INSTITUTE OF DEVELOPING ECONOMIES

IDE Discussion Papers are preliminary materials circulated
to stimulate discussions and critical comments

IDE DISCUSSION PAPER No. 710

The Structure of Coasting Trade in British India from 1905 to 1931

Michihiro Ogawa*, Noriyuki Osada**,
and Kenmei Tsubota***
March, 2018

Abstract

During the early 20th century, South Asia experienced its most regionally integrated period in history, and under British rule, port cities were well connected via coasting trade. This paper examines the trade structure within British India between 1905 to 1931 and shows how South Asia was regionally integrated both through quantitative measures and various maps.

Keywords: South Asia, Coasting trade, Intra-regional trade
JEL Classification: F15, N75, R40

* Associate Professor at Kanazawa University, ogawa@kanazawa-u.ac.jp
** Research Fellow at the Institute of Developing Economies-JETRO, noriyuki_osada@ide.go.jp
*** *Corresponding author*: Research Fellow at the Institute of Developing Economies-JETRO, kenmei.tsubota@gmail.com

The Institute of Developing Economies (IDE) is a semigovernmental, nonpartisan, nonprofit research institute, founded in 1958. The Institute merged with the Japan External Trade Organization (JETRO) on July 1, 1998. The Institute conducts basic and comprehensive studies on economic and related affairs in all developing countries and regions, including Asia, the Middle East, Africa, Latin America, Oceania, and Eastern Europe.

INSTITUTE OF DEVELOPING ECONOMIES (IDE), JETRO
3-2-2, WAKABA, MIHAMA-KU, CHIBA-SHI
CHIBA 261-8545, JAPAN

The Structure of Coasting Trade in British India from 1905 to 1931

March, 2018

Michihiro Ogawa[*], Noriyuki Osada[**], and Kenmei Tsubota[***]

Abstract

During the early 20th century, South Asia experienced its most regionally integrated period in history, and under British rule, port cities were well connected via coasting trade. This paper examines the trade structure within British India between 1905 to 1931 and shows how South Asia was regionally integrated both through quantitative measures and various maps.

Keywords: South Asia, Coasting trade, Intra-regional trade
JEL Classification: F15, N75, R40

[*] Associate Professor at Kanazawa University, ogawa@kanazawa-u.ac.jp
[**] Research Fellow at the Institute of Developing Economies, noriyuki_osada@ide.go.jp
[***]*Corresponding author*: Research Fellow at the Institute of Developing Economies, kenmei.tsubota@gmail.com

1. Introduction

For the past few decades, intraregional trade has been recognized as an important catalyst for regional economic growth. This is observed most predominantly within East Asia and Southeast Asia. However, South Asia is still minor in intraregional trade share[1].

Compared to the situation in the 21st century, South Asia enjoyed its most regionally integrated period in history during the first half of the 20th century. Starting in 1858, the British Raj further deepened its maritime trade networks as well as inland transport networks and established administrative, political and economic institutions to create easier business transactions. Technological developments equally created rapid expansion; steamers enabled much faster, stable, and larger shipping methods of goods, and telegraphs enabled efficient communication among otherwise remote places. During the late 19th century, market integration with Europe also advanced following the opening of the Suez Canal, and South Asian ports became well-connected in coasting trade. This period is known as the first globalization, as it was coined by Jacks et al (2007).

Within the context of South Asia's first globalization period, this paper examines the trade structure formed under British rule in order to illustrate the area's regional integration in early 20th century. Namely, what picture emerges of South Asia's trade schemes or other forms of regional cooperation that led to regional integration? How do they differ from the past systems? In order to critically compare any progress in the future, this paper creates a benchmark based on the once regionally integrated South Asia. For this purpose, instead of looking to foreign trade, this research focuses on intraregional trade structures within South Asia from 1905 to 1930[2].

The rest of the paper is organized as follows. Section 2 provides a brief literature review and data sources. Section 3 examines the intraregional trade structure through the lens of various maps. Section 4 takes a closer look on intra-regional trade. Finally, Section 5 offers concluding remarks.

2. Literature Review

The integration of Indian markets into world markets from the late 19th century to the first half of the 20th century was primarily analyzed in relation to Western impact. While this certainly merits examination, there is still a gap in the literature in that trade

[1] Intraregional trade of South Asia is as low as 5%, which is far lower than East Asia (33%).

[2] The reason of this selection of time period coming from the data availability within our research project. Some tables were not available for provinces for 1900.

links within Asia The emergence of trade with Europe inevitably reformed domestic markets and diversified commodities and technology used for their production. Sugihara (1996, 2005) presented a detailed examination of the regional trade structure among Europe, South Asia, Southeast Asia, and East Asia and revealed trade had accelerated in the early 20th century among Asian regions. He argued that regional integration in Asia spurred industrialization, a reduction in transportation costs, and the internationalization of merchants. In addition, Sugihara's analysis identified neighbouring impacts and the progress of regional integration along major trade links, particularly led by Great Britain from China-Singapore-India-Europe and by Holland from Batavia-India-Europe. While this exposed a broader spatial scale along with these links, Sugihara treated the Indian subcontinent as one entity and therefore regional integration in South Asia was left unanalyzed[3].

In order to analyze intraregional trade structures in South Asia, statistical publications, mainly the Annual Report of Sea Borne Trade and Navigation, provide the data. This report was published for the Bengal, Bombay, Madras Presidencies as well as for the Sind and Burma Provinces. Some portions are also compiled in the Statistical Abstract of British India, however, tables that detail subordinate ports and the flow of trade between them can be found only in regional annual reports; digitized versions of Table 1, 1A, 2, and 2A of Coasting Trade can be found for most of the reports.

