



Coastal China

LEARNING OBJECTIVES

- ★ Recognize the variation in how China defines different geographical regions.
- ★ Understand the geographical setting and historical development of the coastal region.
- ★ Recognize the coastal region's shared characteristics and geographical variability.
- ★ Learn the history of Shanghai's development.
- ★ Develop an understanding of the economic geography of the Yangtze River Delta region.
- ★ Recognize Hainan as a unique province in the region.

KEY CONCEPTS AND TERMS

regionalization scheme;
coastal development policies;
intraregional variability;
Yangtze River Delta region;
research and development (R&D);
growth pole development policy;
primary, secondary, and tertiary sectors;
unequal Treaty of Nanking;
concession districts;
transnational corporations (TNCs);
foreign direct investment (FDI);
spatial agglomeration; "Hawaii of China"

REGIONS IN CHINA

This is the first of three chapters in which we take a regional approach to study specific regions within the Chinese territory (see Chapter 1 for a brief discussion of the two major approaches in geography—"systematic" and "regional"). Unfortunately, there are no official regional definitions in China similar to the definitions of the nine census regions used in the United States.¹ How, then, are regions in China defined?

China has used region as a spatial planning concept to formulate numerous regionalization schemes. Since 1949, these schemes have reflected various political and economic concerns. For example, Mao's attempt to reduce unequal development between the coastal and inland regions led to the development of a scheme that included six economic regions. During the first Five-Year Plan, about two-thirds of government-initiated industrial projects were allocated to the interior region. In the mid-1960s, the intensification of the Cold War between China and western countries put national security at the top of Mao's agenda. As a result, a radical three-region scheme was adopted. The country's military and critical industries were shifted to the central and inland regions.

Since 1976, Mao's radical policies have been replaced with economic development policies, which seek to "let a small number of people get rich first." In this context, a new three-region division—east, central, and west—and a coastal development strategy was introduced. Despite the fact that this regionalization scheme received widespread acceptance among scholars and policy makers, government authorities developed their own schemes for specific purposes. For instance, when the National Bureau of Statistics of the People's Republic of China (PRC) reports census data for the nation, it organizes the data into six regional groups.² Beijing, Tianjin, Hebei, Shanxi, and Neimenggu form a group; Liaoning, Jilin, and Heilongjiang constitute another group; and Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, and Shandong form a third group. Three other groups include several southern provinces, provinces/autonomous regions in the southwest, and provinces/autonomous regions in the northwest. However, these regions are not commonly used for other governmental functions. The National Bureau of Statistics has also defined four economic regions³: east (Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, and Hainan); central (Shanxi, Anhui, Jiangxi, Henan, Hubei, and Hunan); west (Neimenggu, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Xizang, Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang); and northeast (Heilongjiang, Jilin, and Liaoning). These various regional schemes not only demonstrate inconsistency between government departments, but also confuse researchers and students studying China.

In this book, we use a relatively simple three-region scheme. This scheme is mainly geographical, but also takes into account the similarities among areas in terms of economic conditions, population, and cultural characteristics. Our three-region scheme consists of the coastal region, the interior, and the peripheral or border region (see Figure 10.1). We discuss the coastal region in this chapter. In the next chapter (Chapter 11), we focus on the peripheral region, covering areas near the Chinese border to the north, west, and south. Geographically between the coastal and peripheral regions is the central region, but we do not dedicate a chapter to this region, as many of its important and interesting aspects are already covered in other chapters. Instead, we focus in Chapter 12 on Chinese territories outside the mainland. These territories include the two special administrative regions (SARs) of Hong Kong and Macau, as well as Taiwan, which the PRC regards as part of China. Clearly, these territories are not spatially linked (contiguous), but they



FIGURE 10.1 The three-region scheme we have adopted for this book: coastal, central, and peripheral.

exhibit many similarities in terms of history, current political situation, and future relationships with the Chinese central government (i.e., the PRC).

Located at the center of Asia, China borders 14 countries to the north, west, and southwest on land. However, given its huge territory, the remaining border is a coastline of 14,500 km to the east and southeast⁴ (Figure 10.1). With more than 36,000 km of territorial boundary, slightly less than 40% is coastline, providing access to the Pacific Ocean through the Yellow Sea in the north, the East China Sea to the east, and the South China Sea to the south and southeast (Plate 6). Areas along the coastline not only have the locational advantage of ocean access, but they also include the estuaries and delta regions of three major rivers: the Huang He (Yellow River), the Yangtze River, and the Zhu Jiang (Pearl River). These delta regions are rich in alluvial soil, which is generally fertile. As a result, agricultural productivity in these delta regions has been relatively high, and therefore these regions have the capacity to support relatively large populations.

This coastal region includes any administrative unit near the coast or with a coastline. This regional definition is similar to the coastal region adopted by Wei (2004). The extent of this region, starting from the north, includes Hebei, the two municipalities of Beijing and Tianjin, Shandong, Jiangsu, the municipality

of Shanghai, Zhejiang, Fujian, Guangdong, and Hainan. Although Liaoning is a province with a coast, it, Heilongjiang, and Jilin are often grouped together as the “north-three provinces” because they share many characteristics (see Chapter 11). Therefore, Liaoning is not included in our definition of the coastal region and is only mentioned once or twice in this chapter. Guangxi shares a small portion of the Chinese coastline to the south, but it is an autonomous region, and the coastal impact on the region is relatively insignificant. Therefore, we also do not include Guangxi in the coastal region, and it is not discussed in this chapter. Geographically, the two SARs of Hong Kong and Macau, as well as Taiwan, which have administrative status similar to that of a province, belong to the coastal region; however, Hong Kong, Macau, and Taiwan are discussed in Chapter 12, as noted above. Plate 6 highlights the relevant administrative units in this region.

In this chapter, we emphasize the importance of the coastal region to China. The physical setting of the region is reviewed first. Then we highlight some of the similarities and differences within the region. The importance of the coastal region is not accidental; it has been cultivated in recent Chinese history, particularly by economic development policy. We discuss relevant issues related to the region’s growth and strengths. The coastal region is also characterized by the presence of two major economic engines: the delta regions of the Pearl and Yangtze Rivers. We focus here on the situation in the Yangtze River Delta, with Shanghai at its center. The chapter also provides a brief overview of Hainan—a province that is often ignored, partly because of its peripheral location, but that occupies a special niche in the increasingly important Chinese tourist industry.

PHYSICAL SETTINGS OF THE COASTAL REGION

The north–south geographical extent of the coastal region is defined by Hebei province in the north and Hainan province in the south. The latitudes range from slightly above 40 degrees North to 17 degrees North. This latitudinal range is equivalent to the spatial extent from Massachusetts and Connecticut in the north to the southern tip of Florida into Cuba and Jamaica. The southern tip of the Chinese coastal region is below the Tropic of Cancer (i.e., 23.5 degrees North); the island province of Hainan and a significant portion of Guangdong province are therefore in the tropical climate zone. This climate is characterized by hot summers with frequent thunderstorms and mild to cool winters with no clear dry season, although the summers are wetter than the winters.

The northern end of the region, Hebei province, is in the temperate climate zone. Winter can be cold at such a high latitude, especially when the region is under the influence of the cold air masses from Siberia in the far north. However, its proximity to the ocean allows the water to have a moderating effect, keeping the region from extreme climatic conditions. Ocean water off the coast is usually warmer than the temperature on land during winter, and therefore it raises the temperature of the coastal region. The summer situation is the opposite, with cooler water off the coast, reducing the summer temperatures from hot to warm.

Climate along the coastal region is very much affected by the powerful monsoon climate, a climatic system characterized by a reversal of wind direction between summer and winter (see Chapter 2 for a fuller description). During winter, wind blows from the frigid continental interior toward the coast, creating occasional cold fronts sweeping into the region. During summer, wind blows from the cooler oceans inland, creating sea breezes that moderate the hot summer temperature. Associated with the summer monsoon is the occasional formation of typhoons. Like hurricanes in the Atlantic Ocean, typhoons are tropical depressions (low-pressure cells) that form over the oceans. When they approach the continent or make landfall, they may bring disasters and significant amounts of rainfall. People living in the coastal region often have to endure this type of natural disaster. Evacuations along coastal and lowland areas are quite common during the typhoon season.

