Mapping Indian Entrepreneurial Growth

SORIS

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Abstract

India is experiencing faster economic growth for last two decades which has been changing the pattern of Indian economic environment. Growth story of Indian economy has been through development of private sector during this period. Most of this growth has taken place through entrepreneurial growth in the private sector. Development of Entrepreneurships at every period creates dynamism in the economy. New Entrepreneurs finds niche market which helps development of market economy. They are more likely to introduce new technology, new system of management, marketing. They are proactive to introduce new product and expands to new markets. Not only new entrepreneurs create employment, it modernizes the economy and gears up to faster growth. While new generation of entrepreneurships with new ideas of management, ability to innovate and create wealth for the economy emerge in the changing macroeconomic environment and with technological advancement. Studies show that preconditions for the growth of entrepreneurships are creating and supporting competitive environment. According to the study, India is still in nascent state of entrepreneurial growth and this is factor driven which is different from the growth of entrepreneurships through efficiency-driven, innovation-driven. These types of entrepreneurial growth is more dynamic, creates employment among high skilled workers which contributes to further r growth through market development in different sectors. Growth of self employment alone does not reflect growth of dynamic entrepreneurship. Knowledge Commission of India has categorized growth of entrepreneurship in four groups e.g. agriculture and allied services (level I), trading services (level II), old economy sectors such as manufacturing, gas, electricity and water supply(Level III) while the last level of entrepreneurial growth has been taking place in the knowledge intensive high growth sector, IT, Finance, supply chain, transportation and communication(Level IV).

Recently Indian Economy has experienced growth between 8-9 percent per annum growth which is mostly contributed by service sector yet growth of entrepreneurship has been diverse in different states and also in among sectors. Some states have experienced faster growth while many of them have low per capita income and high percentage of population under poverty line and Low HDI. Recent NSSO 66th round report shows that self employment in the Indian economy has gone up to more than 66 per cent. GCR (2011-12) on, India's competitiveness has deteriorated compared to previous years and compared to other countries. This paper investigates regional pattern of growth of entrepreneurships in organized corporate Sector for companies limited by share. The paper looks into global studies on competitive environment for growth of business and environmental factors. Some individual studies also analyses factors that induce entrepreneurial development in an economy and those that have been constraints for Indian economy. The empirical analysis of the paper is based on data from annual reports of Ministry of Company affairs, census of India for both 2006 and 2010. Regression analysis has been carried on between regional growth of companies limited by shares and four factors e.g. Electricity availability, per capita income, higher education facilities and banking services.

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These factors are able to explain more than sixty percent of regional variation of growth of companies limited by shares.

Introduction

Entrepreneurship development is perceived as a driver to sustainable economic growth in the capitalist economy through market forces. While development of entrepreneurship changes the contour of macroeconomic environment through creation of competitive environment, expands employment, boost innovation, efficiency and develops new products and markets. Growth of entrepreneurship brings in equitable distribution in the economy. While new generation of entrepreneurships with new ideas of management, ability to innovate and create wealth for the economy emerge in the changing macroeconomic environment and with technological advancement along with some enterprises becoming obsolete and non competitive in a dynamic economy. Studies show that preconditions for the growth of entrepreneurships are creating and supporting competitive environment of the economy. Observations on mature market economy are that in the period of economic prosperity, new entrepreneurships emerge that are able to satisfy the growing demands for the prosperous economy. Technological change also encourages new entrepreneurs with new motivation and ideas.

India is experiencing faster economic growth for last two decades which has been changing the pattern of Indian economic environment. Growth story of Indian economy has been through development of private sector during this period. Most of this growth has taken place through entrepreneurial growth in the private sector and has occurred in the service sector. Yet regional pattern of growth in Indian economy has been diverse. Some states have experienced faster growth while many of them have low per capita income and high percentage of population under poverty line and Low HDI. Recent NSSO 66th round report shows that self employment in the Indian economy has gone up to more than 66 per cent. GCR (2011-12) on, India's competitiveness has deteriorated compared to previous years and compared to other countries. According to the study, India is still in nascent state of entrepreneurial growth and this is factor driven which is different from the

