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# Assessment of the Relationship Between City and Port in Mersin, Turkey

## *Mersin’de Kent ve Liman Arasındaki İlişkinin Değerlendirilmesi*

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### ABSTRACT

It is important to understand the characteristics of a 21<sup>st</sup> century port city in terms of the spatial relations of the city and its port. In this study, the port/city relations between the container port of Mersin in Turkey and Mersin city itself are examined. The purpose of this study is to examine which class of port city Mersin falls within and how spatial relations are established at the intersection of the port and urban area in Mersin. The Relative Concentration Index is used for evaluation at the regional scale, as used in port city classifications. The method reveals the importance of port and urban relations at a regional level in the urbanization processes of coastal cities. It is seen that Mersin Port has been at the level of a Hub since 2007 among the container ports of Turkey. ‘Hub’ is among the port city classes for which spatial planning policies in the port/city intersection area should be emphasized. It is important to integrate the revival projects with planning strategies and policies to engender a ‘living urban port area’ image for the transition zone between city and port.

**Keywords:** Port-city, Waterfront, Relative Concentration Index

### ÖZ

21. yüzyıl liman kentinin özellikleri, limanlar ve buldukları şehirlerle mekânsal ilişkilerini tanımlama açısından önemlidir. Bu çalışmada, Türkiye’nin konteyner limanları arasında yer alan Mersin Limanı ile Mersin kenti arasındaki liman-kent ilişkileri incelenmiştir. Bu çalışmanın amacı, Mersin’in hangi liman-kent sınıfında olduğunu ve Mersin’de liman ve kentsel alanın kesiştiği noktada mekânsal ilişkilerin nasıl kurulduğunu incelemektir. Bu inceleme için, liman-kent sınıflandırmalarında kullanılan bölgesel ölçekte değerlendirilen yöntem olarak Bağıl Yoğunlaşma Endeksi (RCI) kullanılmıştır. Yöntem, kıyı kentlerinin kentleşme süreçlerinde bölgesel düzeyde liman ve kent ilişkileri konusunu ortaya koymaktadır. Mersin Limanı’nın Türkiye’deki konteyner limanları arasında 2007 yılından bu yana “Aktarma Merkezi” değerlerine sahip olduğu görülmektedir. “Aktarma Merkezi”, kentsel mekânsal alanda liman-kent kesişim alanında üretilecek mekânsal planlama politikalarının vurgulanması gereken liman-kent sınıfları arasındadır. Mersin, potansiyel bir liman-kent imajına sahip, kıyı kenti karakterini ve alanın görünürlüğünü sağlamak için yeni planlama araçlarına ihtiyaç duymaktadır. Kent ile liman arasındaki geçiş bölgesinin “yaşayan kentsel liman alanı” imajı kazandırmak için canlandırma projelerinin planlama stratejileri ve politikaları ile bütünleştirilmesi önemlidir. Mekânsal planlama alanında kıyı kentlerinin kent kimliklerinde, iç bölgelerdeki kentlerden farklı kıyı kentlerinin potansiyellerinde işlevsel olarak baskın rollere sahiptir. Günümüz kent kimliğine vurgu açısından, liman ağırlıklı şehirlerde limanla yaşayan şehir merkezlerini ön plana çıkaran plan kararları önemli konular arasında yer almaktadır.

**Anahtar kelimeler:** Liman-kent, Liman bölgesi, Bağıl Yoğunlaşma Endeksi

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## 1. INTRODUCTION

Ports and cities are always interacting in urban systems. This interaction plays a role in the development of the city from a socio-economic structure to a socio-cultural and socio-demographic structure. A port that contributes significantly to the growth of the city not only provides economic development to the city but also contributes to its social and cultural development (Bilgin et al., 2012; Meyer, 1999; Pearson, 1998; Polanyi, 1963). Maritime trade, which grew stronger after the 20<sup>th</sup> century, has affected port cities through globalization. Trade has forced port cities to undergo structural change economically, spatially, and technologically (Hayuth, 1982; Voorde, 1995). The port areas of coastal cities have been defined as gateways to the city. The definition has been adapted to the modern fields of politics, socio-economics and informatics today. Therefore, port cities vary in terms of geographical location, urban morphology, and historical and cultural structures (Beaven et al., 2016; Macdonald, 2018; Schubert, 2012).