Overall, the coastal region in China does not have extreme or unbearable climatic conditions. Compared to the interior parts of China, where arid, desert climates (such as that in Xinjiang) or rugged terrains (such as that in Xizang) are found, the coastal region has physical conditions relatively favorable to human settlement. The coastal region also has moderate relief with relatively low elevations. North of Zhejiang province, the coastal lowland includes the delta regions of the two main rivers, the Huang He and Yangtze. The coastal area from Hebei to Zhejiang is relatively gentle, with no major mountain ranges (refer to the terrain map in Plate 1). Some of the areas near the river deltas are low-lying and thus have been historically subject to flooding. These areas also have the most fertile soil—partly because of the frequent flooding, which brings alluvium from the rivers to land to support the intensive agricultural system. The coastal areas of Zhejiang, Fujian, and part of Guangdong are more rugged, even though the region does not have major mountains. The delta region of Zhu Jiang (the Pearl River Delta) in Guangdong province is another major agricultural area with both desirable climate and landscape.

The coastal area has easy access to the oceans. East of Hebei and the two municipalities of Beijing and Tianjin is Bohai (*hai* [海] in Chinese means “sea”), which is the bay leading to the Yellow Sea and the East China Sea (Plate 6). The rest of China’s coastline in the northeast is along Korea Bay in Liaoning province, which shares its international boundary with North Korea. The East China Sea and South China Sea surround the rest of the coastal region, with the Gulf of Tonkin adjacent to Vietnam at the western end of the ocean. The narrow Taiwan Strait between Taiwan and the mainland has been a political and military flashpoint for decades, with several islands heavily guarded by troops on both sides. Many major cities along the coastal area serve as seaports to facilitate trade and commerce. Although we do not include Liaoning province as part of the coastal region, its famous port, Dalian, at the southern tip of the Liaodong Peninsula,⁵ has historically been an important naval base and provides convenient access to the Yellow Sea and then the East China Sea. Farther south is another famous seaport, Qingdao, which used to be spelled “Tsingtao” (this is now the name of a popular Chinese beer and brewery). Qingdao is in the eastern tip of the Shandong Peninsula next to the Yellow Sea. The city serves as a major seaport and also a naval base. Many other major cities

are found near major bodies of water, such as rivers (e.g., Nanjing in Jiangsu and Hangzhou in Zhejiang) or lakes (Suzhou in Jiangsu), in this coastal region.

Despite the tremendous variation in the physical environment along the coastal region, this area has several consistent characteristics—including its relatively low-lying relief, strong agricultural potential, and (in recent decades) immense economic power. The rest of this chapter discusses some of these strengths in greater detail.

ECONOMIC DEVELOPMENT POLICY AND ITS IMPORTANCE TO THE COASTAL REGION

Out of the 31 major administrative units in China (excluding Hong Kong, Macau, and Taiwan), only 10 are found in the coastal region. However, this region contains an exceptionally large number of politically and economically important cities. Figure 10.2 shows the major cities found in the coastal region (and in nearby provinces). Three of the four municipalities directly under state control are in the coastal region: Beijing, Shanghai, and Tianjin. All of the cities designated earliest as special economic zones (SEZs) are coastal cities: Zhuhai, Shenzhen, Shantou, and Xiamen. Several of the 20 largest Chinese cities (see Chapter 6, Table 6.1) are found in this region, and four are seaports: Shanghai, Shenzhen, Dalian, and Qingdao. In terms of its number of administrative units and its area, the coastal region is relatively small. However, it has disproportional significance in the Chinese economy and history. Its significance in today's Chinese economy is partly attributable to the economic policies adopted in the past several decades.

Coastal Development Policies

The development of modern China's coastal region has been closely tied to the overall economic policy of the Chinese central government and various political movements in recent Chinese history. In the early Communist era, Mao Zedong was desperate to eliminate the development gap between the coastal and inland regions. He said:

In the past our industries were concentrated in the coastal regions. . . . This irrational situation is a product of history. The coastal industrial base must be put to full use, but to even out the distribution of industry as it develops we must strive to promote industry in the interior. . . . Without doubt, the greater part of new industry should be located in the interior so that industry may gradually become evenly distributed. (1977, pp. 286–287)

Radical measures followed that emphasized local industrial production of all kinds, whether or not local conditions were favorable for such production. The Cultural Revolution not only created massive social protests, but sent many urban dwellers, including businessmen and intellectuals, to rural farming areas for



FIGURE 10.2 Major cities in the coastal region and in nearby provinces. The special administrative regions (SARs) of Hong Kong and Macau are also included in this figure, although they are discussed in detail in Chapter 12. SEZ, special economic zones.

“rehabilitation.” This caused major disruption to the rebuilt postwar urban economy, particularly in the highly urbanized coastal region. Overall, the strategy was to shift emphasis away from the coast to the interior, in order to achieve more balanced development and to reduce the influence of the colonial and capitalist centers along the coast. Thus the development of coastal areas was not favored during the early Communist era.

Mao’s death marked the beginning of a new era of “rational” economic reform, which to a large degree was initiated by Deng Xiaoping. Agricultural reform included the household responsibility system in which farmland was leased to farmers, giving them the incentive to produce more to increase income. On the business side, township and village enterprises (TVEs) were created, as described in Chapter 7. These production units were essentially private enterprises, owned and operated by the local jurisdictions. A market mechanism was also embraced in the new development era. Furthermore, the central government decided to accelerate the economic growth of the coastal region, realizing that it had many locational advantages over the interior. Accepting the economic principle of “comparative advantage,”⁶ the Chinese government stimulated industrial development and trade in the coastal region, believing that these were effective means to lift the Chinese economy overall. Another major idea behind this shift was the “growth pole” development policy, or the idea that wealth accumulated in the coastal region would eventually trickle down to the less developed interior and therefore benefit the entire country.

One of the effective policies adopted early in the economic reform era was to establish the SEZs, mainly in southern China near the Pearl River Delta. Rules in these zones were relaxed so that local governments could attract foreign business to set up production facilities in China, taking advantage of cheap labor and other factors. Initially, four SEZs (Shenzhen, Zhuhai, and Shantou in Guangdong province, and Xiamen in Fujian province) were established; the great success of these four was envied and demanded by other jurisdictions. More SEZs were soon set up along the coastal region, and many port cities were opened to foreign investors.

The National Importance of the Coastal Region

Among the 20 largest cities in China (refer to the 20 largest cities according to the UN in Chapter 6), nine are in the coastal region. These nine cities together have a total population of almost 65 million, approximately 56% of the population in the 20 largest cities in 2008. The total population in the coastal region was almost 550 million, according to the 2010 census. That accounts for more than 38% of the total Chinese population, but the area of the coastal region is only about 9.7% of Chinese territory. Given the relatively small area and the large population size, this region has a population density of almost 554 people per square kilometer (km²), versus 97 people/km² for the rest of the country in 2010. Table 10.1 includes some statistics comparing the coastal region with the rest of the country.

TABLE 10.1. Selected Statistics Comparing China as a Whole, Averages for the Coastal Region, and Averages for the Rest of the Country

| | Countrywide | Coastal region (average by units) | Rest of country (average by units) |
|--|---------------|--------------------------------------|---------------------------------------|
| Population density (per km ²) (2000/2010) | 131.46/141.01 | 484.53/554.48 (by region) | 93.72/96.80 (by region) |
| % Nonagricultural population (2000/2010) | 24.73/29.14 | 34.52/36.30 | 25.09/29.85 |
| % Age 6 years and older with no education (2000/2010) | 7.75/5.00 | 6.55/3.91 | 11.16/7.10 |
| % Age 6 years and older with college education (2000/2010) | 3.73/9.53 | 6.03/13.90 | 3.52/8.76 |
| % of Population in Han ethnic group (2000/2010) | 91.53/91.60 | 96.55/96.39 | 79.42/79.69 |
| % of R&D expenditure of GDP (in 2009) | 1.7 | 2.12 | 1.07 |
| Average earnings, 2006 (in yuan) | 20,856 | 25,338 | 18,263 |

Note. The statistics for the coastal region and the rest of the country are statistically different at the 90% confidence level (except for the nonagricultural population proportions in both years). Calculations are based on the fifth (2000) and sixth (2010) population censuses in China. Other calculations are based on special topic statistics provided by the National Bureau of Statistics of China (www.stats.gov.cn/tjsj/pcsj/rdzyqc/decrdzyqc).

