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Institutions and development:

The Italian Chambers of Commerce in the promotion of the regional industrialisation during the 19th century

By

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Abstract: The research analyses the relationship between the establishment of the Italian Chambers of Commerce and the regional industrial development during the 19th century. By applying an OLS regression model, the work finds a positive, strong, and significant correlation between the Chambers' functioning years and the industrial value-added of their administrated territory. The study offers supporting evidence for the inclusion of the institutional approach in discussing the North-South Italian divide.

Keywords: Institutions, Chambers of Commerce, Industrialisation, North Italy.

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1. Introduction

In today's world, development differences are present between and within countries. These asymmetries often arose centuries ago, mainly after the first industrial revolution at the turn of the 19th century. In many cases, this industrialisation process led certain regions to exceed others. Italy is an example.

Later than other European countries, Italy developed its secondary sector only after its national unification in 1861 (O'Rourke & Williamson, 2017). Within the country, the growth of the industrial capacity has always been strongly polarised. In the late part of the 19th century, Northern Italy developed strong manufacture of silk-related products and mechanical goods, while the South remained mainly agrarian (Zamagni, 2019). This unequal economic specialisation created a country with a substantial regional inequality in terms of economic growth, which persisted until today.

This picture is reported in numbers. In 2017, the Italian National Institute of Statistics (Istat) (2018) calculated that the Gross Domestic Product (GDP) per capita in the North (33'500 euros) was almost double that in the South (18'500 euros). Similarly to GDP per capita, in the third trimester of 2019, the unemployment rate for the North was 6.5%, while in the South, it reached 16.2% (Istat, 2019). This difference in the economic performance between the two regions has its roots in historical time; therefore, its analysis may offer economic historians the ground to better understand development forces.

For its historical roots, the North-South Italian divide – also called 'questione meridionale' (the Southern question) – remains a topic of discussion among economic historians. What is not entirely sure are the underlined factors that led to the relatively industrialisation of the North compared to the South in the late 19th century.

Current approaches attribute the difference in economic growth to internal forces, such as geography and initial economic specialisation (Missiaia, 2014; Zamagni, 2019); real wages (Federico, Vasta & Nuvolari, 2019; Foreman-Peck, 2005); or human capital accumulation (Cappelli, 2016), among others. Along this line, the institutional approach has been considered. Current institutional literature on the Italian regional divide touches upon financial institutions (Chiaruttini, 2020; Toniolo, Conte, and Vecchi, 2003), political institutions (Felice, 2018b), and educational reforms (Cappelli, 2016; Postigliola & Rota, 2021). Additional researches cover international factors responsible for shaping the domestic context. In this regard, Federico and Tena (2014) and Missiaia (2016) addressed the role of regional exports and market access as potential explanatory variables.

This work aims to contribute to the current literature on the North-South Italian divide by analysing economic institutions and their effects on industrial development. In particular, the paper addresses the role of the Italian Chambers of Commerce in promoting regional industrialisation during the 19th century.

1.1. Purpose of the study

By analysing the role played by the Italian Chambers of Commerce in the development of regional industrialisation, this study plans to contribute to the literature on the North-South Italian divide through an institutional perspective.

To the extent of the author's awareness, among the major academic narrative on the Italian regional divide, the institutional perspective covering the role of the Chambers of Commerce has not been wholly covered. The study's relevance is supported by the fact that the Chambers represented one of the most important economic institutions for the regional promotion of trade and industrialisation. It is then possible to hypothesise that their functions likely affected the socio-economic context in which they were located. The analysis of their effects represents a gap in the literature that the thesis would like to address.

The thesis aims to quantify the effects of the Italian Chambers of Commerce on the promotion of industrialisation in their administrated territory. The study lays on the following theoretical ground: the Chambers of Commerce started to appear in various pre-unitary Italian states at the turn of the 19th century. Given the promotion of industrialisation at the provincial level as one of their primary functions, it is possible to hypothesise that their establishment can be positively associated with the level of industrialisation of the province. Supporting this hypothetical scenario, it is worth mentioning that the Chambers of Commerce started to appear in the relatively industrialised North part of the country long before the South. On average, their foundation preceded the country's industrial development by roughly 50 years. This reasoning opens the possibility that the Chambers of Commerce were relevant institutions for shaping the industrial development in Northern Italy rather than in the South. In the prospect that the empirical evidence of this study underlines a correlation between the establishment of the Chambers of Commerce and the local industrial development of Italy, it will be possible to theorise a potential causal relationship linking the Italian Chambers of Commerce to the creation of the North-South development gap. This scenario may lead to the realisation of further studies investigating the causal relationship between the two.

The thesis's theoretical approach gravitates around the relevance of the Chambers of Commerce as a critical institution for the development of industrialisation. In support of this argument, Bidischini and Musci (1996) sustain that the Chambers represent a vital economic institution for developing the regional economy during the 19th century. In general terms, their main functions are identified in the assistance of businesses during their administrative processes, promotion of the local economy, lobbying for the realisation of regional infrastructure, incentivisation of innovation, and establishing subsidiary institutions to promote development (Bennett, 1998; Bidischini & Musci, 1996; Sapelli, 1997; Toniolo, 2013). With these initial premises, it is possible to argue that the Chambers of Commerce contributed to the industrial development of their administrative territory. In quantifying the effectiveness of the Chambers' actions in promoting industrialisation, the research adopts an econometric approach.

Besides considering the Chambers of Commerce as a critical economic institution for promoting industrialisation, the analysis is aware that additional factors may have influenced the disparity in the regional development of Italy. In this regard, the thesis considers this institutional approach as a corollary factor in the overall discussion on the North-South Italian divide. In a general perspective, the work expects to find that the longevity of the Chambers of Commerce can be positively associated with the adoption of a provincial industrial economy, which subsequently led to more vigorous economic development.

1.2. Research questions

In contributing to the discussions about regional differences in economic growth, the thesis addresses the following research question: to what extent did the Chambers of Commerce contribute to the creation of the North-South Italian divide?

Through this research question, the thesis adopts an institutional perspective that aims to quantify the effects of norms and practices of one of the leading economic institutions in the Italian context of the 19th century, namely the Chambers of Commerce. To achieve this goal, the work investigates the effects of the Chambers of Commerce on the promotion of the industrial sector. The matter at the core of the analysis wonders if the territorial establishment of these institutions affected the socio-economic landscape of the province in which the Chambers were established.

In addressing this topic, the work formulates the following hypothesis: the presence of the Chambers of Commerce is positively correlated with the industrial output of their administrative territory.

To test this hypothesis, the analysis investigates the relationship between the longevity of the Chambers of Commerce and the provincial industrial outputs. The Chamber's presence in a territory is measured as the total functioning years of the institution, from its establishment until 1871, while industrial value-added indicates industrial development. The year 1871 is chosen since it represents the earlier available estimation capturing a provincial-level industrial value-added after the Italian unification. Similarly, the analysis considers a provincial-level analysis since the general administrative territory of the Chambers corresponds to the provincial level. The research adopts an econometric approach to empirically measure the degree of the relationship between the Chambers and industrialisation.

Even if the theoretical literature on the Italian Chambers of Commerce is limited, the link between Chambers of Commerce and industrial development is present. The main channel linking the two is the Chambers' function in promoting the industrial sector.

From a theoretical point of view, Maennig and Ölschläger (2011) support this argument by linking the Chambers of Commerce to industrialisation. In their work, the two authors analyse the role of the German Chambers of Commerce in current times. They report that the Chambers of Commerce represent a crucial institution for promoting innovation. The two scholars found evidence that the expenditures of these economic institutions foster

development through an increase in the number of start-ups and patents (see also Maennig, Ölschläger & Schmidt-Trenz, 2015). They also report a positive influence on development from the Chambers' initiatives since their events construct a network effect in the community. If, from one side, the literature suggests the existence of a current relationship between Chambers of Commerce and industrial development, a similar role could have been played by the Italian Chambers of the 19th century.

Additionally, the historical evidence supports the role of the Chambers in the promotion of industry. Bidischini and Musci (1996) report the historical events on which the different Italian Chambers promoted the adoption of industrialisation. Among various examples, the Italian Chambers of Commerce organised international exhibitions; they actively participated in the construction of railroads, harbours, and irrigational infrastructures; and they established different institutions committed to the supply of technical education matching the provincial economic requests (Bidischini & Musci, 1996).

1.3. Thesis' outline

The remaining part of the thesis is structured as follows: Chapter 2 presents the historical background of the research. To better illustrate the Italian economic conditions during the 19th century, this chapter is divided into two sections: the first section addresses the main North-South Italian differences, while the second one looks at the history of the Italian Chambers of Commerce. Chapter 3 offers the theoretical framework upon which the work operates. In this case, the first section covers the broader institutional approach from a theoretical standpoint. It follows a second section focusing on the role of the Chambers of Commerce in promoting industrial development. Chapter 4 illustrates the data and method adopted in the analysis, while Chapter 5 reports results, discussion, and limitations. Chapter 6 concludes.

