

A STUDY ON TRENDS IN GROSS CAPITAL FORMATION IN INDIA

By

¹**Dr. Ramesha. K.**, Assistant Professor in Economics, Department of Post-Graduate Studies in Economics, Acharya Patashala College of Arts and Science, N. R. Colony, Bengaluru – 560019.

²**Dr. Parashurama. G. S.**, Principal, Anupama College of Management and Science, Mahalakshmiipuram, Bengaluru.

ABSTRACT:

A recent push to give access to bank accounts to all households has created the infrastructure through which financial savings could be further increased. Beyond households, savings for capital formation is also done by both public sector and private sector. Efficient intermediation by financial sector leads to higher economic growth by increasing savings and their optimal allocation for productive uses. Currently, a big challenge towards raising the rate of savings and investments is the intermediation by the financial sector.

Key Words: financial savings, capital formation, financial sector, savings and investments.

INTRODUCTION:

Capital is a life bold for any activities that is being performed. Capital plays an important role in the development of the Economy. It is a major tool for the industries for its growth and expansion. Capital formation is an important task for the entrepreneurs in order to meet their financial needs. Hence, the present study is conducted with a motive of finding determinants of capital formation. Since last few decades, a plenty of research has been conducted to explore sources for capital formation in the country.

STATEMENT OF THE PROBLEM:

Formation of capital requires careful examination of various sources. Capital can be accumulated from various sources but the rate at which the capital is being formed is to be considered. Here in this chapter it tries to understand the process of capital formation and the rate at which the capital is formed as it is the need of the hour.

REVIEW OF LITERATURE:

According to Barro (1998) democracy can affect economic growth and this can be captured by looking at the average income of people and the level of democratic functioning in the economy. However, in the context of a developing economy like India, this may not hold true because the net effect of democracy on increasing per capita income can easily be offset by the rapid rise in population base.

Fischer (1991) also observed that in the short-run, the growth rate is affected considerably by the inflation rate and the budget deficit. An adverse supply shock would reduce the growth rate and raise the inflation rate. It is due to the cost push effect on the price level. Also, at a given level of government spending a reduction in growth would increase the deficit. Therefore these factors, though important in the

context of short-run economic growth, may only have a neutral impact on the economic growth in the long-run.

Ghfar & Nur Azura (2002) while carry out study to examine the dynamic capital structure choice in the presence of taxes and bankruptcy cost found that bankruptcy cost, age, growth opportunity and lagged leverage ratio significantly explain the dynamic variation of leverage ratio for Malaysian firms. Their findings lead to the implications that firm with high growth opportunity prefers to use debt financing.

Harbison (1973) observed that resources are the ultimate basis of the wealth of nations. According to the study the developing countries come across with two major problems: firstly underutilization of the capacities of human beings as indicated by rising unemployment and underemployment in both rural and urban areas, due to high rates of population growth; and secondly the under development of the capacities of human agents for productive use.

Ganguli and Gupta (1976) used three set of composite indices to measure levels of living in Indian states. The first covers the primary components of the levels of living namely nutrition, housing, medical care and education. The second one covered the secondary components viz., leisure, security and environment. The third is an overall index of the level of living which was constructed by taking into accounts both the primary and the secondary components of the level of living. Study found that while the levels of per capita domestic product and the levels of living have a close relationship it was not so when the levels of per capita consumption expenditure were considered.

Gupta (2001) developed a two sector growth model of a small open developed economy in which physical capital accumulate over time and the capital accumulation is constrained by the existence of the child labour market. Study analyzed the properties of the growth path and showed that the equilibrium size of the child labour market is reduced as the accumulation of physical capital takes place.

Mukherjee. M. (1974) concluded that for practical reasons, it may be desirable to separate the basic problem of valuation of national product from the deflation. Since, in most countries, deflation is more approximate process than basic valuation, it may be permissible to use a weaker price basic for deflation than for valuation. The paper examines the problem of lack of comparability in the available information on prices and volumes, in the context of the procedures used to obtain the Indian official national income statistics which give a distribution by industrial origin.

OBJECTIVES OF THE STUDY:

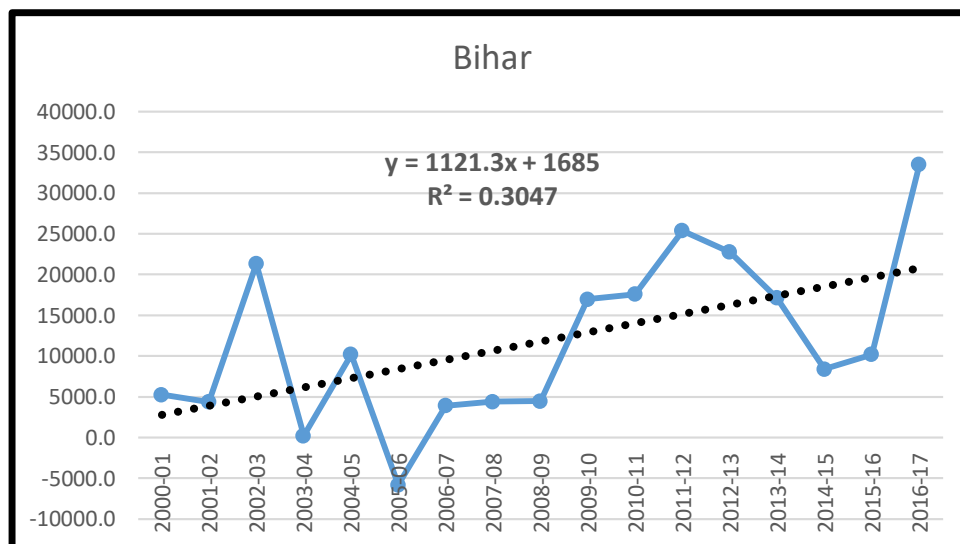
1. To examine the trends in the Gross Capital Formation in selected North Indian states.
2. To investigate the tendencies in the Gross Capital Formation in selected South India states.
3. To inspect the inclinations in the Gross Capital Formation in selected overall India.