Besides having nine of the 20 largest Chinese cities, the coastal region is also relatively highly developed, with significant manufacturing and commercial activities. The percentage of the population engaged in nonagricultural activities was more than 36% in 2010 in the region. Although this percentage is higher than the almost 30% for the rest of the country, the difference is not statistically significant (Table 10.1). Related to the level of development is education. Only 3.91% of the population 6 years old and older in the coastal region received no education in 2010, versus 7.10% for the rest of the country. More than 13.90% of the population 6 years old and older received at least a college-level education in this region, but only 8.76% of this group in the rest of country received that same level of education. Economic development is often stimulated by research and development (R&D) activities. In the coastal region, slightly more than 2% of total gross domestic product (GDP) was spent in R&D activities, almost twice the percentage for the rest of the country. Not surprisingly, the average earned income per person in this region was over 25,000 yuan, much higher than the average of 18,263 yuan for the rest of the

country. Another interesting characteristic of the coastal region is the dominance of the Han ethnic group, with an average of 96.39% of the population. In the rest of the country, including all the autonomous regions, the average percentage of Han was only 79.69%.

To summarize, the coastal region is relatively well developed economically and has large numbers of major cities, including three of China's four independent municipalities. The population is relatively homogeneous and well educated, and its ethnic composition is dominated by the Han. Many of them are employed in non-agricultural sectors with relatively high income. But they are confined to a relatively small region, enduring high population density. Nevertheless, not all provinces in the region are equally prosperous. They vary tremendously in their historical and political legacies. A point to note is that the differences between the coastal region and the rest of the country narrowed between 2000 and 2010. This is evidence (supporting the growth pole development policy) that the benefits of development have been trickling from the coastal region to the interior.

HISTORICAL AND ECONOMIC VARIATIONS WITHIN THE COASTAL REGION

The coastal area is the most developed region in China, with major political and economic engines that have run exceptionally well in the past several decades. However, its current prosperity is not just the result of the Chinese government's development policy enacted during the past several decades. The region's success is also due to its deeply entrenched role in the political history of China.

Historical and Political Clout

The nine largest Chinese cities found in the coastal region are, in descending order of population size, Shanghai, Beijing, Guangzhou, Tianjin, Shenzhen, Dongguan, Nanjing, Jinan, and Qingdao. Quite a few of these cities (Shanghai, Guangzhou, Tianjin, Nanjing, Jinan, and Qingdao) and others in the coastal regions were once "treaty ports" some of which, like Shanghai, have "concession districts." That is, because of the terms of treaties signed in the 19th century, China had to make concessions to foreign powers and experienced occupation by these powers. The foreigners, however, brought industrial technologies with them. Therefore, these cities and the coastal region as a whole were more accustomed to industry and trade, and more ready to be engaged in the global economy, than the interior part of the country.

Three coastal cities are currently provincial capitals (Guangzhou, Nanjing, and Jinan). However, the three political powerhouses are Beijing, Tianjin, and Shanghai—municipalities that enjoy an administrative status equivalent to provinces and autonomous regions. Many of these cities were capitals of China in the past, and their historical importance has been carried into the present.

The rest of the large coastal cities are important from a different perspective. Qingdao in Shandong province, the smallest of these cities, was once a concession city occupied by Germany after foreign powers demanded the opening of Chinese seaports in the Qing dynasty. The two large southern cities of Shenzhen and Dongguan are economic powerhouses in the south, but have no important history and were not of any political significance. Geographically, there are three subregional clusters within the coastal region: Beijing–Tianjin is the political center; Shanghai–Jiangsu–Zhejiang is a combined political and economic center; and southern Guangdong province around the Pearl River Delta is an economic center. The last two clusters constitute the two major delta regions of China and are discussed in more detail later.

No large city of historical or political significance is found in the provinces of Fujian and Hainan. Although the provincial capital of Fujian is Fuzhou, the most well-known city in the province is probably Xiamen (known as Amoy in the past). Xiamen is one of the four original SEZs opened for foreign investment by the Chinese government in the early 1980s. However, it did not grow as fast as Shenzhen, another SEZ in Guangdong province, just north of the Hong Kong SAR.

Jinmen (or Kinmen)—an island or county officially controlled by the Taiwanese government (the Republic of China, or ROC)—is off the coast of Fujian province, just a few kilometers from Xiamen. It has been a political “hot button” on both sides of the Taiwan Strait, and there are ROC army outposts on the island, right on the doorstep of PRC territory. Occasional military drills conducted by the Taiwanese army on the island draw protests from the mainland government and stir up international concern. Hainan—an island in the South China Sea off the coast of Leizhou Peninsula, the southernmost tip of the Chinese mainland—was part of Guangdong province until 1988. It has a tropical environment like Hawaii’s, which attracts tourists from all over Asia.

Economic and Social Variations

China’s coastal region is the most developed and highly populated region in the country. But variations within the region should not be ignored. Figure 3.7 in Chapter 3 shows that the three municipalities and Jiangsu, immediately adjacent to Shanghai, have the highest population density levels. Fujian and Hainan have the lowest density levels in the coastal region.

To assess these variations at a finer geographical level, we calculated population density levels at the county level, and these are reported in Figure 10.3. There is relatively high population density in the stretch between Beijing–Tianjin and Shanghai that cuts through the southern part of Hebei, Shandong, and Jiangsu. The figure also shows clearly that in the provinces of Zhejiang, Fujian, and Guangdong, high population density is restricted to limited areas and is not widespread. Hainan’s population is very small. Beyond the three municipalities, population distribution is clearly related to the locations of rivers, particularly the delta regions. Thus not all of the coastal region is densely populated.

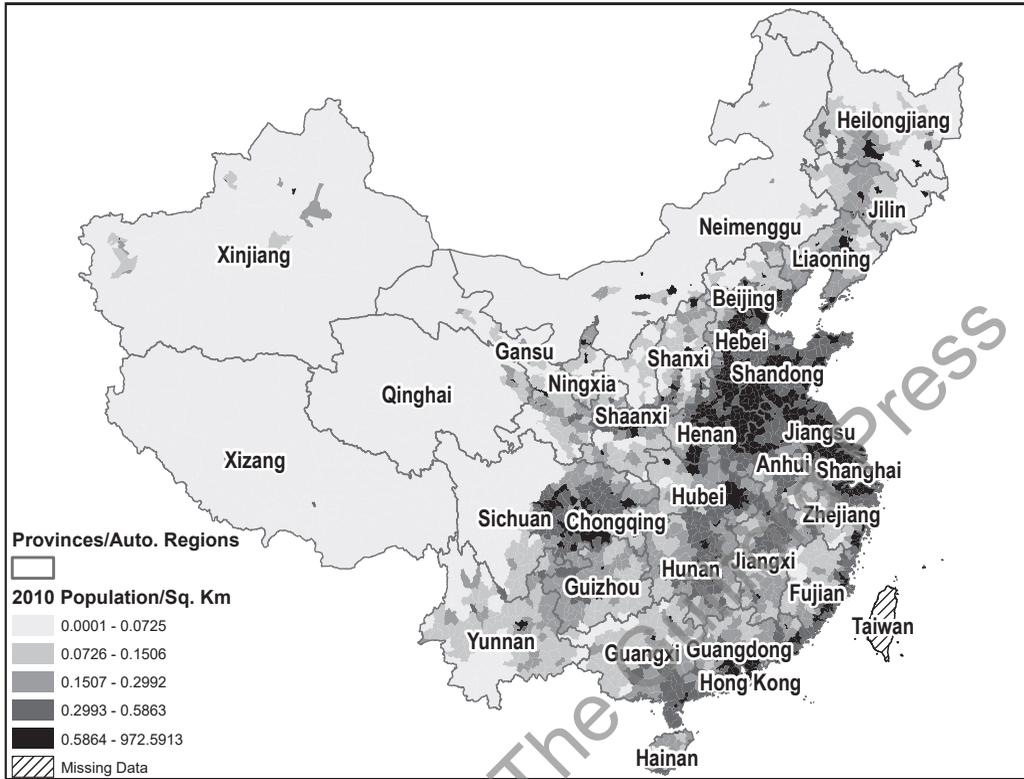


FIGURE 10.3 Population densities at the county level. Data from 2010 Chinese census.

To a large extent, the variation of population density within the coastal region reflects different levels of economic development. In Table 10.2, the region’s political and administrative areas are arranged from north to south, together with selected population and economic statistics. The percentage of the nonagricultural population reflects the extent to which the area relies on industrial and commercial activities, an indicator of the strength of the modern economy. Not surprising are the high nonagricultural percentages in the three municipalities, ranging from 50 to 62%. Beijing is the national capital and the seat of the central government, which dominates employment in the municipality. There is a very low percentage of the nonagricultural population in the surrounding Hebei province (21%). In fact, Hebei has the lowest percentage of this population in the entire coastal region.

