

TELEGRAPHIC PROTECTIONISM: GROWTH OF OTTOMAN TELEGRAPH BUSINESS AS A PUBLIC ENTERPRISE, 1854-1914

Sırrı Emrah Üçer¹

ABSTRACT

This article aims to provide a business history account for development of Ottoman telegraph network in the nineteenth and early twentieth centuries. Study of telegraphic business is a part of the greater research agenda, namely business history of utilities policy in semi-peripheral countries, with its branches of transportation, communication, energy, water, and urban scale infrastructure networks. However, Ottoman communication policy preferred public ownership and public enterprise of telegraph network. This preference demonstrates a deviation from nineteenth century business history pattern of concessions for foreign companies in infrastructure networks. Ottoman Empire protected its telegraph network from penetration of foreign companies, despite the fact that it granted concessions for other infrastructure networks. I argue that concept “telegraphic protectionism” is a useful tool to analyze growth of Ottoman telegraph business under public ownership and public enterprise. Concerns of security and bureaucratic centralization had a significant role in formation of this strategy of telegraphic protectionism. This article analyzes this specific formation of semi-peripheral telegraph policy by employing perspective of business history.

Keywords: communication, Ottoman Empire, telegraph business, public enterprise, protectionism, utilities policy, telecommunications.

Jel Code: N83, L96, L98.

¹ Dr., Yıldız Technical University, Faculty of Economic and Administrative Sciences, Department of Economics.
seucer@yildiz.edu.tr, <https://orcid.org/0000-0001-5548-9577/>

Atıf (Citation): Üçer, S. E. (2021). Telegraphic Protectionism: Growth of Ottoman Telegraph Business as a Public Enterprise, 1854-1914. *Muhasebe ve Finans Tarihi Arařtırmaları Dergisi*(21), 21-45.

Qualitative Research Article / Nitel Arařtırma Makalesi

Geliř Tarihi / Received: 12.12.2020

Revizyon Tarihi / Revised: 10.01.2021

Kabul Tarihi / Accepted: 10.05.2021

TELGRAF KORUMACILIĞI: BİR KAMU İŞLETMESİ OLARAK OSMANLI TELGRAF ŞEBEKESİNİN GENİŞLEMESİ, 1854-1914

ÖZ

Bu makale Osmanlı telgraf şebekesinin on dokuzuncu ve erken yirminci yüzyıllarda gelişimini işletmecilik tarihi perspektifiyle incelemeyi amaçlamaktadır. Telgraf işletmeciliği üzerine olan bu çalışma, yarı-çevre ülkelerde kamu hizmetlerinin işletmecilik tarihini ulaştırma, haberleşme, enerji, su ve kent ölçekli altyapı şebekeleri gibi dallarıyla inceleyen daha geniş bir araştırma gündeminin bir parçasıdır. Ancak Osmanlı haberleşme politikası telgraf şebekesinin kamu mülkiyeti ve kamu işletmeciliği altında yürütülmesi yönünde bir tercihle şekil almıştı. Bu tercih on dokuzuncu yüzyıl işletmecilik tarihinde yaygın rastlanan bir kalıp olan altyapı şebekelerinde yabancı şirketlere imtiyaz tanınması yönteminden bir sapma anlamına gelmekteydi. Osmanlı İmparatorluğu, diğer altyapı şebekelerinde imtiyazlar tanınmasına rağmen telgraf şebekesini yabancı şirketlerin yayılmasına karşı koruma altına almıştı. Bu makale “telgraf korumacılığı” kavramının Osmanlı telgraf şebekesinin kamu mülkiyeti ve kamu işletmeciliği altında büyümesini incelemek için yararlı bir araç olduğunu iddia etmektedir. Güvenlik ve bürokratik nüfuz kaygıları telgraf korumacılığı stratejisinin oluşmasında önemli rol sahibi olmuştu. Bu makale bu yarı-çevre telgraf politikasının özgün biçimlenişini işletmecilik tarihi perspektifiyle analiz etmektedir.

Anahtar Kelimeler: haberleşme, Osmanlı İmparatorluğu, telgraf işletmeciliği, kamu işletmeciliği, korumacılık, kamu hizmetleri politikaları, telekomünikasyon.

Jel Kodu: N83, L96, L98.

1. INTRODUCTION: FROM POSTAL DEPENDENCE TO TELEGRAPHIC PROTECTIONISM

The existence of more than one foreign postal networks active in the territories of Ottoman Empire, China, Japan, and Ethiopia in the nineteenth century is the basis of my concept postal dependence. Postal dependence was a common pattern for a group of semi-peripheral countries, which were able to sustain their political independence from colonial empires under the conditions of economic dependence on core economies.² These semi-peripheral governments faced a challenge of modern state formation under conditions of trade and capital dependence. For a state modernization and centralization that followed the footprints of European modern states, one of the essential parts of reforms was to form a modern postal network under government control. In the nineteenth century Ottoman Empire and other semi-peripheral governments established postal networks under public management. But they were unable to monopolize their national post organization by sweeping out foreign post offices.

² Şevket Pamuk (1988) employs the concept semi-periphery in order to signify economically dependent and politically independent countries of the nineteenth century, especially Ottoman Empire and China. In this respect Ottoman Empire was categorized as a semi-periphery. This categorization is an adaptation of the original theory in order to meet demands of Ottoman historiography and is not in full agreement with the World Systems Perspective (Wallerstein, 1979). The case of communication policies in the nineteenth century supports the original theoretical interpretation of Pamuk, as a series of semi-peripheral countries demonstrated historical pattern of postal dependence in the nineteenth century. For further discussion on dependency variations of Turkish historiography see Karaömerlioğlu (2001). Also see Üçer (2019a) for theoretical background of this study.