STATE-WISE GROSS CAPITAL FORMATION IN NORTH INDIA:**Gross Capital Formation in Bihar:****Table-1. Year wise of Details Gross Capital formation in Bihar State:**

Year	Bihar	Year	Bihar
2000-01	5261.1	2010-11	17572.3
2001-02	4366.9	2011-12	25378.6
2002-03	21303.0	2012-13	22767.2
2003-04	219.0	2013-14	17115.3
2004-05	10181.1	2014-15	8401.9
2005-06	-5797.7	2015-16	10184.5
2006-07	3916.5	2016-17	33501.8
2007-08	4393.0	CAGR = 12.3%	
2008-09	4473.4		
2009-10	16961.3		

Source: Handbook of Statistics on Indian States, RBI, 2018

The table 1 shows year-wise gross capital formation in Bihar. From the above table we can identify the compound annual growth rate of capital formation of Bihar and it is at 12.3%. The capital formation seems inconsistent which will affect the performance of the state. It is found that the average capital formation in Bihar is 11776.42. Maximum capital formed in the state was recorded at 33501.8 and minimum was recorded at -5797.7. The total amount of capital formation in the state is 200199.2.

Graph-1. Annual growth rate of gross capital formation in Bihar state:

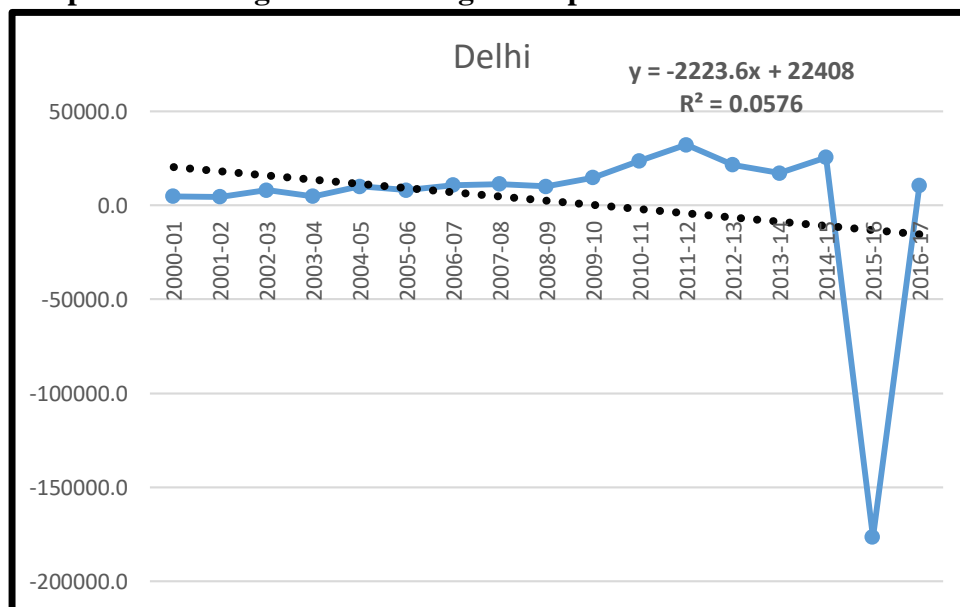
Graph 1 indicates the growth rate of capital formation in Bihar. The state Bihar has been succeeding in increasing the level of capital formation by the magnitude of 1121.3 crores.

Gross Capital Formation in Delhi:**Table-3. Year wise of Details Gross Capital formation in Delhi State:**

Year	Delhi	Year	Delhi
2000-01	4831.5	2010-11	23582.3
2001-02	4444	2011-12	32207.9
2002-03	8061.4	2012-13	21572.3
2003-04	4780.2	2013-14	17131.6
2004-05	9990.8	2014-15	25545.8
2005-06	8003.3	2015-16	-176509
2006-07	10662.9	2016-17	10399.2
2007-08	11297.7	CAGR = 4.9%	
2008-09	9964.7		
2009-10	14763.1		

Source: Handbook of Statistics on Indian States, RBI, 2018

The table 3 shows year-wise gross capital formation in Delhi. From the above table we can identify the compound annual growth rate of capital formation of Delhi and it is at 4.9%. It is found that the average capital formation in Delhi is 2395.871. Maximum capital formed in the state was recorded at 32207.9 and minimum was recorded at -176509. The total amount of capital formation in the state is 40729.8

Graph-2. Annual growth rate of gross capital formation in Delhi state:

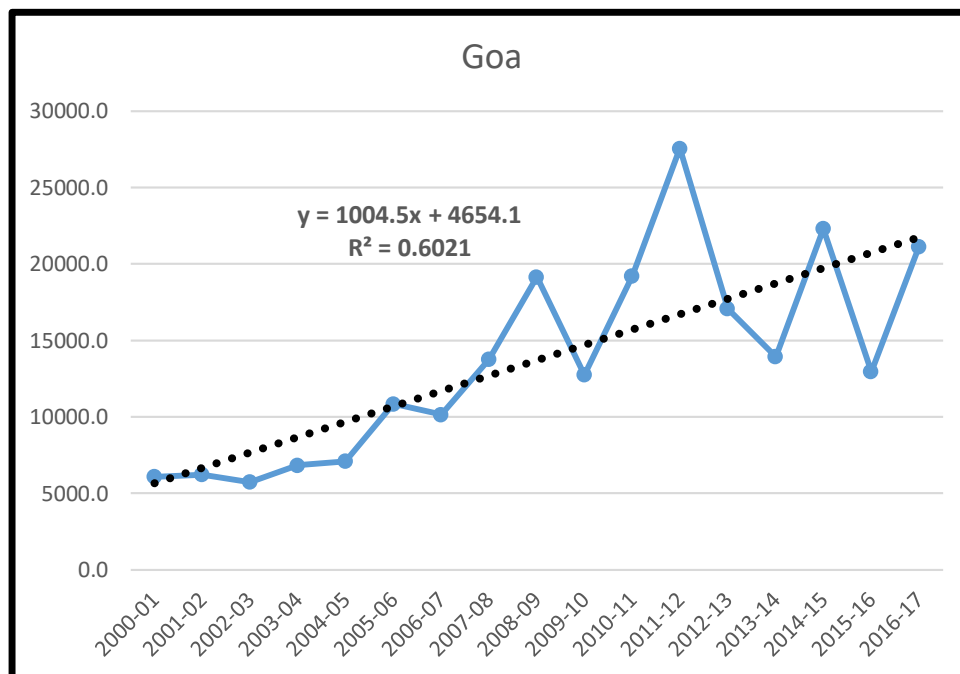
Graph 2 indicates the growth rate of capital formation in Delhi. We can see the trend line below equivalence and it is downward as it indicates the capital formed was very low and wherein the capital formation has been decreasing by 2223.6 crores every year.

Gross Capital Formation in Goa:**Table-5. Year wise of Details Gross Capital formation in Goa State:**

Year	Goa	Year	Goa
2000-01	6075.3	2010-11	19227.6
2001-02	6222.0	2011-12	27558.7
2002-03	5741.9	2012-13	17082.1
2003-04	6827.3	2013-14	13930.8
2004-05	7089.6	2014-15	22316.2
2005-06	10841.9	2015-16	12958.7
2006-07	10150.8	2016-17	21131.4
2007-08	13757.3	CAGR = 8.1%	
2008-09	19147.3		
2009-10	12749.0		

Source: Handbook of Statistics on Indian States, RBI. 2018

The table 5 shows year-wise gross capital formation in Goa. From the above table we can identify the compound annual growth rate of capital formation of Goa and it is at 8.1%. It is found that the average capital formation in Goa is 13694.58. Maximum capital formed in the state was recorded at 27558.7 and minimum was recorded at 5741.9. The total amount of capital formation in the state is 232807.9.

Graph-3. Annual growth rate of gross capital formation in Goa state:

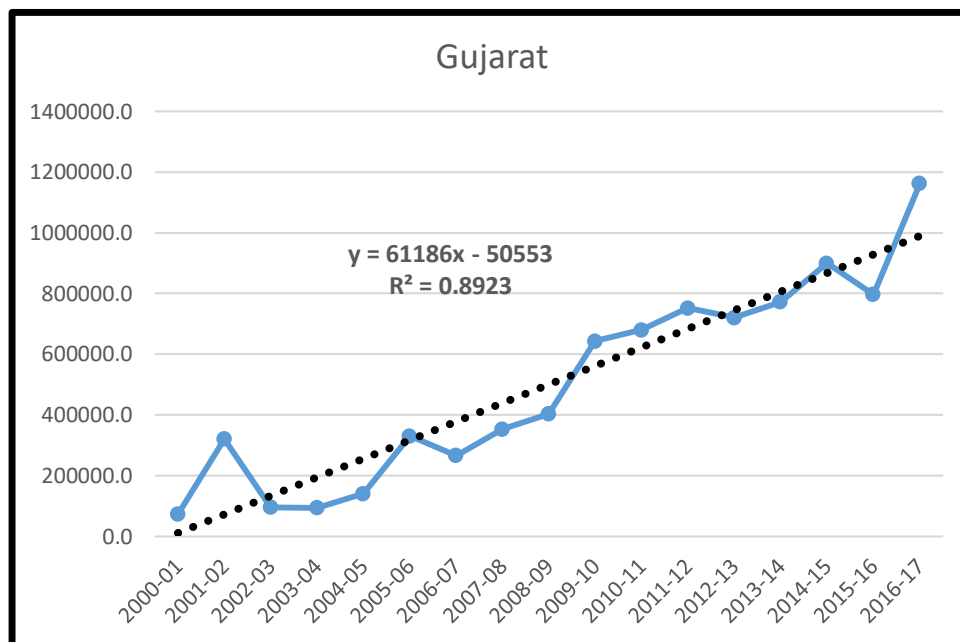
Graph 3 indicates the growth rate of capital formation in Goa. Every year in Goa state the capital formation has been increasing by 1004.5 crores.