Extreme situations are found along the borders in the Beijing–Tianjin–Hebei region, and they constitute a very unusual geographical pattern. Typically, areas with similar characteristics are found close together, and dissimilar areas are usually far apart.⁷ The two neighboring municipalities, Beijing and Tianjin, are surrounded by a very different environment in Hebei. Although Hebei did not have the highest percentage of people age 6 years and older without education (indicating low education level), its percentage of the population with at least a college education was the lowest among all areas in the coastal region. Its percentage of GDP

spent on R&D was the second lowest, slightly more than twice the lowest in Hainan. Hebei's per capita earning was also the second lowest, slightly higher than that for Hainan. These extremely different economic conditions found in adjacent areas are mostly due to the artificial administrative boundaries that control resource allocation and policies across administrative borders. This is an example of the administrative zone economy, discussed in Chapter 5.

The lowest percentage of GDP spent on R&D was 0.35% in Hainan; this partly reflects Hainan's economic emphasis on tourism. This contrasts with the 5.5% GDP spending on R&D in Beijing. Hainan's percentage of the nonagricultural population was significantly higher than those in Hebei, Fujian, and Shandong, indicating that Hainan has significant nonagricultural sectors. But Fujian and Shandong have relatively low nonagricultural population levels, low averages in earning, and relatively low percentages of people with at least a college education. At the other end of the spectrum, the three municipalities have the most favorable statistics and conditions, followed by Guangdong, Zhejiang, and Jiangsu provinces. It is interesting to note that all the administrative units in the region, except for Hainan in the south, have populations that are more than 95% Han. In other words, the region is highly ethnically homogeneous. In Hainan, Li is the largest minority group.

Figures 10.4 and 10.5 provide a more detailed picture by comparing the economic structure of the coastal region with the rest of the nation. Using data from the 2008 China economic census, we classified employment numbers into primary, secondary, and tertiary sectors by provinces, municipalities, and autonomous regions. These areas were grouped into the coastal region and the rest of the country. The

TABLE 10.2. Selected Population and Economic Statistics for Provinces and Municipalities within the Coastal Region

| Provinces/ municipalities | % of Nonagricultural population | % Age 6 years and older with no education | % Age 6 years and older with at least college education | % Population in Han ethnic group | R&D expenditure as % of GDP (in 2009) | Average earnings, 2006 (¥) |
|------------------------------|---------------------------------------|--|--|--|--|----------------------------------|
| Hebei | 21.26 | 3.26 | 7.93 | 95.83 | 0.78 | 16,456 |
| Beijing | 61.79 | 1.93 | 32.84 | 95.91 | 5.50 | 39,684 |
| Tianjin | 50.24 | 2.52 | 18.26 | 97.44 | 2.37 | 27,628 |
| Shandong | 23.43 | 5.96 | 9.32 | 99.24 | 1.53 | 19,135 |
| Jiangsu | 33.47 | 4.65 | 11.48 | 99.51 | 2.04 | 23,657 |
| Shanghai | 61.89 | 3.15 | 22.82 | 98.80 | 2.81 | 37,585 |
| Zhejiang | 25.02 | 6.55 | 9.86 | 97.77 | 1.73 | 27,570 |
| Fujian | 22.14 | 3.46 | 8.98 | 97.84 | 1.11 | 19,424 |
| Guangdong | 28.77 | 2.67 | 9.12 | 98.02 | 1.65 | 26,400 |
| Hainan | 34.96 | 4.91 | 8.43 | 83.56 | 0.35 | 15,843 |

Note. ¥, yuan. Data from the 2010 Chinese population census and other sources from the National Bureau of Statistics of China (www.stats.gov.cn/tjsj/pcsj/rdzyqc/decrdzyqc).

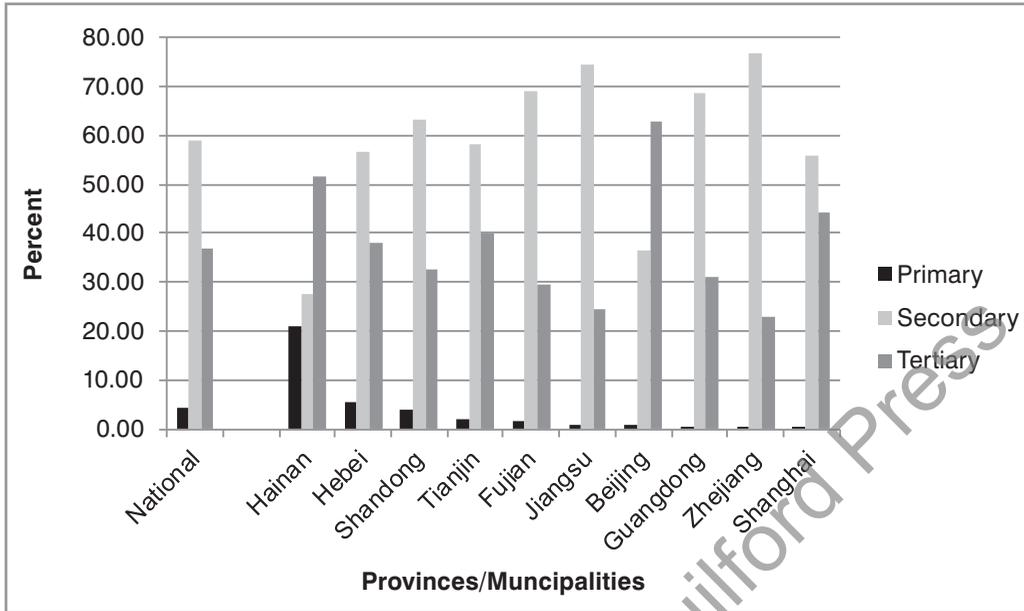


FIGURE 10.4 Employment compositions of legal establishments by economic sectors at the national level and in each province or municipality in the coastal region. Data from State Council Economic Census Leading Group (SC-ECLG) (2010).

percentages employed in the three sectors for these areas can be compared with the national percentages. At the national level, the percentage employed in the primary sector (agriculture, animal husbandry, fishery, forestry, and mining) was around 4%; those employed in the secondary sector (manufacturing, processing, construction, and energy) represented almost 60%; and those working in the tertiary sector (services) accounted for 36%. Figure 10.4 shows that the economic data for Hebei and Shandong were most similar to the national economic structure, meaning that they were dominated by the secondary sector. Hainan’s data were most different from the national situation, with relatively large primary and tertiary sectors, but the smallest secondary sector in the coastal region. The three municipalities and other provinces had small or no percentages employed in the primary sector, but sizable secondary and tertiary sectors, indicating the dominance of industries and services in these provinces.⁸

Specifically, both Beijing and Hainan were dominated by the tertiary sector, although by different types of services. The government, which is part of the tertiary sector, is the largest employer in Beijing, while services in the hospitality industry are the largest sources of employment in Hainan. For all other provinces and municipalities in the coastal region, the secondary sector was the largest. The secondary sector was notably dominant in Fujian, Jiangsu, Guangdong, and Zhejiang provinces—the most industrialized areas in the nation. Hainan still has a significant primary sector.

As for the rest of the country (Figure 10.5), the economic data for the first four provinces and municipalities, Henan, Chongqing, Anhui, and Jiangxi, were most similar to the national situation: The secondary sector was the largest, followed by the tertiary sector and then the primary sector. Heilongjiang and Shanxi were similar in their economic structure, with a relatively large primary sector, and secondary and tertiary sectors of similar sizes. Xinjiang also had a relatively large primary sector, but its economy was dominated by the tertiary sector. For the other provinces and autonomous regions, the secondary sector was not as dominant as in the national situation. Xizang (Tibet) had a very large tertiary sector (around 70%). This outlier, similar to that of Beijing, was partly due to the large presence of government, but for a different reason: control and monitoring of the minority Zang (Tibetan) population. Another majority “contribution” to the tertiary sector consisted of religious organizations, which have a large presence in Xizang because of relatively large Buddhist institutions. Only three provinces and autonomous regions, Hubei, Guangxi, and Xizang (Tibet), had a relatively smaller primary sector than the national average. The relatively small primary sector in Xizang was mostly attributable to the lack of natural resources, including an undesirable climate for most crops.

