GDP from 2004-05 to 2017-18 are 0.366166 and -0.92989 respectively. Correlation between the Mutual funds and GDP is 0.33. From the trend line it can be seen that Growth of mutual funds is gradually increasing from 2004-05 to 2017-18 (Figure-4) but growth trend in GDP and GDS (Figure-5) is almost stable in specified time period. In spite of increasing trend in Mutual funds growth, growth trend in gross domestic savings is stable it means some part of savings are increasing with comparatively low rate. So it cannot be concluded that mutual fund growth is reason for growth of domestic savings. Increase in mutual funds because people are not directly participating in capital market or savings market through banks and post offices but prefer to go through mutual funds. If this trend increases then savings in the form of holdings can be more mobilized. To increase the output two options are available either to improve capital labor ratio or increase the savings. Saving can be increased by lowering the consumption or by converting physical savings to financial savings. Mutual fund plays significant role here because real interest rate of post office and bank deposits is negative or zero even for gold interest is also almost zero. Only capital market and physical market (real estate, lands) are providing returns so if these savings are diverted to financial savings then financial savings can increase and leads to higher investment and GDP of an economy.

Conclusion

Increased returns in mutual funds are associated with higher Aggregate demand. It creates a growth momentum in the economy. Rate of interest is important here because if interest rate is goes down then growth of mutual funds are positively affected. Since investment is component of Aggregate demand $[C+I+G (X-M)]$ by increasing investment in mutual funds, consumption increases which leads to rise in output and associates with higher income level. Once income is increased it again lifts the aggregate demand through the multiplier effect working in the economy and encourages the investment in the country. Higher investment is associated with higher growth of a

country. So, no direct relation is found between the mutual funds and economic growth because form of savings only changed. Indirectly growth of mutual funds affects economic growth in a nation. If country has savings in physical and financial form except gold then it is very fruitful for nation. Further, household savings are motivated if returns and expected potential return increases. People generally avoid investment in bank deposit because deposit in banks cannot beat the prevailing inflation in the economy. Not prefer to investment in share market because of risk element. Middle class group get mutual fund option as it beats the inflation, in long term demand for real estate is fulfilled and in short run purchase of durable consumer good rises. Increased demand for Mutual funds supports the manufacturing and other sectors in the economy. If Aggregate demand is high it maintains the growth prospect. Although it might not directly affect the investment but indirectly affect the demand for investment. Change in the form of saving is not influence the growth but size of saving is important for growth.

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