Gross Capital Formation in Gujarat:**Table-7. Year wise of Details Gross Capital formation in Gujarat State:**

Year	Gujarat	Year	Gujarat
2000-01	73023.6	2010-11	679839.5
2001-02	320429.4	2011-12	752056.7
2002-03	95800.4	2012-13	720563.4
2003-04	93821.2	2013-14	771812.1
2004-05	140219.5	2014-15	899789.6
2005-06	330642.6	2015-16	796616.6
2006-07	265914.1	2016-17	1162258.8
2007-08	353155.4	CAGR = 18.9%	
2008-09	403533.5		
2009-10	642629.0		

Source: Handbook of Statistics on Indian States, RBI. 2018

The table 7 shows year-wise gross capital formation in Gujarat. From the above table we can identify the compound annual growth rate of capital formation of Gujarat and it is at 18.9%. It is found that the average capital formation in Gujarat is 500123.8. Maximum capital formed in the state was recorded at 1162259 and minimum was recorded at 73023.6. The total amount of capital formation in the state is 8502105.

Graph-4. Annual growth rate of gross capital formation in Gujarat state:

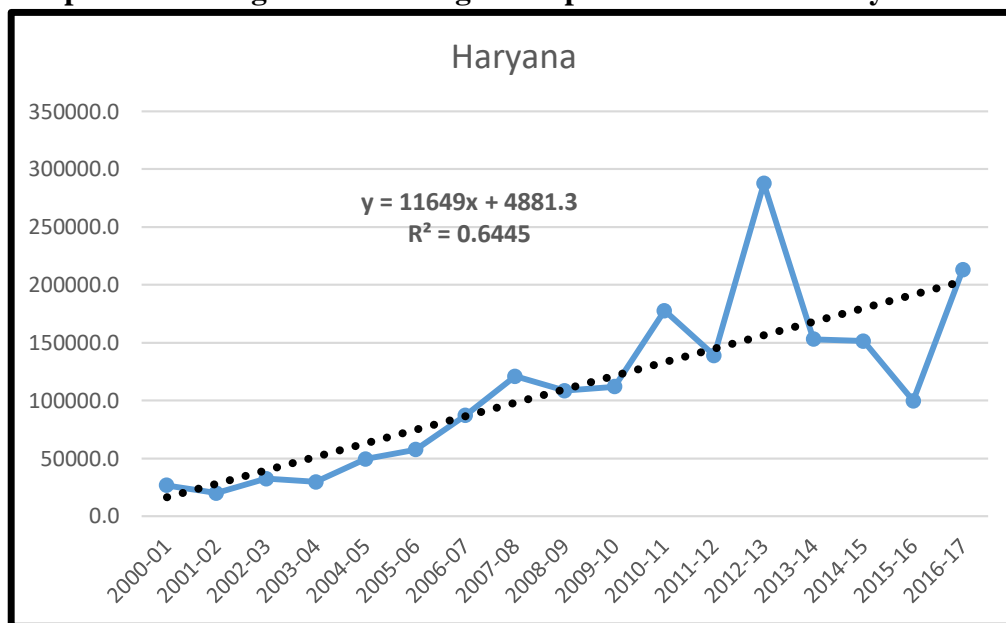
Graph 4.4 indicates the growth rate of capital formation in Gujarat. We can see the trend line below par in some of the years as it indicates the capital formed was low and wherein the graph has constantly fluctuating which is not good sign.

Gross Capital Formation in Haryana:**Table-9. Year wise of Details Gross Capital formation in Haryana State:**

Year	Haryana	Year	Haryana
2000-01	26546.4	2010-11	177637.1
2001-02	19955.1	2011-12	138969.1
2002-03	32276.2	2012-13	287528.9
2003-04	29657.6	2013-14	153009.1
2004-05	49344.7	2014-15	151402.0
2005-06	57480.3	2015-16	99757.9
2006-07	87101.3	2016-17	213200.9
2007-08	120924.5	CAGR = 13.9%	
2008-09	108505.3		
2009-10	111928.2		

Source: Handbook of Statistics on Indian States, RBI, 2018

The table 9 shows year-wise gross capital formation in Haryana. From the above table we can identify the compound annual growth rate of capital formation of Haryana and it is at 13.9%. It is found that the average capital formation in Haryana is 109719.1. Maximum capital formed in the state was recorded at 287528.9 and minimum was recorded at 19955.1. The total amount of capital formation in the state is 1865225.

Graph-5. Annual growth rate of gross capital formation in Haryana state:

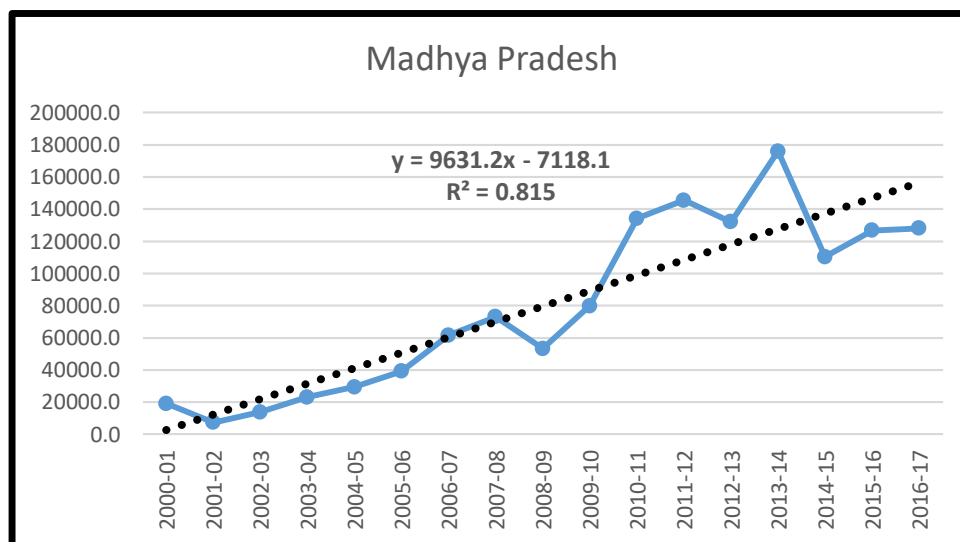
Graph 5 indicates the growth rate of capital formation in Haryana. The state Haryana has put a prompt effort in increasing the level of capital formation and it is accounted for every year the capital formation has increased by 11649 crores.

