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### THE ANALYSIS OF CITY SYSTEM IN TURKEY ON THE SCALE COUNTRY-REGION AND CITY

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#### **1. Introduction**

Size Order Rule, has recently gained its value in expressing the properties of an city system. According to this rule, the order of the sites according to their sizes is shown on the x axis and their population is shown on the y axis. The expression of city size in this way has two important reasons. The first reason is the convenience of the determining the borders of the city and application of this rule. The second reason is the, in the observations done by Zipf cities are ordered on the line whose inclination is minus one (-1) and the balance between centralization and being widespread is provided.

Suitability of city order in the United States according to this rule, that United States is considered to be one of the most advanced countries caused this rule to be kept for years in the literature of the settlement systems. On the other hand, it is not clear the relationship between city system order and development level. Although city order is formed by sizes of individual cities, size is dependent on the cities on the system. Whereas since this theory does not have any spatial data, it is not correct to form a direct relationship between the development of a city system and its size order. Still, researches have been still doing researches about this field.

In this study, size order rule was applied on the scale of country, region and province and partly spatial dimension was tried to in the second part, size order rule was applied on the scale of whole country, Turkey. In the third part, size order rule was applied on the scale of region. In the fourth part, this rule was applied on the scale of city. In the last part, the evaluation of all these applications was done.

### 2. The Application of Size Order Rule On The Scale of Country

The application of size order in Turkey was done in accordance with the principle comparing with other developing countries in the city order 1945, Istanbul was primary city but later it decreased. The reason for it was that Istanbul was the capital city of the Ottoman Empire and after the second world war, It was the biggest city in Turkey and it had a capacity more than it needed.

In the first years of Republic, there were lot of efforts to develop Anatolian cities and investments were mostly taken place in Anatolian. This caused the distribution of the population evenly and decreased the property of Istanbul to be primary city.

Moreover, according to size order in 1975, the population of Istanbul was fair less than expected. After 1980, in the population control of big cities, the same sensetiveness was not shown and the population of Istanbul started to increase again. So it is primary city in the list again.

In general, city order on the scale of country resembles the one in the western countries, But it has been observed that medium size cities have been developed enough. This is closely related with the inability of the country to industrilialize adequately. Present industry has been mainly situated in big cities and encouraged people to migrate to these big cities.

When industrialization of the country increases more and more factories will be opened in medium size cities and urbanization of the country will be in a balanced way. Small cities have taken placed in the list according to size order in proper way.

The order of cities according to their sizes in Turkey, can also be seen in other countries. India is a good example for it. Historical background and trading routes throughout the history caused the distribution of urbanization in a balanced way.

#### 3. The Application of Size Order Rule Regionally

The application of size order rule regionally resulted in three ways.

- 1. The regions under control of primary city.
- 2. In terms of region capacity, regions having no center,
- 3. Regions where region itself or its sub regions have center.

Marmara, Central Anatolian, Aegean, Mediterranean and Southeastern Anatolian are in the first group. Istanbul has an important place in order of the cities in Marmara Region. Other cities in this region have a perfect distribution.

Similarly Ankara is the primary city in order of cities in Central Anatolian. The rest of the cities have regular order. In Aegean Region Izmir is the primary region. Unfortunately, these cities are far from the expectancy of size order rule. Since a lot of people migrate to these primary cities than middle size cities following them. Small cities have perfect order.

In East Mediterranean Region, Adana and yn West Mediterranean Region, Antalya are primary cities. The rest of the cities in East Mediterranean have an appropriate order. Whereas cities in West Mediterranean did not develop enough.

In Sought East Anatolian Region, Gaziantep and Diyarbakr have taken placed in order but cities developed after they did not develop in the same manner.

Black Sea Region is in the second group. Since the cities in East and West Black Sea Region have narrow hinterland, they do not have region center in terms of region capacity.

East Anatolian is in the third group. In this region, cities were ordered in steps according to their sizes so neither in terms of region nor in terms of sub region, centers

have developed. The reason for this is that topography is mountainous so economic and social relationships between sub regions have not developed well.

## 4. Application of Size Order Rule on Provinces.

Size order rule applied to provinces to evaluate the distribution of urbanization in the provinces.

In Bursa that is one of the most important provinces in Marmara Region, according to size order rule, orders of the cities show a perfect distribution. In This order, center of Bursa is not primary city but all the cities have sizes over 45 degree's inclination. In this result, industry and service sectors that are over this capacity of city and developed a lot play a major role.Balkesir settlement show a balanced distribution but center in Balkesir is not primary city.

In Aegean Region. Orders of cities in Izmir show a perfect distribution like Bursa. In Izmir settlements have urbanized more than capacity.

In Black Sea Region, because of the fact that the mountains are parallel to the sea the hinterlands of the cities are narrow and cities can develop Trabzon according to size order rule have shown appropriate distribution. Though, center of Ordu could not develop enough in the capacity.

In West Black Sea Region, settlements in Kastamonu, has proper order but in general it developed less than enough. In Bolu the major district developed over its capacity, but the whole province did not develop enough.

In Adana, settlements in general are appropriate but seven big districts developed over their capacities.

In Eastern Anatolian, in Erzurum center are developed enough though, other districts are less developed.

### 5. Conclusion

In this study, size order rule has been applied on the scale of country, region and province. The results can be used in development of country in a balanced way in the studies that will be done afterwards. If the distance factor is taken into consideration step by step more detailed results can be optioned.

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