Doctoral Dissertation

Interuniversity Doctoral Program in
Urban and Regional Development (XXXVII Cycle)

The Geography of Logistics Hinterlands in Northern Italy

Financialization, Growth and Governance of Logistics Real Estate in a Sprawling City-region

Elia SILVESTRO

Supervisor:
Prof. Carlo Salone

Doctoral Examination Committee:
Prof. Nicolas Raimbault, Referee, University of Nantes, France
Prof. Daniel Sanfelici, Referee, Fluminense Federal University, Brazil
Prof. Giancarlo Cotella, Member, Politecnico di Torino, Italy
Prof. Adeline Heitz, Member, Conservatoire National des Arts et Métiers, France
Prof. Matthieu Schorung, Member, Sorbonne University, France

Politecnico di Torino - Università degli Studi di Torino

I hereby declare that the contents and organisation of this dissertation constitute my own original work and does not compromise in any way the rights of third parties, including those relating to the security of personal data.

Elia Silvestro Turin, September 2025

Summary

This study investigates the geography of logistics real estate in Northern Italy with the instruments of political-economic geography. In light of the lack of literature on Italian logistics development from an urban and political-economic lens, we survey international works on logistics hinterlands, logistics political economy, and logistics real estate financialization. This corpus of literature is harnessed to create a dialogue between theories of urban political economy and contemporary reflections on planetary urbanization and operational landscapes, and theorize a link between the financialization trend of logistics real estate and the development of logistical hinterlands. We hypothesize this phenomenon mimics the nature of an urban regime, where logistics real estate is developed through the work of multiscalar and multipolar coalitions of actors. We use quantitative elaborations of logistics real estate data to single out two notable cases of logistics hinterlands in Northern Italy and investigate their historical background to understand the reasons behind local logistics development. We proceed to reconstruct the relational geography of logistics growth actors through a mix of desktop research and semi-structured interviews. This exposes the involvement of all governmental scales from local to supra-national, as well as that of non-governmental actors from the financial and logistics sphere, such as investors, asset managers, real estate agencies, logistics operators, and intermediary bodies such as lobbies and interest groups. The geography of private actors is strongly concentrated in the financial center of the country, Milan, suggesting that the whole market of high-end logistics real estate is controlled by a handful of actors with links to global markets. Particularly strong links emerge between these financial actors and local governments, while the higher-scale planning power of regional authorities turns out to be weak and easily swayed by the pressure of local governments and investment opportunities. At the same time, high-scale governmental and intermediary actors exert a soft power role in terms of infrastructure funding, favorable legislation and influence over local

planning; government policies and narratives also do not seem to consistently match the interests of market actors. Based on this evidence, we conclude by advancing the notion of Territorial Logistics Regimes (TLRs) to describe the variously shaped coalitions of governmental and non-governmental actors working for the development of logistics facilities and infrastructure. We believe this heuristic encapsulates the missing link between finance and logistics hinterlands at the core of our research question.

Acknowledgements

This work is the result of a three – actually, a bit more – years long journey through the long and perilous route of a PhD program. It has not been without hiccups and setbacks, but I do not regret riding it.

To begin with, my supervisor Carlo deserves the highest praise. He is a wise and enthusiastic professor and, even more importantly, an exceptionally sympathetic human being. I would not have made it through the scientific and personal challenges I encountered in these past years without his support, his understanding and his fine humor.

Thank you also to all the other younger and older academics inside and outside Politecnico who have given me precious scientific advice, feedback and courage – the list would be too long, but you all know you were of great help.

Thank you to my beloved URD colleagues who have made my time in the office (and under the trees, and at the wine bar…) a blast. I will make a special mention to the Truffles, an adorable international bunch who also became my dear friends and supporters beyond the department, too. I wish you guys all the best, wherever life and careers will take you.

A big thank you to my friends, near and far, for their care and solidarity in such a messy time of our lives. Our times might be precarious, our logistics (ha!) complex, but our bonds are steadfast.

Thank you to my family for their material and emotional support – I especially appreciate your presence considering that I've never quite managed to explain what it is that I do for a living.

And finally, thank you to those who have crossed my life path during these years. Our ways might have diverged, but I treasure our time together.