3. Coasting trade in the Indian Subcontinent between 1905 and 1925

This section is based on the GIS analysis of Trade and Navigation of British India[4]. Even after railways were opened in the late nineteenth century under the British rule, local trade was carried out via river and coastline as railways only covered connections between major cities[5]. Therefore, coasting trade is quite important in understanding India's economic zones where historically, local trade occurred. The following maps identify which ports, cities, and areas within the five coastal regions (Bengal, Bombay, Burma, Madras, and Sind) engaged in trade for years 1905, 1910, 1915, 1920, and 1925. The maps illustrate where ports, cities, and areas exported goods as well as where

[3] For example, in chapter 5 of Sugihara (1996), there are various analysis on commodity level with distinguishing the regional differences within India. However, the focus is more on external trade. In terms of comprehensive statistical analysis, disaggregation at provincial is concisely done in Appendix Table 5.1. However, analysis at port levels was untouched.

[4] Bengal, Bombay, Burma, Madras, and Sind Trade and Navigation Annual Statements, India Office Records, British Library.

[5] In this sense, the opening of railways greatly affected formation of inter-city networks and development of cities themselves in Indian subcontinent.

goods were imported to the five provinces. The colors of pillar indicate different years as 1905 (tick red), 1910 (light red), 1915 (white), 1920 (light blue), and 1925 (tick blue).[6]

This section identifies imports and exports for each of the five provinces one by one in order to understand the influence of local coasting trade on India's economic zones.

3.1. Coasting trade in Bengal

Excluding the year 1915, trade between Bombay port and Bengal held greater value than that between Coromandel ports and Bengal. Among Coromandel ports, Madras port did not always have substantial transactions with Bengal province, while Burmese ports, excluding Rangoon, were the largest partners. The trade value of imports between Bengal and its first and second largest partners (Burmese ports and Bombay) exceeded exports. Particularly after 1915, Burmese import values increased substantially. Further research is required to better understand the types of imported goods from Burmese ports to Bengal province. Interestingly in 1925, imports from Muscat to Bengal province can be seen, albeit with a comparatively low trade value.

=Figure 1 and 2 comes around here=

3.2. Coasting trade in Bombay

Bombay province held the largest import and export values among the five provinces. During the early twentieth century, trade partners with Bombay province were primarily ports, cities, and areas on the western coast of the Indian subcontinent. After 1920, however, the value of imports from Burma, particularly from Rangoon among others, rose rapidly—a trend that was commonly seen in trade between Bengal and Burmese ports. Likewise, the port of Bombay steadily increased its imports and exports over this period.

=Figure 3 and 4 comes around here=

3.3. Coasting trade in Burma

Burma's largest trading partner was Bengal, especially in Calcutta, between 1905 and 1925, with import values exceeding those of exports. This was followed by Bombay port as the second largest partner and ports on Coromandel coast as Burma's

[6] The data for Bengal in 1920 was not available during our project period. So the data is not shown in the maps.

third largest partner. After 1920, the trade values between Burma province and Coromandel ports gradually increased, and trade in the Bay of Bengal developed centered around Calcutta during this period. As the chief port in the region, Calcutta's imports increased from approximately 70% to 80% of imports in the region, and exports maintained its majority share at 80%.

=Figure 5 and 6 comes around here=

3.4. Coasting trade in Madras

The scale of imports and exports in Madras province was the smallest among the five regions. For trade between Madras province and large port cities in British India, namely, Karachi, Bombay, and Calcutta, among others, the value of imports exceeded exports. Although trade in this province was relatively small, it traded with almost all the ports, cities, and areas on the western coast. After 1915, the importance of trade from Bombay port and other Burmese ports increased along with Madras province, and imports from both areas rose steeply. At the same time, Madras port, St. George, held very little sway in the region, representing between 20% to 40% of imports and10% to 20% of exports in the region.

=Figure 7 and 8 comes around here=

3.5. Coasting trade in Sind

Bombay port was always by far Sind's largest trading partner. While Sind province traded on a small scale, transactions with various ports occurred on both the western coast as well as Coromandel coast. This trade pattern was the same as that of Madras province. Due to the presence of only a few small ports, Karachi port dominates trade and hosts almost 99% of imports into Sind. In addition, an increasing trend is found in 1910s for exports, yet following the period between 1926 and 1930, there was no publication of subordinate ports.

=Figure 9 and 10 comes around here=

3.6. Coasting trade between 1905 and 1930

Imports and exports in Calcutta and Bombay were much larger than other ports,

however, Rangoon, Madras, and Karachi had on occasion surprisingly less trade activity compared other minor ports. In fact, other Burmese ports had greater trade activity than Rangoon. On the whole, coasting trade developed after 1920. During this period, the scale of trade in ports, cities, and areas on the Bay of Bengal developed more so than those on the western coast. Trade activity in Burma especially became highly developed in various ways. It is important to consider the heightened development in trade patterns in Burma in 1920, as this could help explain trade relations between the Indian subcontinent and Southeast Asia during that period. As Sugihara (2015) affirmed that the intra-Asia trade network formed during the interwar period, it is important going forward to understand and study these developments through wider contexts. At the same time, such change during the 1920s does not mean Bombay experienced a decline in this period. As maps in 1905 illustrate, Bombay had already established its position as one of the major ports in Arabian Sea at the beginning of the twentieth century and retained its position throughout the period in this study.