These foreign post offices continued to dominate postal services until 1920s, as they work upon transportation networks controlled by foreign railway and steamship companies. In contrast with colonial-periphery countries like India and Indonesia, the European powers monopolized the postal services under colonial administrations, just like they did in Europe in earlier periods. Elsewhere I analyzed postal dependence of Ottoman Empire in a comparative perspective in the context of capitalist world economy (Üçer, 2018a; 2018b: 28-31; 2020). This paper follows up the argument by analyzing business history of Ottoman telegraph network under government control, a policy I call telegraphic protectionism.

This article aims to explain the factors that gave birth to the telegraphic protectionism in the Ottoman Empire, in accordance with the Ottoman postal dependence. To do so, I explain the evolution of electric telegraph in different country groups and propose three categories of nineteenth century telegraphic organizations for core, colonial-peripheral, and semi-peripheral countries in the second section of paper. Third section explores the relationship between Britain-India telegraph route and Ottoman telegraph protectionism.

This paper discovers two primary sources of business history of Ottoman telegraph. First is the historical French language annual reports of International Telegraph Union (ITU, 1869-1931). These annual reports include historical statistics of telegraph for Ottoman Empire and a series of countries. These statistics provide an opportunity to analyze the growth of Ottoman telegraph network. The second original primary source of business history this paper relies on is the proceeding by Maurice G. Simpson, Director-in-Chief of Indo-European Telegraph Department of UK, which was presented at convention of Royal Society of Arts in January 1928 (Simpson, 1928). This proceeding is based on memories of Simpson and provides a summary of price conflict between Ottoman telegraph administration and international telegraph companies. These two sources of business history of Ottoman telegraph network are analyzed in the fourth section of this paper. Conclusion section discusses the relationship between telegraphic protectionism and telephone skepticism and posits this business history of Ottoman telegraph as a background for business history of Ottoman telephone network in specific and Turkish telecommunications in general.

2. EVOLUTION OF ELECTRIC TELEGRAPH BUSINESS: FROM CORE COUNTRIES TO PERIPHERAL COUNTRIES

Before the advent of electric telegraph, France and UK adopted optical-mechanical telegraph systems in the 1790s. These systems of optical-mechanical telegraph were nothing more than modern governmental organizations, telescope-observation towers with a few officers placed on hilltops that see each other. This was a direct answer to the needs rooted in military urgencies of modern states and was devoted to the conveyance of governmental messages only (Beauchamp, 2008: 4-19; Burns, 2004: 29-54). In a similar fashion, the Ottoman Empire established a semaphore telegraph in Istanbul in 1828, in order to answer needs of military urgency during the war against Russia (Davison, 1990: 133). In this early phase, the commercial use of network by ordinary citizens was not a determining factor, a feature that differentiated mechanic telegraph communications from the postal communications.

Technological adaptation of electricity to the telegraph in the 1830s was a significant rupture, as the conveying speed of messages increased dramatically. This change reshaped communications services as modern telecommunications. At the beginning, the demand from railway companies for signaling services by electric telegraph triggered expansion of telegraph business in the core countries.³ By time, a popular demand for commercial telegraph services emerged and companies invested in telegraph business in the core and peripheral countries (Burns, 2004: 86-90; 108-109). European governments launched telegraph as a publicly owned communications network or nationalized telegraph business in early period. UK consolidated and nationalized telegraph business between 1868 and 1870, after four decades of private competition (Beauchamp, 2008: 73-81). France nationalized telegraph business in 1878 and Italy in 1889 (Başaran, 2000: 58). In the late nineteenth century, the general view for a core country in Europe was a nationalized and monopolized telegraph business, with an exception for United States (US), in which Western Union became a huge private telegraph monopoly in the 1880s and 1890s.⁴ Long-range submarine telegraphic connections within core and between core and periphery were generally built by trans-national private companies in the late 1860s and 1870s (Müller, 2016). National telegraph networks of European countries were also integrated with the postal networks to form the nucleus of well-known post-telegraph-telephone (from now on PTT) organization pattern that shaped pre-privatization telecommunications policies in the twentieth century (Table 1, column 2).

As Roderic Davison (1990: 155) puts it, the advent of electric telegraph declared the "...divorce of communications from transportation." This divorce was especially crucial for semi-peripheral countries that were dependent on steamship and railway lines operated by the foreign companies, and unable to find funds for building alternative transportation networks like inland roads. Under the conditions of absence of an inland road network, dependence on the steamship and railway companies was the economic basis of postal dependence of semi-peripheral countries like China and Ottoman Empire. Relatively cheap network of electric telegraph was an opportunity for semi-peripheral governments to release from communications dependence. Compared to the late advent of railway technology, electric telegraph was quickly adopted and expanded by the semi-peripheral governments of Japan, China, and Ottoman Empire in the 1850s and 1860s. Among these three semi-peripheral countries that shared a common background of postal dependence (Üçer, 2018a), Ottoman Empire was the earliest adopter of telegraph technology, as the first commercial telegraph line was launched in 1854. Japanese government introduced the telegraph network through public ownership in 1869 during the Meiji Restoration (Ito & Iwata, 1994: 440). Telegraph companies and publicly owned telegraph network expanded side by side in China in the 1870s. Electric telegraph was introduced in China in the 1870s through investments of British Cable & Wireless and Danish Northern Telegraph companies. The government telegraph network was installed in the 1880s but co-existed with the foreign companies, similar to the coexistence of domestic and foreign

³ The existence of a ready network of railways in the US and European countries accelerated the expansion of telegraph network (Beauchamp, 2008: 34-40). As a contrast, as Yakup Bektaş (2000: 671) puts it "...development of the telegraph in the Ottoman Empire, as in Japan and China, was independent of the railway service."