Contents

List of Figures

List of Tables

Chapter 1

Introduction

In any metropolitan corner of the world, one cannot fail to notice how inner-city apartment buildings, offices, and public spaces morph into swaths of ‘big boxes’ on the farther edges of cities, sometimes even in agricultural outer suburbs. These unsightly assortment of such elements as warehouses, data centers and waste treatment plants, but also roads and rail, forms ‘operational landscapes’, the sometimes distant yet constitutive infrastructure of the urban (Brenner & Katsikis, 2020). Their mission is to quietly handle the material and informational to-and-fro of global metabolisms: in a word, logistics. In its facilities, its movements, its daily operationalization of workforce and resources, logistics embodies the apparent intangibility of global capitalism: as Danyluk puts it, “the processes abstractly referred to as globalization are constituted in no small part by the concrete movement of goods through physical infrastructure networks” (2018, p. 632). In a way, it is so integral to the functioning of contemporary forms of production that it does not only support, but actually shapes global capitalism: logistics causes a “subordination of production to the conditions of circulation” (Bernes, 2013).

Quite self-evidently, logistics has an intrinsic spatial nature. This includes, of course, the large distances it enables to bridge, but also the multiple spatial scales it intersects, combining goods and information flows – perhaps it is its ability to mediate all of these variables that makes it so fascinating. As orderly as they may portray themselves, the whirlwinds of logistic flows are difficult to grasp. Among the many embodiments of logistics in space, we resolve to begin this study from logistics facilities.

Accessing logistics operations and approaching those who experience them is often a difficult task, and even fixed elements such as logistical facilities can prove hard to inspect more closely. At least, though, we can map their location and features. Ultimately, they are buildings: just like any other, they are involved in the mundane processes of planning, construction, transaction and so on. Yet, through the lines of these ordinary practices we note that the logistical function entails specific modes of production of these spaces.

Using logistics facilities as a point of departure suggests the perspectives of political-economic and urban geography to address the theme. At a higher scale, logistics is described both as a keystone of planetary urbanization (Brenner & Katsikis, 2020) and as a key to understand contemporary capitalism – a nexus of logistics, extraction and finance (Mezzadra & Neilson, 2013). As we get closer to the ground, we see how these dynamics play out in specific urbanization patterns (Dablanc & Browne, 2020) which are mediated through socio-technical structures where multiple actors from the spheres of finance, logistics operations, politics and interest groups negotiate for their respective advantage (Magnani et al., 2024; Raimbault, 2022). It is also harnessed to narrate and design grandiose infrastructural projects (Danyluk, 2021; Schindler & Kanai, 2021). These processes and their intersections can be evident, but more often than not the very nature of logistics makes them more obscure and intricate. It is their very complexity that inspires my research.

Thesis title and research plan

Before diving into the study itself, a few words on the title of this thesis are in order to give a sense of what comes next:

The Geography of Logistics Hinterlands in Northern Italy. Financialization, Growth and Governance of Logistics Real Estate in a Sprawling City-Region

First, the choice of this title conveys the exquisitely interpretative nature of the work. By design, this thesis does not aim to produce detailed policy

indications, but rather to build, test and systematize a category of political economy which will be later exposed, which, we believe, describes the development of logistics hinterlands well and may be fruitful for future research. Hence, a ‘geography’ rather than ‘planning’, ‘policies’ or similar terms. Second, some indicative, but not exhaustive elements of this geography hint at the characteristics of the intricate political economy of logistics the work will describe.

Going into detail, this study focuses on the development of logistics real estate in Northern Italy. The process is approached from the perspective of political-economic and urban geography and creates a dialogue between some of the classical theories of urban political economy and contemporary reflections on planetary urbanization. Our theoretical framework depicts the development of logistics real estate as the materialization of a political economy where local and global actors from governmental and non-governmental spheres come together to promote growth through land development for logistics facilities and related infrastructure, with the support of finance, which eventually impregnates the process with its logics. This process typically takes place and produces what we call logistics hinterlands, crucial components of the global production chains of contemporary capitalism that lie spatially far from the urban cores whose material and financial flows they nurture.

We map out the growth of logistics facilities in the hinterlands of the city-region, focus on a few notable cases and trace the constellation of actors involved in the process. We mainly use quantitative methods, such as GIS data elaboration, to select outstanding case studies embodying the notion of logistics hinterland. We proceed to analyze them using both quantitative and qualitative methods, such as desktop research and interviews with key actors from related governmental and non-governmental sectors. The goal is to map the relational geography inherent to logistics real estate, allowing to expose the linkages between the immaterial flows of finance and the material hinterlands of logistics, illustrating how these elusive notions unfold in practice. Ultimately, we proceed to advance an analytical category

encapsulating the workings of logistics hinterlands growth as a political-economic process.

This research project can be summarized in the following question:

What is the geography of governmental and non-governmental actors behind the financialized growth of logistical hinterlands in Northern Italy?