Port and urban connections grew stronger until the mid-20<sup>th</sup> century due to the influence of the industrial age, but by the 1990s these connections were weakening. Port/city relations, which strengthened after the 20<sup>th</sup> century, were affected by maritime trade and this forced spatial changes. Therefore, policies have developed adaptive approaches to strengthen the relationship between port and city. Revitalisation work is being carried out for the coastal areas of the cities that have become debilitated and the coastal areas whose connection to the city has been weakened (Bilgin et al., 2012; Van der Knaap & Pinder, 1992). The revived zones become urban competition areas (Charlier, 1992). The aim of the revitalisation interventions is to create socially and economically competitive spaces in the intersection of the city and port (Ducruet, 2006; Hoyle, 1997; Hoyle & Pinder, 1992; Lee et al., 2008; Meyer, 1999; Van der Knaap & Pinder, 1992). It is important that a city has the image of a port city, rather than the economic structure of a more standard city, which depends on how the urban zone in the port and hinterland region provides an intersection economically, socially, and spatially, and how it creates a social space and

affects the city form (Boulos, 2016). Features of the port city can be seen not only in the cities where the port is actively used in the global trade network, but also in cities that experienced periods in history when port city activities were dominant (such as Genoa) (Bilgin et al., 2012; Bird, 1973; OECD, 2014). In this context, the image of ports for local areas, due to their global location and technological possibilities, have varied (Ducruet, 2006; Hoyle & Pinder, 1992; Van der Knaap & Pinder, 1992).

In the reconstruction process between the port and the city, coastal cities have taken a leading role in maintaining port and urban vitality. Port cities are diverse. In addition to being a phenomenon arising from the close relationships between cities, ports have become a symbol of the unity of environment and social dimension, which reflects the modern world economy and blends historical accumulation and cultural diversity (Hoyle, 1997). In the interactions of the spatial relationship between the port and the city (**Table 1**), the convergences and divergences of the port and the city differ according to periods and geography. Geographically, there are differences between Western port/city relations and Asian port/city relations. Starting in the 19<sup>th</sup> century in Europe, unusable port areas could be found due to the need for economic and spatial growth of ports. After that, port activities began to separate from urban settlement, and revitalisation activities were seen in the old port areas within the city. However, after the 1980s, urban settlement areas and urban port areas, which are the intersection area where port activities are integrated, started to occur. In Asia, ports grew and developed as global hubs in various stages (colonial period, warehouse use, free trade period) starting from a small port and settlement relationship and continuing to the 1980s. While the evaluation of economic relations and port volume are prioritized in the port cities that are considered hubs, the role of urban port regions as new urban living areas in urban and port intersection zones begins to come to the fore in European port city models. For this reason, policies are being carried out in the 21<sup>st</sup> century for strengthening port and city connections (Hoyle, 2000).

Port cities have been the strategic nodes of main trade regions from the past to the present. The importance of these

**Table 1:** Stages of the evolution of Asian port city and Western port city interfaces (Hoyle, 1989; Lee et al., 2008).

| Period  | Asian Hub Port City Consolidation Model | Western Port City Model         |
|---|---|---------------------------------|
| <b>Ancient-medieval to 19<sup>th</sup> century</b>      | Fishing coastal village                 | Primitive port/city             |
| <b>19<sup>th</sup> to early 20<sup>th</sup> century</b> | Colonial cityport                       | Expanding port/city             |
| <b>Mid-20<sup>th</sup> century</b>                      | Entrepot cityport                       | Modern industrial port/city     |
| <b>1960s - 1980s</b>                                    | Free trade port city                    | Retreat from the waterfront     |
| <b>1970s - 1990s</b>                                    | Hub port city                           | Redevelopment of the waterfront |
| <b>1990s - 2000+</b>                                    | Global hub port city                    | Renewal of port/city links      |

nodes is increasing, in particular, because 90% of trade in Asia and Europe is via the sea. Port city development in node areas varies based on the commercial history of the port and the city, geographical structure, degree of competitiveness, location on the route, and inner or outer sea opening situations. The multi-link between the port function and the urban form ensures the integration of urban development and maritime trade with its entire history (Ducruet & Lee, 2006; Hoyle, 2000; Lee et al., 2008). Among the most influential factors affecting the development of the port in the coastal city, or its role as a port city, are the different types of transportation (road, rail, etc.) to the regions in the hinterland, the provision of strong infrastructure, the connection of the port with the inland and open sea, the spatial relationship between the city and the port, the geographical location, and economic and political reasons. Being at an important point in maritime transport (point-to-point, hub-and-spoke) in international transport relations also affects the competitiveness of the port. For instance, Western port cities such as Hamburg, Barcelona, and Amsterdam, which have the image of a port city, have advantages such as trade, transportation, and strategic location. The ports, which are part of the city, have either been integrated with the city or moved out of the city over time. Spatial development strategies are implemented within the scope of glocalization policies to protect or reveal the image of the port city. Urban use functions such as innovation zones, mixed-use zones, commercial functions, and offices are the spatial equivalents of these strategies relating to structural transformation of the coastline. Some examples of urban transformation projects carried out in the port area are 22@Barcelona and HafenCity (HafenCity, 2006; Meyer, 1999; Merk & Hesse, 2012; Pages Sánchez, 2015; Scholar, 2012; Schubert, 2012). Spatial revitalisation policies aim to bring the spaces in the port areas into common use and integrate the port activities with the functions within the city. The goal is to integrate the functions for the city and the port to provide the highest benefits, such as spatial quality, social relations, environmental integration, and economic gain from the region where city-land and port-water intersect (Bilgin et al., 2012; Gleave, 1997; Pages Sánchez, 2015; Van der Knaap & Pinder, 1992; Schubert, 2012).