The major difference between the coastal region and the interior, then, is in their differing emphases on the primary and secondary sectors. The strength of

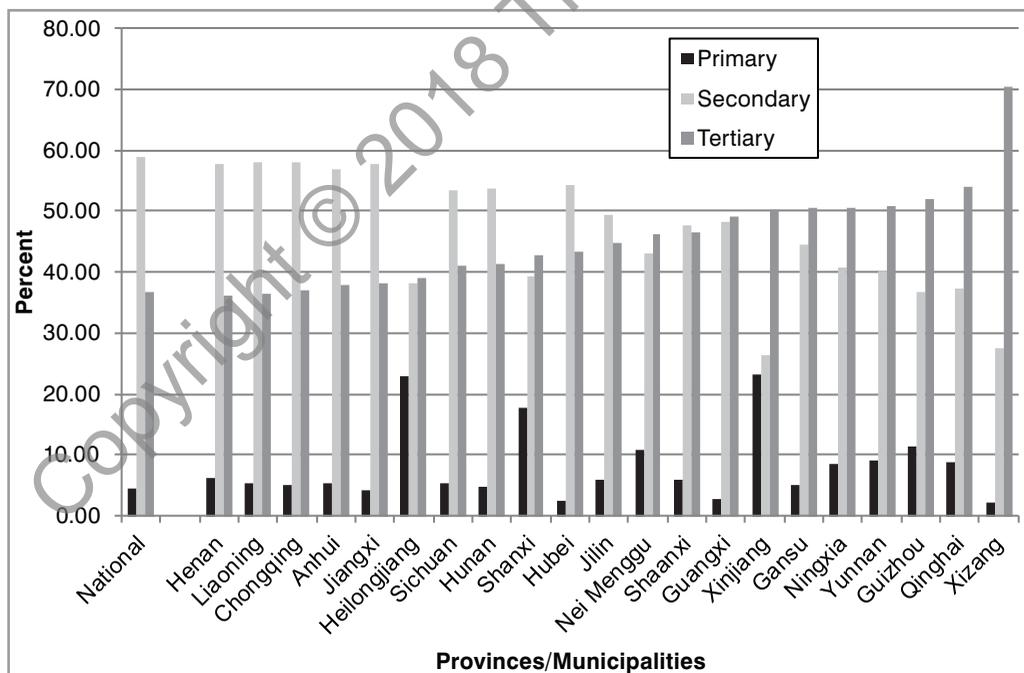


FIGURE 10.5 Employment composition of legal establishments by economic sectors at the national level and in each province or municipality outside the coastal region. Data from SC-ECLG (2010).

the secondary sector in the coastal region, and particularly in the two delta regions centered in Shanghai and Hong Kong–Guangzhou, separates the coast from the interior quite significantly.

THE YANGTZE RIVER DELTA REGION AS AN ECONOMIC ENGINE

The coastal region is no doubt the most economically vibrant region in China. But within it, the two delta subregions of the Yangtze and Pearl Rivers are the most powerful economic engines, lifting the economic prosperity of contemporary China to a new level. The composition, historical development, economic strengths, and the future development of the Pearl River Delta are discussed in Chapter 12. In this part of this chapter, we focus on the Yangtze River Delta, with the municipality of Shanghai at its center.

The city of Shanghai is located on the southern bank of the Yangtze River (Figure 10.6). Across the Huangpujiang (Huangpu River) to the east is the newer, more glamorous Pudong district. There, the 101-floor Shanghai World Financial Center—once the world’s tallest building—rises among other tall skyscrapers, such as the 88-floor Jin Mao Tower and the iconic Oriental Pearl Tower with its communication



FIGURE 10.6 The municipality of Shanghai and the Yangtze River Delta region.



FIGURE 10.7 High-rises in the Pudong district along the Huangpujiang—a view from the “old” Shanghai city. (Photo: courtesy of Dr. Banggu Liao, Shanghai Normal University)

antenna (“needle”) on top. Figure 10.7 shows the Pudong skyline across the Huangpujiang from old Shanghai city. Although the city of Shanghai is no doubt the most prosperous and important economic center in the country, it is only one of the many well-connected and fast-growing economic nodes in the delta region (Figure 10.6). Less than 300 km (186 miles) to the west is Nanjing, and about 200 km (124 miles) to the southwest is Hangzhou; both are major second-tier cities. Within the territory bounded by these three cities is a region supported by an efficient transportation system, filled with pro-business local governments, and populated by a large pool of relatively inexpensive but skillful workers. These large cities—together with a large number of medium-size cities, such as Changzhou, Ningbo, Suzhou, and Wuxi, and smaller cities—form a very economically powerful network in the delta region. Because of the historical influence of Western powers, easy access to the global economy, and aggressive Chinese economic development policy, Shanghai and its surrounding area constitute one of the most prosperous and wealthiest regions in China.

The Historical Development of Shanghai

Within the coastal region, the economy of Shanghai was the earliest to take off. In the mid-19th century, the Qing dynasty’s government was defeated by foreign powers in the Opium Wars (Chapter 12 describes these wars in greater detail).⁹ As a result, China had to make many concessions to these foreign countries. These were formalized in treaties that opened up Chinese ports to these powers for business

and trade. One of the major concessions was to let the foreigners occupy Chinese territories, particularly in cities. Shanghai was targeted by these foreign powers. Two “concession districts” were created within the city. The French Concession was located west of the walled city of Shanghai; a larger concession district, called the International Settlement and shared by other foreign powers (including the British and Americans), was located north of the old city along the Huangpujiang (Henriot, 2004). Figure 10.8 shows that the concession areas were quite dynamic, and that over time they expanded, reflecting the weakening and collapse of the Qing dynasty. Within these concession areas, foreigners controlled business and population settlements, even though most of the residents within the concession districts were Chinese.

The invasion of Shanghai by Westerners brought Western cultures and lifestyles to modernize the city. Knowing and learning foreign languages in Shanghai became highly desirable, as language proficiency could open doors to various job opportunities brought by the foreign occupants. Western fashions became popular, in contrast to traditional Chinese clothing. Tailors in Shanghai received exposure to Western sewing and tailoring techniques; the skills of Shanghainese tailors and the quality of their work were regarded as first-class. Remnants of these cultural influences are still visible in today’s Shanghai.

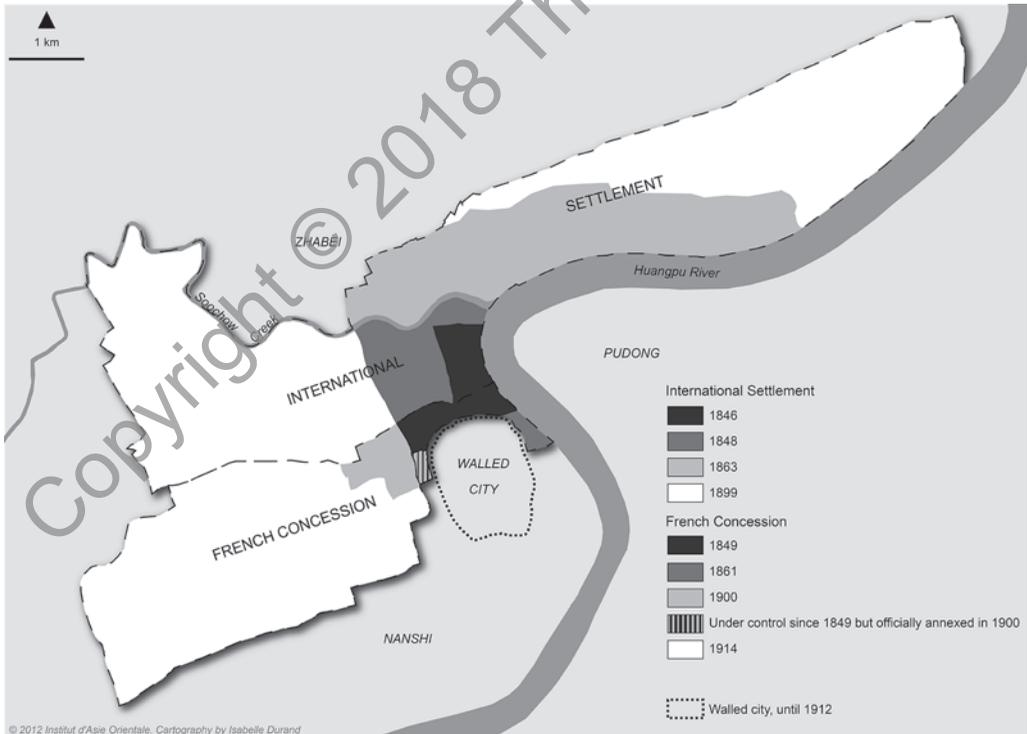


FIGURE 10.8 The French Concession and International Settlement districts in Shanghai before 1914. Based on Henriot and Durand (2012).