As will be later elaborated, this study follows three hypotheses:

(1) The development of logistics facilities in Northern Italy is pursued through financialized growth coalitions of governmental and non-governmental actors ranging from the global to the local scale.
(2) The peculiar geographies of logistics in Northern Italy result from the multiple configurations of power between governmental and non-governmental actors.
(3) The financialization of logistics real estate produces logistical hinterlands.

Chapter 2

Literature review: the multiple geographies of logistics

Logistics is not only, yet unquestionably, a spatial phenomenon – to quote from Hesse, it is "geographical by nature" (2020). While it helps to start from detailed, clear-cut technical definitions like "the transformation and circulation of goods, such as the material supply of production, the core distribution and transport function, wholesale and retail and also the provision of households with consumer goods as well as the related information flows" (Handfield & Nichols, 1999) or De Lara's more concise "the field of logistics amounts to the integration of physical transport modes [...] with information-based inventory control" (2018, p. 65), chosen by Coe in his recent comprehensive review of the subject (2020). Through the lines of these anodyne descriptions of freight flows we can peek at imaginaries of coordination and control, urbanization, labor struggle and so on. As Coe suggests, it is more appropriate to speak of "logistical geographies". The latter are not limited to the geographies of logistics in their most literal, topographical sense, but consider the production of geographies through logistics' ultimate goal: the quest for flow control and optimization, something so crucial in our times it is stated to be "perhaps the central discipline of the contemporary world" (Thrift, 2007, p. 144). Bearing the cruciality of logistics in mind, we will proceed to go through a necessarily limited overview of works that we deem especially relevant to this study.

The emphasis on control suggests that a primary theme logistics is related to is power and how it is enacted through logistics space. This is an inevitable consequence when we follow Chua et al.'s "rejection of the field's

self-depiction as an apolitical science of circulation" (Chua et al., 2018, p. 625). Behind the pursuit of control lie controversial dynamics, which Cowen alludes to when she refers to "the entire network of infrastructures, technologies, spaces, workers, and violence that makes the circulation of stuff possible" (2014, p. 1). Logistics must obey the imperative of flow efficiency, no matter the contradictions, violence and conflict this generates. In this sense, logistics intersects with, or just *is*, power (Neilson, 2012) and it is so spatially, through its manipulation of flows – after all, power is (and can only be) circulatory (Foucault, 2012, p. 32). To this end, logistics and power structures are necessarily enmeshed. This is blatant when we observe the workings of the global division of labor. Beyond its plain role of orchestrating production and trade, logistics serves capital's quest for cheap labor and provides tools to discipline it. As a logic of shaping and managing space, it also morphs organizations and individuals in its interests: it is an 'active form' (Easterling, 2014). Workers' discipline and performance are meticulously tracked to achieve maximum efficiency (Kanngieser, 2013). At the same time minor disruptions in these hyper-optimized processes can bring about supply chain interruptions reverberating globally. In addition, the supposed homogeneity logistics aims to produce simply cannot be: logistics has to navigate constant friction (Tsing, 2005) and must adapt to the different contexts and spatial scales it operates at (Tsing, 2009, 2012). Logistics also has a power to reconfigure borders and sovereignty. The networked, border-crossing nature of logistics allows for novel ways to dodge regulations and even build new polities, such as in the case of special economic zones. A contemporary version of free ports, special economic zones are established with the ostensible goal of promoting economic growth by providing, indeed, 'logistical' zones with less paperwork and taxation (Easterling, 2012). This results in effectively separate entities defying state regulation on goods and workforce, adjusting themselves to efficient logistical operations and easier capital accumulation.

The spatial optimization intrinsic to logistics is the result of its military blueprint. The techniques of logistics are rooted in millennia of military practice, and its logics were only later deployed for civilian uses. What we call logistics today is mostly originated by the adaptation of military

techniques to civilian purposes after WWII. The interest in coordinating resources across space and time dates way further back in time than its systematization as a science. The efficient spatial management of bodies, resources and territories has been a preoccupation of government structures from the earliest times of Antiquity, whether in times of peace or war (Cowen, 2014, p. 26). However, it was in World War I that logistics started to lead strategy rather than follow it and World War II definitively made logistics the fulcrum of warfare (Cowen, 2014, p. 29). The expertise developed during the conflict was repurposed in the civilian economy to support the growth of post-war capitalist production. This, however, does everything but resolve the controversial relationship of civilian logistics with military methods, from the enforcement of trade corridor security to the biopolitics of logistical work.