4. The Extent of Intraregional Trade between 1906 and 1911

It is important to understand how the intraregional trade share during the early twentieth century compares to current measures. Such analysis requires examining import and export values for each South Asian country in the current territory. Ports remain at the same place and are therefore easily identifiable when assigned to a country. However, the Partition of Bengal presents a major challenge, and perhaps solution, in comparing past and present regions of trade. As current Bangladesh was once a part of the Bengal Presidency, trade should be separated between ports in the Bengal Presidency and ports in other presidencies. Luckily, Calcutta and Chittagong were the main ports in the Bengal Presidency, while the other subordinate ports there had minimal impact on trade. As such, as long as Calcutta and Chittagong can be separated, it is possible to construct trade flow data to calculate intraregional trade share for the colonial period. The separation of Calcutta and Chittagong occurred between 1905 to 1911 due to the Partition of Bengal by Lord Curzon, and so using the trade statistics published only between this period can allow us to observe the intraregional trade structure in South Asia.

Table 1 is the compiled results from the tables on coasting trade for all regions in 1911 in the Annual Report of Seaborne Trade and Navigation and from the tables on foreign trade in the Statistical Abstract.[7] In the Annual report of Trade and Navigation, we see the intraregional trade flow, which is counted as international trade in the

[7] Sri Lanka was treated as a foreign country, then known as Ceylon.

current territory.

Regional total exports were 51 million pounds in 1906 and remained at similar levels until 1910. Import levels were also 51 million pounds from 1906 to 1908, until imports began decreasing in 1909 and 1910. In addition, intraregional trade share was 36.5% in 1906, before increasing to 39.4% in 1908, and then decreasing to 32.9% in 1910, whose average is approximately 36%.[8] These are the numbers after excluding the intra-provincial trade and defined the region as Indian subcontinents and excluding Sri Lanka as foreign country. If we compare these numbers to the one in 21st century, the level is far larger. It is an evidence that at the time of deeper regional integration in Indian subcontinent in early 20th century, regions trade more among them.

By changing the definition of "region", we can observe how the rise and fall with the trading partners. By taking Indian subcontinent and other Asian countries (including East Asia, and Southeast Asia) as a whole, the regional trade share had been on the rise, increasing from 11.5% in 1906 to 14.7% in 1910. Differently, if we group the region as Indian subcontinent and Europe, the intraregional trade share fluctuate around 44% with decline in 1908 at 40.67% and rise to 1910 at 45.10%. When we take the region as UK and Indian subcontinent, the intra-regional share comprises approximately 26.5%. This provides direct evidence of the deeper regional integration in early 20th century in South Asia. These trends indicate that with some fluctuations, the trends in direction of trade were stable from 1906 to 1910.[9]

5. Discussion and Conclusion

This paper exposes the intraregional trade structure of South Asia during the early 20th century. The findings show that during this period, South Asian ports traded to a larger extent among neighboring coastal ports compared to current trade flows. Calculating intraregional trade share in Indian continent requires separated figures for the Chittagong and Calcutt trade ports since both ports are within the same presidency. Except for the period of 1906 to 1911 where there was the First Partition of Bengal, such figures were not available. Utilizing this special period, this paper constructed the intraregional trade tables and calculated intra-regional trade in Indian subcontinent (including Burma). It shows that the average intraregional trade share during the First

[8] Following the definition of intraregional trade share, $R_G = \sum_g^G (x_{g.ij} + m_{g,ji})/(X_G + M_G)$, where R_g is the intraregional trade share, $x_{g,ij}$ is the export from port i to j in a group g, and $m_{g,ij}$ is the import from port i to j in a group g, whose total number is G. X_G is the total export and M_G is the total import for the group g.

[9] For further detailed analysis of intra-regional trade, it is desirable to capture the size of land trade. Also, for the comparative purpose, current intra-regional trade share shall be calculated with the same set of countries.

Partition of Bengal was around 36% which is well above the current figures available in 21st century.

References

Sugihara, Kaoru (1996), Ajiakan boeki no keisei to kozo (in Japanese) [The formation and structure of intra-Asian trade], Kyoto: Minerva Shobo.

Sugihara, Kaoru (2015) Asia in the Growth of World Trade: A Re-interpretation of the 'Long Nineteenth Century'", in Ulbe Bosma and Anthony Webster eds., *Commodities, Ports and Asian Maritime Trade since 1750,* Basingstoke: Palgrave Macmillan, pp.17-58.

Jacks, David S., Christopher M. Meissner, and Dennis Novy (2008) "Trade Costs, 1870–2000", *American Economic Review: Papers & Proceedings*, Vol.98 (2), pp529–534.

