City Size Distributions and Hierarchy among Cities in India

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Abstract: *The article examines the pattern of distribution of cities from the framework of the theory given by Zipf (rank size rule) and Jefferson (law of primate city). The idea of urban hierarchy is core to the concept of urban system. The urban places have different population sizes and functions where one urban place may dominate another. Study of the urban hierarchy of any country helps to understand the pattern exists in the distribution of cities. For this analysis the urban population data have been used for the year 1951-2001. The analysis confirms that India's urban system is not following the rank size distribution of cities, but Indian urban system have shown primacy at regional level.*

Key Terms: Indian urban system | Urban hierarchy | Rank size relationship among cities | Urban primacy

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Introduction

The concept of Urban System was introduced by Brian J.L. Berry (1964) in his remarkable work "Cities as systems within systems of cities". Urban places do not exist in isolation. There is a whole series of different types of relationship between separate towns and cities and we use the term urban system to indicate that the individual urban centres are linked to each other (Short 1984). The urban centres play a significant role in social and economic transformation, and geographic shift of population. With the increase of population globally, towns and cities have become magnets of economic, social and political processes. 'At national level cities are part of a complex system of interrelated urban places and the key elements in economic, social and political organisation of regions and nations. The interdependence among towns and cities makes it important to view a country as a system of urban places rather than as a series of independent settlements' (Pacione 2009: 121). Urban system is defined as any network of interdependent urban places. The nature of interdependence among urban place may be economic, political, social or cultural. In the system of cities, the changes taking place in one city such as population, economy, employment structure, etc. will have consequences on other cities in the system. The idea of urban hierarchy is central to the

concept of urban system. The urban hierarchy concept considers that the urban places vary in population sizes and economic functions. The analysis of urban hierarchy mainly relates to the ranked order of cities based on different criteria, such as population size, economic power, retail sales and number of industrial workers (Kaplan et al. 2004)

The three prominent theories which provide the explanation for the distribution of cities in an urban system are: central place theory, rank size rule and the law of primate city (Das and Dutt 1993). In order to understand the pattern in the distribution of cities this paper focuses on the rank size relationship and the primacy pattern of Indian urban system.

The objective of this paper is to analyse the urban hierarchy (ranked order of cities based on population size) in post colonial India from the census data (1951-2001) and to analyse the primacy pattern and the rank size distribution of cities. The analysis of rank size distribution of cities in this paper is confined to the census 2001 data as the census 2011 data for all the city class categories has yet to come. The analysis of different city size categories using the rank size and primate city method contributes towards the understanding of

India's urbanisation processes in the post colonial era. This study helps to understand how the urban centre of different class categories are positioning themselves in the urban hierarchy.

The paper is divided into five sections. After the introductory section the second section deals with the theory of rank size relationship among cities and the theory of primate city. The third section examines the rank size relationship among cities in India. The fourth section analyses the primacy pattern in Indian urban system at national and regional level. The last section concludes the paper.

The Theoretical framework
The Rank Size Rule
Rank size rule was proposed by Zipf (1949); Zipf identified regularity in the distribution of cities of varying sizes. According to Zipf, size and number of settlement in an urban system are determined by forces of unification and the forces of diversification. This theory states that in an urban system the forces of diversification results in the concentration of population near the source of raw material in order to minimise the transportation cost. In this case the location of the settlements primarily depends upon the availability of the raw materials. As a result of forces of diversification the population would split into a larger number of small settlements as the raw materials are widely distributed. That is, the location of these small settlements would be determined by nearness to the source of raw materials. In case of diversification primary economic activities are predominant and the possibility of trade between the settlements is low. Hence in this case land becomes the basic raw material or resource.