BOX 10.1. Shanghai: The Most Westernized Chinese City, Then and Now

Shanghai's earliest encounters with the Western world probably occurred after it became one of the treaty ports. China was forced to open these ports to foreign powers after the Qing dynasty was defeated during the Opium Wars (1839–1841). The Qing government signed the Treaty of Nanjing in 1841, granting foreigners the right to live and trade in “treaty ports.” Shanghai was one of the five initial treaty ports. The other four were Canton, or Shamian Island near today's Guangzhou; Amoy, or Xiamen, and Fuzhou in Fujian province; and Ningbo in Zhejiang province. The major foreign occupants included the British, the Americans, the French, and later the Japanese. The treaty also allowed foreigners to establish their own jurisdictions as “concession districts” and to enjoy extraterritorial rights so that they were not subject to Chinese laws. In Shanghai, concession districts established by the four dominant foreign powers occupied most of the old city. Later the British and Americans merged their districts, and it became the International Settlement (see Figure 10.8).

The presence and influence of Western cultures in Shanghai were manifested in many ways. The historic district at the eastern end of Shanghai city along the Huangpujiang is a striking example. This area along the riverbank extends from north of the old walled city (Figure 10.7) toward the north in the Nanshi and Huangpu districts (Figure 10.9). The waterfront area, often called the “Bund,” was the center of foreign powers in Shanghai, and this legacy is reflected in the 50 or so historical buildings in both classical and modern styles of architecture. The Bund is one of the most famous tourist sites in Shanghai (Figure 10.10). A favorite tourist activity is to take a sunset cruise along the Huangpujiang and see the Bund buildings lit up after dark (Plate 7).

Another dimension of Western cultural influence was entertainment. Although many Western or Westernized entertainment establishments in the former concession districts have ceased to exist, some structures remain and are historical landmarks in today's Shanghai. Figure

10.11 shows the historical building in downtown Shanghai, still called the “Great World” (大世界). It had been the center of the city's entertainment industry for decades before the Communist era. Located in the former French Concession, it today includes performance halls, theatres, roof gardens, and pavilions; in other words, it is a multimedia complex with all-day activities. During the occupation era, the building held a variety of shows, movies, and performances in its various sections, accommodating people of different tastes, including Western-style movies and dance. The complex also provided a gathering place for both foreign and domestic elites and dignitaries. Through entertainment, therefore, Western culture penetrated Chinese society in subtle ways. While glamorous and lavish entertainment may no longer exist in the building's current “amusement park” atmosphere, the Great World is a reminder of what Shanghai used to be—a confluence of traditional Chinese and Western cultures and values.

Figure 10.12 shows the Paramount, still another example of Western cultural influence in Shanghai before the Communist era. Completed in 1933, the Paramount is an Art Deco-style building (the Chrysler Building in New York City is another instance of Art Deco style). The building was financed by a group of Chinese bankers; it operated initially as a casino, and later as a nightclub and ballroom where wealthy people in Shanghai high society gathered. Famous taxi girls provided their services as dancing partners or escorts to wealthy men, Chinese and foreigners alike. Dancing became so popular and pervasive that even white-collar workers became frequent visitors to the Paramount and numerous other ballrooms in Shanghai. After years of decay, a Taiwanese businessman renovated the Paramount, restoring some of its old-time glory. Today, a modern disco coexists with the traditional ballroom. The ballrooms and buildings provide the Shanghainese with a place not just to enjoy the fox-trot, tango, or rumba, but also to indulge in the lavish atmosphere that once defined high society.



FIGURE 10.9 Regional layout of the Shanghai municipality.



FIGURE 10.10 Historic buildings along the Bund in Shanghai. Note the Chinese flags flying over the buildings. (Photo: courtesy of Dr. Banggu Liao, Shanghai Normal University)



FIGURE 10.11 The Great World entertainment complex, downtown Shanghai. (Photo: David W. S. Wong)



FIGURE 10.12 The Paramount in Shanghai—now including both traditional ballroom dance and modern dance clubs. (Photo: Dr. Banggu Liao, Shanghai Normal University)

The Western occupation also brought Western technology, which made Shanghai one of the most industrious light manufacturing centers in China at the time. A large number of industrial establishments owned by foreign powers were located in the concession districts of Shanghai. Among the foreign powers, the Japanese employed the largest workforce in the textile industry, followed by the British. British industrialists focused on textiles, paper processing, food, and public utilities, employing sizable workforces. The Americans shared interests with the British in public utilities and also in electrical equipment (Henriot & Durand, 2012). While the numbers of foreign-owned industrial establishments were significant, they were still not in the majority because the Chinese industrial base in Shanghai was quite massive. Businessmen and industrialists in Shanghai were extremely skillful.

The economic growth of Shanghai was interrupted by the invasion of Japan during World War II, and later by the Communist takeover of mainland China. Both disruptions triggered massive exits of entrepreneurs from Shanghai. Many Shanghainese businessmen and industrialists ended up relocating to Hong Kong, a British colony that provided some sense of security during the years of turmoil. These entrepreneurial migrants, part of the social and economic network of old Shanghai, became major economic forces in building the Hong Kong economy, which took off during the second half of the 20th century.

The exodus of industrialists and businessmen from Shanghai after the Communist takeover did not significantly cripple Shanghai's economic growth, however. Gradually, industries in Shanghai expanded and moved into the surrounding areas, creating positive economic spillover into these neighboring provinces and cities. Shanghai itself evolved to become a commercial business center, parallel to the political government center in Beijing. As a result, the municipality of Shanghai is China's largest city in terms of population, surpassing that of Beijing. However, the economic region centered in Shanghai is much bigger than the city itself. The entire region has become a major economic engine in China.

Shanghai: Market versus Policy; Local versus Global Forces

The economic status of Shanghai today is the result of the interplay among several factors: the central Chinese government's economic development policy, particularly the Four Modernizations in the early Communist era; the role of local government in creating favorable business environments; the emergence of a globalized economy; and the arrival of massive foreign capital. The early Communist economic policy that favored geographically balanced development definitely hurt Shanghai. Its importance and that of the surrounding Yangtze River Delta region were deemphasized. Its locational advantages—situated at the Yangtze River Delta, on the east coast between Beijing and Hong Kong, with access to the rest of the world—were ignored. Its pre-World War II legacy as a world trade, financial, and industrial center was not exploited under Communist rule. Before 1980, Shanghai and its surrounding region were told to be self-sufficient. Its manufacturing industries constituted its major economic engine.

But the economic reform that began in the late 1970s introduced market mechanisms and created a turning point for the entire country. For Shanghai, it meant an opportunity to regain its economic supremacy in the Chinese city system. The Shanghai municipal government realized that under the open-door economic policy, a strong tertiary sector was a must for Shanghai to be competitive—not just domestically, but internationally. A “spatial restructuring” of the economy in the region gradually took shape, with manufacturing industries moving away from the city proper to its suburbs and surrounding regions. The municipal government also adopted a land-leasing system (see Chapter 6): It actively collaborated with private capital in redevelopment projects, building megastructures and providing critical infrastructure. With the development of the Pudong district, east of old Shanghai city across the Huangpujiang, the municipal government showed that it was committed to putting Shanghai on the map of the global economy.

Besides managing land development and real estate projects, the government of Shanghai was also directly involved in business enterprises. A significant number of high-tech businesses in Shanghai are partly or wholly owned by the municipal government. Government resources serve as the foundation of economic development in the region. Local government has had a role in strengthening the competitiveness of Shanghai through the creation of a favorable economic environment. But the major forces propelling Shanghai into a world-class financial center were the arrival of transnational corporations (TNCs) and the accompanying overseas investment capital, often labeled “foreign direct investment” (FDI). Foreign countries regard Shanghai as an open window to accessing the gigantic Chinese economy. The strategic location of Shanghai and its business-friendly environment have made it the prime destination for FDI. Major Fortune 100 companies have chosen Shanghai to be their regional headquarters because of the abundant supply of relatively high-quality labor to support headquarters operations, as well as the availability of the stock exchange to raise capital.