Economic national input-output indices of port clusters according to the OECD (2014) offer a useful comparison: Le Havre/Rouen with the value of 2.47, Marseille with the value of 2.01, Mersin with the value of 1.79, Hamburg with the value of 1.71, Antwerp with the value of 1.18, and Rotterdam with the value of 1.13. The port of Mersin and the port of Hamburg have approximate values. The port cities have more dominant roles

within the national services (OECD, 2014). Therefore, understanding the characteristics of the 21<sup>st</sup> century port city is important in defining ports in Turkey and their spatial relations with the cities in which they are located (Akova, 1999). In this study, the port/city relations between Mersin Port (a container port in Turkey) and city are examined. The purpose of this study is to examine in which port city class Mersin can be categorized and how spatial relations are established at the intersection of the port and urban area in Mersin. Thus, the Relative Concentration Index is used for evaluation of port city classifications on a regional scale. The method reveals the importance of port and urban relations at the regional level in the urbanization processes of coastal cities. The Relative Concentration Index put forward by Ducruet (2006) classifies port cities for the regional share of throughput by the regional share of population in the evaluation of relations between the city and the port. According to this index, it is seen that Mersin Port has had the values to be classified as a hub since 2007. ‘Hub’ is among the port city classes for which spatial planning policies should be applied in the port/city intersection area within the urban spatial zone. Therefore, it is one of the urban developments that drives the future planning policies of coastal cities.

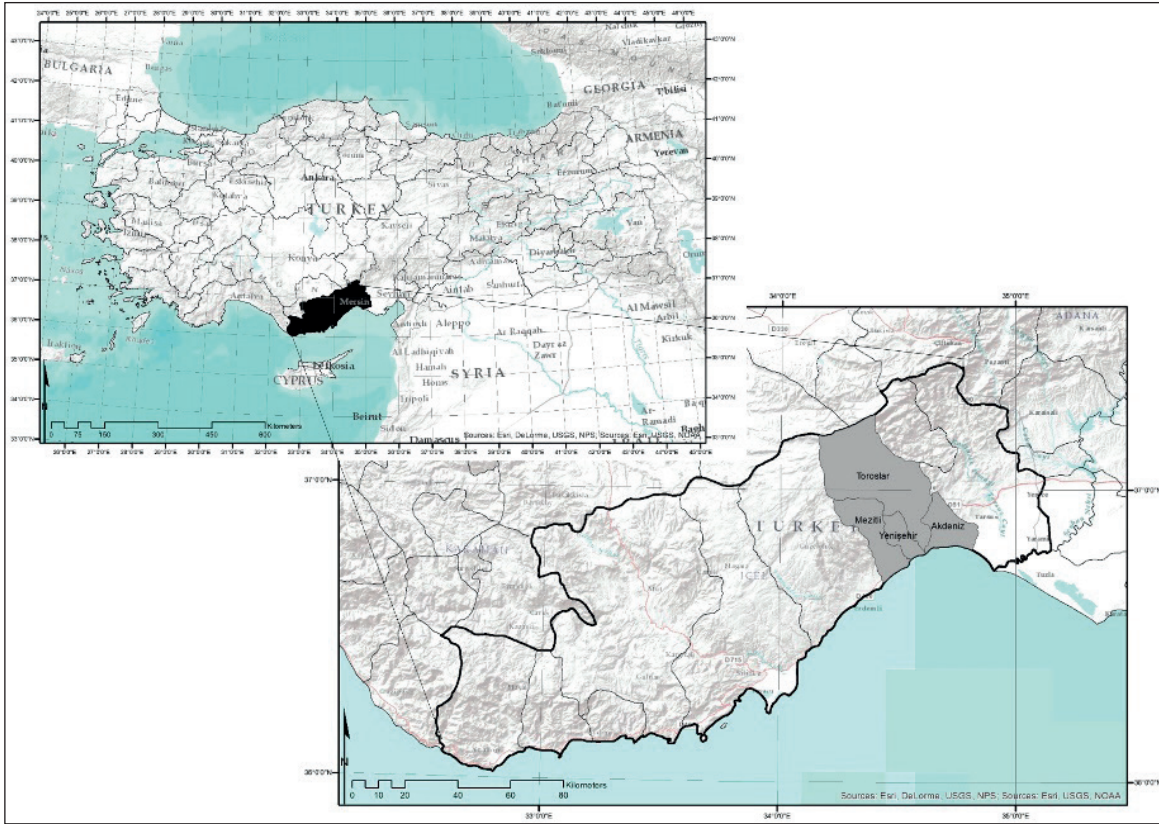
## 2. METHODOLOGY

This section covers the study area, data, and methodology subsections.