growth of entrepreneurships through efficiencydriven, innovation-driven. These types of entrepreneurial growth is more dynamic, creates employment among high skilled workers which contributes to further growth through market development in different sectors. Growth of self employment alone does not reflect growth of dynamic entrepreneurship. Knowledge Commission of India has categorized growth of entrepreneurship in four groups e.g. agriculture and allied services (level I), trading services (level II), old economy sectors such as manufacturing, gas, electricity and water supply(Level III) while the last level of entrepreneurial growth has been taking place in the knowledge intensive high growth sector, IT, Finance, supply chain, transportation and communication(Level IV). This paper investigates regional pattern of growth of entrepreneurships in organized, Nature of Entrepreneurship Development in India: summary of studies and reports on Indian Entrepreurial Development. Crucial efforts initiated after economic liberalization - including systematic attempts to reduce the 'license raj', reforms in the financial sector easily accessible to entrepreneurs and institutional supports of creating SEZs - have helped improve the climate for Entrepreneurship development. Globalisation and dynamics of Global economic Environment had been conducive for growth of entrepreneurships in India. Nature of Entrepreneurship in recent decade has been qualitatively different from the past particularly with the rise in knowledge-intensive services. New entrepreneurs do not belong to traditional business communities. They have begun to emerge in large numbers. visibly so, creating wealth and generating employment. New breed entrepreneurs with their ability to adapt to changing market conditions and anticipate future technologies and economic trends have expanded across a large number of markets. They have developed comparative knowledge leverage at lower costs to create competitiveness in the global market. In a recent survey by the Deloitte group, India ranks 2nd globally as home to the fastest growing technology firms. 82 Indian companies entered the Deloitte Technology Fast 500 list of Asia-Pacific Companies in 2007 and the companies that have made it to the Technology Fast 50 of India have an average three-year revenue growth of 489%.

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Yet we find that entrepreneurial growth in India has been lopsided and opportunities provided by globalosation and liberalization could not be fully utilized for the corporate growth. Recent NSSO report 66th round (2011) shows more than sixty percent workers in rural are self employed. Some studies have expressed doubts on the methods measuring entrepreneurial growth by taking self employed as entrepreneurs. Growth of self employment could be apparent sign of stagnant Macro Economic Environment or in pockets of less developed regions in a dynamic economies. These cannot be taken as a brighter sign of entrepreneurial growth. Following section would give summary of the comparative position of India in global competitiveness analysed by two studies. Studies reveal that while India has historically had low entrepreneurship rates, this weakness is improving and will be an important stepping stone to further development. In analyzing spatial determinants of local entrepreneurship in India for both manufacturing and service at the district level, evidence points to the roles of local education levels and physical infrastructure quality in promoting entrepreneurial growth. They also find evidence that strict labor regulations discourage formal sector entry, and better household banking environments encourage entry in the unorganized sector. The paper then evaluates how incumbent industrial structures of cities shape the type of entrants that emerge in local areas.

The World Bank Group Entrepreneurship Survey (WBGES) measures formal sector entrepreneurship as the number of new officially registered limited liability corporations (LLCs). By definition, WBGES does not include the informal sector, counting only economic units of the formal sector incorporated as a legal entity and registered in a public registry, which is capable, in its own right, of incurring liabilities and of engaging in economic activities and transactions with other entities.

Global Competitive Report by World Economic Forum develops indices of competitiveness of 142 countries based on 12 indicators such as 1. Institutions 2. Infrastructure 3. Macroeconomic 4. Health and Basic requirements 5. Higher education and training 6. Goods market Efficiency. 7. Labor

market efficiency 8. Financial market development 9. Technological Readiness 10. Market size 11. Business sophistication 12. Innovation. Table I gives ranking of India among 142 countries as well as scores of various indicators listed above in the scale 0f 0-7 zero being lowest while 7 is the highest (GCR, 2011-12).

India's ranking has been affected by its mediocre accomplishments in the areas seen as the basic factors underpinning competitiveness. The country's supply of transport, ICT, and energy infrastructure remains largely insufficient and ill-adapted to the needs of business pushing its ranking in this sphere to 89th position. Though the situation has been slowly improving since 2006.

The picture is similar in the health and basic education pillar. Despite improvements across the board over the past few years, public health and education remain prime causes of concern. There have been some positive trends in these areas but the same can't be said of the institutions and macroeconomic environment, the other two dimensions comprising the basic components of the GCI.