Moving on its political-economic aspects, logistics is a major theme in contemporary literature on urban and regional development, globalized economy and cognate subjects. With economic globalization, the planetary scale has become the standard in processes of extraction, production and trade, leading to think of logistics as a civilian instrument for international trade, and subsequently a matter of economic policy. Firms started to compete not only on products themselves, but also on their efficiency in distribution (Allen, 1997), aiming to reduce the amount of idle stock to a minimum, i.e., to keep capital in circulation in ever more refined ways, as it has become the fundamental priority of the production process (Bernes, 2013). What is labelled as the 'logistics revolution' (Bonacich & Wilson, 2008) was a sea change in the coordination between supply and demand made possible by a timely combination of economic and political factors. Through logistics, Taylorism-style efficiency was extended to the factories of the whole supply chain (Hesse & Rodrigue, 2004). By definition, the latter is fragmented, so logistics acts to consolidate its processes, evolving from a service to production to a component of production itself, supporting the development of Global Production Networks (Hesse, 2008). Their ubiquity, combined with the inevitable extension of distances between the places of extraction, production and consumption, has an effect on the urban fabric through the surge and evolution of transport infrastructure and storage

facilities. The continuous evolutions of flows moving through the latter affects urban – in an extended, Brennerian sense – spaces, whether it is post-industrial areas turned into logistics hubs in the Global North, mushrooming industrial zones in the regions of the Global South where delocalized manufacturing has found a place, or trade corridors cutting through both (Danyluk, 2021; Silver, 2021). On the one hand, it could be argued that logistics brings development opportunities in otherwise isolated location, allowing them to the great game of globalization. On the other hand, it is a fact that advances in transport cost minimization and circulation speed are fundamentally used to take advantage of differences in labor legislation and environmental standards (Hepworth, 2014). Following the imperative of optimization, the spaces of logistics are "fungible spaces" (Danyluk, 2019), disposable components of global supply chains under the constant threat of evolving political-economic conditions. At the same time, continuously redrawing the geographies of logistics is a technique to enhance the "spatial fix" (Harvey, 1985) through a "logistical fix" (Danyluk, 2018). Overall, the tone of much literature from the geographic discipline is at least partly critical, even from voices not labeling themselves as such. Still, it is a rich and diverse production exploring the topic in all directions. As will be exposed below, the Italian debate is still limited in this respect, but it does offer stimulating works to build our reflections on.

A blind spot in Italian geography

Caught between ever-stretching global supply chains, restructured distribution networks and evolving trade routes, Italy has taken part in the explosive growth of logistics. Much like other advanced economies, the country has witnessed the surge in logistics services globalization has entailed. Italy is both an export-oriented economy, due to its poor internal demand, and a historical gateway to continental markets thanks to its seaports. It is also more involved than other European countries in the adaptation of trade routes and gateways to recently integrated near and far markets, such as Eastern Europe and China.

Given the significance of logistics in the Italian economy and, as we will see, in political narratives, one would expect a large academic production. This is valid in some spheres, but the coverage of other facets of the literature is still in its early stage. Logistics has found its way in the Italian economy, but less so in some areas of academia. Grey literature abounds, notably speculating on the relationship between the development of the sector and the turbulent times of global supply chains. Little material can be found, and often touching upon the matter marginally. Many contributions follow established streaks of Italian academic debates, typically in economic geography and regional studies, while other disciplines, such as urban studies, sociology or political science, are only just beginning to open the national debate. We will first proceed to outline the main political-economic elements of logistics in the country, and then gather the relevant literature and put it into context with international contributions.

Besides the context of globalized trade, Italy has some specificities in its development of logistics. Italy's fortunes in the sector have to do with its position just as much as with its economic output. The country has a tumultuous history of international trade across the centuries, narrated in detail by other sources (see e.g. the classic Luzzatto 2013). We will focus here on the recent repositioning of trade corridors across the country's land and sea as history reshuffled their relative importance. Genoa and Trieste have been the leading freight ports for the last decades, with Livorno, Venice and Ravenna in the second tier (ISTAT, 2022). All of them are in Northern Italy, while Gioia Tauro, located in the southernmost mainland region of Calabria, is the first in Southern Italy. However, if we remove fossil fuels from the count, Genoa becomes the leading port by far, followed by Livorno, Ravenna and Gioia Tauro, and Trieste and Venice go further down in the ranking. Still, Genoa has a steady trend, while Trieste boasts a spectacular growth in the last couple of decades. While the former serves the mature market of Western Europe, the latter has developed into a gateway for the growing economies of Central and Eastern Europe – much like it was originally, as the imperial port of Austria-Hungary. Gioia Tauro is specialized in transshipment, being ranked first for container traffic (Dipartimento per la programmazione e il coordinamento della politica economica, 2022). All the

main Italian ports lie at the southern ends of European TEN-T transport corridors (European Commission, 2022), projecting them onto larger traffic landscapes and positioning themselves as competitors of the hegemonic Northern European ports of Rotterdam, Antwerp and Hamburg (Assoporti, 2024). For some years, Italy also embarked on a bold – and controversial, within the EU – foreign relations policy with China, possibly hoping to grab a piece of the Belt and Road Initiative cake (Pugliese, 2020).