With the advancement of the economy, the need for variety of raw materials increases and it cannot be found in one location. In this case population tends to be concentrated in a single place where all the needed raw materials can be easily accumulated. Gradually the place where the population is concentrated becomes the centre for the production of goods and services. The large settlements provide the market, so the place of production of goods and services to the consumers is minimised. Nearness to markets also results in an increase in tertiary activities. Hence in the case of unification, nearness to the market is the determining factor in the location of settlements. The case of unification is opposite to the case of diversification where the

sources of raw materials are the determining factor in the location of settlements. A large settlement constitutes a large market, hence tertiary activities tends to be concentrated in large cities. Even the secondary activities also tend to be concentrated in the large and metropolitan cities. These forces result in the emergence of a few very large cities (Das and Dutt 1993: 126). According to Zipf, it is called the forces of unification and it results in the emergence of small number of large service oriented cities. 'Diversification tends to minimise the difficulty of moving raw materials to the places where they are to be processed; unification tends to minimise the difficulty of moving processed materials to the ultimate consuming populace. If all persons in the society were located at the same point, then maximum unification would be achieved. When both the forces of diversification and unification are at work a distribution of population is presumed to occur that is at optimum with reference to both forces' (Berry and Garrison 1958: 85). In an urban system, forces of diversification and unification work simultaneously, and they determine the relationship between size and number of settlements. A rank size distribution of cities is expected to indicate the economic development and an integrated urban system (Gregory and Urry, 1985).

This theory says that if cities are ranked from largest to smallest populations, then the r ranked city is expected to have a population equal to the top ranked city divided by the rank of that city. For example, if the first rank city, that is, the city with highest population in a country is having a population of 500,000 then the 5th rank city as per the rank size rule will have the one-fifth of the population of the first rank city, i.e., 100,000. The rank-size rule says that when ranks of the cities are arranged in descending order and plotted against their populations (rank 1 being given to the largest, and so on) in a doubly logarithmic graph, a rank-size distribution results. If rank size rule fits in a country's urban system, the logarithmic graph will present a straight line.

The relation between size of the city and ranks can be expressed as: $K = P_r * r^q$, Where, K= population of the largest city, r= rank of a city, P_r= population of a city of rank r, and q= absolute value of slope of the distribution.

In logarithmic form the relation is:
$\log P_r = \log K - q \log r$

The rank size graphs for India for the year 1951-2001 has been presented with their logarithmic equations in the third section. The slope value of the theoretical rank size distribution is the magnitude of the forces of diversification divided by the forces of unification. Slope value as 1, is a balanced case in any urban system. Slope value as 1, indicates that in an urban system the forces of unification and diversification are equally distributed. It represents an integrated and stable urban system. The perfect fit of the urban population data of any urban system with the rank size model, indicates that the population of the smaller cities in that urban system follow a log liner relationship with the city with highest population. The straight line in the rank size graph indicates the state of equilibrium where the growth rate of each city size category stays the same in relation to the national trends. The slope being more than 0 and less than 1 implies the dominance of the force of diversification. In this case there is a tendency for the development of a large number of smaller towns and cities. The slope value of more than 1 implies the dominance of the force of unification.

Berry (1961), suggests the existence of rank size distribution when many forces affect the urban system in various ways. By applying systems theory into rank size study he concluded that rank size distributions are found in three types of countries: countries which have a long history of urbanisation, countries that are industrially developed, and countries that are large.

Law of Primate City
The concept of primate city was first introduced by Jefferson (1939); it gives the relationship between the population size and functions of the largest city with the other cities in a country. 'Once a city is larger than any other in its country, this mere fact gives it an impetus to grow that cannot affect any other city, and it draws away from all of them in character as well as in size. It is the best market for all exceptional products' (Jefferson 1939: 227). The largest city naturally becomes dominant within the system of towns and cities in the urban system of a country. Primate city of an urban system is exceptionally large than the second largest city. It was argued by Jefferson that primate city is super eminent not merely in size, but in national influence too. The primate city exercises its dominance in the spheres of economic, cultural, social as well as political.