But what is more worrisome is that since 2006, India's score in the institutions' pillar has plunged from 4.5 to 3.8. Once ranked at a satisfactory 37th in this dimension, India now ranks 69th, having dropped 11 places this year alone. Meanwhile, the macroeconomic environment (where the country is ranked 105th) continues to be characterized by large and repeated public deficits and the highest debtto-GDP ratio among the Brics. More recently, the stability of the country's. macroeconomic environment is being undermined by high inflation, near or above 10%. As a result, India has been hovering around the 100-mark in this pillar for the past five years. Following table gives India's ranking and scores among 142 countries in global competitiveness of Business. Scores are calculated in 0-7 scale while o is worst and 7 is best.

The Comparison of Business environment in India and China from the Report of combined study of World Bank and IFC on Doing Business for 183 economies (2012) show that India (132) ranks behind China(98) in ease of doing business. In more than

indices specified by World Bank and International Finance Corporation, India's ranking and scores are worse than China. In the era of globalization. this shows why China would be the preferred destination for Global Businesses. This also reflects why and how India's domestic entrepreneurship development could be constrained by environmental factors mentioned above.

Following section of the paper carries out empirical analysis of growth of companies limited by shares in different states of India and in different sectors on the basis of data from Annual Reports of Ministry of Company Affairs over period of 2001-10, Economic census of India (2006). Source of data on other variables are census report of 2011, report on Banking sector from RBI, Central electricity General report for various years (GOI). Registered companies limited by shares are taken for entrepreneurial activities in India. Annual growth of the numer is used for the growth of entrepreneurship over regions and sectors. (Refer Table II)

Growth of Companies Limited by Shares: Regional and Sectoral Diversities

Growth of companies limited by shares over the period from 2001-10 has been analyzed on the basis data from Annual Reports of Ministry of Company Affairs over the period. Annual Growth of these companies for periods e.g. 2001-6 & 2006-10 has been 24 per cent and 19 percent respectively. The trend indicates moderate slow down of the rate in the last four year period. Selected Companies are private and public limited companies limited by share. Percentage of public limited companies shows that the practice of raising capital through market participation is still limited in India, only around 11 percent of companies limited by shares are raising capital through public issues though in earlier years, the percentage was little higher (12 per cent). Average paid up capital is also not very high which is less than a crore. (Refer Table III)

Also there are high regional diversity of entrepreneurial growth which has been captured by the chart below. Maharashtra (21%) had the highest percentage of companies in this category followed by Delhi(20%). States like Assam (0.73), Bihar(1.6), Jammu & Kashmir (0.29), Himachal Pradesh (0.31), Orissa(1.03), Meghalaya (0.08) recorded very low

percentage of companies limited by shares. (Refer Figure I)

Sectoral growth of Companies limited by shares in 2006 is presented in Figure II. Highest number of companies are observed to be in the finance, insurance, real estate and business service (27.4 per cent). Hotel, Restaurant, retail account for second highest number in the service segment. While in the traditional sector, metal and chemical industries have high percentage of companies limited by shares(25.3%). Food stuff, textile, leather also a large percentage of companies limited by shares.

Since service sector has been designated as highest growth potential in India, the chart above gives some view. While overall share of service sector has been above 60per cent from 2004-2010, Trade, hotels & restaurant, financial, storage & Communication and community service have been contributing the highest percentage to GDP over 2004-2010. (Refer Figure III)

Factors Contributing to the Regional Variation of Growth of Companies Limited by Shares

In this section, the paper undertakes regression analysis on the regional diversity of growth of the companies limited by shares.

From Global Studies on Business Competitiveness and Doing Business in different countries as well as reviewing other literature points that emerge that it is socioeconomic as well as legal structure of the country that enables growth of the corporate. Competitive environment of a country is influenced by its Infrastructure, Health and Basic requirements, Higher education and training, Goods market efficiency, Labor market efficiency, Financial market development, Technological Readiness. While there are a number of factors that are responsible for providing smooth flows of business. They relate to problems of starting the business, intellectual property rights, developing financial contracts, ease of getting credit, and complications involved in liquidation of the company in case of eventuality. India 's overall ranking is not very encouraging though some regions and some sectors are growing impressively. We have looked at regional and sectoral variation of development of companies limited by shares and done simple graphical analyses. (Refer Table IV)

Here we have the following equation:

 Y_j = jth state's percentage share in the total companies limited by shares j=1,.....20

 X_{i} = ith factor that influences Y_{i}

Yj=aj + Xjedi +Xjelecpc+Xjpci +Xjhedupc + Xjcrdtdpst

Xji are independent factors influencing Growth of Companies limited by shares The paper takes four independent factors for statistical analysis e.g. availability of electricity normalized by population of the respective state, per capita income of the state at constant price on 2009, credit deposit ratio of each state, education indices of states calculated for the year 2011. aji's are constants for each equations, number of higher education institutes available per thousand population.