### 2.1. Study area

Mersin is a coastal city on the Mediterranean Sea in southern Turkey (**Figure 1**). Mersin is a commercial and port city that emerged in the late 19<sup>th</sup> century and developed within its established borders until the mid-20<sup>th</sup> century, maintaining its port city image during this period (Akova, 1999; Özer, 2004).

The population growth rate, which was at approximately 15% in Mersin, was above average for Turkey as of 1935 (TUIKb, 2020; MERSIN, 2020). With the increase in the population growth rate since the 1950s, the population of Mersin province has increased approximately eight times and the population of the city centre has increased approximately seven times. By 1980, due to rural migration, the urban population of Mersin began to increase (TUIKb, 2020; TUIKc, 2020). Mersin has had above average values in Turkey from the past to the present in terms of population ratio. Moreover, it is seen that there is an increasing trend in the industrial and services economic activities and a decreasing trend in agriculture



**Figure 1:** Location of Mersin and central districts.

according to gross domestic product shares in Mersin's main economic activities. Since 2004, it has had an above average value in the services activities of Turkey. The upward trend in industrial activities in Mersin is increasing by more than the average in Turkey. A rapid decrease in the contribution of agricultural activity was observed (TUIKa, 2020). As a result of the urbanization process, Mersin central districts have doubled in spatial area since the 1980s and are approximately 120 km<sup>2</sup> today (CORINE, 2019).

Since the 1990s, the central settlement of Mersin has shown linear growth from the port area to the outer regions in the west and north-west direction opposite the port region (Figure 2). After the 1960s, Mersin's spatial port city identity began to disappear with the planning decisions implemented in the city, as the city and the port began to operate as two separate functions. In addition to being a developing city with its port and free zone, industrial areas, and commercial organizations, Mersin has developed the image of an industrial city over time, engaging in a variety of trade and service activities (Akova, 1999; MTSO, 2001). Mersin land use consists of residential areas in and around the region where the port and central business areas are concentrated (Figure 2).

Mersin has an international port due to its geographical location, capacity, wide hinterland, and multi-mode transportation connections (DTO, 2020; UBAK, 2014) (Figure 3). Mersin Port, located in the east of the city, was opened in 1962 (MP, 2020). In addition, Mersin has strong transportation links by road and rail to Ankara, Gaziantep, Kayseri, Kahramanmaraş, and Konya, which are among the industrialised cities of Turkey (Akova, 1999; KGM, 2022; UAB, 2022). Internationally, it also has transport links with neighbouring countries such as Syria, Iraq, and the Commonwealth of Independent States. One of Turkey's first Free Zones is located in Mersin. The Free Zone, according to Free Zones Law No. 3218 issued in 1985, offers advantages in global competition among port regions (ASBAS, 2020; MESBAS, 2020). In addition, the presence of a logistics village in Mersin/Yenice is among the factors that reduce the spatial usage density of Mersin Port on the city.

## 2.2. Data

The study used two variables to calculate the Relative Concentration Index (RCI). The values of Twenty-foot Equivalent Unit (TEU) of Turkey's container ports and urban