⁴ The Western Union's successful partnerships with the railway companies and US Post paved the way for monopoly of company in the 1890s (Beauchamp, 2008: 59-60, 65).

post offices (Day Jr, 1994: 244; Fang-Tung & Chi-Kuo, 1994: 315-317). Governments developed national networks based on backbone of landlines, while dependence persisted in the shore-nodes connected by submarine cables of foreign companies, as the deployment of these was too expensive and “hi-tech.” Establishment of a cheap telegraph network under government ownership served for priorities of modern state formation like responsiveness to the military urgencies, bureaucratic centralization, and surveillance of information flow. Another factor that motivated semi-peripheral governments was a consistent flow of revenue guaranteed by an increasing commercial demand for communications services. Paradoxically, while providing an opportunity to release from postal based communications dependence, the construction of domestic telegraph networks and international connections facilitated economic activities of foreign companies in the semi-peripheral countries by answering their demand for rapid communications and therefore contributed to semi-peripheral incorporation to the core in terms of trade and capital transfers. This telegraphic organization was the semi-peripheral telegraphic model of the nineteenth century (Table 1, column 4).

Table 1. Varieties of Early Telegraphic Organization

<i>Varieties of Telegraphic Organization / Distinctive Features</i>	<i>Core Model</i>	<i>Colonial-Periphery Model</i>	<i>Semi-Periphery Model</i>
<i>Market Structure</i>	Postal-Telegraph public monopoly, except US	Colonial telegraph monopoly	Telegraph public monopoly in Ottoman Empire and Japan
<i>Geography</i>	European Powers	India	Ottoman Empire and Japan
<i>Physical Infrastructure</i>	Land lines along railway lines and beyond to nodes of commercial demand, long-range submarine lines by private companies	Submarine connections to core, land lines to colonial administrative and commercial nodes	Land lines independent from transportation networks, dependence on foreign companies for overseas connection

Source: Compiled by the author.

As Gordon M. Winder (2006: 800) puts it, “...geographers normally associate the telegraph with the railroad and conceive it as an instrument of national economic integration, but telegraphy also facilitated transnational economic integration.” Laying down of telegraphic lines between European countries and their colonies contributed much to the economic integration of globe under overseas empires. The telegraphic organization in the colonial-peripheral countries was in great part determined by this process of imperial expansion. The telegraphic connection between Britain and India provides a good case for understanding the

mechanism of telegraph's expansion from core to colonial-periphery. Two factors motivated UK to project a telegraph connection between Britain and India. These are military urgencies of colonial administration and the commercial demand for rapid communication (Hamil, 2010: 268-273). In the mid-1850s It was taking weeks (40 days) to convey a letter from India to Britain by a steamship that sailed through Cape of Good Hope, a factor that decrease the responsiveness of colonial administration. Indian Mutiny in 1857 proved that retard of communications was a real problem for colonial administration (Davison, 1990: 137). As a consequence, telegraphic lines were built through India, and connected the already built colonial-Indian domestic network with the British domestic network. This form of evolution in India represents the colonial-peripheral model of telegraphic organization in the nineteenth century (Table 1, column 3). Building of a telegraphic line to India in the 1860s had to engage with the Ottoman Empire, as the submarine cable technology was not yet capable of by-passing huge territories of the Empire.

3. BRITISH LINE TO INDIA AND OTTOMAN TELEGRAPHIC PROTECTIONISM

It is a good point to further elaborate the Ottoman telegraphic protectionism in the context of semi-peripheral integration into the world economy. The first scientific experiment of electric telegraph happened in the Ottoman Empire in 1847, at Beylerbeyi Palace in Istanbul (Bektaş, 2001: 213-224). However, it was not before the Crimean War (1853-1856) a telegraph line built, in accordance with the general pattern that a military urgency triggered communications investment. In 1854, French allies of Empire built a line between Bucharest and Varna and English allies connected this to Istanbul with a submarine line (Davison, 1990: 134-135). This was a remarkably early time, as the telegraph networks were built in Britain between 1837-1839 (Beauchamp, 2008: 30-33) and in India in 1850-1855 (Gopika, 2014: 32). In 1855, with the launch of commercial line between Istanbul and Edirne, publicly owned Ottoman Telegraph Administration (*Telgraf İdaresi*) was founded (Davison, 1990: 136). *Telgraf İdaresi* took over the lines between Bucharest and Istanbul in 1857 as the first telecommunications nationalization of modern Turkish history (Shahvar, 2002: 170). This means that the commercial telegraph was launched as a publicly owned modern network, a significant milestone of Turkish history of state-owned enterprises (SOEs).