2. Historical background

This chapter provides the historical context of the research. Two sections are presented: Section 2.1 reports the main North-South Italian differences during the 19th century. The addressed dimensions are geography, population, and economic specialisation. Altogether, these components provide a historical overview of the distinct regional conditions in the Italian territory. Section 2.2 addresses the historical evolution of the Chambers of Commerce as one of the key economic institutions in 19th century Italy. Particular attention is devoted to identifying the presence of patterns in the establishment of the Chambers.

Before moving to the regional characteristics of Italy, it is helpful to define which territories belong to the North and which ones to the South. The paper allies Felice's (2018a) approach in the classification of North and South Italy. According to this approach, the division of Italy follows the 1871 regional borders. In this division, North Italy comprises the provinces

included in the current regions of Piedmont, Liguria, Lombardy, Venetia, Emilia, Tuscany, Marche, Umbria, and Latium. At the same time, the South of Italy is composed of the regions of Abruzzi, Campania, Apulia, Basilicata, Calabria, Sicily, and Sardinia. Figure 1 offers a visual representation of the North-South Italian division.

Figure 1: North-South Italian provinces, 1871



Source: Own elaboration from Nuvolari and Vasta (2017).

Note: Italian provinces and regions remain mainly unchanged between 1871-1918. Provinces constitute smaller territorial units than the Italian regions. In 1871, Italy was composed of 16 regions and 69 provinces.

2.1. North-South Italian differences ante unification

To better identify the characteristics on which most of the Chambers of Commerce have been established, let us now present the historical economic conditions of North and South Italy before the Italian unification. Before 1861, North and South Italy were composed of many different independent states. Among the pre-unitary Italian states, In the North, there was the Duchy of Modena, Duchy of Parma, Grand Duchy of Tuscany, Kingdom of Lombardy–Venetia, Kingdom of Sardinia and Papal State. At the same time, the Southern part comprehends the Kingdom of the Two Sicilies. In the Appendix, Figure A.1 visually depicts the subdivision.

Significant development-related differences among these states were present in geography, economic settings, population, education, and institutions, to name a few.

The first crucial difference between North and South is geography. Zamagni (2019) argues that by being relatively abundant in rivers and drinkable water sources, the North could develop an agricultural system that allowed for the creation of agricultural surplus. Theoretically speaking, this surplus permitted the Northern part of the country to concentrate resources in a growing urban environment, setting the first phase of industrialisation (Mendels, 1972). On the other side, the South did not present large and navigable rivers for the cultivation and transport of goods.

Always related to geographical factors, North and South Italy also differentiated in their proximity to other countries. On this point, Missiaia (2014) suggests that the different spheres of influence of the neighbouring countries potentially affected the North-South political inclinations. By being closely related to France and the Austrian Empire, the North developed a relatively liberal political and economic system. At the same time, by being more independent and isolated by the sea, the South adopted a more protectionist and conservative approach toward political and economic policies.

A reflection of these political preferences affected the regional trade of the two regions. As presented in Table 1, the difference in trade between North and South was remarkable. The high trade volume of the North was mainly attributed to the exchange of manufactured goods or related products for their realisation – silk-related goods *in primis* (Missiaia, 2014; Zamagni, 2019). On the other side, the South, mainly identified in the Kingdom of the Two Sicilies, adopted a domestic-oriented economy. From the trade perspective, it is worth mentioning that evidence from Federico and Tena (2014) does not support the hypothesis that the regional export imbalance between the two regions was the primary force leading to the industrialisation and economic growth of Northern Italy relative to the South.

Table 1: Regional economic and social indicators

	Import	Export	Population	Illiteracy	Railways
	Millions of Lire, 1858	Millions of Lire, 1858	Millions, 1861	% of pop., 1861	Km, 1859
Piedmont - Liguria	303	217	3.6	54.2	850
Sardinia	18	20	0.6	89.7	-
Lombardy	86	127	3.3	53.7	{ 522
Venetia	90	60	2.3	75	
Parma-Modena	44	33	0.9	78	-
Papal State	72	63	3.2	80	101
Tuscany	79	45	1.9	74	257
Kingdom of the Two Sicilies	128	139	9.2	87	99
North	674	544	15.2	69.2	1730
South	146	159	9.8	88.4	99
Italy	820	703	25	75	1829

Source: Zamagni (2019).

Note: Piedmont and Liguria belong to the Kingdom of Sardinia with the exclusion of the island of Sardinia, which is separately reported. The Kingdom of Lombardo-Venetia is split into two regions, while in estimating the South, it is included the island of Sardinia. The remaining areas follow the division of pre-unitary states advanced in the text. Lire represents the national currency of the Italian state after unification in 1861.

Differences were also present in the population and educational levels. The Kingdom of the Two Sicilies had the larger population in the whole Italian peninsula. At the time of the Italian unification, the Southern state was populated by 9.2 million people. At the same time, in the North, the Kingdom of Lombardy–Venetia and the Kingdom of Sardinia reported a population of 5.6 and 4.2 million people (Zamagni, 2019).

Among other socio-cultural factors (see Lynn, 2010), North-South distinctions also appeared in the illiteracy and primary school enrolment rates. Zamagni (2019) reports that the North had an enrolment rate of around 90%, while the South scored below 20%. In terms of illiteracy, the author sustains that roughly 50% of the Northern population could not read and write; and almost 90% of the people in the South shared a similar characteristic.

Asymmetries between North and South also appear at the fiscal level. On one side, the states in the North adopted a higher degree of taxation for financing government spending; on the other side, the Kingdom of the Two Sicilies refused to implement policies for the redistribution of resources (Chiaruttini, 2020). The differences in government interventions between the two regions impacted the realisation of major projects, leading to the construction of many infrastructures, like harbours, railroads, and channels in the North. At the same time, the South presented a limited connection between cities and rural areas. Table 1 reports this disparity in infrastructure. At the time of the unification, most of the railways in the Italian peninsula were in the Northern states.

2.2. Italian Chambers of Commerce

As the title may suggest, this section provides a general reconstruction of the history of the Italian Chambers of Commerce. Two sub-sections are present. The first focuses on the Chambers' historical transformations, functions, and characteristics, while the second offers an overview of their spatial and temporal distribution on the Italian territory. The covered period roughly goes from the Chambers' initial appearance in the second half of the 18th century to the late 19th century.

2.2.1. Historical evolution

If from one side, it is safe to argue that the Chambers of Commerce started to appear in Italy in the second half of the 18th century, on the other, it is necessary to specify that their establishment arose from an evolutionary process of previous organisations. Bidischini and Musci (1996) argue that the Chambers of Commerce have historical roots in medieval cities' agrarian, mercantile and local financial associations. These private societies, differently administrated and defined, had the self-declared task of regulating the market, controlling the quality of products, and normalising the legislations of the sector they represented. To some extent, the relevance of these organisations stretched up to the political sphere of the municipalities (Bidischini & Musci, 1996).

These primary economic organisations started as entities performing semi-informal governmental tasks. It was only in the second half of the 18th century that these associations underwent a structural transformation that led to the creation of the Chambers of Commerce. Bidischini and Musci (1996) report that the driving factor for this transformation was establishing a stronger modern state able to compete against the previously self-regulated cooperative organisation. Nevertheless, the shift from these informal associations to the Chambers of Commerce was gradual, and it only consisted of minor reformations of their structure and changes in nomenclature. In support of this argument, the two authors point out that the early Chambers of Commerce assets were constituted by the inheritance of funds and capital from the previous organisations. This transmission of wealth from the self-regulated entities to the Chambers of Commerce suggests the adaptation of the former self-controlled organisations into more structured institutions.

Unsurprisingly, where the previous entities did not have the chance to be transformed into new institutions but instead replaced with new players, the establishment of the Chambers found the opposition of the previous entities. A remarkable example of this 'struggle for power' is captured in the vicissitudes of the Venice Chamber of Commerce. Bidischini and Musci (1996) narrate that in 1764 the Senate of the Republic issued a law that concentrated the functions of the various commerce-related administrative bodies into the tasks of a newly established Chamber of Commerce. The law faced the strong opposition of economic groups that subsequently led to the abrogation of the same legislation in 1768 without ever being truly enforced.

The institutional transformation from independent corporations to the Chambers of Commerce was achieved during the late 18th century. Like previous associations, the newly established Chambers of Commerce partially differentiated among the distinct pre-unitary Italian states. Still, their actions reached an overall universality: if not precisely in their functions, at least in their direction. The different Chambers operated among various channels with the shared aim to formalise and promote economic activities. Among the tasks of the Chambers of Commerce, there was the regulation of trade through the enactment of new legislation, the embodiment of a consultative third party in addressing business issues, the categorisation of the businesses operating in their territory, the promotion of industrialisation, and the supervision of contractual legislations between employers and employees (Bidischini & Musci, 1996).