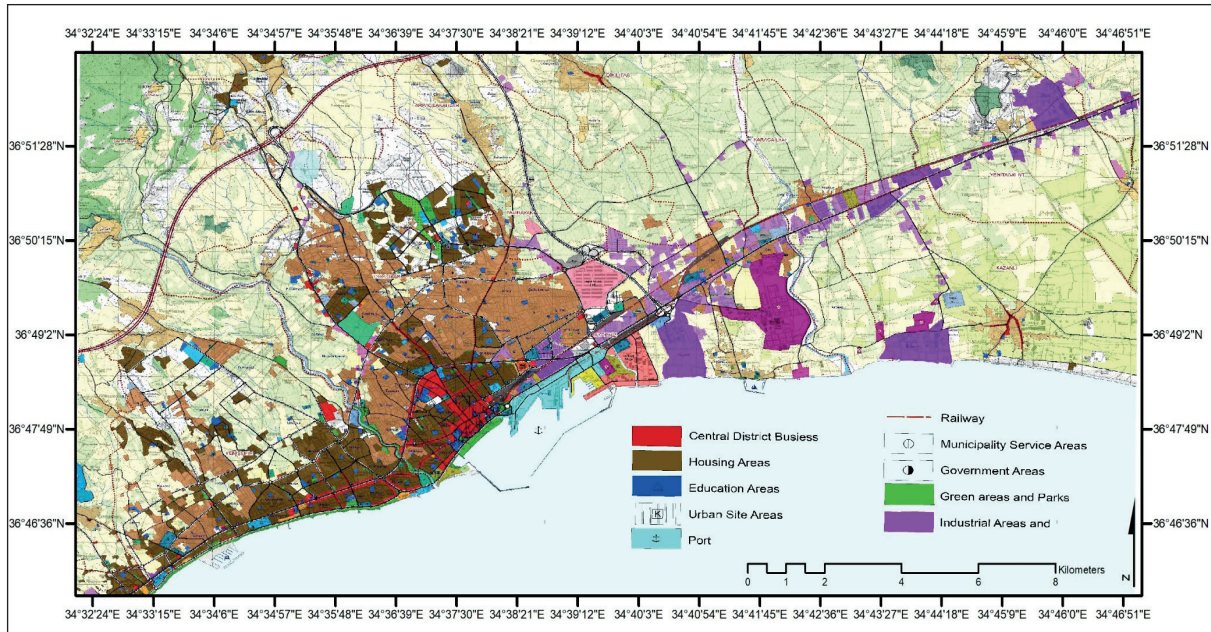


Figure 2: Land use in Mersin.

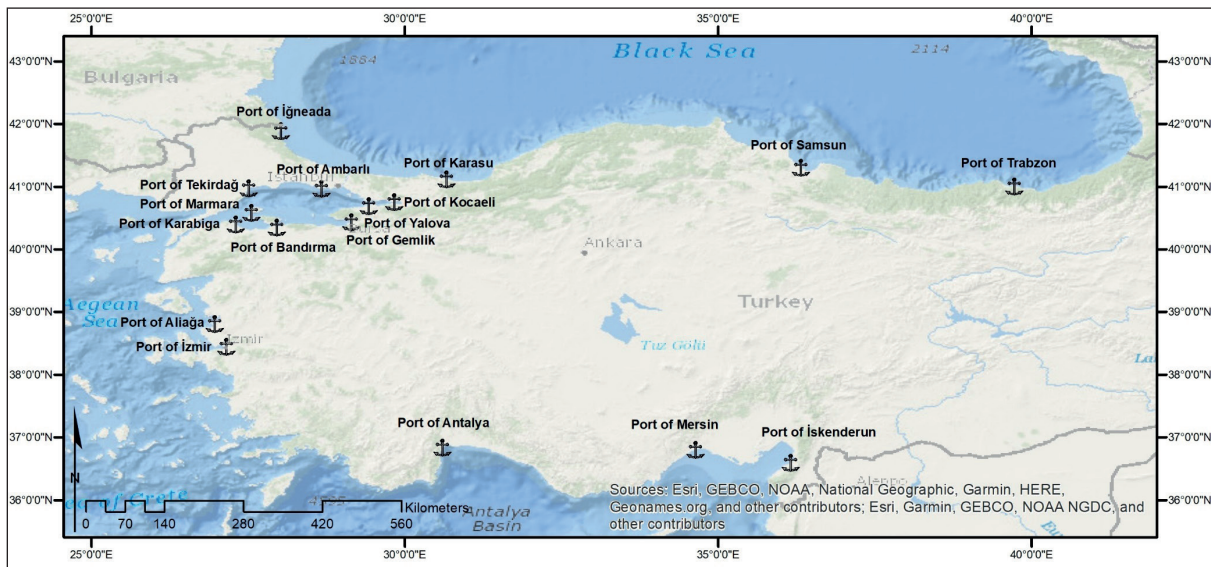


Figure 3: Location of container ports in Turkey.

population of cityports are presented in **Table 2** (TUIKb, 2020; UAB, 2020). These values show that Mersin Port has risen from the 4<sup>th</sup> to 2<sup>nd</sup> row since 2007. In terms of TEU values, Mersin Port has the highest value among the ports in the southern region of Turkey (**Table 2**).

### 2.3. Method

There are variable definitions of the concept of port city in the literature. Waterfront areas define the interface between port function and the broader urban environment, but they are

problematic and controversial definitions (Hoyle, 2000). A port city is described as one in which port activities have important roles in the economic structure of the city. In addition, the interaction zone in the hinterland of the port city is also effective in defining the concept of a port city. Quantitative measurement of the role of the port and the city in the region will provide input in the importance of the port city role of the coastal city. The Relative Concentration Index (RCI) is one of the quantitative method tools used in establishing the association between port and city (Ducruet & Lee, 2006; Lee et al., 2008) (**Figure 4**). The Relative Condensation Index refers to the ratio between TEU