Further expansion of Ottoman telegraph network was closely related to UK plans to build a telegraph line to India. As I explain above, in 1857 UK decided to build the line with commercial and colonial administrative motives. European and Indian Junction Telegraph Company was formed to acquire a concession from Ottoman Empire, a concession for building, owning, and operating telegraph lines in Ottoman Empire (Bektaş, 2001: 677-680). However, Tanzimat pashas who were the actual rulers of Ottoman Empire rejected to issue a concession. Instead, Ottoman Empire proposed to build the part in its territory itself with technical support from British engineers and officers, a proposal that was desperately accepted by UK, as submarine cable technology was only at an initial stage and was not yet able to transmit

messages consistently through long lines in deep ocean.⁵ In this case, Ottoman telegraphic protectionism policy had a complicated stance. On the one hand, by agreeing to build and operate the line, Ottoman Empire facilitated UK plan. On the other hand, by preventing control of British company over lines, Ottoman Empire managed to balance France's reaction. In addition to this famous diplomatic balance policy conducted by Tanzimat pashas, control of line by a public monopoly would have brought advantages of state formation and capturing operating revenues. The Ottoman control over the only British telegraphic route to India was promising additional diplomatic advantages. As Davison (1990: 147) puts it:

"(...) Probably the principal political effect of the electric telegraph was to assist the centralization of power in the Ottoman Empire. The Ottoman archives are full of copies of telegrams sent from the Sublime Porte to provincial officials, and from those officials to the Porte, during the later Tanzimat period and the ensuing rule of Abdülhamid II and then of the Young Turks."

Building of line under Ottoman control and British engineering started in 1859. Line reached from Istanbul to Baghdad in 1861, and to Fao (Basra) in 1865 (Bektaş, 2001: 676-686). This line both achieved the consistent telegraph communications between Britain and India and formation of a basic skeleton of Ottoman telecommunications network.

4. GROWTH OF OTTOMAN/TURKISH TELEGRAPH NETWORK: 1863-1931

Ottoman telegraph network continued to grow under public ownership in the 1860s and 1870s.⁶ Length of lines was 6.490 kilometers (km) in 1863 and expanded to 13.750 km in 1866 just after the completion of Istanbul-Baghdad-Fao line. It exceeded 25.000 km by 1870, 30.000 km by 1880s and 40.000 in the early 1900s (Figure 1). Another indicator of expansion of network was the number of post offices, which jumped from 52 in 1863 to 348 in 1870, 680 in 1890, 1.017 in 1906 (Figure 2). Sudden decreases in 1912 and 1913 in terms of line length and number of offices were consequences of Empire's land losses. The institutional framework of Ottoman telegraph network also evolved in 1860s and 1870s. Ottoman Empire was of first members of International Telegraph Union (ITU, later renamed as International Telecommunications Union) when it was founded in 1865 (Davison, 1990: 146). In 1870, Ottoman imperial post and telegraph was consolidated to form *Posta ve Telgraf Nezareti* (from now on PT), an administration under Ministries of Interior and Public Works (Tanrıku, 1984: 539). This was the nucleus of future Turkish PTT, with a growing number of employees throughout the Empire, 2.536 in 1870, 3.524 in 1890, and 4.683 in 1905 (Figure 3). This body of PT state officials later became a persistent power in favor of public ownership of telecommunications networks. They were also a significant nationwide segment of working classes of Ottoman Empire.⁷ Other significant institutional steps that contributed to policy of

⁵ Soli Shahvar provides a detailed analysis of stances of pro-British Ali and Reşit Pashas and pro-French Keçecizade Mehmet Fuat Pasha. Fuat Pasha, who was against British ownership of telegraph network, convinced Ali and Reşit Pashas to reject concession (Shahvar, 2002: 174-181).

⁶ For some detail on the expansion of commercial network under state ownership, see Tanrıku (1984: 547-554, 559).

⁷ One of the first strikes in the Ottoman Empire was organized by telegraph workers in Istanbul in February 1872 (Yıldırım, 2013: 210, 357). When one takes a look to the list in this book that includes strikes organized in the Empire between 1870 and

telegraphic protectionism were foundation of a telegraph school (*Telgraf Mektebi*) in 1861 and a telegraph factory in 1869, aimed at eliminating public network's dependence on foreign employees and imported inputs (Davison, 1990: 143-144). Ottoman telegraph network had a respectable size and cover when it is compared to telegraph networks of countries like USA, German Empire, Brazil, UK, France, India, Japan, and Egypt. Table 2 derived from historical statistics of International Telegraph Union provides a comparison for years 1885, 1890, and 1900 in terms of length of networks.

Table 2. International Comparison of Ottoman Telegraph Network (km)

<i>Countries/Years</i>	<i>1885</i>	<i>1890</i>	<i>1900</i>
<i>USA</i>	244.449	302.649	312.057
<i>German Empire</i>	82.991	103.308	128.315
<i>Brazil</i>	10.292	12.343	23.686
<i>UK (Britain & Ireland)</i>	46.824	50.918	73.725
<i>France (except Algeria)</i>	86.563	96.632	140.713
<i>India (British Raj)</i>	44.276	60.049	88.562
<i>Japan</i>	9.226	12.883	27.478
<i>Egypt</i>	4.416	5.866	8.820
<i>Ottoman Empire</i>	31.575	33.409	40.405 ⁽¹⁹⁰¹⁾

Source: ITU (1885; 1890; 1900; 1901)

1922, notices that the great majority of strikes were organized by workers in infrastructure sectors like transportation and energy (Yıldırım, 2013: 357-367). This character of working-class formation was in close relationship to the integration of Ottoman Empire into the world economy, as the peripheralization attracted foreign investments towards infrastructure sectors and built modern companies that functioned as the preliminary bases of waged labor. Historical monographies on working class formation in Turkey has flourished in the recent two decades. For a collection of these studies, see Alkan & Çetinkaya (2015). Next step may be an overall evaluation of working-class formation around networks of transportation, energy, communication, and water in Ottoman Empire and other semi-peripheral countries, a dialogue between comparative approach of World Systems Perspective and Thompsonian class-formation analysis.