At the turn of the 19th century, the effects of the French revolution jeopardised the newly emancipated Italian states and, with them, the attempts of the Chambers of Commerce to reform the economy. The subsequent phase in forming these economic institutions was reached through the French intervention. With the imposition of Napoleonic political control on the Northern part of the Italian territory, the Chambers of Commerce underwent a further structural transformation. Most importantly, with the law of the 26th August 1802, the Italian Republic – controlled by Napoleon – extended the operation of the Chambers of Commerce to all the territory of the state, and it gave them a judiciary role in addressing business issues (Bollettino delle leggi della Repubblica Italiana, 1802). In addition, the French emperor also transformed the Chambers into financially autonomous bodies with the power to collect taxes from businesses. A further change saw these new Napoleonic Chambers covering a registry role where all the merchants had the duty to register their enterprises in the newly established institutions.

Along with these transformations in the functions of the Chambers of Commerce, the French model introduced a new administrative organisation for this economic institution. From now on, the board of the Chambers was composed of five members whom the government initially appointed and subsequently elected from the economic society (Bidischini & Musci, 1996). To summarise, this reformation of the Italian Chambers based on the French model drastically increased the number and relevance of the Chambers of Commerce in the Northern Italian territory.

After the first French invasion, a second Napoleonic transformation affected part of the Italian territory with the transition from the Italian Republic (1802-1805) to the Napoleonic Kingdom of Italy (1805-1814). During this state renovation, the Chambers of Commerce lost their jurisdictional function, reducing the institution's powers to purely economic and administrative tasks (Bidischini & Musci, 1996). In addition, the law of the 27th of June 1811 also retrieved the Chambers' duty to collect business details (Bollettino delle leggi del Regno d'Italia, 1811a). These changes transformed the Italian Chambers into pure consultative and promotional institutions.

In December of the same year, the Napoleonic Kingdom of Italy increased the number of Chambers at the provincial level (Bollettino delle leggi del Regno d'Italia, 1811b). This act extended the presence of these institutions at a grass root level in the territories of Northern

and Central Italy. Overall, the actions taken during 1811 reduced the competencies of the Chambers of Commerce, but simultaneously, they allowed a capillary penetration of these economic institutions into the North Italian territory.

After the Napoleonic defeat in 1815, the Italian Chambers of Commerce underwent a stalemate period. No significant reforms or transformations occurred, with only five other Chambers established between 1820 and 1861. During these years, each pre-unitary Italian state independently decided the fate of the Chambers present in its territory. The previous French setting composed of consultative and administrative roles was often maintained.

Following the Italian unification in 1861 arose the desire for a standard model in the classification of the Italian Chambers of Commerce. Given the historical heritage of the different Chambers based on the French criteria, the choice to continue in that direction was perceived as the most suitable. In July 1862, the Kingdom of Italy officially instituted the national 'Chambers of Commerce and Arts' to promote commercial and industrial interests (*Gazzetta Ufficiale del Regno d'Italia*, 1862). Among the major French characteristics adopted into the new Italian Chambers, there was the elective approach in the decision of the administrative board and the attribution of judiciary functions (Waters, 1998). Unlike the Chambers of Commerce present in other European countries, the new Italian Chambers covered an intermediary role between the central government and the local needs (Bennett, 2011; Sack, 2021; Waters, 1999). Waters (1999) suggests that from one side, the Italian Chambers responded directly to the government through the drafting of annual reports and budget approval; on the other side, they met the local requests since their elective internal structure allowed their adaptation to the general provincial will. This balance composition of interests, unique in the European context, allocated the Italian Chambers of Commerce in a position able to influence regional development (Bennett, 2011).

Regarding the functions performed by the newly reformed Chambers of Commerce, they slightly differentiated in quantity and quality among the Italian territory. Waters (1999) summarises the functions of these Chambers in three main activities: firstly, the performance of administrative functions covering the bureaucratic and regulatory aspects of the institution; secondly, the delivery of services to local firms, which mainly constituted the supply of specific education based on the regional specialisation; and finally, they promoted the overall economic interest of the territory primarily occurring through the endorsement of industrialisation.

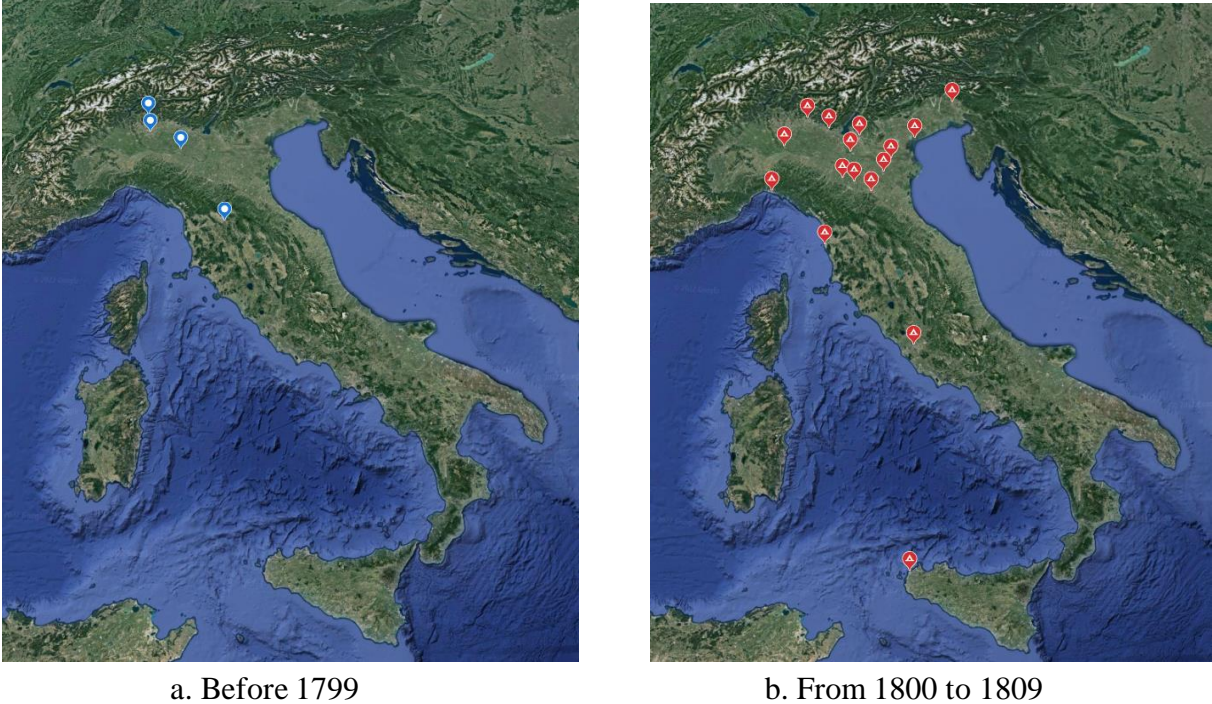
The Italian Chambers of Commerce's history can be condensed into the following stages. The first step was the shift from the medieval informal organisations to the 18th centuries Chambers of Commerce. Subsequently, at the turn of the 19th century, Napoleon introduced newly reformed Chambers. The French influence in Northern Italy can be divided into two stages: the Italian Republic (1802-1805) and the Napoleonic Kingdom of Italy (1805-1814). After Napoleon's downfall, a period of stalemate took place. The stagnation phase ended with the formation of the new Italian state and the national reformation of the Chambers of Commerce based on the French model.

Overall, the just presented historical reconstruction of the Italian Chambers of Commerce offers the opportunity to reflect upon two main aspects: firstly, the strict relationship between these economic institutions and the French administrative model, and secondly, the uneven spatial and temporal foundation of the Chambers in the Italian territory. To better comprehend the presence of potential patterns in the evolution of these institutions, let us move to the following sub-section.

2.2.2. Patterns of establishments

Based on the historical evolution of the Chambers of Commerce, the work provides a graphical representation of their overtime spatial establishment. Figure 2 reports the establishment of the Italian Chambers over four distinct periods: before 1799, from 1800 to 1809, from 1810 to 1819, and from 1820 to 1871. In analysing these different stages, it is worth noting the longer time frame adopted in the first and last periods. The choice of reporting different year intervals is motivated by the fact that only 4 and 5 Chambers were founded before 1799 and between 1820 to 1861. A comprehensive representation integrating the four maps is reported in the Appendix (Figure A.2).

Figure 2: Chambers of Commerce establishments over time and space



Continue on the following page.



c. From 1810 to 1819



d. From 1820 to 1871

Source: Own elaboration from Google Earth (n.d.).