The law of primate city didn't get much attention after Jefferson (London 1977), but several researchers did the rigorous work to apply the law to different regions or countries. Mehta (1964), Linsky (1965), Vapnarsky (1969), Johnston (1971), have further contributed to the primate city concept or have applied the concept. Linsky (1965) using worldwide data proposed that high urban primacy occurs most frequently in countries with small areal extent of dense population, low per capita income, export-oriented and agricultural economies, a colonial history, and rapid rates of population growth. Vapnarsky (1969) observed that 'primacy and rank-size rule is not mutually exclusive models. Rather, a perfect fit to the rank-size rule of all cities in an area except the largest is compatible with a high level of primacy' (Vapanarsky 1969: 580). El-Shakhs (1972), on the basis of analysis of 75 countries concluded that primacy and development are closely related. Haggett (1979), argued that primacy is positively related with strong economic and political forces. Mutlu (1989) analysed the determinants of urban primacy from the policy standpoint. Henderson (2002) empirically examined the internal cost of increase in city sizes, he argued that the primate cities gets more attention in terms of public investment and the government focuses more towards the improvement in the quality of life as the city size increases, this situation gradually led to the deteriorating quality of life for the non primate cities. Berry (1961) considered primacy as a feature of underdeveloped countries and the feature of the intermediate stage in economic development and rank-size one of the developed world.
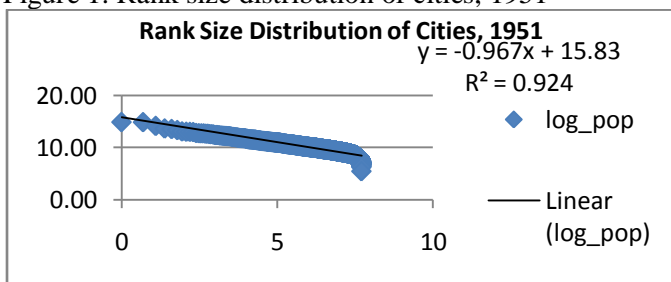
Rank Size Distribution of cities in India
This section analyses the distribution of city sizes in India for the year 1951, 1961, 1971, 1981, 1991 and 2001. To define various class categories of cities Indian censuses have consistently employed six classes of population size.

These class categories are:
Class I: 100,000 or more
Class II: 50,000 to 99,999
Class III: 20,000 to 49,999
Class IV: 10,000 to 19,999
Class V: 5,000 to 9,999
Class VI: less than 5,000

The data for town population has been taken for all the class categories, that is, for class I, class II, class III, class IV, class V and class VI. The population of these towns have been arranged in descending order, that is, rank 1 is given to the city with highest population. Then the rank size graph has been created at the national level. In the graph, X axis represents the log of the ranks of cities and Y axis represents the log of population of the cities. The analysis for ranks and population of cities has been done using the logarithmic values of ranks and population. Logarithm of ranks as an independent variable has been regressed against the population of cities as the dependent variable. The regression equation has been presented for the above mentioned years of India's urban system.

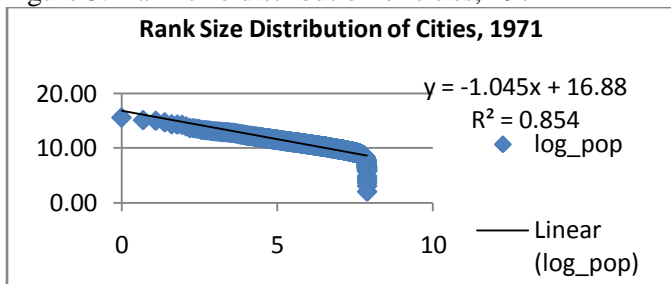Figure 1: Rank size distribution of cities, 1951

Source: Based on data published in Town directory, Census of India (2001)

Figure 2: Rank size distribution of cities, 1961
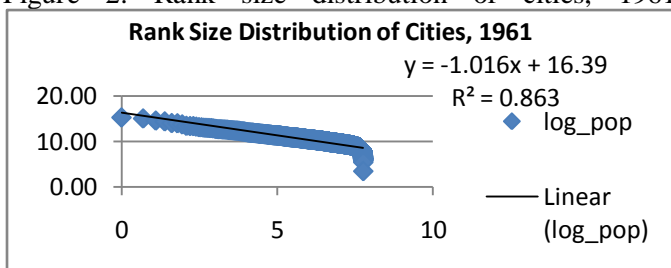
Source: Based on data published in Town Directory, Census of India(2001)

Figure 3: Rank size distribution of cities, 1971

Source: Based on data published in Town Directroy, Census of India (2001)

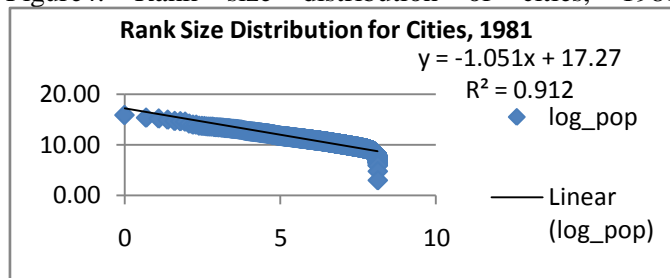Figure4: Rank size distribution of cities, 1981