Gross Capital Formation in Madhya Pradesh:**Table-11. Year wise of Details Gross Capital formation in Madhya Pradesh State:**

Year	Madhya Pradesh	Year	Madhya Pradesh
2000-01	19194.1	2010-11	134124.7
2001-02	7433.4	2011-12	145533.3
2002-03	13868.9	2012-13	132049.0
2003-04	23063.7	2013-14	175948.5
2004-05	29444.3	2014-15	110255.6
2005-06	39178.9	2015-16	126669.4
2006-07	61635.5	2016-17	128035.9
2007-08	72945.7	CAGR = 12.6%	
2008-09	53301.9		
2009-10	79882.9		

Source: Handbook of Statistics on Indian States, RBI, 2018

The table 11 shows year-wise gross capital formation in Madhya Pradesh. From the above table we can identify the compound annual growth rate of capital formation of Madhya Pradesh and it is at 12.6%. It is found that the average capital formation in Madhya Pradesh is 79562.69. Maximum capital formed in the state was recorded at 175948.5 and minimum was recorded at 7433.4. The total amount of capital formation in the state is 1352566.

Graph-6. Annual growth rate of gross capital formation in Madhya Pradesh state:

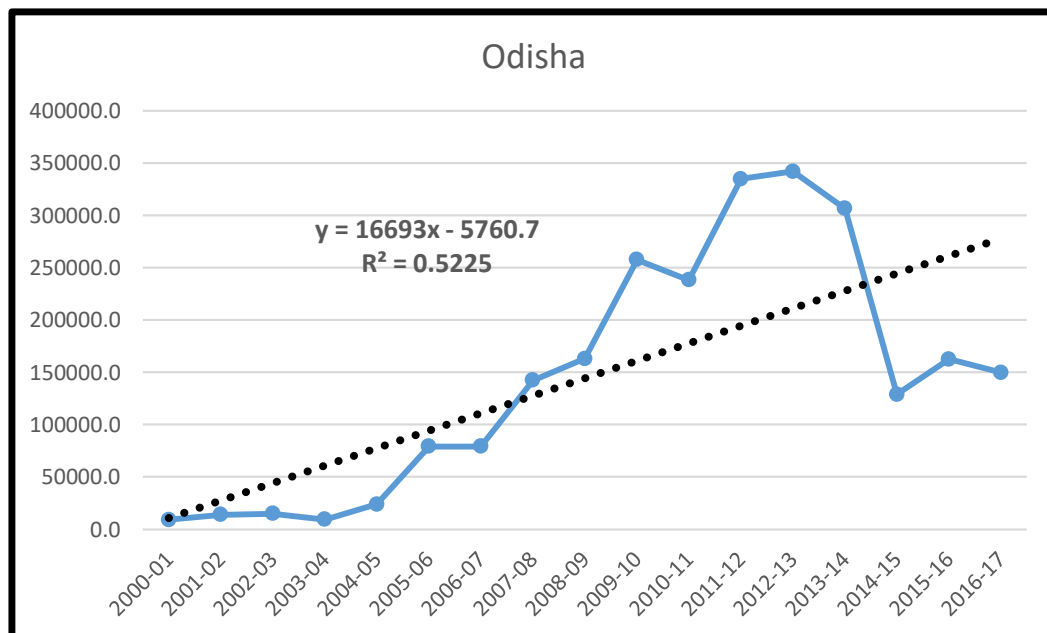
Graph 6 indicates the growth rate of capital formation in Madhya Pradesh. The trend line is moving upward and indicated that the level of capital formation has been increased by the every year at the rate of 9631.2 crores and it is a positive growth of the formation of the capital.

Gross Capital Formation in Odisha:**Table-13. Year wise of Details Gross Capital formation in Odisha State:**

Year	Odisha	Year	Odisha
2000-01	9035.4	2010-11	238208.2
2001-02	13884.7	2011-12	334829.9
2002-03	14859.7	2012-13	342031.2
2003-04	9375.8	2013-14	306719.4
2004-05	23990.4	2014-15	128979.4
2005-06	79312.2	2015-16	162679.5
2006-07	79220.8	2016-17	149779.6
2007-08	142512.9	CAGR = 19.2%	
2008-09	163062.4		
2009-10	257616.9		

Source: Handbook of Statistics on Indian States, RBI. 2018

The table 13 shows year-wise gross capital formation in Odisha. From the above table we can identify the compound annual growth rate of capital formation of Odisha and it is at 19.2%. It is found that the average capital formation in Odisha is 144476.4. Maximum capital formed in the state was recorded at 342031.2 and minimum was recorded at 9035.4. The total amount of capital formation in the state is 2456098.