With its industrial backbone of the country and the possibility of strengthening its role as a freight gateway from East Asia and the Middle East to Europe, one could say that Italy is betting on a 'logistics renaissance'. The signs of this endeavor are both in logistical narratives and in the practical implementation of projects, funding and infrastructure. A major move from the Italian government is the introduction of Special Economic Zones (SEZs) and Simplified Logistics Zones (SLZs). SLZs and SEZs were introduced by the Italian government in 2017 (Bilancio di previsione dello Stato per l'anno finanziario 2018 e bilancio pluriennale per il triennio 2018-2020, 2017; Conversione in legge, con modificazioni, del decreto-legge 20 giugno 2017, n. 91, recante disposizioni urgenti per la crescita economica nel Mezzogiorno, 2017), following the established model of 'free zones' and freeports (UNCTAD, 2019). SEZs and SLZs, designed respectively for Southern and Northern Italian regions, aim at harnessing Italy's purported strategic position as a European logistics hub (Agenzia per la coesione territoriale, 2017; Dipartimento per le politiche di coesione, 2020). They offer economic incentives and tax breaks in specific plots delimited by authorities, with the requirement of having a 'functional link' with a hub port. As their implementation is still at a preliminary stage, their outcomes are hard to evaluate, but speculation around logistics as a surrogate for de-industrialization has mounted (Gerebizza & Taglieri, 2020).

When it comes to 'hard' infrastructure, we witness a season of massive investments for logistics. A big contribution to this comes from European funding via the implementation of after-Covid NextGenerationEU funding, known in Italy as "Piano Nazionale di Ripresa e Resilienza" ("National Recovery and Resilience Plan"). The program, adding up to just shy of 200bn

euro, has been used for extensive upgrading of the railway network, and for some flagship projects, such as the new breakwater of the port of Genoa – the single most expensive project of the plan, at around 1bn euro – and several high-speed/high-capacity lines in historically infrastructure-deprived Southern Italy, as well some incomplete high-speed lines in Northern Italy. Other measures include the "digitalization of the logistics chain" and "Industrial supply chain policies and internationalization", along with several reforms meant to streamline logistics-related bureaucracy[1].

Much like in other Western European countries, the private market of logistics has experienced massive growth. Figures show a more-than-fourfold increase in yearly take-up – the warehouse surface that is rented out each year – between 2006 and 2021 and a spectacular increase of investments, from less than 200mln euro in 2010 to 2.7bn euro in 2022 (PwC, 2022, 2023). Developments are predictably concentrated in Northern Italy, where the bulk of industrial production and population are, with few investments south of Rome. The private market seems to have developed relatively independently of the massive infrastructural project mentioned above, as highway access – the main requirement for locational choice – is widespread in the heavily urbanized areas of Northern Italy.

While logistics appears on the map of Italian research, the literature was long restricted to few, mostly policy-oriented, contributions. Many economists have analyzed the development of the logistics sector as an opportunity, especially for the historically struggling area of Mezzogiorno, as Southern Italy is commonly labelled (Carlucci et al., 2017; Coppola et al., 2007; Forte, 2017; Forte & Miotti, 2014, 2018; Forte & Siviero, 2011, 2020; Spampinato, 2001). These studies identify issues in the competitiveness of seaports and transport infrastructure, a historically heated issue, especially in Southern Italy, and call for reforms, easier bureaucracy and incentives, such as through the activation of Special Economic Zones.

[1] For details, see the relevant sections on https://www.italiadomani.gov.it/.

Other works focus on specific areas of Northern Italy, such as the Port of Genoa (Ghiara & Sillig, 2007) or its hinterlands, for example in relation with Malpensa, the main airport in Northern Italy (Tadini, 2006, 2017, 2019). Particularly when it comes to specific, historically industrialized locales, we often see the contribution of local stakeholders to the debate with grey literature, in the form of reports, position papers, policy proposals, etc. For example, Confindustria, Italy's main employers' federation, fervently lobbies for infrastructure development through its regional chapters (Confindustria Piemonte, 2021). This can take other configurations, such as public-private foundations promoting the development of the sector (Sozzetti, 2021, 2022, 2023).