Beyond Shanghai

The financial power and business glamor of Shanghai are not confined to the city proper. The headquarters of TNCs in Shanghai represent only the tip of the iceberg in terms of their economic impact. The foreign capital that flew into Shanghai did not stop there, but infiltrated the surrounding regions. To the west of the Shanghai municipality is Jiangsu province, where a large number of second- and third-tier cities are located within a 200-km (124-mile) radius of Shanghai. Several other smaller cities are within 200 km (124 miles) of Shanghai to the south, in the province of Zhejiang (Figure 10.6). These cities, together with two fourth-tier cities in the nearby province of Anhui (Ma’anshan and Wuhu) to the west, have a total population of more than 30 million (see Table 10.3). The total population of major cities in this region accounts for less than 2.4% of China’s more than 1.3 billion people. Comparatively speaking, however, it is 50% larger than the approximately 20 million in the greater New York metropolitan area (2010).¹⁰ Among this group of

TABLE 10.3. Population Size and Rank of Cities in the Greater Yangtze River Delta Region

| City | Rank | Population | Province |
|-----------|------|------------|----------|
| Shanghai | 1 | 14,348,535 | Shanghai |
| Nanjing | 12 | 3,624,234 | Jiangsu |
| Hangzhou | 24 | 2,451,319 | Zhejiang |
| Ningbo | 52 | 1,567,499 | Zhejiang |
| Wuxi | 67 | 1,425,766 | Jiangsu |
| Suzhou | 85 | 1,344,709 | Jiangsu |
| Huzhou | 129 | 1,145,414 | Zhejiang |
| Changzhou | 141 | 1,081,845 | Jiangsu |
| Jiaxing | 201 | 881,923 | Zhejiang |
| Nantong | 265 | 771,386 | Jiangsu |
| Yangzhou | 300 | 711,993 | Jiangsu |
| Wuhu | 304 | 697,197 | Anhui |
| Zhenjiang | 305 | 695,663 | Jiangsu |
| Shaoxing | 345 | 633,118 | Zhejiang |
| Ma'anshan | 392 | 567,576 | Anhui |
| Total | | 31,948,177 | |

Note. Data from United Nations Statistics Division (2010).

Chinese cities are two provincial capitals, Nanjing (for Jiangsu province) and Hangzhou (for Zhejiang province). About half of these cities have a population size of more than 1 million, with the smallest city having a population exceeding 500,000.

The economic development in the Yangtze River Delta, with its group of medium-size and smaller cities, is closely tied to the rising financial status of Shanghai in the global economy. As TNCs and the associated FDI poured into Shanghai, the city had to find ways to physically accommodate these businesses. Land redevelopment was one mechanism for housing the new business and financial institutions establishing their presence in Shanghai. Manufacturing industries that used to occupy land in the city proper were relocated to the outskirts of the city or to neighboring provinces. The second- or third-tier cities became attractive candidates for such relocations because they provided an abundant supply of inexpensive but relatively skilled labor. Many TNCs establishing their headquarters in Shanghai intended to exploit the comparative advantage of Chinese manufacturing industries; setting up production in these second- and third-tier cities near Shanghai was an ideal logistical arrangement. As a result, these cities received massive amounts of FDI after 1990 as factories sprang up around the region.

As shown in Figure 10.6, the three cities of Suzhou, Wuxi, and Changzhou form a spatial agglomeration west of Shanghai. Each of these cities has a population of more than 1 million, and the total population of this tri-city region was more than 21 million in 2000 (not counting the 16 million in the Shanghai municipality).¹¹ These three cities and other cities in the region experienced a boom in manufacturing, fueled by the FDI brought in by TNCs, due in part to their proximity to Shanghai. Secondary production increased from 15% in 1980 to 55 or 60% after 2000, dominating the economy in the region (Chen, Xiang, Sun, & Chu, 2006).

Many international corporations established their presence in the tri-city region. Examples of these companies include Motorola, Philips, Sharp, Panasonic, and Siemens. Besides the locational advantage of being close to Shanghai, other location advantages made the region attractive to TNC investment. A very efficient transportation network, including several major highways and railroads, serves the region between Nanjing and Shanghai. Access to the international airports in Shanghai is relatively convenient. The region is heavily populated, and this population provides a pool of inexpensive but relatively well-educated workers. The physical environment is also desirable. Taihu Lake, one of the largest water bodies in China, provides an abundant supply of water. The climate in the region is relatively mild. Local governments have favorable and competitive business-friendly policies to attract FDI. These are all decisive factors for TNCs in deciding to invest.

Therefore, while Shanghai is the largest city and financial center in the region, it is highly integrated economically, organizationally, and spatially with the surrounding network of second- and third-tier cities focused on manufacturing. The Yangtze River Delta, together with the Pearl River Delta region in the south, is one of China's two major manufacturing belts, making China a global economic powerhouse. These manufacturing engines and their associated financial centers (Shanghai and Hong Kong) help integrate the coastal region of China into the global economic system.

HAINAN: ISOLATED BUT ATTRACTIVE

Unlike Shanghai, Hainan province is a remote and slowly developing region at the southern tip of Chinese territory. It is separated from the Leizhou Peninsula on the mainland (the southern tip of Guangdong province) by the Qiongzhou or Hainan Strait, which is about 30 km (19 miles) wide (see Figure 10.13). (There have been proposals to build a bridge or tunnel connecting Hainan to the Leizhou Peninsula.) West of the island is the Gulf of Tonkin, and then the Vietnamese coast. East of Hainan is the South China Sea. The northeastern part of the island has gentle relief, but the southwestern section is relatively rugged, with a coastal flatland surrounding the island.

After the island of Hainan had been part of Guangdong province for centuries, the island and approximately 200 other small islands in the Gulf of Tonkin and South China Sea became the separate Hainan province in 1988. The numerous

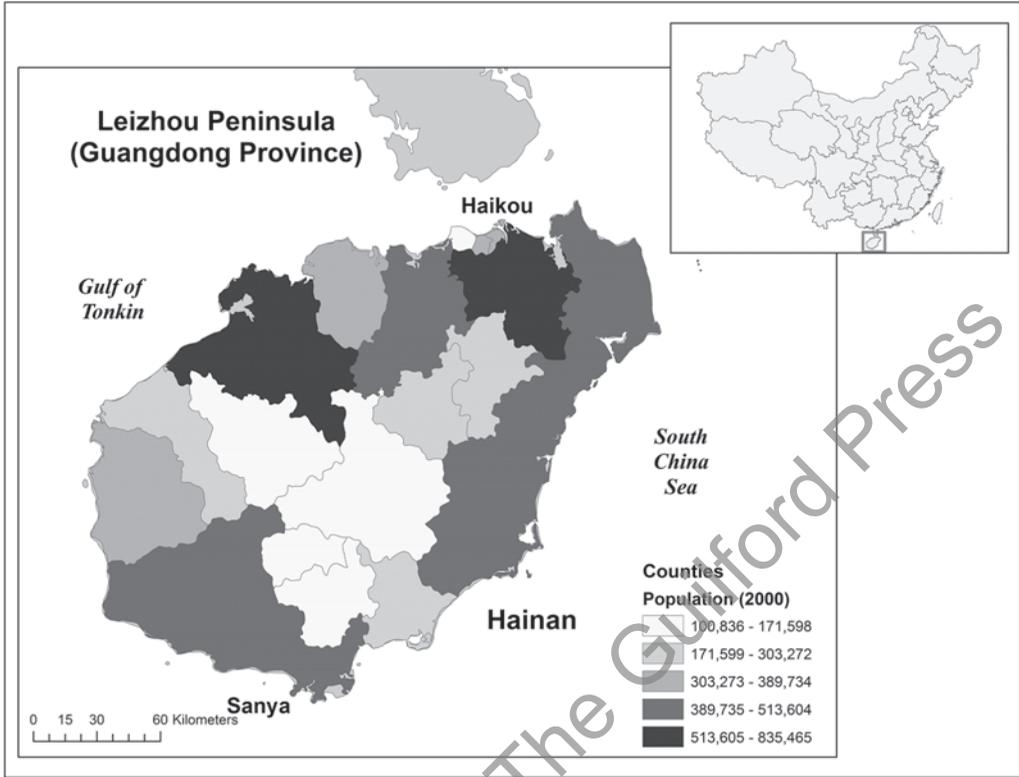


FIGURE 10.13 Hainan province: location, counties, and population distribution.

small islands are insignificant in terms of population, and their resource potential is unknown. Recently, however, the sovereignty of these islands has become a contentious political issue between China and neighboring countries, including the Philippines and Vietnam. The island of Hainan itself accounts for the majority of the population and land mass of the new province. The formation of the province was also accompanied by the island's designation as one of the SEZs, and so it shares that status with the four economically robust cities of Shenzhen, Zhuhai, Shantou, and Xiamen. However, this largest-in-area SEZ has not grown as fast as the other smaller zones economically. Hainan's industrial sector has grown slightly, but its overall growth has been relatively slow as compared to other parts of the mainland.