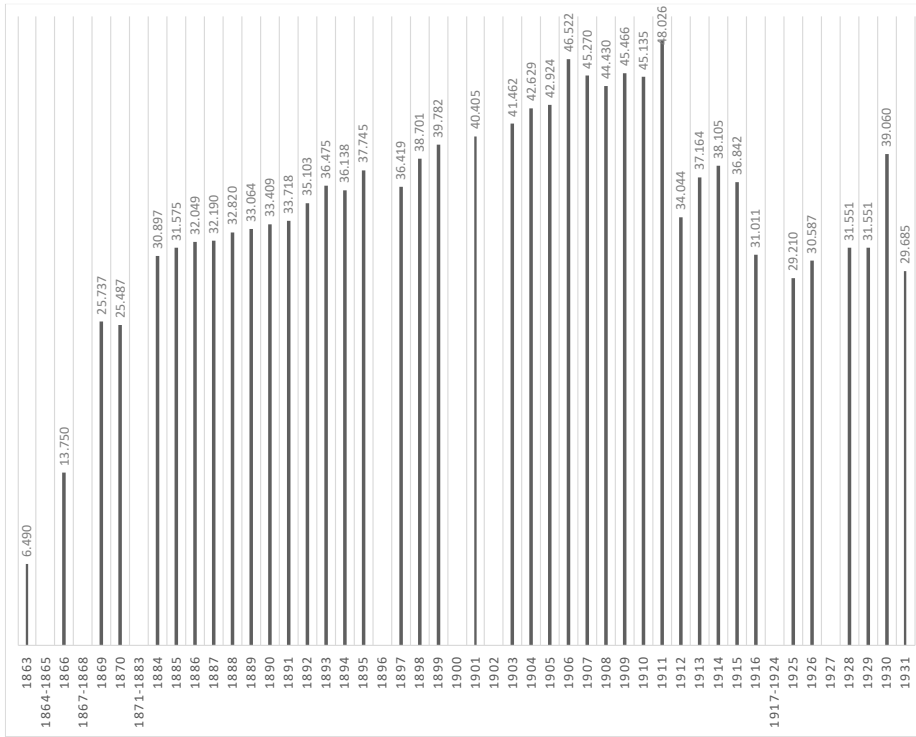


Figure 1. Telegraph Lines in Ottoman Empire and Republic of Turkey, 1863-1931 (kilometers).
Source: Compiled by the author based on data in Tanrıkut (1984: 614-615) and ITU (1870-1931).⁸

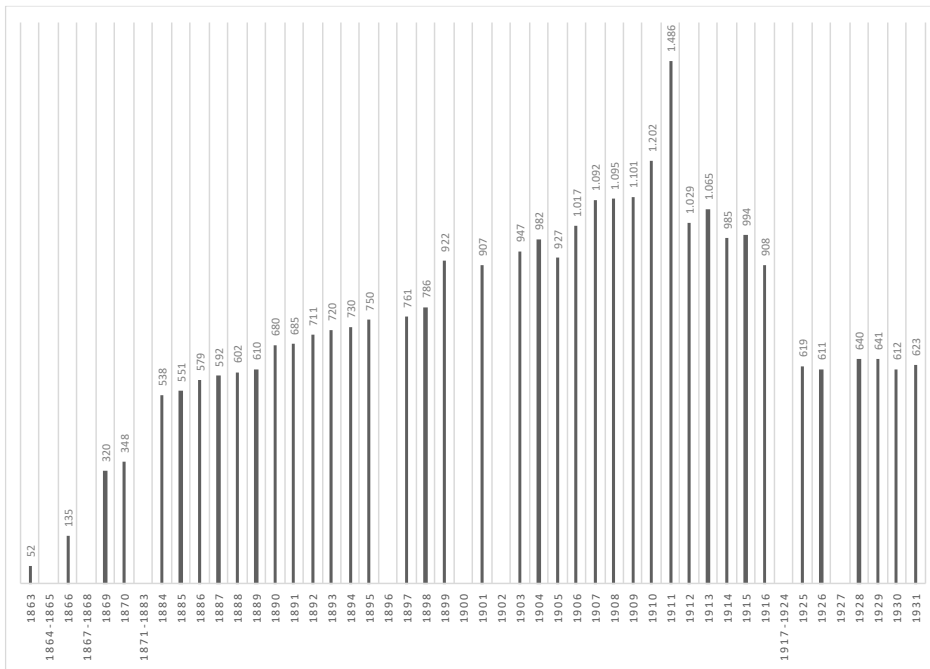


Figure 2. Number of Telegraph Offices, 1863-1931.

Source: Compiled by the author based on data in Tanrıkut (for 1863 and 1866) and International Telegraph Union (1870-1931), and Tanrıkut (1984: 614-615) and ITU (1870-1931).

⁸ For 1863 and 1866, see Tanrıkut (1984: 614-615). For 1869-1870, 1884-1895, 1897-1899, 1901, 1903-1916, 1925-1926, and 1928-1931, see annual reports of *Le Bureau International des Administrations Télégraphiques*. These reports are provided on website of International Telecommunications Union (ITU). For an example of numerous annual reports that I used to compile series, see ITU [*Le Bureau International des Administrations Télégraphiques*] (1869). These data are also sources of figures 2, 3, and 4 below.

As I explain above, demand for transit international messages was an early motive in building of Ottoman telegraph network. In 1869, 194.978 international messages were sent and received through Ottoman telegraph network. 39.300 of these were transit messages. Number of international messages jumped to 377.007 (77.455 transit) in 1885, 556.802 (46.833 transit) in 1895, and 1.376.203 (873.019 transit) in 1901.⁹ Domestic telegraph traffic was much larger, 476.342 messages in 1869, 1.487.461 in 1885, 2.775.632 in 1895 and 3.284.511 in 1901. These numbers indicate that, telegraph network met a significant portion of commercial demand for communications services in the late nineteenth and early twentieth centuries. (See figure 4).