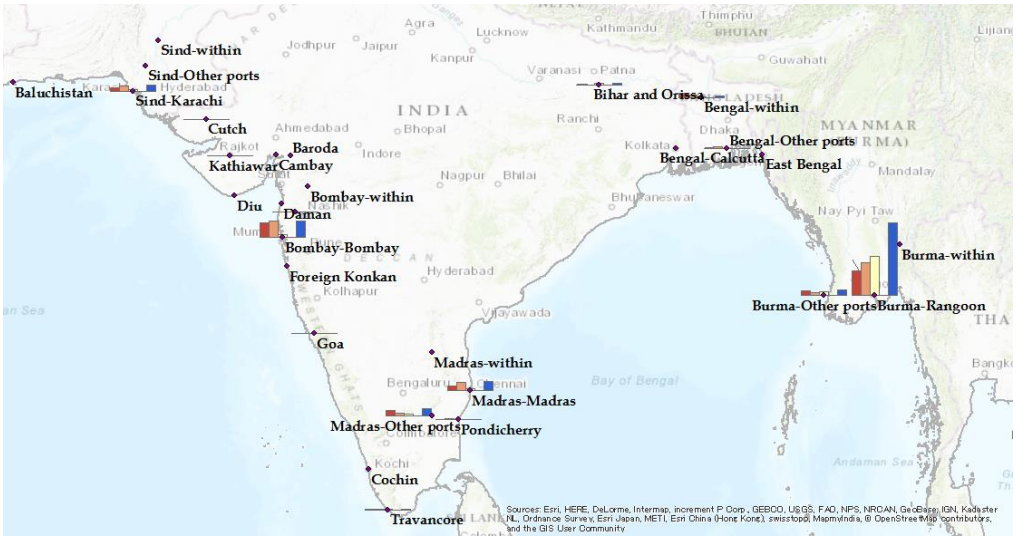
Table 1. Intraregional trade share

	1906	1907	1908	1909	1910
Regional Export	51527309	56314362	56466424	57474784	54060778
Regional Import	53756089	57511036	58336471	56584161	52599637
Total Export	162898067	168019882	152505779	176273206	185965245
Total Import	125387425	143565337	138727479	134172094	138355140
Intraregional trade share	36.52%	36.53%	39.42%	36.74%	32.89%
Asian trade share	11.50%	11.48%	12.22%	13.50%	14.70%
European trade share	44.20%	44.63%	40.67%	42.23%	45.10%
UK trade share	27.61%	28.16%	25.74%	26.15%	26.78%

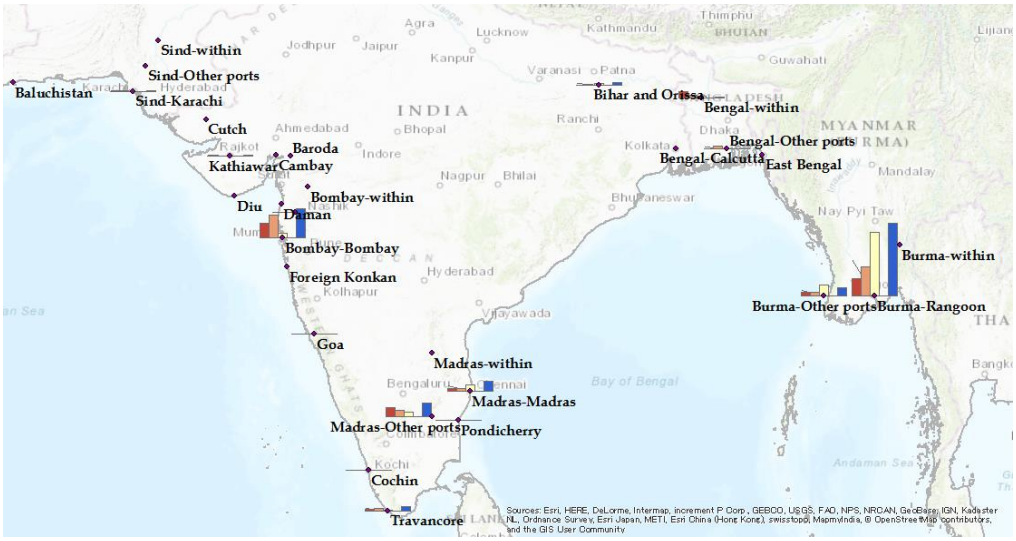
Source: The authors' compilation of data from Statistical Abstract Relating to British India and Annual Report of Seaborne Trade and Navigation for each province. Unit is Sterling Pound.

Figure 1. The direction of intraregional trade from and to Bengal Presidency

(a) Export



(b) Import



Notes: Each bar represents the size of the trade for 1905 (tick red), 1910 (light red), 1915 (white), 1920 (light blue), and 1925 (tick blue). Source: Authors' compilation and cartography