Graph-7. Annual growth rate of gross capital formation in Odisha state:

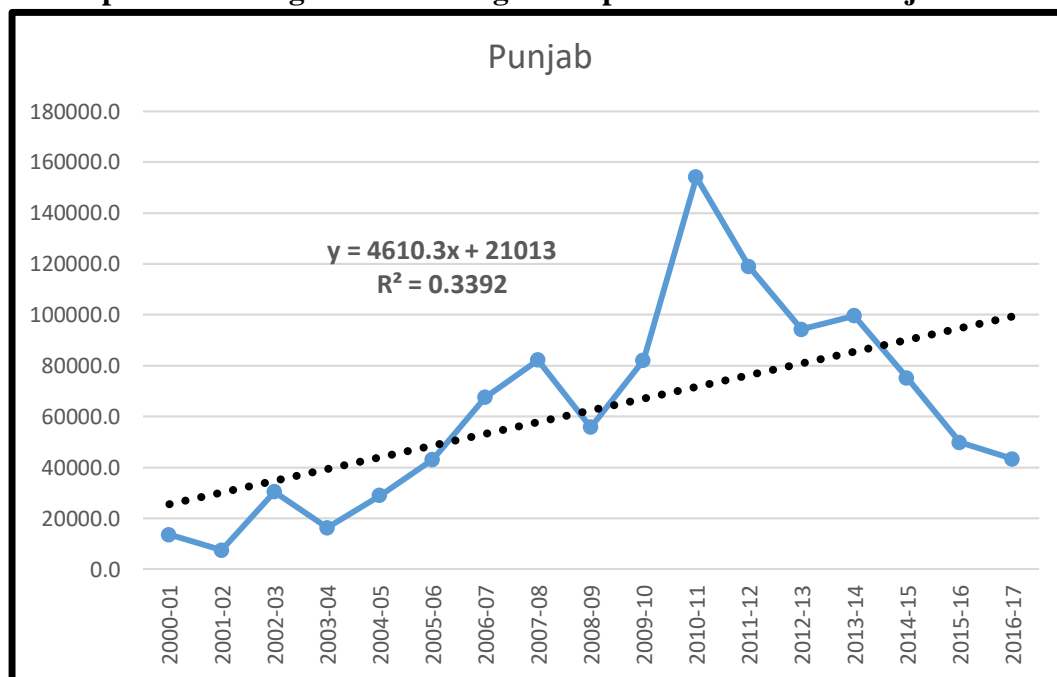
Graph 7 indicates the growth rate of capital formation in Odisha. The positive slope trend line shows that the state has been putting a prompt effort in increasing the capital formation at the rate of 16693 crores every year.

Gross Capital Formation in Punjab:**Table-15. Year wise of Details Gross Capital formation in Punjab State:**

Year	Punjab	Year	Punjab
2000-01	13599.5	2010-11	154106.3
2001-02	7474.7	2011-12	118869.3
2002-03	30412.0	2012-13	94231.2
2003-04	16330.9	2013-14	99589.1
2004-05	28934.7	2014-15	75157.0
2005-06	43079.7	2015-16	49812.1
2006-07	67519.7	2016-17	43375.4
2007-08	82201.3	CAGR = 7.5%	
2008-09	55757.3		
2009-10	82139.3		

Source: Handbook of Statistics on Indian States, RBI. 2018

The table 15 shows year-wise gross capital formation in Punjab. From the above table we can identify the compound annual growth rate of capital formation of Punjab and it is at 7.5%. It is found that the average capital formation in Punjab is 62505.26. Maximum capital formed in the state was recorded at 154106.3 and minimum was recorded at 7474.7. The total amount of capital formation in the state is 1062590.

Graph-8. Annual growth rate of gross capital formation in Punjab state:

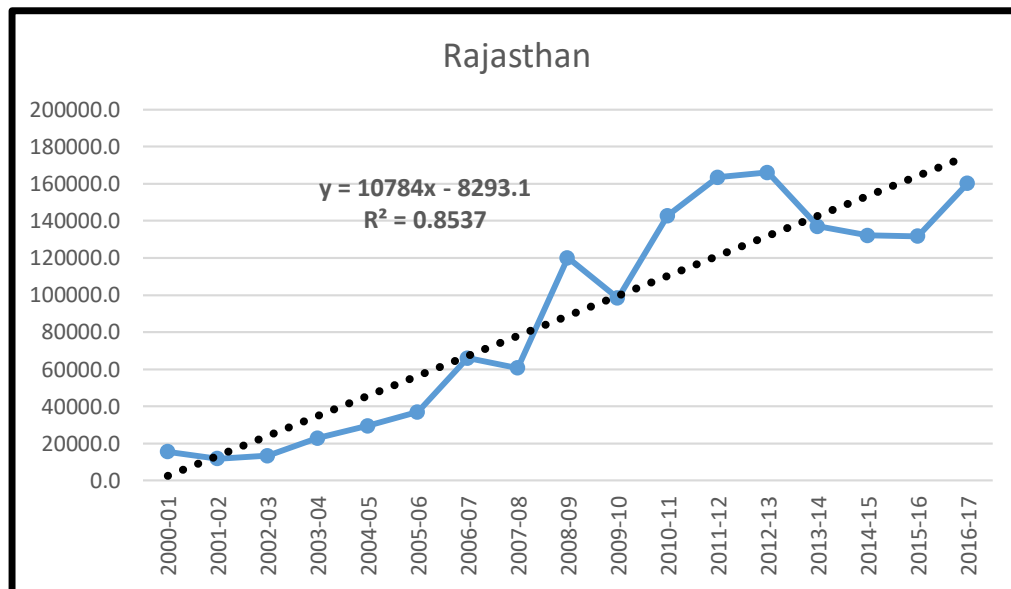
Graph 8 indicates the growth rate of capital formation in Punjab. The state Punjab is also promptly increasing the capital formation every year by the amount of 4610.3 crores. The state is also not lagging behind in increasing the capital stock over the time.