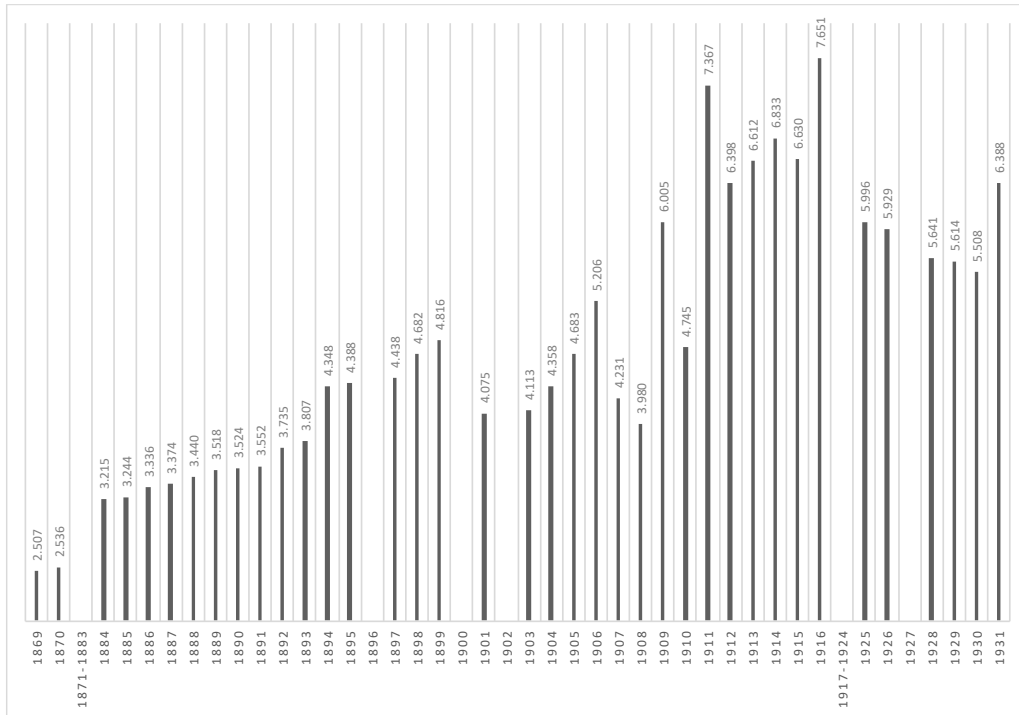


Figure 3. Number of Employees of Ottoman-Turkish Post-Telegraph-Telephone, 1869-1931.

Source: Compiled by the author based on data of International Telegraph Union (1870-1931), and Tanrıku (1984: 614-615) and ITU (1870-1931).

⁹ For number of transit messages, see ITU (1885-1902). I guess that, the sudden rise of transit telegraph dispatches in 1901 was triggered by the Second Anglo-Boer War (1899-1902) between United Kingdom and Boer independence warriors in South Africa. I cannot find proper documenting of this relationship.

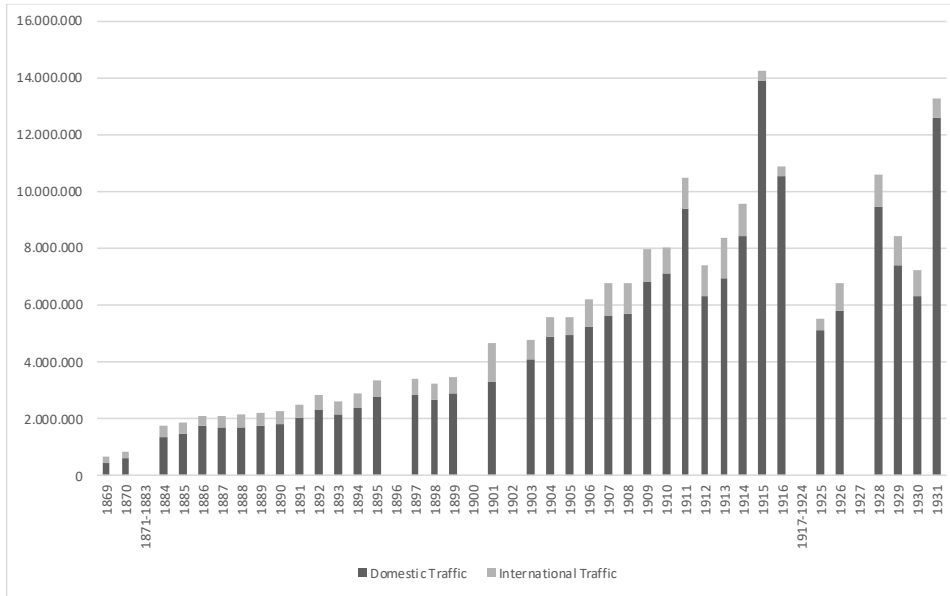


Figure 4. Ottoman-Turkish Telegraph Traffic, 1869-1931.

Source: Compiled by the author based on data of International Telegraph Union (1870-1931) and Tanrikut (1984, 614-615) and ITU (1870-1931).