Source: Based on data published in Town directory, Census of India (2001)
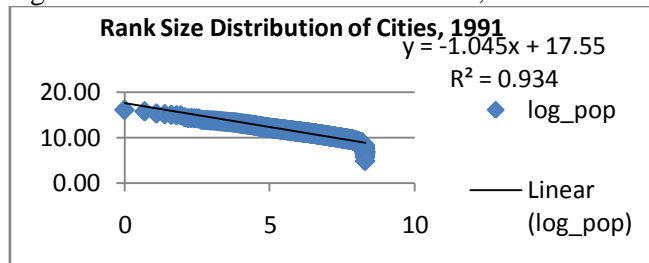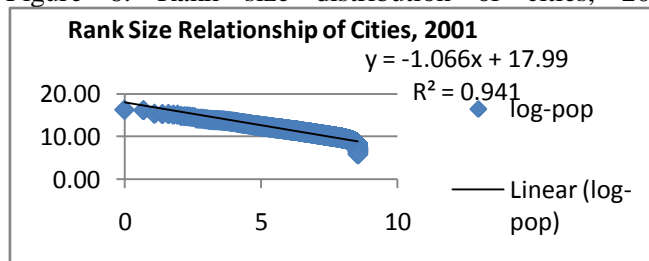
Figure 5: Rank size distribution of cities, 1991

Source: Based on data published in Town Directroy, Census of India (2001)

Figure 6: Rank size distribution of cities, 2001

Source: Based on data published in Town directory, Census of India(2001)

The visual interpretation of the rank size graph indicates that in the year 1951, the straight line has not been formed, because many small cities with very less population exists in the urban system which is shown in the graph in the form of long dropping tail and this phenomenon is highly visible in rest of the years, especially in 1971 and 1981. The number of cities with very small population has increased in comparison to 1951; this increase was highest in the year 1971 and 1981. In all these years the lines were never perfectly straight; it represents interruptions in the rank order patterns. The widely varying slope value in each year also shows interruptions in the rank order.. In the year 1971 the network of large urban places in India's urban system moved up slightly and there was highest interruption in the formation of straight line because of network of small cities in large numbers. This indicates the existence of disequilibrium between the growth of mega cities and small cities. This

implies that small cities have grown at a slower rate than the large cities. After 1971, the network of large urban places is expanding gradually in the urban system because the lines are slowly moving up. The lower tail of the graphs in each year indicates the disparity between the growth of large, medium and small cities. Observation of the lower tail of the graph for the years 1981, 1991 and 2001, indicates the decline and stagnation of small cities in comparison to large cities in the upper tail. The small cities have decreased both in numbers and population and have experienced slow growth in post independence period. The large number of small cities with a very less population disallows them to follow a log linear relationship with the large cities in Indian urban system.

Indian urban system is not following the rank size rule of Zipf in the distribution of cities at national level; it means that in contradiction to what Zipf argued, the second ranked city of India does not have the population as almost half the population of the largest city. Greater Mumbai is the largest metropolis and in 2001 its population was 16,368,084 and the second largest city Kolkata's population in 2001 was 13,216,546 had a much bigger size than one half of Mumbai. Even the fifth ranked city Bangalore had much more concentration of people than one-fifth of Mumbai.

The comparison of the urban system in India for all these years can be done in a better way using the values in regression equations. Table 1 presents the values of regression equations for the urban system of India, these values have been used to interpret the implications of India's city size distribution on the urban system.

Table 1: Regression Equations for the National City Size Distribution in India: 1951-2001

Year	Intercept	Slope (b)	R^2
1951	15.83	-0.967	0.924
1961	16.39	-1.016	0.863
1971	16.88	-1.045	0.854
1981	17.27	-1.051	0.912
1991	17.55	-1.045	0.934
2001	17.99	-1.066	0.941

Source: Based on data Published on Town Directory, Census of India (2001)
Y: Dependent variable- the logarithm of city population.
X: Independent variable- the logarithm of city rank.
R^2: co efficient of variance of Y explained by X.