Some seminal research has been made on logistics real estate trends, exploring prices, locational choice and stakeholders (Creazza & Dallari, 2006; Dallari et al., 2015). These works, often conducted in tight relationship with market actors, have evolved into more detailed studies of building features and market projections (Baglio et al., 2019). We can find an original streak of research investigating the geography of logistics firms within the World City Network (Antoine et al., 2017, 2020). The authors contrast the polycentric geography of logistics operational activities with the concentration of knowledge-intensive functions in cities, chiefly Milan. Lastly, the Politecnico di Milano-based research group on "Operational Geographies" in Northern Italy's regional urbanization is the first to have specifically devoted some attention to the geography of logistics[2] (Armondi et al., 2024). The research has evolved into a new, logistics-specific project with forthcoming publications[3].

Critical logistics studies (Chua et al., 2018) are appearing in Italy, too. Most production revolves around the research collective Into The Black Box[4], formed, among others, by Giorgio Grappi, the author of the first explicitly social sciences-focused volume on the topic (2016). The collective is

[2] See website www.operationalgeographies.polimi.it

[3] See website tr.acking.it

[4] See website www.intotheblackbox.com

preoccupied with the eco- and socio-political implications of logistics, whose growth, especially in Northern Italy, has created new spaces of political struggle (Cuppini & Peano, 2019; Curi & Bologna, 2019). Their manifesto (Into the Black Box, 2018) describes logistics as the "chrysalid of contemporary financialized capital", i.e., the arrangement of operations allowing capital to freely flow in a planetary dimension – that is, as long as the flows of money and labor do not clash. The group has worked on a variety of cases. In the southern region of Puglia, the effects of specialization and supply chain extension on agricultural logistics were analyzed, with a focus on the management of migrant workforce (Peano, 2020). Other works trace back logistics workers' conflicts in Northern Italy, referring to several cases in some of the main logistics hubs of the area, such as intermodal terminals and warehouses in Bologna, Piacenza and Milan (Cuppini et al., 2015). The collective also investigates the nature of platforms and algorithms as logistical power, such as in the cases of Amazon and food delivery services (Bottalico, 2021; Into the Black Box, 2022, 2024). There are also some in-depth critical works on specific logistics hubs (Gazzola, 2022).

Further analysis of the literature shows both an expansion of research perspectives and a lack of collaboration among scholars of different disciplines. As a VOSviewer-produced[5] co-authorship map visualizes (*Figure 1*), author clusters tend to isolate from each other. This suggests that multiple research circles have developed around the topic, but it also warns that interdisciplinarity is scarce. Comprehensive spatial studies of the whole of Italy are virtually non-existent, possibly in connection with the strong divide in economic structure of the 'three Italies' (Bagnasco, 1977). The three economic models of heavy industry, thriving SMEs and non-industrialized regions theorized by Bagnasco is reflected in a sort of tripartite spatial segregation and this seems to affect scholarship.