As I explain above, a part of telegraphic line from Britain to India was built by Ottoman Empire between 1859 and 1865. Up until 1870, Ottoman line operated as the only telegraphic route to India. In 1870, two alternative telegraph lines to India was completed by two private companies, by-passing lands of Ottoman Empire. These were Indo-European Telegraph Company (an affiliate of German and British branches of Siemens) and British-Indian Submarine Telegraph Company (later renamed as Eastern Telegraph, and then as Cable and Wireless). This was the consequence of technologic development of submarine cable technologies and UK's efforts to break dependence on Ottoman telegraph (Winder, 2006, 798-800). Opening of alternative telegraph routes to India caused a sudden drop in number of transit messages through Ottoman telegraph from 39.300 in 1869 to 19.290 in 1870 (ITU, 1870; 1871).

Two private lines were able to transmit telegraphic dispatches from Britain to India much faster than Ottoman line. However, as a disadvantage, infrastructure investments of these two companies were privately financed and were in need of proper debt servicing to capital markets. Three alternative lines started with equal prices in 1870. However, two private companies had to increase their prices gradually to remain profitable. As a consequence, by early 1871, Ottoman line that was offering a cheaper rate for a slower service, persisted to bear a significant portion of traffic. Indo-European Telegraph Company and Eastern Telegraph pressed core governments for a solution to this "problem" in their favor. In 1871, a sub-conference of ITU convened in Berne, Switzerland and core governments induced Ottoman Empire to increase telegraph rates. ITU and core governments made it sure that Ottoman Empire was to adjust prices in favor of companies for following years too. This arrangement decreased the market share of Ottoman line to levels that did not threaten profits of transnational telegraph companies anymore¹⁰. This case was an interesting early example of

¹⁰ For a detailed explanation of this price conflict between Ottoman imperial telegraph organization and foreign companies, see Simpson (1928, 392). Simpson was the Director in Chief of Indo-European Telegraph Department, a high level colonial British administrator in India. This article by Simpson provides one of the most valuable sources on telegraph issues between UK and Ottoman Empire.

economic clashes and trade wars between trans-national companies and peripheral governments, which was solved through lobbying of core governments and international organizations. The modern time Turkish telecommunications policy provided similar cases in the late twentieth and early twenty-first centuries.¹¹ This intervention to Ottoman telegraph rates is also a useful case that showed the structural limits of telegraphic protectionism of a peripheral government in context of an unequal international division of labor, namely capitalist world economy of nineteenth century.

5. CONCLUSION: FROM TELEGRAPHIC PROTECTIONISM TO TELEPHONE SKEPTICISM

In Abdülhamid II period (1877-1908), there was a stance against telephone in particular and urban electrification in general. What were the sources of the resistance by Hamidian administration against urban telephone networks, urban postal organization, electric tram, city lightening, and urban electrification? The skepticism against control of foreign companies on communication networks was a factor, based on observable consequences of postal dependence. Another factor was stance of telegraph administration against telephone concessions for foreign companies. Telegraph administration refused to share their revenues with foreign telephone companies and insisted to build a telephone business under its control. Another significant factor was Abdülhamid II's will of control over societal forces in general and communication in particular. Telegraphic communication was easier to follow, archive and censor if necessary. As a consequence, launch of an urban telephone business in Istanbul delayed until 1913. I analyze Ottoman telephone skepticism and development of telephone business in Ottoman Istanbul elsewhere (Üçer, 2021).

In Tanzimat period and Abdülhamid II period the priority was paid to long-distance networks like railways and telegraph in order to develop state capacity to govern large territories of the Empire. Development of electrified urban scale businesses like electric lightening, telephone, and electric tram accelerated after 1908, following the proclamation of second constitutional monarchy. This was a shift of emphasis towards accessing citizens to infrastructure networks from strengthening state capacity. Between 1910s and 1930s, marketization of urban networks and concessions for foreign companies to provide services was the main policy route adopted by constitutional and Republican governments. In the 1930s, the emphasis of network development shifted towards public ownership. Nationalization of urban network companies in Istanbul and Izmir and enlarging of these urban businesses to national scales became the main policy route. Marketization of infrastructure networks in the form of privatization did not become a policy alternative until 1980s. When the privatization emerged as the dominant policy route in 1990s, there was a great resistance against privatization of telecommunications network, especially from leftist and nationalist circles of Turkish bureaucracy (Üçer, 2018b: 207-212; Üçer, 2019b). This resistance was rooted in public

¹¹ For details on modern Turkish telecommunications policy in the late twentieth and early twenty-first centuries, see Üçer (2018b).

ownership and state control tradition of telegraph networks in the nineteenth century, in other words Ottoman telegraphic protectionism.

This paper is a part of a larger research agenda that aims to discover economic, social, and political factors that shaped Turkish telecommunications networks in particular and Turkish infrastructure networks in general in the nineteenth, twentieth, and twenty-first centuries. The policy priorities of governments shape under seek of balance between three contradicting aspects, namely state capacity (including strategic-military goals, security concerns, and censorship/surveillance policies), access of citizens (citizens' claims to rights to access networks for free or affordable prices), and marketization (commodification of services provided by infrastructure networks, policies of concession, privatization, and public-private partnerships and resistance against them). This seek of balance provided different policy alternatives in different periods like commodification, privatization, and development through private entrepreneurship or de-commodification, nationalization and development under public ownership. I argue that to study Ottoman infrastructure policies and Turkish modern transportation, communication, energy, and water policies in a continuity and in a comparative perspective is necessary to solve the crisis of network policies in this trilemma.