The R^2 value indicates that in 1951 there was 92 percent variance in the distribution of cities. It decreased in the year 1961 and 1971 and then started increasing slightly. In 2001 there was 94 per cent variance in the distribution of cities. For all these years 1951 to 2001 the theoretical relationship between rank and population of the cities as the hypothesis given by Zipf explains less than 95 percent of the variance.

The slope value makes the picture of urban system more clear. According to Zipf the slope of the theoretical rank size distribution is the magnitude of the force of diversification divided by that of the force of unification (Zipf 1949: 366). The regression coefficient (b) measures the slope of the best-fit line.

In 1951 the slope was -0.97, it means that in 1951 the force of diversification were active in the distribution of cities. Although the population in class I towns were increasing, the forces of diversification has resulted in the emergence of large number of smaller towns and cities in the urban system. Since 1961 the slope value became greater than one which means that after 1961 forces of unification begin to dominate the Indian urban system. The regression coefficients for the mentioned years is moving upward from -.967 in the year 1951, -1.016 in the year 1961, - 1.045 in 1971, -1.051 in the year 1981, -1.045 in the year 1991 and -1.066 in 2001. The slope value was highest in the year 2001; it indicates the increasing role of forces of unification in the urban system since 1961, which resulted in the increasing domination of few large cities in the entire urban system. It shows that in post liberalisation period the forces of unification have become more dominant in determining the distribution of cities, and also based on the slope value, 2001 is the period where the urban system has made a significant move away from the theoretical rank size distribution than the previous decades.

The major four metropolitan cities of India remained the dominant cities in Indian urban system; they remained the top metropolitan cities after independence. The large urban centres like Mumbai act as the major magnets for the migrants. The secondary metros are also increasing in size as the IT revolution started in India and get manifested in the increasing number of IT companies in the cities like Pune, Bangalore and Hyderabad. These cities are becoming more popular in the recent era than the pre independence phase. It is happening because these cities are getting more attention for

the urban development, whereas the small and medium cities are not getting much attention by the government in post liberalisation period.

Primacy in India
Primacy in India at National Level
The concept of primate city as given by Jefferson was based on the fact that primate city is the largest by more than twice than the second ranked city. The primacy index has been calculated for cities of India for the year 1951, 1961, 1971, 1981, 1991 and 2001. The formula for primacy index was used as the population of the largest city divided by the population of the second largest city. This is called the two city primacy index.

The largest city in a country is the primate city when it is at least more than two times the size of the second largest city. The value of primacy index in table 2 indicates that since independence India's largest city was never a primate city; the law of primate city is not applicable for any of the census year from 1951 to 2001. Primacy index is showing a declining trend till 1981, after that it has increased first time in the year 1991 and it recorded the maximum increase for the decade of 1991-2001, though it remained less than two.

Table 2: Primacy Index in India

Year	The two city primacy index
1951	1.226
1961	1.180
1971	1.178
1981	1.115
1991	1.142
2001	1.238
2011	1.128

Source: Calculated from the census of India Data, 1951-2011

The value of primacy index is not showing the situation of primacy at national level. This is probably because in India there are four dominant mega cities Mumbai, Delhi, Kolkata and Chennai. The million plus cities like Pune, Bangalore and Hyderabad have also become significantly important in the post liberalisation period. The situation does not allow the concentration of population in one large city. India have more than one dominant city of economic and political importance, Delhi as its administrative centre, Mumbai as the financial centre, Kolkata although have lost its economic importance but until 2001 it was the second largest city of India.

Table 3: Population of India's largest urban places, 1981-2011

Cities	1981	1991	2001	2011
Mumbai	8,243,405	12,596,243	16,368,084	18,414,288
Kolkata	9,194,018	11,021,918	13,216,546	16,314,838
Delhi	5,729,283	8,419,084	12,791,458	11,412,536
Chennai	4,289,347	5,421,985	6,424,624	86,96,010