Figure 2. The chief port's share of total imports and exports through Bengal

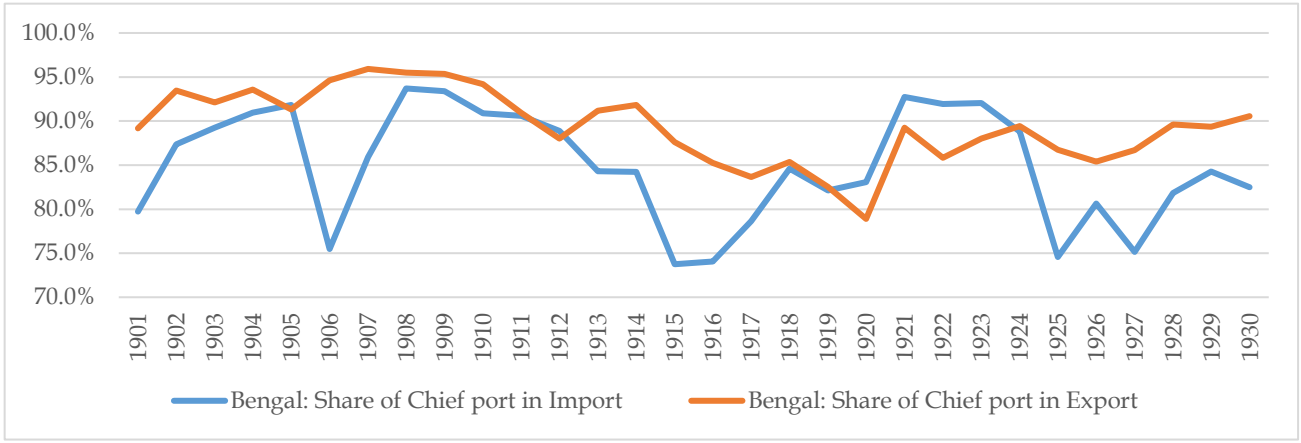
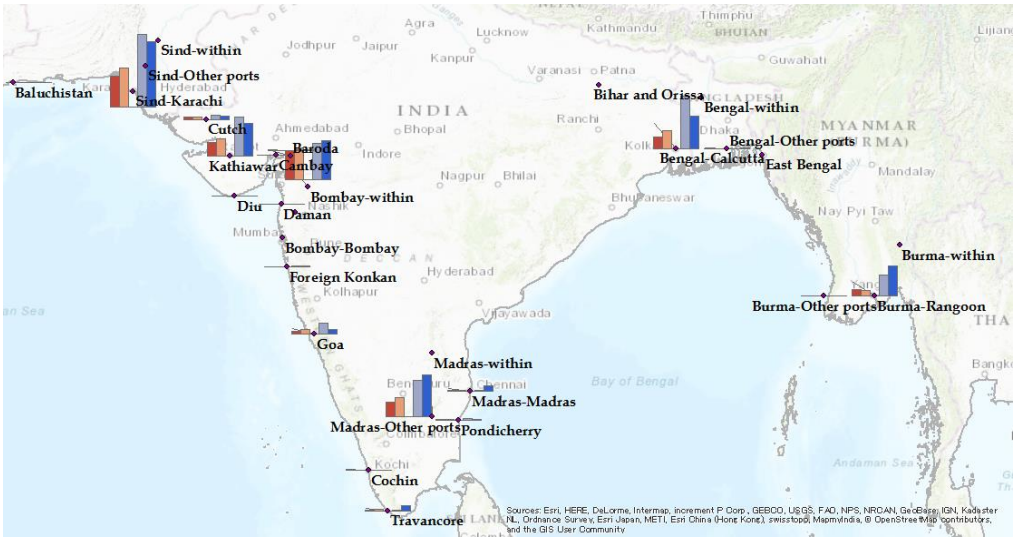
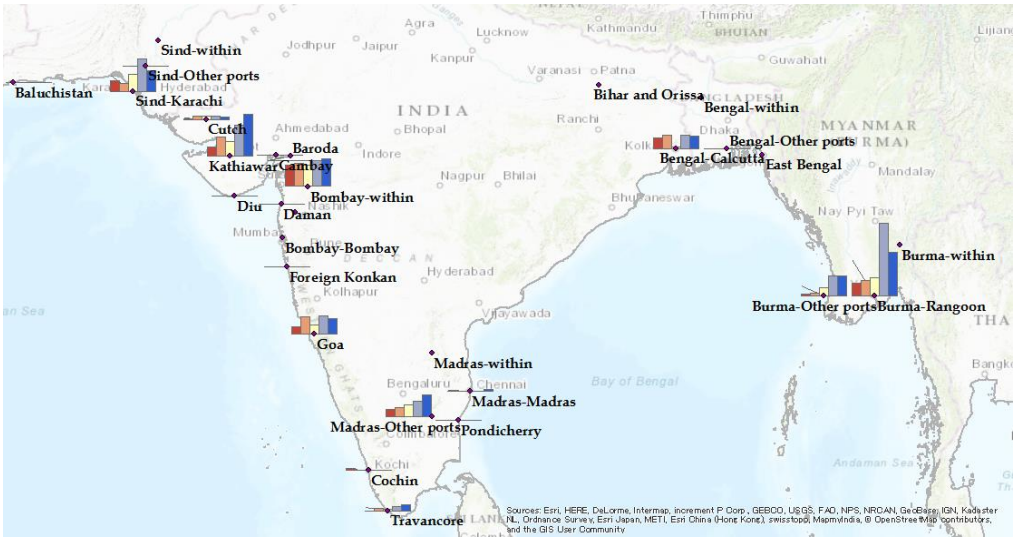


Figure 3. The direction of intraregional trade from and to Bombay Presidency

(a) Export



(b) Import



Notes: Each bar represents the size of the trade for 1905 (tick red), 1910 (light red), 1915 (white), 1920 (light blue), and 1925 (tick blue). Source: Authors' compilation and cartography