REFERENCES

- Alkan, M. Ö. & Çetinkaya, Y. D. (eds.). (2015). *Tanzimat'tan günümüze Türkiye işçi sınıfı tarihi 1839-2014: Yeni yaklaşımlar, yeni alanlar, yeni sorunlar*. İstanbul: Tarih Vakfı Yurt Yayınları.
- Başaran, F. (2000). *İletişim ve emperyalizm: Türkiye'de telekomünikasyonun ekonomi-politiği*. Ankara: Ütopya Yayınevi.
- Beauchamp, K. (2008). *History of telegraphy*. London: Institution of Engineering and Technology.
- Bektaş, Y. (2000). The Sultan's messenger: Cultural construction of Ottoman telegraphy, 1847-1880. *Technology and Culture*, 41(4), 669-696.
- Bektaş, Y. (2001). Displaying the American genius: The electromagnetic telegraph in the wider world. *The British Journal for the History of Science*, 34(2), 199-232.
- Burns, R. W. (2004). *Communications: An international history of the formative years*. London: The Institution of Engineering and Technology.
- Davison, R. H. (1990). The Advent of the Electric Telegraph in the Ottoman Empire. In Davison, R. H. (ed.), *Essays in Ottoman and Turkish history, 1774-1923: The impact of the West* (133-165). Austin: University of Texas Press.
- Day, J. J. Jr. (1994). Hong Kong. In Noam, E. M., Komatsuzaki, S. & Conn, D. A. (eds.), *Telecommunications in the Pacific basin: An evolutionary approach* (242-264). New York: Oxford University Press.
- Fang-Tung, Tseng & Mao Chi-Kuo. (1994). Taiwan. In Noam, E. M., Komatsuzaki, S. & Conn, D. A. (eds.), *Telecommunications in the Pacific basin: An evolutionary approach* (315-334). New York: Oxford University Press.
- Gopika, G. G. (2014). Growth and development of telecom sector in India – An overview. *IOSR Journal of Business and Management*, 16(9), 25-36.
- Hamill, L. (2010). The social shaping of British communications network prior to the First World War. *Historical Social Research / Historische Sozialforschung*, 35(1), 260-286.

- Ito, Y. & Iwata, A. (1994). Japan: Creating the domestic and international network. In Noam, E. M., Komatsuzaki, S. & Conn, D. A. (eds.), *Telecommunications in the Pacific basin: An evolutionary approach* (440-457). New York: Oxford University Press.
- ITU [Le Bureau International des Administrations Télégraphiques]. (1869-1931). *Statistique générale de la télégraphie dans les différents pays de l'ancien continent*. Berne: Imprimerie Rieder & Simmen.
- Karaömerlioğlu, M. A. (2001). “Bağımlılık kuramı, dünya sistemi teorisi ve Osmanlı/Türkiye çalışmaları.” *Toplum ve Bilim*, 91, 81-99.
- Müller, S. M. (2016). *Wiring the world: The social and cultural creation of global telegraph networks*. New York: Columbia University Press.
- Pamuk, Ş. (1988). The Ottoman Empire in comparative perspective. *Review*, 11(2), 127-149.
- Shahvar, S. (2002). Concession hunting in the age of reform: British companies and the search for government guarantees; telegraph concessions through Ottoman territories, 1855-58. *Middle Eastern Studies*, 38(4), 169-193.
- Simpson, M. G. (1928). The Indo-European Telegraph Department. *Journal of the Royal Society of Arts*, March 2, 1928, 382-394.
- Tanrıkuç, A. (1984). *Türkiye’de posta ve telgraf ve telefon tarihi ve teşkilat ve mevzuatı*. Ankara: Efem Matbaacılık.
- Üçer, S. E. (2018a). Posta bağımlılığı: Ekonomi-politik perspektifinden Osmanlı İmparatorluğu posta tarihine bakış. Conference presentation at *V. Yıldız Uluslararası Sosyal Bilimler Kongresi*, Istanbul, Turkey, December 13-14.
- Üçer, S. E. (2018b). *Alo kapitalizm: Turkish telecommunications policy in the context of an outward oriented development strategy* [PhD Dissertation]. Boğaziçi University, Istanbul.
- Üçer, S. E. (2019a). Devlet ve telefon: Tarihsel sosyoloji ışığında altyapı politikalarının incelenmesi için eleştirel bir kuramsal çerçeve önerisi. *Yıldız Social Science Review*, 5(2), 287-310.
- Üçer, S. E. (2019b). Türk Telekom özelleştirmesinin istihdam, yatırım ve hizmetlere erişim açısından sonuçları. *Finans Politik ve Ekonomik Yorumlar*, 56(649), 57-90.
- Üçer, S. E. (2020). Dr. Emrah Üçer ile Osmanlı’da elektrik altyapısı ve sistemlerinin temeli olan telgraf ile telefon tarihi. Talk, *Barış Sanlı Podcast*, Enerji Sohbetleri, May 23, 2020. Online: <https://anchor.fm/enerji-sohbetleri/episodes/Dr--Emrah-er-ile-Osmanlda-Elektrik-Altyaps-ve-Sistemlerinin-Temeli-Olan-Telgraf-ile-Telefon-Tarihi-eefapr>
- Üçer, Sırrı Emrah. (2021). Istanbul Telephone Company from concession to nationalization: A study in business history, 1909-1936. *Muhasebe ve Finans Tarihi Araştırmaları Dergisi*, (20), 63-90.
- Wallerstein, E. (1979). The Ottoman Empire and the capitalist world economy: Some questions for research. *Review*, 2(3), 389-398.
- Winder, G. M. (2006). Webs of enterprise 1850-1914: Applying a broad definition of FDI. *Annals of the Association of American Geographers*, 96(4), 788-806.
- Yıldırım, K. (2013). *Osmanlı’da işçiler (1870-1922): Çalışma hayatı, örgütler, grevler*. İstanbul: İletişim.