Note: 📍 indicates the Chambers established before 1799; 📍 Those between 1800 and 1809; 📍 Those between 1810 and 1819; 📍 Those between 1820 and 1871. For details on the reported Chambers, see Section 4.1.

Interestingly, Figure 2 reports the distribution of the Italian Chambers of Commerce is far from uniform. Based on this representation, it is possible to argue that the establishment of the Chambers started in the Northern part of Italy before the Napoleonic invasion at the beginning of the 19th century. However, during the French control of Northern Italy, these institutions started to penetrate at the provincial level, thus becoming a widespread organisation. In Southern Italy – where the Napoleonic influence was not strongly present (Postigliola & Rota, 2021) – the foundation of most of the Chambers of Commerce only occurred after the Italian unification in 1861.

This picture reports the earlier adoption of the Italian Chambers of Commerce in the Northern part of the country. At the same time, the implementation of these economic institutions in the South is a subsequent phenomenon. It is precisely this regional difference in establishing the Chambers of Commerce that offers the base on which it is possible to hypothesise that these economic institutions may have played a relevant role in shaping the distinct industrial development of North and South Italy.

3. Theoretical framework

To better comprehend the economic forces upon which the research is built, this chapter proposes the theoretical reasoning at the base of the analysis. Overall, an institutional approach is adopted. Two sections describe the theory adopted in the research: the first section presents the link between institutions and economic development. Subsequently, the second one focuses on the relationship between the Chambers of Commerce and industrial development.

3.1. Institutions and economic growth

Our understanding of the mechanisms regulating economic development is still undergoing. What is missing is the complete comprehension of the different forces at the base of modern economic growth. The institutional framework may offer appealing explanations among the possible factors shaping development. The main idea behind this approach is that institutions provide the necessary formal and informal rules that shape the incentives and opportunities in each society. It is precisely through these norms and practices that the development of certain countries succeeded over others. In this perspective, institutions can be defined as “the rules of the game” (North, 1990, p.3). Rules that promote certain norms – and not others – shape a territory’s development.

According to this approach, the unparalleled economic growth of the Western world during the past two centuries is mainly attributed to its political and economic setting. On this point, Acemoglu, Johnson, and Robinson (2005) and North, Wallis, and Weingast (2006) argue that institutions are the fundamental cause of development. The authors’ line of reasoning suggests that prosperity is created by incentives, which are created by norms and practices defined by the institutions. In this chain of events, institutions represent the starting point for economic growth since they provide the necessary rules on which a society can prosper. These rules can be associated with property rights, the rule of law, a decentralised price system, and free trade. In Neoclassical terms, these norms are essential for economic growth since they reduce transaction costs and asymmetries of information, and more importantly, they protect individual incentives to cooperate and invest.

Given the validity of the institutional approach, one can assume differences in economic growth among regions regulated by different institutions. Acemoglu, Johnson, and Robinson (2001, 2005) and North, Wallis, and Weingast (2006) provide historical evidence supporting the institutional approach. One of their examples reports the economic development of South Korea relative to its Northern counterpart. Initially, the Korean peninsula was constituted by a unified state, which subsequently has been divided into North and South. The newly created nations shared geography, culture, and language similarities, but they started to adopt two distinct institutional settings after their separation. The Southern part adopted a democratic political and economic system that enforced property rights. At the same time, the

North developed a communist institutional setting which carried the abolition of private property and the enforcement of a planned market economy. With time, the development trajectories of the two countries diverged, reaching the point in 1998 when the GDP per capita of South Korea was more than five times higher than its Northern counterpart (Acemoglu, Johnson & Robinson, 2005). From the authors' perspective, the success of South Korea over the North was possible thanks to the country's implementation of a democratic political system and a liberal economy.

Additional examples where the institutional approach provides a compelling explanatory perspective to economic growth can be found in the case of Nogales, Arizona (US) and Nogales, Sonora (Mexico), West and East Germany, and the European colonial expansion (see Easterly & Levine, 2016; Frankema, Green & Hillbon, 2016). As suggested by these natural experiments, the development of a territory can partially be attributed to its institutional setting.

However, the institutional approach also faces some criticism. Among many institutional sceptics, Diamond (2012) and Sachs (2003, 2012) perceive the institutional setting as too 'simplistic'. They advance the idea that geography and culture represent better determinants for economic development rather than institutions.

One of the major criticisms of the institutional approach is the necessary condition of having an 'open-access social order' for achieving an economic growth sustainable over time (North, Wallis & Weingast, 2006). With the term 'open-access social orders', North, Wallis, and Weingast (2006) intend a stable ordered society achieved through competition in the political and economic sphere. A competition that can only be supplied by democratic nation-states and the adoption of a free-market economy. On this point, Sachs (2012) advanced empirical evidence underling that economic development has also been achieved by policies of authoritarian countries like Prussia in 1806, Japan in the late 19th century, or China in the 1980s, where free-market and democracy were not present.

These contrasting and compelling views alimnt the academic debate regarding the fundamental forces of development. In this debate, the thesis aims to contribute to the institutional perspective. The overall theoretical framework adopted by the thesis can be schematised as follow:

Difference in regional
Chambers distribution → Regional industrialisation → Regional development

The starting point of the thesis' theoretical approach coincides with the regional differences in establishing the Italian Chambers of Commerce in the late 18th century. As previously presented, the distribution of these economic institutions strongly diverged between North and South Italy. In the North, the Chambers appeared in the early part of the 19th century, while in the South, mainly in 1862. This translates into different time frames for the regional Chambers of Commerce to operate in their administrative territory. On average, the Northern institutions had more time to shape their socio-economic landscape than their Southern

counterparts. As will be presented in the next section, it is possible to argue that the Chambers of Commerce of the North had a relatively longer time frame to influence the economy of their territory through the promotion of industrialisation. This theoretically contributed to creating a more robust secondary sector in the North part of Italy relative to the South. Consequentially, the implementation of industrialisation incentivised the creation of a specialised economy, which translated into a competitive advantage in the more globalised world of the late 19th century and onwards (Felice, 2018a). Thus, by being relatively abundant and an earlier adopter of Chambers of Commerce, Northern Italy enjoyed a more vigorous regional development.

Given the evidence of regional asymmetries in the establishment of the Italian Chambers of Commerce (presented in Section 2.2); and the common idea that industrialisation represents one of the critical factors for achieving a higher degree of development; what remains to address is the link between the Chambers of Commerce and the promotion of the industrial development.

3.2. Chambers of Commerce and industrial development

This sub-section touches upon three key aspects concerning the Italian Chambers of Commerce. The three parts respectively address the territorial extension of the Chambers' actions, the identification of the main functions performed by the Chambers in the 19th century, and finally, the theoretical and historical evidence linking the role of these economic institutions to the promotion of industrialisation at the provincial level.

The Italian Chambers of Commerce generally operated into a territory delineated at the provincial level. Inside this confined territory, the Chambers performed their administrative and promotional functions at the service of local businesses. This suggests that the effects of the Chambers of Commerce were mainly exercised at the local level, and reasonably, they contributed to the provincial economic growth.

In addressing the forces of regional development, Waters (1999) points out the relevance of 'cooperative development' as a critical component for endogenous growth. The author, along the line of reasoning of Pyke and Sengenberger (1992), stresses "the relationship between local economic development and the institutional context in which it occurs" (p. 118). According to the three authors, the economic growth of a region is strictly affected by the institutions operating in that area (see also Pike, Rodríguez-Pose & Tomaney, 2017).

This institutional perspective underlines, once again, the relevance of institutions in shaping the development path of the territory. On the topic, Pyke and Sengenberger (1992) suggest that the interactions between the institutional network and the local business community are crucial for achieving endogenous economic growth. From the institutions' perspective, it is precisely the ability to govern and administrate the economic needs of the territory in relation to the broader market that favours the development of regional businesses. From the businesses' standpoint, the success of their activities is strictly related to the market

achievements of the overall community – to which the institutions belong. Based on these theoretical conditions, it is possible to argue that in the Italian context of the 19th century, the regional role of the Chambers of Commerce in the promotion of local activities was crucial for fostering ‘cooperative development’. ‘Cooperative development’, which in turn, was responsible for shaping the endogenous growth of the province.

As previously presented in Section 2.2, the functions of the Italian Chambers of Commerce varied substantially among the spatial and temporal dimensions. They performed activities ranging from pure bureaucratic roles on behalf of the government to the judiciary ones. However, one key aspect often performed by the Chambers of Commerce throughout their history was the promotion of the general economic interest of the territory. This promotion generally consisted of organising “trade fairs and business conferences and other activities designed to attract external investment to a locality” (Waters, 1999, p.117).