The island of Hainan has 20 counties and cities (see Figure 10.13). The total provincial population was slightly smaller than 8.7 million, according to the 2010 Chinese census. Compared to its 7.558 million people in 2000, the population had increased substantially by 2010. Its share of China's total population has increased slightly, from 5.33 to 5.36%, putting the province in the top third of all provinces in terms of population increase over the decade (Table 10.4). The provincial capital is Haikou, which is also the largest city in the province, located at the northern end of the island (Figure 10.13). Its location clearly provides the best shelter along

TABLE 10.4. Population Size of Provinces, Municipalities, and Autonomous Regions in 2010, and Changes in Their Shares of Total Population between 2000 and 2010

| Province, municipality, or autonomous region | Population (2010) | Share in 2000 | Share in 2010 | Difference | Coastal |
|--|-------------------|---------------|---------------|------------|---------|
| Guangdong | 104,303,132 | 6.83 | 7.79 | 0.96 | Yes |
| Shanghai | 23,019,148 | 1.32 | 1.72 | 0.4 | Yes |
| Beijing | 19,612,368 | 1.09 | 1.46 | 0.37 | Yes |
| Zhejiang | 54,426,891 | 3.69 | 4.06 | 0.37 | Yes |
| Tianjin | 12,938,224 | 0.79 | 0.97 | 0.18 | Yes |
| Xinjiang | 21,813,334 | 1.52 | 1.63 | 0.11 | No |
| Shanxi | 35,712,111 | 2.6 | 2.67 | 0.07 | No |
| Jiangxi | 44,567,475 | 3.27 | 3.33 | 0.06 | No |
| Yunnan | 45,966,239 | 3.39 | 3.43 | 0.04 | No |
| Hebei | 71,854,202 | 5.33 | 5.36 | 0.03 | Yes |
| Hainan | 8,671,518 | 0.62 | 0.65 | 0.03 | Yes |
| Ningxia | 6,301,350 | 0.44 | 0.47 | 0.03 | No |
| Tibet | 3,002,166 | 0.21 | 0.22 | 0.01 | No |
| Qinghai | 5,626,722 | 0.41 | 0.42 | 0.01 | No |
| Fujian | 36,894,216 | 2.74 | 2.75 | 0.01 | Yes |
| Jiangsu | 78,659,903 | 5.88 | 5.87 | -0.01 | Yes |
| Shandong | 95,793,065 | 7.17 | 7.15 | -0.02 | Yes |
| Inner Mongolia | 24,706,321 | 1.88 | 1.84 | -0.04 | No |
| Heilongjiang | 38,312,224 | 2.91 | 2.86 | -0.05 | No |
| Shaanxi | 37,327,378 | 2.85 | 2.79 | -0.06 | No |
| Liaoning | 43,746,323 | 3.35 | 3.27 | -0.08 | No |
| Guangxi | 46,026,629 | 3.55 | 3.44 | -0.11 | No |
| Gansu | 25,575,254 | 2.02 | 1.91 | -0.11 | No |
| Jilin | 27,462,297 | 2.16 | 2.05 | -0.11 | No |
| Hunan | 65,683,722 | 5.09 | 4.9 | -0.19 | No |
| Guizhou | 34,746,468 | 2.78 | 2.59 | -0.19 | No |
| Anhui | 59,500,510 | 4.73 | 4.44 | -0.29 | No |
| Henan | 94,023,567 | 7.31 | 7.02 | -0.29 | No |
| Chongqing | 28,846,170 | 2.44 | 2.15 | -0.29 | No |
| Hubei | 57,237,740 | 4.76 | 4.27 | -0.49 | No |
| Sichuan | 80,418,200 | 6.58 | 6.00 | -0.58 | No |

Note. Data from Population Reference Bureau, www.prb.org/pdf11/china-2010-census-results-table.pdf (retrieved January 24, 2012).

the coast. The city was ranked 230th in population size among all Chinese cities, according to the United Nations *2008 Demographic Yearbook* (United Nations Statistics Division, 2010), with approximately 830,000 in population. The second largest city is Sanya, located at the southern end of the island, with a population of almost 500,000.

According to Figure 10.4, the economic structure and the industrial composition of Hainan are quite different from those of the other coastal provinces. Its secondary sector (manufacturing and fabricating) is the smallest of the three sectors, and the tertiary sector is the largest. The large primary sector is mainly attributable to its agricultural production: Its tropical climate makes the production of rice, tropical fruits, and natural rubber ideal. Besides agriculture, other activities in the primary sector exploit the natural resources available in the region. These resources include seafood (particularly in the South China Sea), minerals (including some precious metals), and oil extracted from oil shale and offshore drilling. All these activities contribute significantly to the primary sector. The secondary sector relies heavily on the foods produced and resources extracted from the primary sector; the processing of these foods and raw materials serves as the backbone of this sector. Crude oil has to be refined, another major secondary-sector activity on the island.

The tertiary sector is the largest sector in the Hainan economy, primarily due to its services industry targeting tourists. Because of its natural rainforest and picturesque beaches, Hainan Island was designated as a prime tourist destination by the Chinese central government in 2009. The intention is to establish Hainan as the “Hawaii of China”—an international destination attracting tourists from all over the world, but particularly from Asia. As a result of this designation, investment on the island has surged significantly. Real estate prices on Hainan have also risen.

Hainan has a long history within Guangdong province, and Han is the largest ethnic group in Hainan. The largest minority population is the Li people, who account for 10–15% of the total population. They are found mostly in the middle and southern parts of the island. The Miao people, originally from Guizhou province, are the second largest minority group; they are mostly located in the highland areas in the west (Figure 10.13).

.....FINAL THOUGHTS.....

The coastal region is the most developed area in China, with a relatively high concentration of its population. Its prosperity is attributable to its relative location within China and globally, and to its physical environment, even though it does not have a strong natural resource base. Its largest resource is probably its relatively abundant supply of high-quality labor. However, levels of economic development within the region vary significantly, with the two delta regions leading manufacturing in the entire country. Areas outside the municipality clusters of Beijing–Tianjin, Shanghai, and Guangzhou are relatively less affluent and developed within the coastal region. Despite the intraregional variation, people in the region still enjoy

the most affluent and modern lifestyles in China, with the best quality of life. The southern tip of the region in Hainan is at the lower end of the spectrum.

The coastal region's relationship with the rest of the country is an interesting and dynamic one. As its prosperity continues, more people from the interior will be attracted to the coastal region. It is not clear how many more migrants the coastal region can accommodate, however. It is also not clear when more of the coastal region's prosperity will trickle into less developed regions, so that more geographically balanced economic development can be achieved for the entire country. There are clear indications that the Chinese government has started paying more attention to the interior cities. In particular, the development of some provincial capitals—such as Xi'an (capital of Shaanxi), Zhengzhou (capital of Henan), Wuhan (capital of Hubei), and Chengdu (capital of Sichuan)—has recently outpaced the development of many cities in the coastal region. Whether a real development strategy of rebalancing is at work and sustainable has yet to be determined.

NOTES

1. www.census.gov/geo/maps-data/maps/pdfs/reference/us_regdiv.pdf.
2. www.stats.gov.cn/tjsj/pcsj/rkpc/5rp/index.htm.
3. www.stats.gov.cn/tjsj/cjwtd/201308/t20130829_74318.html (accessed on June 23, 2015).
4. <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>.
5. Liaodong Peninsula (or, in Chinese, Liaodong Bandao) is the peninsula in Liaoning province that divides the coastal waters between Bohai Bay to the west and Korea Bay to the east.
6. According to the theory of “comparative advantage,” when two parties or countries have different costs in producing two commodities, both parties will gain if each party produces the relatively cheaper one and trades with the other party.
7. The “First Law in Geography,” coined by geographer Waldo Tobler (1970), is that “everything is related to everything else, but near things are more related than distant things.” Such geographical regularity is often translated into the spatial statistical term of positive spatial autocorrelation.
8. This dataset consisted of the same 2008 Chinese economic census data used in Chapter 5 (State Council Economic Census Leading Group [SC-ECLG], 2010). The numbers of employees were for registered “legal entities.” Therefore, these statistics probably represented undercounts, particularly in the agricultural sector.
9. Since the 18th century, the British had been illegally exporting opium from India to China. Chinese officials attempted to stop the import and ended up in conflict with the British troops. China was defeated and signed the “unequal” Treaty of Nanking (so called because it penalized China heavily) in 1842. The French joined the British in the subsequent conflict with China. China was defeated again, and the Treaty of Tianjin was signed in 1858, legalizing the importation of opium and opening several ports to foreign trade and residence.
10. www.census.gov/population/www/cen2010/cph-t/cph-t-5.html.
11. Tabulated by the authors based on census data for 2000.

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