Explanation of Independent Variables

Xjedi is education indices for jth state on 2010. This has been calculated on the basis of UN data on HDI and GDI Estimates for India and the States/UTs: Results and Analysis. This source gives dat for 2006 for Human Development indices for Indian states and its constituents such as Education (Edi), per capita income indices. Indices of Edi for 2006 have been used to get annual compounded scores and then this has been used to calculate Edi indices for 2010. Edi of UN is the Index of Knowledge' based on 7+ Literacy Rate and Mean Years of Education for 15+ age group.

Xjelecpc is availability of electricity for a state normalized by population of respective state. Data on total availability of electricity are taken from General Review State-wise Energy available published by Central Electricity Authority, Govt. of India while state wise population data have been taken from census report. Availability of electricity is one basic infrastructure which is essential for the corporate growth. Studies both at global level and individual basis pointed importance of electricity for corporate growth.

Xjpci is per capita income of states Data source is census of India. This one of the factors which contribute to growth of local market which is essential for corporate growth.

Xjhedupc is the measure of higher education facilities for jth state. Data on number of Higher Education Institute from intermediate to Post Graduate and Professional colleges. In Table V this represent number of such institutions per thousand population.

Xjcrdtdpst is credit deposit ratio of different states in order to find influence of development of banking sector for the growth of companies limited by shares. Large companies need medium term and short term credits for investment and working capital requirements. They also need banking facilities for carrying out business. Credit deposit ratio of a state indicates how far bank deposits collected from that area is utilize for providing credit facilities for that area. Data has been taken from RBI source for 2010.

Table VI shows how five independent factors are correlated with each other as well as with the dependent variable which is the percentage share of each state in total companies limited by shares. Results look to be very interesting as these show that independent variable e.g. per cent age share of states in total companies limited by shares has good association with per capita income of the state, utilization of credit facilities in that state and education up to fifteen years, while it is negatively related to the availability of higher education facilities in the state.

In the next stage Multiple Regression has been fitted in the following form and regression coefficients are calculated

Ycos = Inte rcept +Xjelecpc+Xjpci + Xjcrdtdpst +Xjhedupc+Xjedi

= 6.9 – 12.33 Xjelecpc + 0.00042 Xjpci + 7.30 Xjcrdtdpst -1.00059 Xjhedupc

- 21.23Xjedi

Regression Statistics

| Multiple R | 0.830724 |
|-------------------|------------------|
| R Square | 0.690102 |
| Adjusted R Square | 0.57091 |
| Standard Error | 4.158713 |
| Observations | 19 |
| F | Significance F |
| 5.789854 | 0.005004027 |

Results are interesting as explanatory independent variables are able to explain almost 70 per cent of variation of independent variable – percentage share of the state in total companies limited by shares. F value is highly significant at one per cent level of confidence.

Conclusion

Entrepreneurial Growth is a driving force for sustainability of development. India after Globalization and liberalization has achieved faster economic growth through entrepreneurship development in service sectors such as financial service, communication, hotel management and construction. Some companies in the technology sector has grown in astoundingly high rate and been able to enter into global market. Yet can not be considerate to be having conducive macroeconomic environment for growth of entrepreneurship. Evidence of large number of growth of self employment is in no way indication of growth of dynamic entrepreneurship. In a retarded macroeconomic environment self employment grows due to lack of opportunities.

Empirical investigation in the paper finds wide variation of growth of entrepreneurship among Indian states. Regression Analysis find that almost seventy percent of diversity of development of companies limited by shares can be explained by three factors namely per capita availability of electricity, banking and bank's credit, education up to fifteen year of schooling and per capita income. The factor that explains infrastructure for higher education shows negative relations. This could indicate that higher education creates mobility and benefit of this is not exclusive for the region providing higher education facilities.

Thus the paper find that India's entrepreneurial growth and sustainably of development requires favourable macro economic environment to improve competitiveness of Indian economy along with some more emphasis of these factors.