Some examples of Chambers’ functions can refer to the actions of the Chamber of Commerce of Avellino for establishing the successful exposition of agriculture, industrial, and manufacture; those of the Chamber of Massa-Carrara for the realisation of railroads and harbours; or the roles of the Ascoli Piceno Chamber for its collaboration in international exhibitions and the consolidation of industrial activities (Bidischini & Musci, 1996).

Now, to justify the role of the Chambers of Commerce as a crucial entity for economic development, let’s consider their role in the promotion of industrialisation. With the Italian society mainly based on agriculture, the frontier of innovation was embodied in industrialisation. The new industrial production processes – recently developed in England through the industrial revolution – offered the prospect of higher production, more efficient methods to utilise resources, and a general promise to increase the overall well-being of society. Based on these favourable promises, the promotion and application of the secondary sector theoretically matched the common will of institutions and businesses. Thus, it represents the base on which a ‘cooperative development’ could have been based.

A first theoretical argument sustaining that the Chambers of Commerce were promoters of industrialisation is based on the contemporary evidence that these economic institutions stimulate innovation. On this point, Maennig, Ölschläger and Schmidt-Trenz (2015) theoretically sustain to be the case. By analysing the German Chambers of Commerce in current times, the two authors report that these economic institutions are effective agents in promoting innovation. They found evidence sustaining the positive relationship between the Chambers’ expenditures and the increase in the number of patents and start-ups. Similarly to their findings, Maennig and Ölschläger (2011) propose the Chambers’ positive influence on development by stimulating networking effects through the organisation of their events. If from one side, the literature suggests the current relationship between Chambers of Commerce and industrial development, a similar role could have been played by the Chambers of the 19th century. This argument is strengthened by the historical evidence suggesting that the 19th century Italian Chambers were involved in similar activities as the current ones, namely the organisation of exhibitions and international events.

A second argument favouring the idea that the Chambers of Commerce were central to the industrial promotion of the 19th century can be found in their nomenclature. With the evolution of their classification, it appears clear how the relevance of industrialisation is increasingly attached to the mission of these institutions. Among various terms, the Italian Chamber of Commerce referred to: ‘Chamber of Commerce and Industry’, ‘Chamber of Commerce, Industry, and Agriculture’, or ‘Chamber of Commerce, Industry, Craftsmanship and Agriculture’. The relevance of including the term ‘industry’ in the nomenclature of the institutions emphasises the relevance of Chambers’ activity in the secondary sector.

This nomenclature argument is strengthened if the legislative articles establishing the Chambers are considered. On the 24th of July 1786, Giuseppe II (Holy Roman Emperor from 1765) enacted a law that can be paraphrased as “Chamber of Commerce refers to a body composed by members of the commercial social class who are entitled to think about the proposals that satisfy the providences in favour of the commerce, the increase of the national industry, and public credit” (Biblioteca sacra, 1838, p. 290). From this example, it is clear how the Chambers of Commerce were established as promoters of the industrial sector.

In support of this nomenclature argument, many historical events underline the actions taken by the Chambers in the promotion of industrialisation. Among the various activities, there is the promotion and realisation of strategic infrastructure devoted to facilitating the exchange of goods. For instance, many of the Chambers’ functions concentrated on realising harbours. This task was performed by the Chamber of Naples, the Chamber of Messina, and the Chamber of Agrigento (Bidischini & Musci, 1996; Calabrese, 2007; Camera di Commercio di Messina, 2021). In other cases, the role of the Chambers contributed to the realisation of railroads linking the harbours with the inland territory. This activity was performed by the Chamber of Rome, Syracuse, and Messina (Bidischini & Musci, 1996; Calabrese, 2007; Camera di Commercio di Messina, 2021). Additionally, the construction of highways was another significant step in supporting industrialisation. Remarkable achievements in this direction were performed by the Chamber of Syracuse, Trieste, and Varese (Bidischini & Musci, 1996; Calabrese, 2007; Ghiringhelli, 1977).

Other actions of the Chambers of Commerce in promoting industrialisation have been the establishment of institutions. Outstanding are the efforts in realising financial facilities to support the regional economy. This task has been performed by the Chamber of Palermo in the realisation of a deposits and loans funds, by the Chamber of Florence and Livorno for administrating the Bank of Tuscany, and by the Chamber of Agrigento for opening a branch of the national bank in its territory (Bidischini & Musci, 1996; Camera di Commercio Firenze, 2021). In the realisation of parallel institutions for the development of the territory, the establishment of technical schools for the supply of skilled workers constituted another significant activity of these economic institutions. Examples of Chambers devoted to meeting the labour market requirements were the Chamber of Agrigento, Cosenza, and Genoa (Bidischini & Musci, 1996). Further remarkable examples of Chambers devoted to facilitating industrial operations can be found in the Chamber of Ancona for its role in managing warehouse, surveillance of the harbour, and silk ageing activities, and the Chamber of Trieste and Rome for their efforts in regulating trade tariffs (Bidischini & Musci, 1996). Altogether,

these activities provide the historical base from which it is possible to advance the relevant role of the Chambers of Commerce in the promotion of their industrial territory.

Based on the contemporary evidence offered by Maennig and Ölschläger (2011), along with the just mentioned historical Chambers' actions in promoting the secondary sector, it is possible to argue that the 19th century Italian Chambers of Commerce were involved in the process of provincial industrialisation. In following this line of reasoning, it remains to analyse if there is an empirical correlation between the two. In doing so, let us present the adopted data and method for the analysis.

4. Data and method

This chapter presents the data and methodological approach adopted in the thesis. In general terms, data are mainly from secondary sources, and they cover the Italian landscape of the 19th century. To the extent of data availability, the research aims to adopt provincial-level data to better identify the phenomena and provide more robust reliability in the results. Regarding the methodology, the work plans to adopt an econometric analysis. Let's now consider these two sections separately.

4.1. Data

Table 2 reports the descriptive statistics of the data utilised in the analysis. The thesis collects the data on the Chambers of Commerce and their foundation year mainly from Bidischini and Musci (1996). The work of the two authors perfectly fits the aim of the research since it provides an overview of the historical evolution of the Italian Chambers of Commerce, along with detailed specifications on the Chambers' archival material. During the collection of the observations, the thesis considers as Chambers of Commerce those economic institutions that refer to the Italian name of 'Camera di Commercio' and 'Camera Primaria di Commercio', along with the variety of facets in their nomenclature. Some examples of similar classifications included in the sample refer to the 'Camera di Commercio, Arti e Manifatture', 'Camera di Commercio, Industria, e Agricoltura'. Instead, organisations named as 'Camera dei Mercanti', 'Tribunale del Commercio', or 'Camera' are not considered proper Chambers of Commerce. As presented in Section 2.2, these latter organisations often constituted the antecedent institutions upon which the Chambers of Commerce have been established. However, since the thesis focuses on the Chambers of Commerce, they are not reported in the analysis until their nomenclature changes into 'Camera di Commercio', or on a similar nomenclature. On this point, subsequent studies could investigate more in-depth the effects of these precedent organisations on the North-South regional divide.

Table 2: Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Chamber of Commerce	65	33	18.908	1	65
Functioning time	65	35.03077	27.62583	6	84
Industrial value-added	65	21.011	17.207	3.2	93.5
Export	65	98.569	53.385	20	217
Population 1871	65	365697.34	194289.77	106040	948320
Higher education enrolment rate	65	.492	.326	0	1.5
GDP per capita	65	2009.815	308.442	1371	2997
Specialised districts	64	4.203	3.537	0	12

Source: Own elaboration.

Note: Regarding the units of measurement, ‘Chamber of Commerce’ is a simple count of the Chambers present in the Italian territory, ‘Functioning time’ is measured in years, while the ‘Industrial value-added’ and ‘Export’ are in millions of lire (1911 prices). ‘Population 1871’ refers to the estimation of the number of people living in each Italian province, ‘Higher education enrolment rate’ is the per cent given by the number of students expressed as a percentage of the population between 19 to 24 years old, ‘GDP per capita’ is reported in Euro (2011 prices), and ‘Specialized district’ is a count of districts in a given region.

In total, this work identified 65 Chambers of Commerce. The Chambers of Commerce considered in the analysis are those established before 1871. Similarly, the study only counts those Chambers included in the Italian territory in 1871. This translates into the exclusion of the Trentino-South Tyrol Italian region (with the provinces of Trento and Bolzano) and the cities of Gorizia and Trieste since in 1871 their territory did not belong to the newborn Italian state. The unavailability of industrial value-added and population estimations also determines a further reduction of five Chambers from the analysis¹. In the Appendix, Table A.1 lists the Italian Chambers of Commerce included in the study.

Based on the Chambers’ year of foundation, the research constructs the variable ‘Functioning time’ capturing the total functioning years of the institution from its establishment until the 1st of January 1871 (year of analysis)². The variable considers possible periods when the Chambers of Commerce did not operate by subtracting the inactivity time frame from the overall estimation.