**Table 2:** TEU and urban population of container ports in Turkey.

| Port Authorities     | TEU          |      |              |      |               |      | Urban population |      |            |      |            |      |
|----------------------|--------------|------|--------------|------|---------------|------|------------------|------|------------|------|------------|------|
|                      | 2007         |      | 2013         |      | 2019          |      | 2007             |      | 2013       |      | 2019       |      |
|                      | value        | %    | value        | %    | value         | %    | value            | %    | value      | %    | value      | %    |
| Ambarlı and İstanbul | 2.289.830    | 50.0 | 3.460.207    | 43.8 | 3.148.120     | 27.2 | 12.573.836       | 67.0 | 14.160.467 | 65.0 | 15.519.267 | 65.1 |
| Mersin               | 799.532      | 17.4 | 1.367.134    | 17.3 | 1.854.312     | 16.0 | 825.299          | 4.4  | 840.418    | 3.9  | 1.035.632  | 4.3  |
| Kocaeli              | 132.563      | 2.9  | 807.757      | 10.2 | 1.715.193     | 14.8 | 820.482          | 4.4  | 930.397    | 4.3  | 1.069.373  | 4.5  |
| Tekirdağ             | 1.826        | 0.0  | 1.602        | 0.0  | 1.413.962     | 12.2 | 161.136          | 0.9  | 179.239    | 0.8  | 204.001    | 0.9  |
| Aliağa               | **           | **   | 466.009      | 5.9  | 1.132.480     | 9.8  | ***              | ***  | 80.948     | 0.4  | 96.974     | 0.4  |
| Gemlik               | 403.628      | 8.8  | 669.305      | 8.5  | 861.657       | 7.4  | 98.085           | 0.5  | 101.389    | 0.5  | 113.493    | 0.5  |
| İskenderun           | 476          | 0.0  | 148.016      | 1.9  | 680.120       | 5.9  | 306.594          | 1.6  | 245.083    | 1.1  | 248.380    | 1.0  |
| İzmir                | 869.335      | 19.0 | 683.607      | 8.7  | 541.679       | 4.7  | 2.486.076        | 13.2 | 2.641.548  | 12.1 | 2.738.964  | 11.5 |
| Antalya              | 62.865       | 1.4  | 216.221      | 2.7  | 150.678       | 1.3  | 913.568          | 4.9  | 1.161.148  | 5.3  | 1.395.458  | 5.9  |
| Samsun               | **           | **   | 33.362       | 0.4  | 67.426        | 0.6  | ***              | ***  | 605.319    | 2.8  | 706.331    | 3.0  |
| Bandırma             | **           | **   | 23.404       | 0.3  | 18.220        | 0.2  | ***              | ***  | 143.117    | 0.7  | 156.787    | 0.7  |
| Trabzon              | 21.593       | 0.5  | 21.258       | 0.3  | 5.783         | 0.0  | 292.513          | 1.6  | 306.286    | 1.4  | 328.457    | 1.4  |
| Toplam*              | 4.582.267.50 |      | 7.899.933.50 |      | 11.591.837.50 |      | 18.773.694       |      | 21.799.921 |      | 23.831.649 |      |

Port operations below 1% are not shown.

\* Sum of TEU values of all container ports and urban population values

\*\* no data

\*\*\* The urban populations of ports without TEU data are not included.

Port Authorities in 2007 and 2013 were considered according to their activity status in 2019.

The ports of Çeşme, Bartın, Rize in 2007 are not shown.

The ports of Marmara Island, Karabiga, İnebolu, Taşucu, Ünye, Bartın in 2013 are not shown.

The ports of Marmara Island, Karabiga, Yalova, Karasu, İğneada in 2019 are not shown.

Ports with a handling value below 1000 are not shown.

Urban populations included in areas where ports are located:

Ambarlı and İstanbul: Province of İstanbul

Mersin: Toroslar, Mediterranean, Yenişehir, and Mezitli districts

Kocaeli: Körfez, Derince, İzmit, Gölcük, Başiskele, and Kartepe districts

Tekirdağ: Süleymanpaşa district

Aliağa: Aliağa district

Gemlik: Gemlik district

İskenderun: İskenderun district

İzmir: Balçova, Bayraklı, Bornova, Buca, Gazimir, Karabağlar, Karşıyaka, Konak, and Narlıdere districts

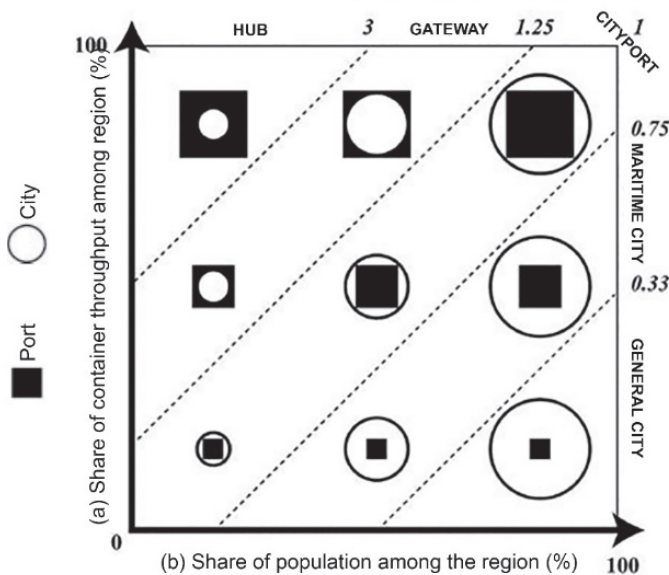
Antalya: Aksu, Döşemealtı, Kepez, Konyaaltı, and Muratpaşa districts