Source: Census of India, 1981-2011

In 1981, Delhi was the third ranked metropolis after Kolkata and Mumbai; their respective population were 5.7, 8.2 and 9.19 million. This was not the case of primacy. In 1991, the population of Greater Mumbai Urban Agglomeration was 12.5 million and it was the leading metropolis, but at the same time, Kolkata had the population of around 11 million and Delhi which is third in rank (Table 3) had the population of more than 8.4 million. Hence there was no case of primacy in India. In 2001 the population gap between the largest metropolis Mumbai and the second largest metropolis Kolkata has increased a bit; but it was far less than the condition of Mumbai being the primate city at national level. It was argued by Das and Dutt (1993) that 'the political, cultural and economic nerve centre of a nation tends to be the primate city. But in India, there have been several cities that functioned as the centres of national administration, economic and cultural activities at different time periods' (Das and Dutt 1993: 130). Although the comparatively decreasing importance of Kolkata made Greater Mumbai the dominant urban place, but in terms of concentration of urban population these three port cities along with the capital Delhi remain the largest urban places of India. In post independent India the secondary metros such as Bangalore, Pune and Hyderabad gained great importance because of their importance as the Information Technology hub. . So in India there are several large cities of economic and political importance. The population is concentrated in these few large cities and not in only one dominant city. Therefore the law of Primate City given by Jefferson is not applicable in India at national level.

Regional Primacy in India
The four largest urban places of India Mumbai, Kolkata, Delhi and Chennai are located in four regions; Western, Eastern, Northern and Southern region respectively. Each state wants the development of its own metropolitan city. In this

situation the regional level primacy exist in Indian urban system. The four mega cities are the largest in their respective regions. In Western region Mumbai remained the largest city and the second largest city is Ahmadabad. In Northern region Delhi remained the largest city and Kanpur was the second largest city. In Eastern and Southern regions the second ranked cities have changed positions. In the southern region Hyderabad was the second largest city in 1951, 1961, 1971, while Bangalore overtook it in 1981, 1991 and 2001.

Kolkata is showing the situation of urban primacy in eastern region. Till 2001 Kolkata was almost seven times bigger than the second largest city of Eastern region. At regional level, Kolkata remained a primate city and experienced an increase in primacy level in 2011. It was argued by Ramachandaran (1989), that the case of primacy of Calcutta is even comparable to that of the United Kingdom or other cities of world with primate city characteristics. West Bengal's second largest city, Asansol, was indeed very small in relation to Calcutta; it was 1/25th the size of Calcutta in 1981 (Ramachandaran 1989). Kolkata was created by the colonisers as a capital location for the administrative, military and business activities. It became the major reason for primacy of Kolkata. For so many years it remained the most industrialized metropolis of India and hence there was a continuous flow of population towards this city. Kolkata merged as the largest city of Eastern region; it further produced the agglomerative effect to the entire region. Being the largest urban place of the region, Kolkata became an important city in terms of employment, education and a centre of many such opportunities for the migrants. These processes contributed to Kolkata's emergence as a primate city. The high level of primacy of Kolkata led to the situation of scarcity of other big towns in the eastern regions and at the same time resulted in the low level of urbanisation in Eastern India. In fact it was observed by Ramachandran (1989) that in Calcutta's hinterland there are so few towns and cities that one town of at least 20,000 populations serves a rural population of 500,000 or more. Calcutta remained the only million-plus metropolis in the region until 1981. Each of the three other regions of India, North, West and south had at least two million-plus cities in 1981. Kolkata historically got very little competition from any other city of eastern region because of its economic and administrative importance and this made Kolkata the largest city of eastern region. The case of Kolkata also explains

the relationship between primacy and low level of urbanisation in the region (Das and Dutt 1993).

Table 4: Regional Level Primacy Index in India, 1951-2011

Regions	Eastern	Western	Northern	Southern
1951	9.78 (Kolkata)	3.60 (Mumbai)	1.70 (Delhi	1.30 (Chennai)
1961	10.02 (Kolkata)	3.44 (Mumbai)	2.43 (Delhi)	1.38 (Chennai)
1971	11.60 (Kolkata)	3.43 (Mumbai)	2.86 (Delhi)	1.77 (Chennai)
1981	10.00 (Kolkata)	3.24 (Mumbai)	3.50 (Delhi)	1.47 (Chennai)
1991	10.02 (Kolkata)	3.80 (Mumbai)	4.14 (Delhi)	1.25 (Chennai)
2001	7.74 (Kolkata)	3.62 (Mumbai)	4.75 (Delhi)	1.13 (Chennai)
2011	9.18 (Kolkata)	2.90 (Mumbai)	5.59 (Delhi)	1.02 (Chennai)

Source: Calculated from the data of Census of India, 1951-2011.
Note: The figures in the bracket represent the primate/largest city of the region.