The dependent variable for the econometric section of the research is the industrial value-added. Retrieved from Ciccarelli and Fenoaltea (2013), this indicator measures the provinces’ aggregate value that it created during the industrial production processes inside its territorial borders. Thus, it represents a proxy for the provincial degree of industrialisation. Through the

¹ The Chambers excluded from the analysis due to data unavailability are those of Civitavecchia in the South, and Savona, Lecco, Lodi, and Varese in the North.

² For most cases, the foundation year is reported with a day-level precision. If the day or the month was not reported, the thesis assumes the 1st of January.

analysis of the industrial value-added, the work expects to capture the industrial distribution of the Italian provinces and, hopefully, to relate this propensity toward industrialisation with the institutional effect of the Chambers of Commerce.

The estimations of the two authors follow 1871 provincial boundaries, and they are measured in 1911 million Lire. The temporal choice of using 1871 as a reference year is dictated by data availability. The value represents the earlier reconstruction available capturing the provincial-level industrial value-added after the Italian unification in 1861.

Relevant to be mentioned, these estimations exclude construction industry observations since, in the authors' perspective, it is "subject to violent local cycles" (Cicarelli & Fenoaltea, 2013, p. 62). The two authors suggest that the construction industry at the end of the 19th century mainly depended on big infrastructure projects, like railroads or aqueducts. By considering only the 1871, there is the risk that the construction effects on industrialisation might have drastically altered the overall picture of the province, resulting in a significant variation from the average estimation.

As previously presented in Section 3.2, the administrative territory of the Chambers generally coincided with the provincial boundaries where the institutions were located. Given the regional nature of the study, both Chambers of Commerce and industrial value-added refer to the provincial level. This connection is facilitated by the fact that the Chambers of Commerce were usually established in the province's capital. However, the paper assumes that the administrated territory of the Chambers of Commerce always coincided with the whole provincial environment. This has not always been the case since, for specific periods and observations, the administrative extensions of certain Chambers were restricted to the provincial's city. The work's choice to assume an overall extension of the administrative territory to the provincial level is motivated by the limited exceptions and the time constraints for the analysis. Examples of a restricted Chambers' administration at the city level can be referred to the Chamber of Bergamo, Brescia, and Como between 1811 and 1849. The limitation section (Section 5.3) provides further details.

To conduct the econometric analysis, the research utilises controlling variables. These variables are the regional export estimations from Zamagni (2019), provincial-level population estimations from Mariella, Postigliola, and Rota (2020), regional observations of higher education enrolment rate (19-24 years old) from Felice (2012), and the average level of rainfall for the main Italian cities from Istat (1968). The work also adopts regional estimations reporting GDP per capita (Felice & Vecchi, 2015) and the number of specialised districts (Iuzzolino, Pellegrini & Viesti, 2011) as alternative indicators to industrial value-added. GDP per capita and the number of specialised districts are utilised as robustness checks.

The controlling variables refer to the year of the analysis, with the exceptions of export and average rainfall estimations that correspond to the years 1858 and the average between 1860 and 1870. The adoption of these indicators is motivated by scarce data availability, and they represent the closest date available to the year of analysis. However, the paper perceives that these values are in line and functional in depicting the picture in 1871.

A first look at the data, reported in Table 3, captures the spatial and temporal location of the Chambers of Commerce considered in the analysis. As previously mentioned, these are the Chambers of Commerce established before 1871. The number of Chambers established before the Italian unification exceeded the post-unitary ones (38 Pre- vs 27 Post-unitary). This phenomenon supports the argument underlining the relevance of the Chambers of Commerce during the whole 19th century, and not as a product of the national unification.

The table also suggests that the Chambers of Commerce in the Northern part of the country are present in a more significant number than in the South (42 vs 23). This difference is further strengthened once the Chambers of Commerce established before the Italian unification in 1861 are considered (30 vs 8).

In conclusion, the data support the historical evidence proposed in Section 2.2, sustaining that the establishment years of the Chambers are not normally distributed over time, but they concentrate on precise years. Four primary years appear to be relevant for the establishment of the Italian Chambers of Commerce. They are 1786, 1802, 1811 and 1862. Altogether, they coincide with the years during which the main legislations regulating the Chambers have been enacted. During these four years, more than 70% of the Italian Chambers of Commerce were founded (see Table A.2 in the Appendix).

Table 3: Spatial and temporal Chambers of Commerce subdivision, before 1871

Region	Pre-unitary		
	No	Yes	Total
South	15	8	23
North	12	30	42
Total	27	38	65

Source: Own elaboration.

4.2. Methodology

In addressing the initial research question – asking to what extent the Chambers of Commerce contributed to the regional Italian divide – the work opts for an econometric approach. In particular, the research adopts an Ordinary Least Squares approach (OLS) to investigate a potential relationship between the establishment of the Chambers of Commerce and the industrial value-added of the Italian provinces.

In line with the main research question, the thesis tests the hypothesis stating that the presence of the Chambers of Commerce is positively correlated with the industrial output of their administrative territory. In this attempt, the work aims to better understand if and to what extent the Chambers of Commerce affected the industrial disposition of the province under their administration. Similarly to Postigliola and Rota (2021) – who analysed the effects of the Napoleonic reforms on the literacy rate in the Italian territory – the research performs a

simple OLS estimation. This approach measures the correlation between the effects of Chambers of Commerce on the industrial outcome of the province.

The adopted OLS regression model also accounts for the possibility that alternative factors may have influenced the industrial value-added of a province. In this regard, the research adopts a stepwise approach that includes the following control variables. Controlling for exports allows for capturing the predisposition of a province toward an export-oriented economy. A highly specialised export-oriented economy could lead to stronger and more targeted institutional assistance. A population estimate is also considered since a higher population density may generate higher surplus and specialisation (Mendels, 1972). Additionally, monitoring the enrolment rate in higher education can capture the specialised educational level necessary for creating an industrial economy. Finally, the research includes rainfall estimations to check the sensitivity of the results. The final OLS model can be summarised as follows:

$$\text{Industrial value-added}_i = \alpha + \beta_1 \text{Functioning time}_i + \beta_2 X'_i + \varepsilon_i \quad (1)$$

Where the ‘Industrial value-added_{*i*}’ is given by a constant (α); combined with the ‘Functioning time_{*i*}’ corresponding to the total functioning years of each Chamber of Commerce from its establishment to 1871; a vector of controls (X'_i) that accounts for export, population, higher enrolment rate and rainfalls; finally, an error term (ε_i) concludes the equation. Appendix (*i*) stands for the singular Chamber of Commerce.

To address the validity of the OLS results, the research performs two robustness checks that substitute the industrial value-added with GDP per capita and the number of specialised districts in 1871. These additional estimations inspect and underline the reliability of the previous estimates. Simultaneously, they aim to stress the relevance of the Chambers of Commerce as vital economic institutions in shaping the overall socio-economic context.

Given the OLS regression approach's inability to define the line of causality between the independent and dependent variables, an historical argument has to be advanced to avoid the possibility of reverse causality. As discussed in the historical section (Section 2.2), the establishment of the Italian Chambers of Commerce is a phenomenon that started to occur roughly at the beginning of the 19th century. Differently, the industrialisation of Italy only arose in the latest decades of the century (O'Rourke & Williamson, 2017). This difference in the time of appearance between the Chambers of Commerce and industrialisation provides a solid argument from which it is possible to exclude the possibility of reverse causality between the two.

From the thesis perspective, by following the just presented methodology – constituted by an econometric approach that sees the application of an OLS model – the work should be able to find support for the hypothesis. Through the test of this hypothesis, and with the broader historical literature on the topic, the work perceives to be able to comprehensively address the main research question. The results, in relation to the general literature on the North-South debate, are discussed in Section 5.2.

5. Empirical analysis

5.1. Results

Table 4 reports the estimations of the OLS model. The results suggest a strong and positive correlation between the total functioning years of the Chambers of Commerce and the industrial value-added of a province. The magnitude of the effect decreases when controlling variables are added from column 1 to column 5, but it remains substantial. On average, one year increase in the functioning of the Chambers of Commerce translates into an increase of 144'000 Lire in industrial value-added of the province. The statistical relevance of the main independent variable is strong, while exports and higher education enrolment rate are generally not significant, probably due to their regional (and not provincial) dimension.

Table 4: Chambers of Commerce effect on industrial development: OLS regressions

VARIABLE	(1)	(2)	(3)	(4)	(5)
	Industrial value-added 1871				
Total functioning years	0.237*** (0.073)	0.255*** (0.065)	0.150*** (0.029)	0.146*** (0.029)	0.144*** (0.029)
Export		0.135*** (0.034)	-0.003 (0.017)	-0.003 (0.017)	-0.003 (0.017)
Population 1871			0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Higher education enrolment rate				2.939 (2.483)	2.285 (2.479)
Rainfalls					0.005 (0.003)
Constant	12.714*** (3.228)	-1.210 (4.551)	-12.041*** (2.101)	-13.057*** (2.263)	-16.922*** (3.219)
Observations	65	65	65	65	65
R-squared	0.145	0.318	0.872	0.874	0.880

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Source: Own elaboration.