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Table I: India's Rank in following Competitiveness Indicators: 2011-12 GCR

| Overall Comp. | | 1. Institut | 1. Institutions | | 2. Infrastructure | | 3. Macroeconomic | | 4. Health and Basic requirements | |
|------------------------------------|----------------|-------------|-------------------------|------------|-------------------|------|---------------------|------|----------------------------------|--|
| Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | |
| 56 | 4.30 | 69 | 3.84 | 89 | 3.60 | 105 | 4.30 | 101 | 5.25 | |
| | | | | | | | | | | |
| Higher education | | 6. Goods | 6. Goods market | | 7. Labor market | | 8. Financial market | | Technological | |
| and traini | nd training ef | | | efficiency | efficiency | | development | | Readiness | |
| Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | |
| 82 | 3.97 | 43 | 4.46 | 49 | 4.57 | 107 | 3.59 | 62 | 3.76 | |
| 10. Market size | | 11. Busin | 11. Business 12. Innova | | ation | | | | | |
| | | sophistica | sophistication | | | | | | | |
| Rank | Score | Rank | Score | Rank | Score | | | | | |
| 101 | 2.86 | 43 | 4.27 | 38 | 3.58 | | | | | |
| | | | | | | | | | | |

Source: Global Entrepreneurship Monitor Special Report (2011-12): A Global Perspective on Entrepreneurship Education and Training, The Global Entrepreneurship Research Association (GERA).

Table II: Doing Business in India and China: A Comparative Analysis

| | India | China |
|---|-----------|-------|
| Ease of doing business (rank) | 132 | 91 |
| Staring Business | | |
| (i) Rank | 166 | 151 |
| (ii) Procedures (number | 12 | 14 |
| (iii) Time (days) | 29 | 38 |
| (iv) Cost(% of income per capita) | 46.8 Cost | 3.5 |
| Getting electricity | | |
| (i) (rank) | 98 | 115 |
| (ii) Procedures (number | 7 | 5 |
| (iii) Time (days) | 67 | 145 |
| (iv) Cost (% of income per capita) | 216.2 | 640.9 |
| Dealing with construction permits | | |
| (i) (rank) | 181 | 179 |
| (ii) Procedures (number | 34 | 33 |
| (iii) Time (days) | 227 | 311 |
| (iv) Cost (% of income per capita) | 1,631.4 | 444.1 |
| Registering property | | |
| (i) (rank) | 97 | 40 |
| (ii) Procedures (number | 5 | 4 |
| (iii) Time (days) | 44 | 29 |
| (iv) Cost(% of income per capita) | 7.3 | 3.6 |
| Getting credit | | |
| (i) (rank) | 40 | 67 |
| (ii) Strength of legal rights index (0-10) | 8 | 6 |
| (iii) Depth of credit information index (0-6) | 4 | 4 |
| (iv) Private/Public bureau coverage (% of adults) | 15.1 | 82.5 |
| Protecting investors | | |
| (i) (rank) | 46 | 97 |
| (ii) Extent of disclosure index (0-10) | 7 | 10 |
| (iii) Extent of director liability index (0-10) | 4 | 1 |
| (iv) Ease of shareholder suits index (0-10) | 7 | 4 |
| (v) Strength of investor protection index (0-10) | 6.0 | 5.0 |
| Resolving insolvency | | |
| (i) (rank) | 128 | 75 |
| (ii) Time (days) | 7.0 | 1.7 |
| (iii) Cost(% of estate) | 9 | 22 |

Source: IFC & World Bank, Doing Business, 2012

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Table III: Percentage of Public Limited Companies and Size of Average Paid up Capital

| | Percentage of public | Average paid up | | |
|--------|----------------------|-------------------|--|--|
| Year | limited company | Capital Rs crore) | | |
| 2001-2 | 12.94519 | 0.69 | | |
| 2002-3 | 12.50059 | 0.75 | | |
| 2003-4 | 12.06213 | 0.78 | | |
| 2004-5 | 11.52477 | 0.96 | | |
| 2005-6 | 10.9457 | | | |

Source: Annual Reports, Ministry of Company Affairs, Govt. of India

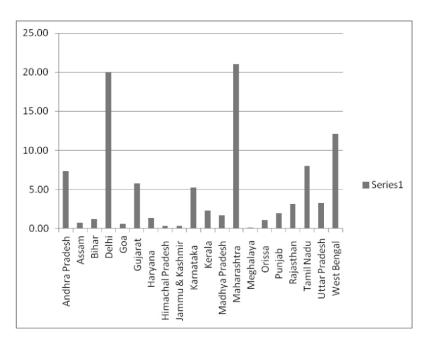


Figure I: State Wise Percentage Distribution of Companies Limited by Shares (2010) Source: Annual Report, Ministry of Company Affairs, 2011, Govt. of India