Samsun: Atakum, Canik, İlkadım, and Tekkeköy districts

Bandırma: Bandırma district

Trabzon: Ortahisar district

Marmara Island: Okullar, Hürriyet, and Cumhuriyet neighbourhoods



**Figure 4:** Relative Concentration Index (RCI) (Ducruet & Lee, 2006, 112).

values, which are port activities, and the urban population. The index is formulated as follows:

$$RCI = \left( \frac{TEU_i / \sum TEU}{pop_i / \sum pop} \right)$$

$TEU_i$ : Amount of TEU (Twenty-foot Equivalent Unit) in  $i$  city

$pop_i$ : Urban population in the region where the port is located in  $i$  city

The Relative Concentration Index values between the port and the city correspond to the classifications expressed in **Figure 4**. Coastal cities with an RCI value below 0.33 are classified as ‘general city’, those between 0.33-0.75 are classified as ‘maritime city’, those between 0.75-1.25 are classified as ‘cityport’, those between 1.25-3.00 are classified as ‘gateway’, and those with a value of 3.00 and above are classified as ‘hub’. As a result of RCI, the following classifications are obtained: (i) ‘general city’

and ‘sea city’, where port activities are not dominant; (ii) cities where there is an equally functional city/port relationship, where they take on the role of ‘cityport’; (iii) the role of port city as a ‘hub’ and ‘gateway’ comes to the fore in the case of predominant port activity in the city (Ducruet & Lee, 2006). From the general city to the hub, there is a range of changes from the predominantly urban functions in the city to the dimension where the port functions are more dominant. Cityport values state that port and city functions are balanced within the urban system.

### 3. FINDINGS

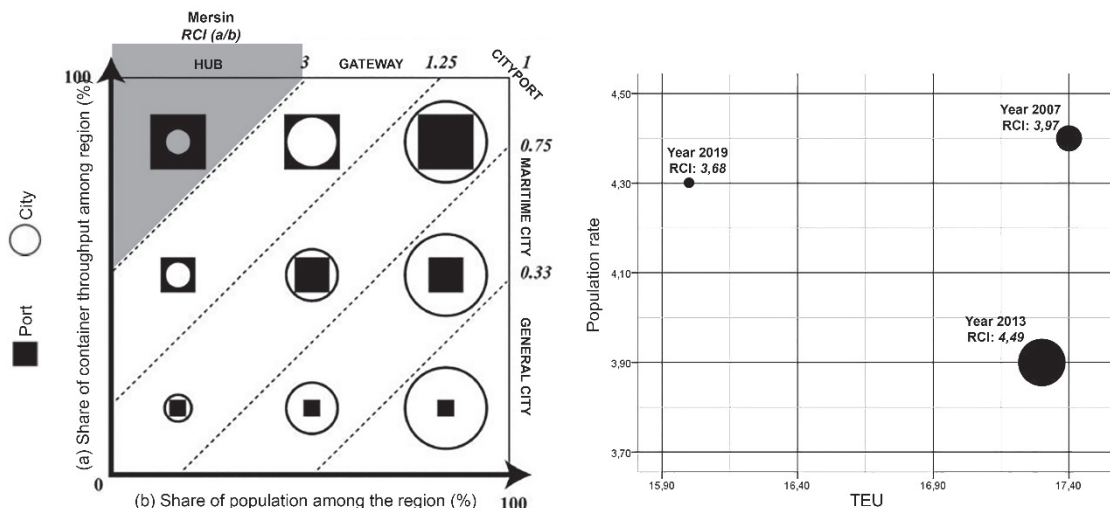
City and port relationships on the urban spatial area over time are among current research topics (Charlier, 1992; Hoyle, 2000; Lee et al., 2008; Williams, 1992). The Relative Concentration Index has been used to quantitatively express the city’s relative position compared to other container ports within the country, within the scope of the port. TEU values, covering economic

effects and population values, which are the most important factors that provide input to spatial values, have been used in the calculation of this index. Turkey’s major container ports are Istanbul (Haydarpaşa & Ambarlı), Izmir, Mersin, and Kocaeli, in addition to the minor container ports of Hatay, Antalya, Balıkesir, Bursa, Yalova, Sakarya, Tekirdağ, Kırklareli, Samsun, and Trabzon (DTO, 2020; UBAK, 2014) (Figure 3). In this study, the RCI values of Turkey’s container ports and cities and the RCI classifications of Mersin over time were obtained.