Note: Industrial value-added is measured in millions of Lire (1911 prices).

To check for the reliability of the result, the work proposes a robustness check. As robustness checks, the thesis regresses two alternative dependent variables with the same controlling variables of the OLS model. The outcome variables for the test are GDP per capita and the number of specialised districts for the year 1871. Similarly to industrial value-added, the two outcome variables may be perceived as indicators for industrial development. The results are reported in Table A.3. In the first column of the table – measuring the correlation between total functioning months of the Chambers with GDP per capita – the work omits export and population since they are strongly correlated with GDP per capita by construction. On average, the results suggest a strong, positive, and statistically significant correlation between the number of functioning years and the dependent variables. The outcome of this test provides additional confidence in the validity of the results of the OLS model.

5.2. Discussion

Following the presentation of the results, this section locates the outputs of the study in relation to the thesis's research question and the literature on the North-South Italian divide. Given the initial hypothesis affirming that 'the presence of the Chambers of Commerce is positively correlated with the industrial output of their administrative territory', it is now possible to sustain that the empirical evidence addressed in the research provides support to this statement. Through the analysis of the Italian Chambers of Commerce in the 19th century, this thesis points out the positive relationship between the establishment of these institutions and the development of local industries.

Simultaneously, the work reports the spatial and temporal distribution in the foundation of these economic institutions, with the Northern part of Italy developing the Chambers of Commerce at an earlier stage than its Southern counterpart. In short, the Northern Chambers of Commerce appears more normally distributed over time and more territorially present at a grass-roots level than their Southern counterparts. On the contrary, the Southern Chambers of Commerce have mainly been established through a centralised national decision in 1862.

This difference in the regional distribution of the Chambers of Commerce opens to the formulation of a speculative idea that considers these economic institutions as relevant components in shaping the North-South Italian divide. The potential mechanism at the base of this line of reasoning sees the Northern part of the country benefitting from a longer time frame in establishing the Chambers. The longer presence of these institutions in the Northern territory potentially translated into a more prolonged and continuous promotion of industrialisation in the North than in the South.

In addition, the analysis also sustains that the line of causality between the establishment of the Chambers and the development of the secondary sector is likely to be unidirectional (from Chambers to industry) since, on average, the appearance of these institutions occurred long before the industrialisation of the country (O'Rourke & Williamson, 2017). Nevertheless, this study addressed and found evidence supporting the correlation between the establishment of the Chambers and industrial development, but it did not perform a precise causal investigation

between the two. This analysis does not entirely verify the theoretical line of causality, but it represents a potential future development of the research.

Leaving to further research the causes behind the regional difference in Chambers distribution, it is now dutiful to address the thesis' research question stating to what extent the Chambers of Commerce contributed to creating the North-South Italian divide.

Based on the work's results, it is possible to argue that the Chambers of Commerce may have played a relevant role in the creation of the regional Italian divide. Through their positive effects on the local industrial development and the imbalance in the territorial and spatial distribution between North and South, it is likely that these economic institutions favoured the development of the North relative to the South.

However, the institutional approach addressed in the thesis is unlikely to determine by itself the reasons behind the Italian regional divide since already compelling explanations are present. On this point, the effects of the Chambers of Commerce can be integrated into the North-South differences in geography, economic specialisation, and population, among other factors. The simultaneous consideration of these factors represents a more comprehensive approach to the forces shaping the Italian divide. Nevertheless, the actions of Chambers of Commerce – mainly oriented toward the construction of infrastructure, creation of side institutions for the technical education, the access to credit, and realisation of international exhibitions for the promotion of networking (Bidischini & Musci, 1996) – have not to be neglected in addressing the topic. Simultaneously, the analysis of the Chambers' functions offers an unexplored territory where further exciting conclusions can be reached.

A contrasting situation is present in locating the thesis' outcomes into the broader literature on the Chambers of Commerce. From one side, this work confirms Maennig and Ölschläger (2011) and Maennig, Ölschläger and Schmidt-Trenz (2015) evidence supporting the positive role of these economic institutions in the promotion of industrialisation. Similarly to the authors' findings, the Italian Chambers of the 19th century had a positive effect on the industrial development of their administrative territory. On the other side, the outcomes of this research partially contrast the findings of Waters (1999). In her work – consisting of a case study addressing the impact of three Italian Chambers of Commerce on the regional development for the years 1992 and 1993 – the author did not find evidence supporting the positive role of the Chambers in the promotion of economic growth. Waters (1999) comments on her findings by advancing the possibility that the Italian Chambers of the late 20th century were “often excluded from the key organisational networks responsible for local economic development” (p. 116), and they were usually “confined to narrow regulatory functions” (p. 116). Nevertheless, there is to consider the distinction in the temporal dimension between the two studies. Given the historical evolution of the Chambers of Commerce, it is plausible that these economic institutions have had different impacts on the socio-economic sphere depending on the time in which they are evaluated. By having a larger spectrum of duties (reaching the judiciary task), the Italian Chambers of the 19th century may have had a more meaningful impact than the late 20th century Chambers of Commerce, which functions were confined to administrative roles.

To conclude, it is relevant to point out that the findings of this research are in line with the general perspective advanced by Acemoglu, Johnson, and Robinson (2005), and they are congruent with the broader direction of the institutional approach. As the institutional approach suggests, the development of institutions that favour a democratic political system and the free-market economy tend to promote the development of a territory. This analysis of the Italian Chambers of Commerce in the 19th century provides evidence supporting the validity of the institutional perspective in addressing economic growth.

5.3. Contributions, limitations, and further studies

Among the contributions to the academic literature provided by the thesis, the most relevant is the identification of a positive, strong, and significant correlation between the establishment of the Chambers of Commerce and the regional industrial development of Italy. The thesis' results advance the possibility that the Italian Chambers of Commerce played a relevant role in shaping the North-South Italian divide. This is particularly the case if the temporal and spatial distributions of the Chambers in the Italian territory are considered. Additionally, the relationship between these institutions and the development of the secondary sector is unlikely to present reverse causation since the Chambers of Commerce generally appeared long before the Italian industrialisation.

To the extent of the author's awareness, this institutional approach – addressing the role of the Chambers of Commerce – consists of a novelty in addressing the debate about North-South Italian differences, and it can be included in the overall discussion.

Nevertheless, this work also presents several limitations that can further be improved. First, the work considers Chambers of Commerce only those economic institutions registered under 'Camera di Commercio' and 'Camera Primaria di Commercio' or similar nomenclatures. This choice was mainly adopted since the research is interested in analysing the effects of Chambers of Commerce and no other institutions (for details, see Section 4.1). However, the exclusion of previous and informal organisations, differentiating from the thesis classification, may still have impacted the overall picture. Secondly, not all Chambers provide detailed historical records reporting the institution's specific early activities and roles. This undermined the possibility of identifying a *de facto* year of establishment of the Chambers for the performance of defined and practical activities for promoting industrialisation. To overcome this issue, the analysis assumed that the foundation year coincided with a universal execution of functions devoted to promoting industrial development. A deeper specification of the Chambers' functions and starting years of these activities may address this generalisation.

An additional assumption undertaken by the study regards the Chambers administrative territory. The work considers that the Chambers' functions were exercised over the entire

province for the whole period. This assumption simplifies the restriction of factual territorial administration to the provincial city for 9 cases out of 65³. The assumption was motivated by the fact that most of the province's industrial output was concentrated at the city level and not performed in the province's countryside. A second assumption relates to the application of estimations of export and average rainfalls retrieved for different years than 1871, and they do not represent a provincial-level detail. The use of these data is motivated by data limitations. Future studies can further test and replace these assumptions with empirical evidence.

The novelty of this institutional approach opens the possibilities for further analyses. Given the rich and unexplored archival material of the Italian Chambers of Commerce, further research can implement this analysis utilising primary sources. As previously presented, the Italian Chambers were actively involved in collecting business details during historical times. Due to the logistical difficulties and time restrictions, this rich amount of data has not been in-depth analysed. It represents a valuable material into which future analyses can tap. Additionally, a more in-depth Chambers of Commerce's categorisation by time, functions, and nomenclature can provide additional evidence supporting the relationship between these institutions and industrial development. A final suggestion for future improvements calls for investigating the presence of a solid line of causality between the establishment and functions of the Italian Chambers of Commerce and the development of the regional industrial sector.