[5] Software available at www.vosviewer.com

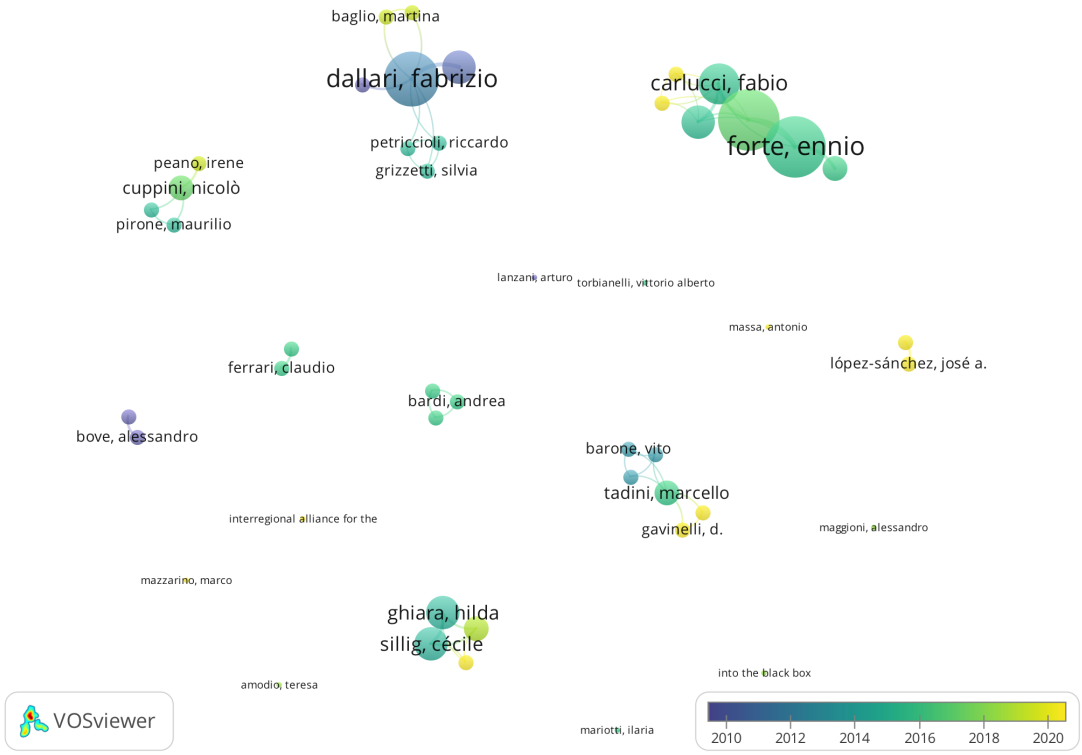

Figure 1 Co-authorship map of Italian logistics literature (author's elaboration)

If economic and geographic scholarship specifically devoted to logistics is scarce, a closer look at key grey literature gives some more insight. A cornerstone of Italian development policies is the grandiose "Progetto '80" (Centro Studi e Piani Economici, 1971). This was one of the few (and not realized) attempts at a comprehensive 5-year-plan-style economic policy, with a heavy focus on infrastructure and therefore at logistics *avant la lettre*. While many economic assumptions have not come true, some observations deserve attention even five decades later. They highlight the risk of a further concentration of main urban and industrial hubs, leading to congestion in terms of goods (Centro Studi e Piani Economici, 1971, pp. 14–19). A detailed plan for relieving congested spots included a diversion towards a polycentric structure based on promising second-tier centers, as well as underdeveloped areas in Southern Italy "Mezzogiorno" (Centro Studi e Piani Economici, 1971, pp. 25–29) – an assumption that would underlie later regional development policies (Salone, 2005). Interestingly, the authors note

the congestion of some ports to the detriment of other underutilized ones and suggest distributing Genoa's traffic among all neighboring ports, and to develop the Port of Trieste as a gateway to Central Europe – exactly today's configuration. The future projection of transport flows was that of an "essential" network that would "save" public money by optimizing links through a comprehensive design instead of separately investing in suboptimal solutions (Centro Studi e Piani Economici, 1971, p. 36) to be implemented through more effective planning instruments – a deficiency that has not really been dealt with to date.

As European policies, with their principle of subsidiarity, have increasingly cascaded into national schemes, a new season of EU seven-year plans has taken over. In a study for the 2007-2013 EU Program, studies were carried to assess port-railway connections, 'target' polycentric logistic development areas, and strategic mobility plans (Ministero delle Infrastrutture e dei Trasporti, 2007, pp. 42–45). Indicators were also computed to map differences in logistics activity, with highest values and growth trends along the Rhine-Alpine corridor stretching from Genoa to the Swiss border, as well in the areas of Trieste and south of Venice (Ministero delle Infrastrutture e dei Trasporti, 2007, p. 55). The growing prevalence of key 'hub-territories' over 'area-territories' is advanced as a key for reading logistics flows and for identifying the hubs where surging Mediterranean freight flows can be captured (Ministero delle Infrastrutture e dei Trasporti, 2007, pp. 63–69). The report points out the weaknesses of Italy's logistics performance in terms of goods transport by air and by rail, where coordination, intermodality and the increasingly demanding nature of Just-In-Time mechanisms have left some modes behind. The report resolves to address territorial development via the comprehensive instrument of "strategical territorial platforms", where economic and material flows can be harnessed through multi-level governance in a "future vision" of (logistics) growth (Ministero delle Infrastrutture e dei Trasporti, 2007, p. 137). Whether Italian or European, most policy production prophesies a bright future for Italian logistics, in contrast with the struggles of logistics labor critical geographers engage with (see above). The latter have only recently caught the attention of lawmakers (Senato della Repubblica, 2022).