Gross Capital Formation in Rajasthan:**Table-17. Year wise of Details Gross Capital formation in Rajasthan State:**

Year	Rajasthan	Year	Rajasthan
2000-01	15559.7	2010-11	142747.4
2001-02	11740.3	2011-12	163540.6
2002-03	13332.3	2012-13	166075.4
2003-04	22907.1	2013-14	137061.8
2004-05	29434.6	2014-15	132215.0
2005-06	36988.5	2015-16	131714.0
2006-07	66052.0	2016-17	160398.5
2007-08	60678.0	CAGR = 15.7%	
2008-09	120131.8		
2009-10	98422.2		

Source: Handbook of Statistics on Indian States, RBI. 2018

The table 17 shows year-wise gross capital formation in Rajasthan. From the above table we can identify the compound annual growth rate of capital formation of Rajasthan and it is at 15.7%. It is found that the average capital formation in Rajasthan is 88764.66. Maximum capital formed in the state was recorded at 166075.4 and minimum was recorded at -11740.3. The total amount of capital formation in the state is 1508999.

Graph-9. Annual growth rate of gross capital formation in Rajasthan state:

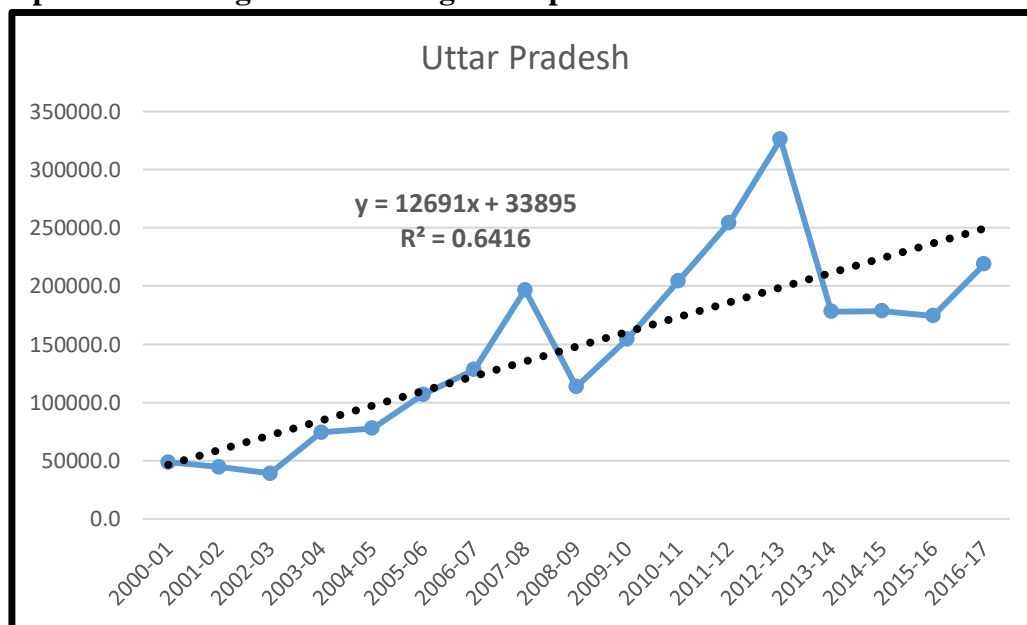
Graph 9 indicates the growth rate of capital formation in Rajasthan. We can see the trend line below par in some of the years as it indicates the capital formed was low and wherein the graph has constantly fluctuating which is not good from growth prospects.

Gross Capital Formation in Uttar Pradesh:**Table-19. Year wise of Details Gross Capital formation in Uttar Pradesh State:**

Year	Uttar Pradesh	Year	Uttar Pradesh
2000-01	48490.9	2010-11	204267.6
2001-02	44384.2	2011-12	254548.3
2002-03	38995.5	2012-13	326108.4
2003-04	74203.4	2013-14	178154.8
2004-05	77654.5	2014-15	178562.7
2005-06	106779.9	2015-16	174346.0
2006-07	128135.7	2016-17	218985.0
2007-08	196609.0	CAGR = 9.9%	
2008-09	113343.4		
2009-10	154400.2		

Source: Handbook of Statistics on Indian States, RBI, 2018

The table 19 shows year-wise gross capital formation in Uttar Pradesh. From the above table we can identify the compound annual growth rate of capital formation of Uttar Pradesh and it is at 9.9%. It is found that the average capital formation in Uttar Pradesh is 148115.9. Maximum capital formed in the state was recorded at 326108.4 and minimum was recorded at 38995.5. The total amount of capital formation in the state is 2517970.

Graph-10. Annual growth rate of gross capital formation in Uttar Pradesh state:

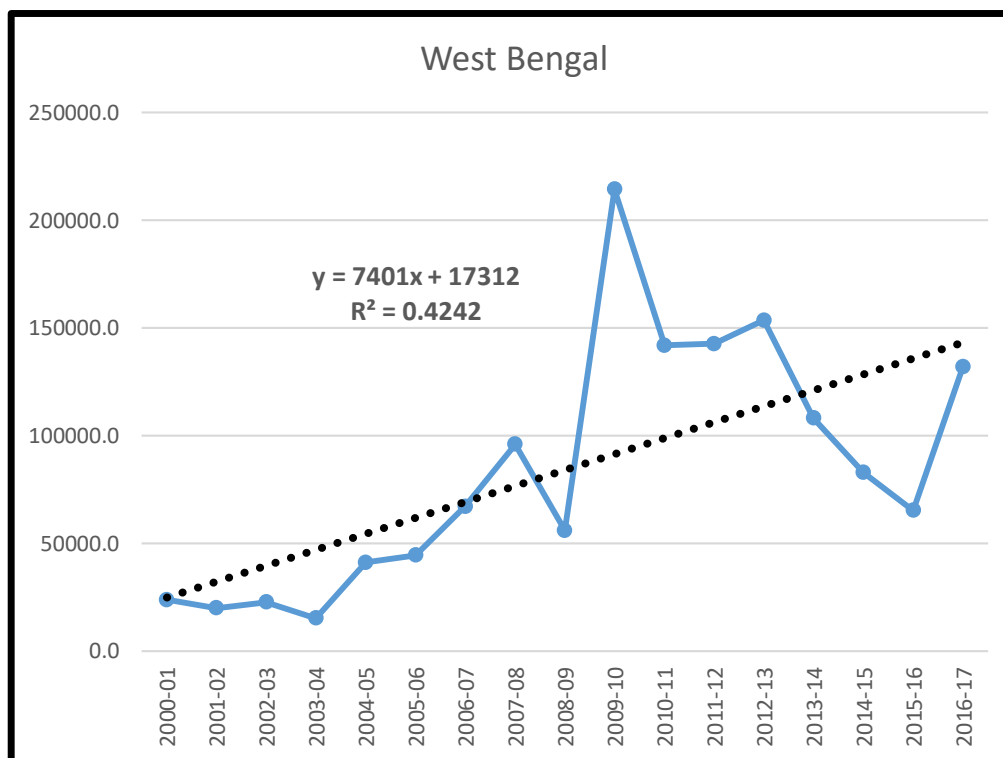
Graph 10 indicates the growth rate of capital formation in Uttar Pradesh. The state Uttara Pradesh has also seriously strived a lot to increase the level of capital formation every year by the magnitude of 1269 crores.

Gross Capital Formation in West Bengal:**Table-21. Year wise of Details Gross Capital formation in West Bengal State:**

Year	West Bengal	Year	West Bengal
2000-01	23739.2	2010-11	141844.9
2001-02	19942.1	2011-12	142700.3
2002-03	22678.5	2012-13	153490.9
2003-04	15210.3	2013-14	108045.6
2004-05	41079.7	2014-15	82885.5
2005-06	44472.9	2015-16	65220.6
2006-07	67113.9	2016-17	131875.0
2007-08	96001.3	CAGR = 11.3%	
2008-09	55987.3		
2009-10	214377.6		

Source: Handbook of Statistics on Indian States, RBI. 2018

The table 4.21 shows year-wise gross capital formation in West Bengal. From the above table we can identify the compound annual growth rate of capital formation of West Bengal and it is at 11.3%. It is found that the average capital formation in West Bengal is 83921.51. Maximum capital formed in the state was recorded at 214377.6 and minimum was recorded at 15210.3. The total amount of capital formation in the state is 1426666.

Graph-11. Annual growth rate of gross capital formation in West Bengal state:

Graph 11 indicates the growth rate of capital formation in West Bengal. It is found that trend line was moving upward and tells that every year the capital formation has been increased by 7401 crores during the observed period.

SUGGESTIONS OF THE STUDY:

It is observed that many of the states have failed to take initiatives to improve the capital formation in their states. States must immediately adhere to their loop holes. Necessary measures and investment friendly policies should be adopted by the state government. States should try to attract Foreign Direct Investment for the growth and development of the economy as whole. States should try to implement the measures taken by the other governments to improve the rate of capital formation.

CONCLUSION:

After the analysis and studying the subject it is concluded that many states have not maintained the average accumulation of capital in their states which has hindered the performance of the states as whole hence the states must take initiatives to improve their capital accumulation and should try to bring new policies and measures which helps them to attract capital sources.

References:

- Chkir, Imed and Cosset, Jean-Claude (2003), The Effect of International Acquisitions on Firm Leverage. Journal of Financial Research, Forthcoming. [Electronic copy pp.1-28] Available at: <http://www.crefa.ecn.ulaval.ca/cahier/0120.pdf>.
- Inessa Love, & Peria Martinez, Soledad Maria, (2005), "Firm financing in India: Recent Trends and Patterns," Policy Research Working Paper Series 3476, The World Bank.
- Guha-Khasnobis, Basudeb & Kar, Saibal (2006), "The Corporate Debt Market- A Firm Level Panel Study for India", UNU-WIDER World Institute for Development Economics Research, Research Paper No. 2006/50, ISBN 92-9190-818-5 (internet version).
- Garg C Mahesh & Shekhar Chander, (2002), "Determinants of Capital Structure in India", The Management Accountant, February 2002, pp.86-92.
- Singla R.K & Mittal R.K, (1997), "Influence of Industry-Class and Ownership Pattern on Corporate Capital Structure in India", Finance India, March 1997, pp. 17-27.
- Bhat K,Ramesh (1980), "Determinants of Financial Leverage: Some Further Evidence", The Chartered Accountant, December 1980, pp.451-458.
- Seetanah Boopen, Padachi Kesseven and Ronoowah K Rishi (2007), "Determinants of Capital Structure: Evidences from a Small Island Developing State", The ICFAI Journal of Applied Finance, Vol-13, No.3, March 2007, pp.5-28.
- Hovakimian, Armen G. and Li, Guangzhong (2009) "Do Firms Have Unique Target Debt Ratios to Which They Adjust?" [Date accessed: 26-10-2009], Available at SSRN: <http://ssrn.com/abstract=1138316>.