6. Conclusion

The central aim of the thesis was to analyse the extent to which the Italian Chambers of Commerce contributed to the creation of the North-South development gap. Through an econometric analysis of the 19th century Italian Chambers of Commerce, this work provides evidence sustaining the positive relationship between the establishment of these institutions and the formation of the secondary sector. Along with this positive, strong, and significant correlation between the two, the possibility of a reverse line of causality (from industrial development to the Chambers of Commerce) is unlikely since the appearance of these institutions occurred on average long before the Italian industrial development.

Patterns in the spatial and temporal distribution of the Chambers suggest that these economic institutions started to appear in the Northern part of the country around the first two decades of the 19th century. Subsequently, only after the Italian unification in 1861, did the Chambers of Commerce spread in Southern Italy. The Chambers' spatial and temporal

³ Chambers assumed to have a provincial administrative territory are those of Bergamo, Brescia, Como, Cremona, Mantua, Milano, Pavia, Sondrio, and Verona. On average, the Chambers' administrative restriction to the city level is confined in the years between 1811 and 1849, while for the remaining period, their functions comprehend the whole province.

distribution opens the possibility that they potentially contributed to the regional development of North and South Italy. The findings of the research present the presence of a strong correlation between the establishment of the Chambers and industrial output, but the causal verification of this relationship is left to further analyses.

The results of this thesis constitute a preliminary attempt to underline the relevance of the Italian Chambers of Commerce in shaping the regional development gap. The study's outcomes are in line with the broader literature on institutional development associating the achievement of economic growth through the implementation of institutions for the promotion of a democratic and free-market social setting (Acemoglu, Johnson & Robinson, 2005). The research findings advance the possibility that an institutional approach may be considered in the overall discussion on the regional Italian differences along with the already consolidated approaches of geography, economic specialisation, and demography.

In addressing the institutional approach as a potential factor responsible for shaping the regional Italian divide, the thesis contributed to the broader literature on regional development. The research outcomes perceive the Italian Chambers of Commerce as promoters of industrialisation. In including the thesis' results in the more general literature on the Chambers of Commerce and industrialisation, two main aspects are present. Firstly, the work provides support to the findings of Maennig and Ölschläger (2011) and Maennig, Ölschläger and Schmidt-Trenz (2015), arguing for the positive role of the Chambers in promoting regional development. Secondly, the thesis outcomes appear to diverge from Waters (1999). The author argued for the inability of the late 20th century Italian Chambers of Commerce to promote the development of their territory. However, the difference in the considered periods between the two studies appears crucial to this divergence. As presented in the historical section (Section 2.2), the role of the Chambers of Commerce in the 19th century went beyond the purely administrative tasks compared to the 20th century Chambers (Bidischini & Musci, 1996). This difference in the Chambers' functions between the two periods is likely to represent the reason behind the conflict between the two outcomes.

In addressing this topic, the thesis noticed the poor literature covering the Italian Chambers of Commerce. The theoretical knowledge and historical evidence on the argument appear to be scarce. This assessment is surprising given the richness of the archival material of the Italian Chambers and their relevance in shaping the socio-economic context of the 19th century. Simultaneously, this gap in the literature offers the possibility for further research.

Deeper analyses of the role of the Italian Chamber of Commerce may result in a broader understanding of the primordial causes behind Italy's distinct regional development, which in turn, may offer practical solutions for closing the North-South development gap, preventing its widening, or avoiding the formation of new ones.

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Appendix

Figures

Figure A.1: Italian States ante-unification




Source: Wikipedia (2012).

Note: the figure represents Italy according to pre-unitary states borders in 1843. For further details see text.

Figure A.2: Spatial distribution of the Chambers of Commerce



Source: Own elaboration from Google Earth (n.d.).

Note:  indicates the Chambers established before 1799;  Those between 1800 and 1809;  Those between 1810 and 1819;  Those between 1820 and 1871. For details see Section 2.2.

Tables

Table A.1: Chambers of Commerce details

	Chamber of Commerce	Italian region	Region	Foundation year	Total functioning years
1	Agrigento	Sicily	South	31aug1862	8
2	Alessandria	Piedmont	North	16oct1862	8
3	Ancona	Marche	North	27jun1811	60
4	Arezzo	Tuscany	North	23oct1862	8
5	Ascoli Piceno	Marche	North	31aug1862	8
6	Avellino	Campania	South	25oct1864	6
7	Bari	Apulia	South	27mar1849	22
8	Belluno	Veneto	North	27jun1811	60
9	Bergamo	Lombardy	North	26aug1802	68
10	Bologna	Emilia-Romagna	North	26aug1802	68
11	Brescia	Lombardy	North	26aug1802	68
12	Cagliari	Sardinia	South	21aug1862	8
13	Caltanissetta	Sicily	South	31aug1862	8
14	Caserta	Campania	South	23oct1862	8
15	Catania	Sicily	South	26oct1852	18
16	Catanzaro	Calabria	South	23oct1862	8
17	Chieti	Abruzzi	South	05oct1862	8
18	Como	Lombardy	North	24jul1786	84
19	Cosenza	Calabria	South	05oct1862	8
20	Cremona	Lombardy	North	24jul1786	84
21	Cuneo	Piedmont	North	05oct1862	8
22	Ferrara	Emilia-Romagna	North	26aug1802	49
23	Florence	Tuscany	North	01feb1770	75
24	Foggia	Apulia	South	12apr1820	51
25	Forlì	Emilia-Romagna	North	05oct1862	8
26	Genoa	Liguria	North	17jun1805	66
27	L'Aquila	Abruzzi	South	31aug1862	8
28	Lecce	Apulia	South	16oct1862	8
29	Livorno	Tuscany	North	01oct1801	69
30	Lucca	Tuscany	North	01jul1816	55
31	Macerata	Marche	North	27dec1811	12
32	Mantua	Lombardy	North	26aug1802	68
33	Massa-Carrara	Tuscany	North	31aug1862	8
34	Messina	Sicily	South	20oct1818	52
35	Milan	Lombardy	North	24jul1786	84
36	Modena	Emilia-Romagna	North	26aug1802	21
37	Naples	Campania	South	11mar1817	52
38	Padua	Veneto	North	27dec1811	59

39	Palermo	Sicily	South	13oct1819	51
40	Parma	Emilia-Romagna	North	13may1814	57
41	Pavia	Lombardy	North	26aug1802	68
42	Perugia	Umbria	North	23oct1862	8
43	Pesaro/Urbino	Marche	North	31jan1835	36
44	Piacenza	Emilia-Romagna	North	05nov1817	53
45	Pisa	Tuscany	North	16oct1862	8
46	Porto Maurizio	Liguria	North	31aug1862	8
47	Potenza	Basilicata	South	05oct1862	8
48	Ravenna	Emilia-Romagna	North	31aug1862	8
49	Reggio Calabria	Calabria	South	23oct1862	8
50	Reggio Emilia	Emilia-Romagna	North	26aug1802	14
51	Rome	Latium	North	26dec1809	61
52	Rovigo	Veneto	North	26aug1802	68
53	Salerno	Campania	South	31aug1862	8
54	Sassari	Sardinia	South	31aug1862	8
55	Siena	Tuscany	North	23oct1862	8
56	Sondrio	Lombardy	North	05oct1862	8
57	Syracuse	Sicily	South	27dec1811	40
58	Teramo	Abruzzi	South	31aug1862	8
59	Trapani	Sicily	South	22dec1802	68
60	Treviso	Veneto	North	16jan1851	20
61	Turin	Piedmont	North	19oct1811	24
62	Udine	Friuli-Venezia Giulia	North	01jan1806	65
63	Venice	Veneto	North	05feb1806	65
64	Verona	Veneto	North	26aug1802	68
65	Vicenza	Veneto	North	27jun1811	60

Source: Own elaboration.

Table A.2: Percentage of Chambers founded in 1786, 1802, 1811, and 1862

Chambers founded in 1786, 1802, 1811, or 1862	Freq.	Percent	Cum.
No	18	27.69	27.69
Yes	47	72.31	100.00
Total	65	100.00	

Source: Own elaboration.

Table A.3: Robustness checks: OLS regressions

VARIABLES	(1)	(2)
	GDP per capita 1871	Specialized districts 1871
Total functioning years	3.523*** (1.041)	0.072*** (0.013)
Export		0.015* (0.007)
Population 1871		-0.000* (0.000)
Higher education enrolment rate	366.116*** (89.290)	2.538** (1.104)
Rainfalls	0.431*** (0.111)	0.002 (0.001)
Constant	1,337.054*** (104.669)	-1.376 (1.434)
Observations	65	65
R-squared	0.480	0.433

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Source: Own elaboration.

Note: When using GDP per capita as dependent variable instead of industrial value-added (column one), the average rainfalls on the major Italian cities for the year 1860 to 1870 becomes strongly statistically significant. This do not occur when investigating specialized districts. In the second column, only the significance of the constant changes. GDP per capita is in Euro (2011 prices).