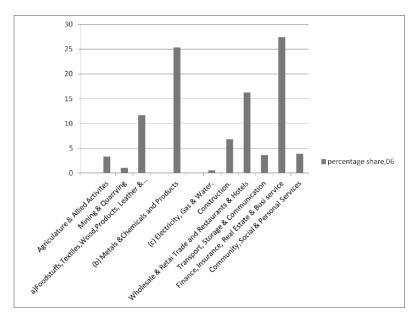


Figure II: Percentage Share of Different Sectors of Companies Limited by Shares, 2006 Source: Annual Report, Ministry of Company Affairs, 2006

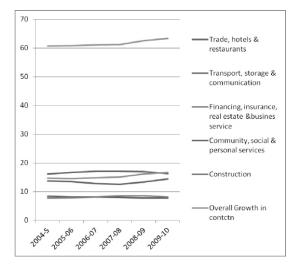


Figure III: Percentage Share of Companies Limited by Shares in Service Sector Over Years

Table IV: Basic Statistics for Regression Analysis

| State | Percenta ge share of no cos. 2010 | Electricity per capita/ kilowatt | PCI(Cont Price 2009-10 in RS | Credit/ Deposi t Ratio | Higher edu. Ins per 10k populati on | Rounde d EDI2 010 |
|---------------------|--|--|---------------------------------------|------------------------------|---|-------------------------|
| Andhra Pradesh | 7.30 | 0.89 | 36345 | 1.05 | 2.9 | 0.450 |
| Assam | 0.73 | 0.14 | 20279 | 0.37 | 2.1 | 0.630 |
| Bihar | 1.16 | 0.09 | 11558 | 0.28 | 0.62 | 0.420 |
| Delhi | 20.00 | 1.34 | 95943.0 | 0.75 | 1.2 | 0.730 |
| Goa | 0.60 | 2.17 | 89037 | 0.25 | 3.5 | 0.660 |
| Gujarat | 5.80 | 1.00 | 49030 | 0.65 | 1.7 | 0.560 |
| Haryana | 1.30 | 1.10 | 55214 | 0.63 | 2.72 | 0.550 |
| Himachal Pradesh | 0.31 | 0.94 | 40690 | 0.41 | 4.51 | 0.620 |
| Jammu & Kashmir | 0.29 | 0.77 | 26739 | 0.47 | 1.4 | 0.493 |
| Karnataka | 5.24 | 0.71 | 37464 | 0.77 | 2.8 | 0.523 |
| Kerala | 2.24 | 0.42 | 46511 | 0.64 | 1.8 | 0.702 |
| Madhya Pradesh | 1.64 | 0.49 | 19736 | 0.6 | 1.5 | 0.490 |
| Maharashtra | 21.00 | 0.85 | 57458 | 0.81 | 2.1 | 0.610 |
| Meghalaya | 0.08 | 0.51 | 31853 | 0.24 | 2.8 | 0.623 |
| Orissa | 1.03 | 0.62 | 24098 | 0.53 | 2.3 | 0.475 |
| Punjab | 1.90 | 1.32 | 43539 | 0.71 | 1.7 | 0.579 |
| Rajasthan | 3.15 | 0.57 | 23669 | 0.88 | 2.21 | 0.428 |
| Tamil Nadu | 8.02 | 0.91 | 46823 | 1.23 | 1.3 | 0.587 |
| Uttar Pradesh | 3.28 | 0.29 | 16182 | 0.43 | 0.91 | 0.480 |
| West Bengal | 12.14 | 0.37 | 30504 | 0.61 | 1.02 | 0.550 |

Table V: Correlation Matrix of the Variables

| | Ycos | Xjelecpc | Xjpci | Xjcrdtdpst | Xjhedupc | Xjedi |
|------------|----------|---|----------|---|----------|------------|
| | ******* | *************************************** | | *************************************** | | ********** |
| Ycos | 1 | | | | | |
| Xjelecpc | 0.141003 | 1 | | | | |
| Xjpci | 0.490724 | 0.843975 | 1 | | | |
| Xjcrdtdpst | 0.504969 | 0.098224 | 0.189861 | 1 | | |
| Xjhedupc | -0.30446 | 0.427838 | 0.273773 | -0.24069 | 1 | |
| Xjedi | 0.345065 | 0.452904 | 0.739503 | 0.014386 | 0.298878 | |