Primacy exists in the Western region, although comparatively less than that of the eastern region. The level of urbanisation in western region is much higher in comparison to the eastern region. Since 1961 there is a slow decline in the primacy of Mumbai in western region, the exception was the period of 1991 when the primacy value increased, but it decreased again in 2001. This is primarily because of the increasing number and size of million plus cities in this region. In western region Ahmadabad and Pune are the two major million plus cities which are competing with Mumbai.

In the southern region Chennai was never a primate city, although the relative primacy of Chennai has declined after 1981. The other two major cities of this region are giving close competition to Chennai, these cities are Bangalore and Hyderabad. These two cities became very significant in this region because of their importance as IT hub in post liberalisation period. The primacy index has declined since 1981, and in 2011 it became 1.02. The second ranked city of the region is Bangalore and it has given a high competition to Chennai. The 2011 census reported the population of Chennai as 86,96,010 and the population of Bangalore as 84,99,399, the regional primacy index was lowest in this year.

Delhi in the Northern region is continuously rising as the primate city. It is the only city among the four largest cities whose primacy index has not declined since 1951. Delhi is the capital city of India and the central government is focusing more for the infrastructure, industrial and over all development of the city. Delhi also has many educational

institutions, all these leading to its increasing steps towards primacy.

Conclusion

The rank size model given by Zipf and the law of primate city by Jefferson helps to understand the distribution of cities and hierarchy among cities in an urban system. The perfect rank size of cities distribution in an urban system indicates economic development and an integrated urban system, whereas, the primate city size distribution indicates underdevelopment and imbalances in distribution of cities.

The distribution of cities in Indian urban system reveals that class I cities have grown at a higher rate than the small cities. The rank size distribution of cities as suggested by Zipf (1949) where the forces of unification and diversification have balanced each other, has never been achieved in Indian urban system. It indicates that the large cities are growing at a much faster rate in comparison to the small cities. It disallows the small cities to follow a log linear relationship with the large cities of Indian urban system. The rank size rule also explains the size distribution of settlements in relation to economic activities. The disequilibrium between the growth of small and large cities as explained by rank size graphs and slope values indicates dominance of large cities and the developed regions in the Indian urban system.

The absence of rank size rule in the distribution of cities in Indian urban system indicates the possibility of primacy in India. The analysis of primacy in India's urban system leads to two important facts. Primacy doesn't exist at national level but Indian urban system is characterised by primacy at regional level.

The urban primacy at national level has not been achieved because there is more than one large and economically and politically important metropolitan cities existing in Indian urban system. The four mega cities Mumbai, Delhi, Chennai and Kolkata don't allow the concentration of urban population in one urban centre. In the post liberalisation period Pune, Hyderabad and Bangalore have emerged as other economically significant metropolises. The importance of the emerging metropolises as major IT hubs of India has resulted in the concentration of urban population in these urban centres as well. So at national level, no city in India exercises dominance over the entire nation, because, as a result of colonial history and post liberalisation, India has more than one dominant cities of national significance. Therefore urban population is concentrated in these significant urban centres.

The primacy exists at regional level as all the three regions confirmed primacy except the southern region. In Eastern region Kolkata is the classic example of primate city. Mumbai is the primate city in western region. The colonial history of India seems to be a major reason for the regional primacy. During British rule the port cities Bombay, Calcutta and Madras were the leading administrative, commercial and industrial cities. In the colonial period these three port cities made significant contribution in the maritime trade because of their geographic location. Delhi became the capital of British Indian empire in the year 1911, this resulted in the development of New Delhi. In northern region Delhi as a primate city is growing rapidly. In southern region Chennai is the largest urban centre but it was never the primate city and the relative primacy of Chennai has declined after 1981. In this region absence of primacy is because of the rapid growth of Bangalore and Hyderabad as IT hubs. Chennai, Bangalore and Hyderabad remained the major cities of Southern region. In post independence period, the individual state governments are focusing on the development of their own economically important cities. This has resulted in the formation of urban primacy at state level.

As argued by Jefferson (1939), the primate cities are super eminent not only in size, but also in national influence. The regional and state level primacy in India indicates the same influence of the primate city. Over a period of time these cities have become the dominant economic and political nerve centre of their state and region as well as the major destination for migrants.

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