Figure 4. The chief port's share of total imports and exports through Bombay

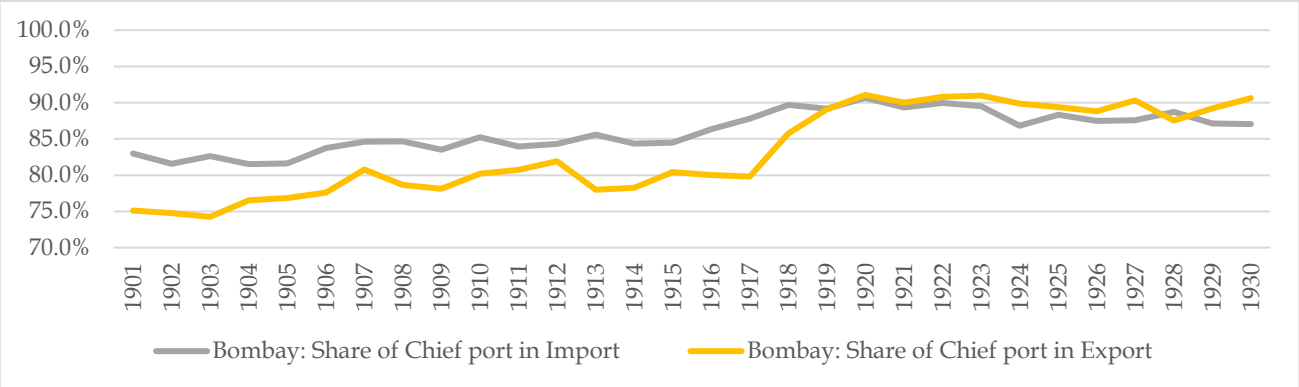
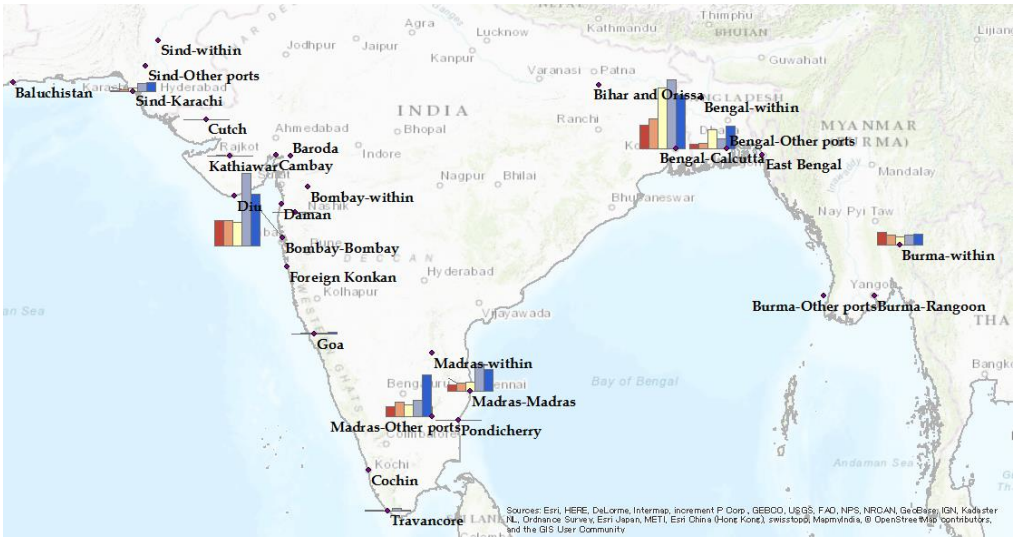
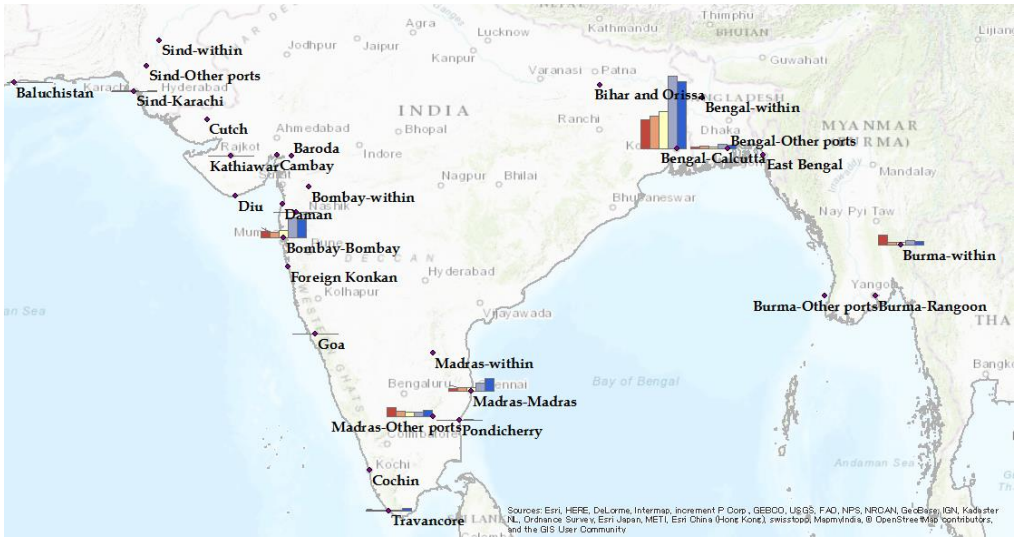


Figure 5. The direction of intraregional trade from and to Burma Province

(a) Export



(b) Import



Notes: Each bar represents the size of the trade for 1905 (tick red), 1910 (light red), 1915 (white), 1920 (light blue), and 1925 (tick blue). Source: Authors' compilation and cartography