When the Relative Concentration Index has a value above 1, it means that there is a trend towards dominance of the port in the city. On the other hand, when the index is towards a value lower than 1, it means that urban functions are more dominant in the urban systems. Ports in the range of 1 to 3 can be evaluated in the same classification as both ‘gateway’ and ‘hub’. Accordingly, Mersin’s RCI values were 3.97 in 2007, 4.49 in 2013, and 3.68 in 2019 (Table 3, Figure 5). Since 2007, Mersin has been in the

**Table 3:** The Relative Concentration Index values and classification based on Port Authorities in Turkey.

| Port Authorities     | RCI   |       |       | Classification of RCI |               |               |
|----------------------|-------|-------|-------|-----------------------|---------------|---------------|
|                      | 2007  | 2013  | 2019  | 2007                  | 2013          | 2019          |
| Ambarlı and İstanbul | 0.75  | 0.67  | 0.42  | Cityport              | Maritime city | Maritime city |
| Mersin               | 3.97  | 4.49  | 3.68  | Hub                   | Hub           | Hub           |
| Kocaeli              | 0.66  | 2.40  | 3.30  | Maritime city         | Hub           | Hub           |
| Tekirdağ             | 0.05  | 0.02  | 14.25 | General city          | General city  | Hub           |
| Aliğa                | ***   | 15.89 | 24.01 | ***                   | Hub           | Hub           |
| Gemlik               | 16.86 | 18.22 | 15.61 | Hub                   | Hub           | Hub           |
| İskenderun           | 0.01  | 1.67  | 5.63  | General city          | Gateway       | Hub           |
| İzmir                | 1.43  | 0.71  | 0.41  | Gateway               | Maritime city | Maritime city |
| Antalya              | 0.28  | 0.51  | 0.22  | General city          | Maritime city | General city  |
| Samsun               | ***   | 0.15  | 0.20  | ***                   | General city  | General city  |
| Bandırma             | ***   | 0.45  | 0.24  | ***                   | Maritime city | General city  |
| Trabzon              | 0.30  | 0.19  | 0.04  | General city          | General city  | General city  |



**Figure 5:** Relative Concentration Ind.



‘hub’ class according to classification due to its RCI values. The ‘hub’ classification, which has RCI values higher than 1.25, refers to specialized port activities. Mersin’s port activities are more dominant than the city identity.

According to Ducruet & Lee (2006), the globally-implemented RCI index does not specify a significant measurable region because the hinterlands the ports serve are locally and regionally competitive. In support of regional competitiveness, in a study on thirty Mediterranean ports by Polyzos & Niavis (2013), Mersin Port ranked second among Turkish ports according to the score ratings covering the competitiveness of the ports after Ambarlı Port (Polyzos & Niavis, 2013). The rankings of RCI values (**Table 3**) obtained in this study show similarity based on the study by Polyzos and Niavis (2013).

Mersin’s port-oriented redevelopment strategies were not seen in Mersin’s agenda or local spatial policies; the city is instead positioned for urban-oriented redevelopment. However, Mersin has a huge potential image of port city as a hub. The physical area of Mersin Port is expanding, although port-urban planning is required (rather than port redevelopment) in terms of urban spatial policies.

#### 4. CONCLUSION

Western Port cities and Asian Hub Port cities have shown spatial differentiation in the relationship between port and city. In Western Port cities, planning policies were carried out as part of a restructuring to bring lost port areas back into the urban economy. Asian Hub Port cities, on the other hand, continued as two separate functions: city and port.

Social and economic targets should be evaluated together in coastal cities where port activities are dominant in the urban system. In this context, the image of the city and the appearance of the city gain importance within the process of glocalization. Structural transformation on the coast is a paradigm for urban development policies. Evaluation of the port and the city should be considered in a common context from past to future through these interventions in coastal areas. Waterfront policies are the controversial interface between port function and the urban environment.

In contrast to the revival interventions in European port cities with their industrial revolution heritage, Mersin is of the model of Asian Hub Port cities, becoming active after the 1960s and developing as a new port city. It has shown an increasing number

of industrial and port activities over time. Rather than revitalizing Mersin’s port city zone, there is a necessity for planning policies to increase the attractiveness of transition regions in reflecting the urban image, particularly in areas where the port area and other urban functions spatially intersect.

Mersin has common characteristics with many global ports in today’s competitive conditions. For Mersin, which has a potential port city image, new planning tools are needed to ensure the coastal city character and visibility of the space. It is important to integrate revival projects with planning strategies and policies in order to make the transition zone between the city and the port a ‘living urban port area’.

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