Figure 6. The chief port's share of total imports and exports through Burma

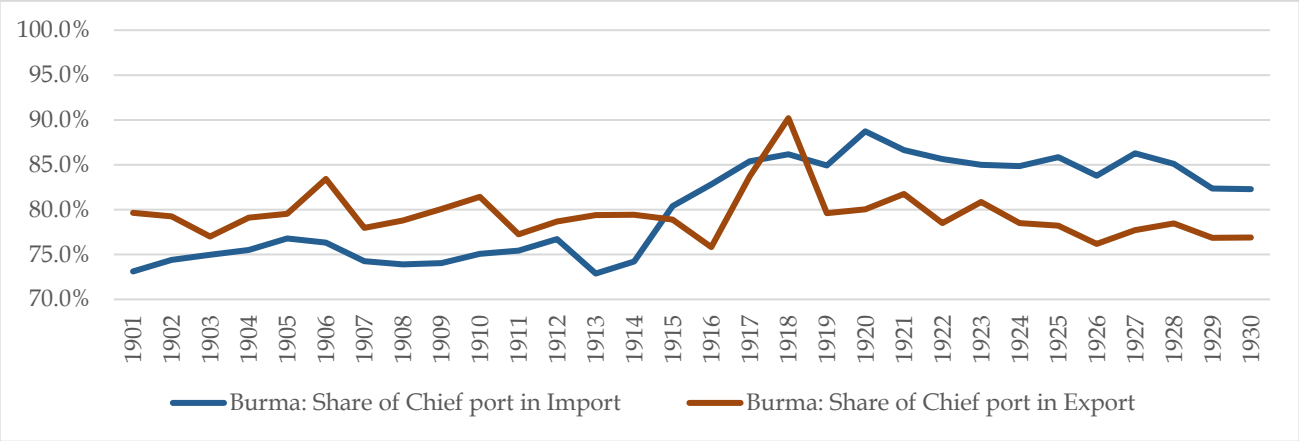
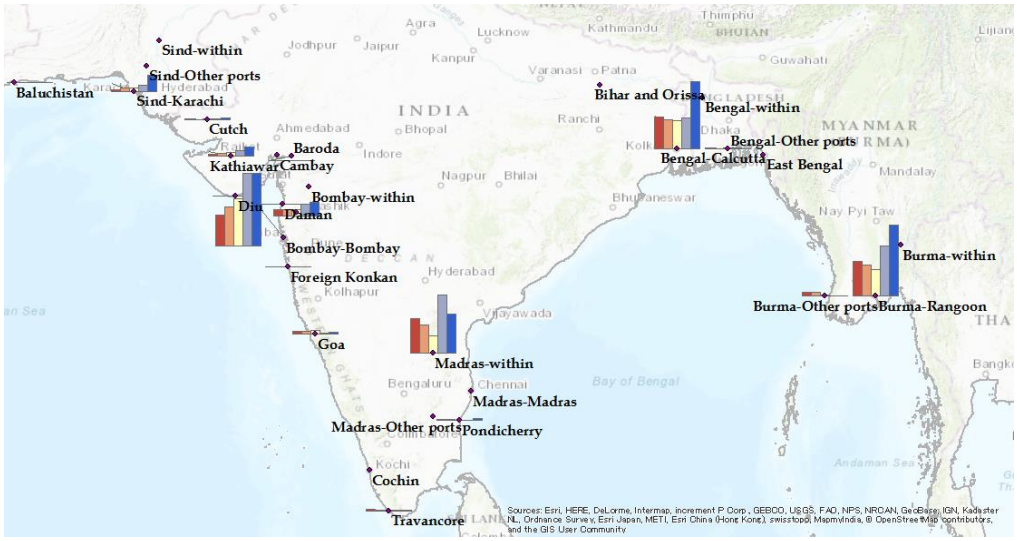
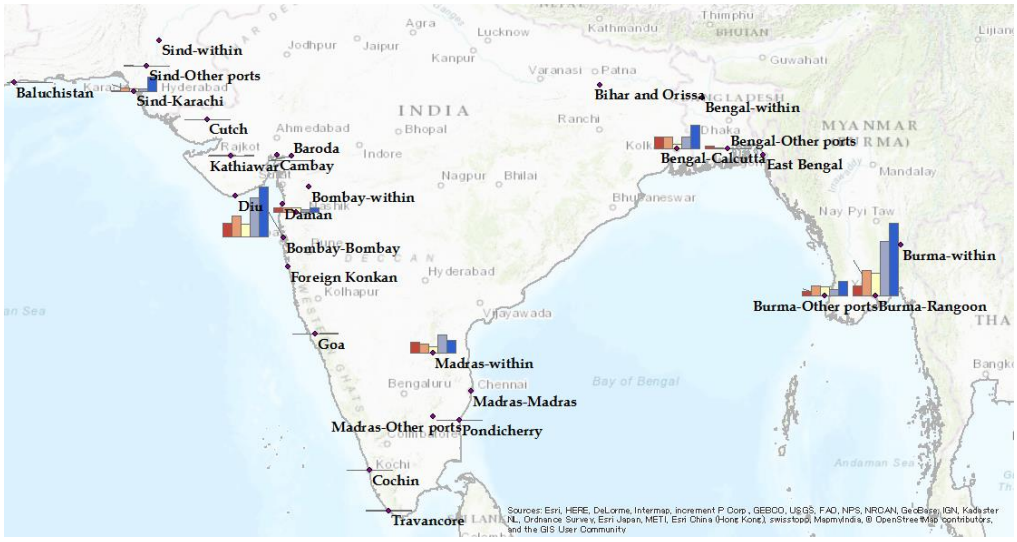


Figure 7. The direction of intraregional trade from and to Madras Presidency

(a) Export



(b) Import



Notes: Each bar represents the size of the trade for 1905 (tick red), 1910 (light red), 1915 (white), 1920 (light blue), and 1925 (tick blue). Source: Authors' compilation and cartography

Figure 8. The chief port's share of total imports and exports through Madras

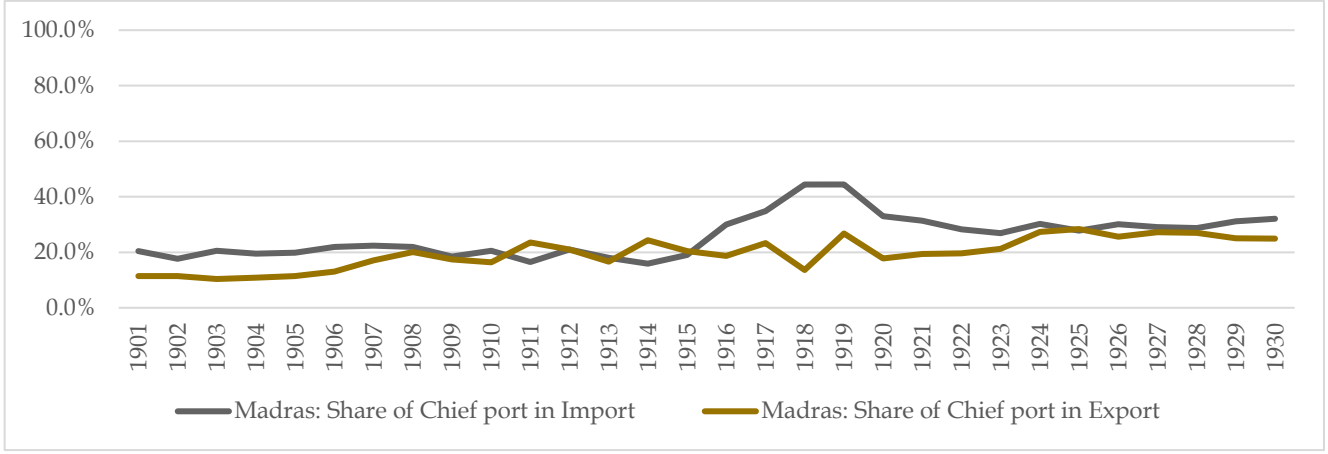
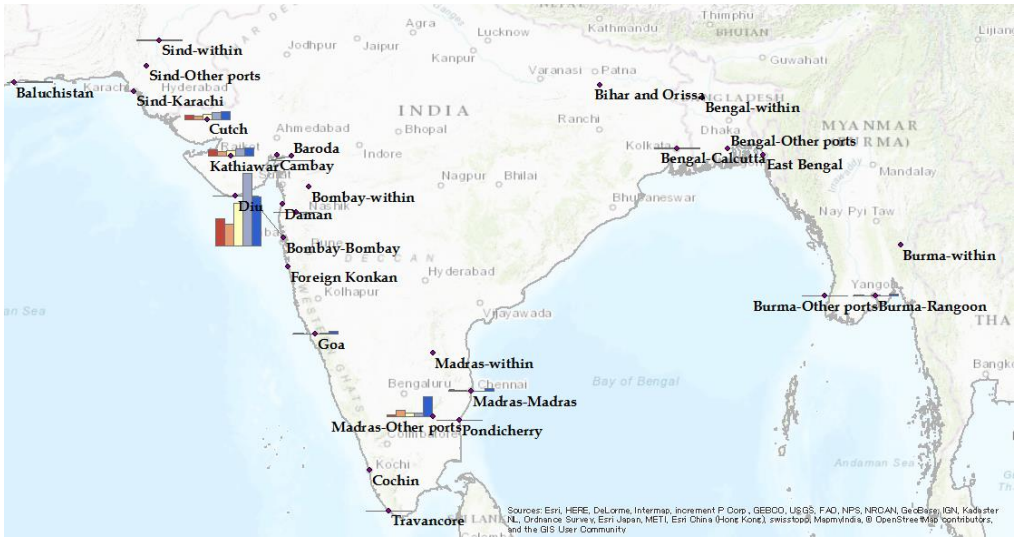
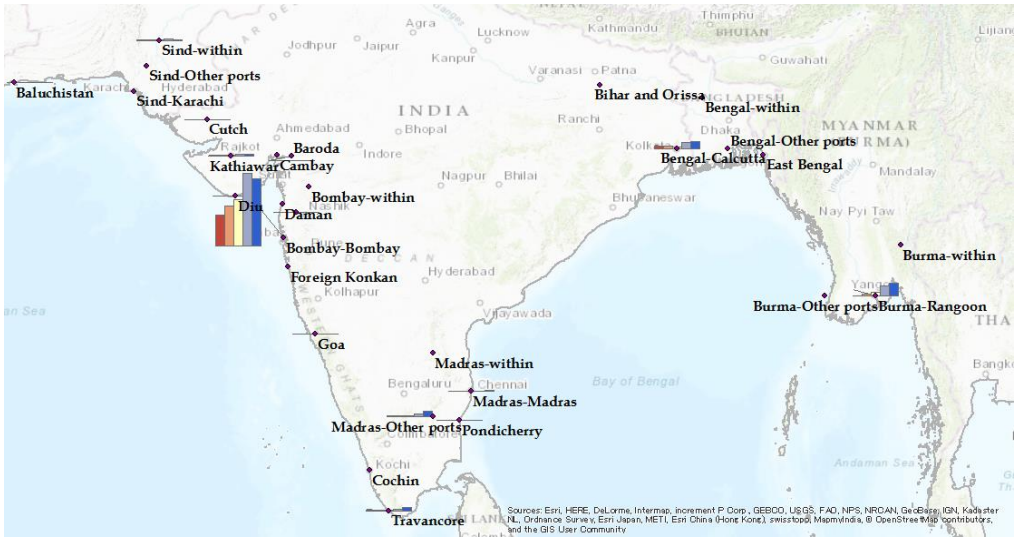


Figure 9. The direction of intraregional trade from and to Sind Province

(a) Export



(b) Import



Notes: Each bar represents the size of the trade for 1905 (tick red), 1910 (light red), 1915 (white), 1920 (light blue), and 1925 (tick blue). Source: Authors' compilation and cartography

Figure 10. The chief port's share of total imports and exports through Sind