What emerges from this survey is a growing corpus of literature, but one where the debate is still limited to isolated circles. Most works date back to no earlier than fifteen years ago, and they seem to spin off from established themes of Italian academia rather than from independent research endeavors. The area with the most substantial contributions is that of territorial development. A long tradition in the field has resulted in logistics being covered as an extension of growth policies both in established hubs (Dallari et al., 2015; Tadini, 2017) and as a sector to develop (Forte, 2017). Yet, scholars rarely seem widen their very local scopes and co-authorships among clusters are not in sight. Logistics is also casually mentioned in grey literature and urbanization-focused reports, but it is only just starting to be the overarching theme. Little can be found that 'looks outwards' to global production networks and supply chains (Tadini, 2018, 2019; Tadini et al., 2020); some reflections on trade corridors would more aptly be ascribed to geopolitical speculation (Tanchum, 2020). A small but growing production is that of critical logistics studies *à la* Cowen (2014). The reference is to themes such as labor, power relations and violence, which are burgeoning in the international arena (Chua et al., 2018; Danyluk, 2021; Hepworth, 2014; Neilson, 2012), just like they are in Italian society. Here, we are witnessing some promising production engaging with Italy's intensely contested logistics landscape. Concerning our specific research interests, there is much room for further reflection. There is some noticeable interest for the subject by and large, but the literature remains patchy, with a corpus of works essentially linked to either territorial development or critical approaches from the realms of political science and sociology. We cannot but notice the stark lack of works from the perspective of urban and political-economic geography.

One crucial issue in this field is logistics sprawl. Urban sprawl, "a form of urbanization distinguished by leapfrog patterns of development, commercial strips, low density, separated land uses, automobile dominance, and a minimum of public open space" (Gillham, 2002, p. 8), has long been examined internationally – notably in the United States, where the magnitude of the trend is especially appreciable – but also in Italy (Balducci et al., 2017; Bonomi & Abruzzese, 2004; Indovina, 1990, 2009; Turri, 2000). As land-

hungry buildings reliant on highway access, logistics facilities have been found to have a sprawling development pattern in several American and European cases (Dablanc & Browne, 2020; Dablanc & Rakotonarivo, 2010; Dubie et al., 2020; Heitz, Dablanc, et al., 2017; Kang, 2020; Klauenberg et al., 2020; Strale, 2020; Woudsma et al., 2016), with distinctive economic and political determinants (Raimbault, 2022; Raimbault et al., 2013). In spite of its major environmental and socio-economic implications, logistics sprawl has not been studied yet in the Italian context.

Another promising but untouched angle is the nature of logistics as a real estate sector. Just like it has happened with other property types, the industry has been working on absorbing warehouses in the financial market for a couple of decades now, with generally lucrative investments (PwC, 2022, 2023). This may or may not bring benefits to the local economy and public finances (Nefs & Daamen, 2023; Raimbault, 2022; Strale, 2020). Financialization has started to appear in the national academic landscape (Anselmi & Vicari, 2020), but not concerning logistics. Given the size of the market, logistics facilities development is a key trend in Italian urbanization and its driving factors deserve inquiry.

We will later elaborate on the interconnections of these themes for the purposes of our research. We see them as compelling topics to elaborate through the epistemologies of urban political economy, notably the frameworks of growth coalitions and urban regimes (Logan & Molotch, 1987; Stone, 1993), as well as relational geography (Bathelt, 2006; Bathelt & Glückler, 2003; Yeung, 2005), which have so far been applied to a limited extent (Antoine et al., 2017).

Chapter 3

Theoretical framework: a political economy of logistical hinterlands

The development of a theoretical framework descends from the materiality and temporality of logistics. These qualities have a large variability to them, lending themselves to a variety of interpretations. Therefore, we will first need to narrow down their extent.

A much-discussed complexity of logistics is its tension between flows and frictions (Gregson et al., 2017; Tsing, 2005): what is depicted as a relentless stream of goods clashes against the inherent resistance of logistics infrastructure and the human factor of political struggle and conflicts. For our purposes, we will concentrate on the fixity of logistics infrastructure. This is also meant in the sense of leaving aside the daily operations of logistics, the to-and-fro of workers and goods taking place *inside* the 'box'. Our main preoccupation is with logistics as an element of urbanization, i.e., logistics as a 'box' seen from the *outside*. This mostly takes the shape of warehouses of variable size and use and, occasionally, attached infrastructure such as freight yards or intermodal terminals.

Limiting ourselves to its material, fixed component, we concentrate on the system of privately-owned or public logistics facilities and transport infrastructure enabling the storage and movement of goods. As we will see in more detail below, this assemblage of warehouses, parking spaces, terminals, road and rail is aptly described as a component of "operational

landscapes" (Brenner & Katsikis, 2020), the non-city spaces absorbed in the urban metabolism in various ways. What sets logistics apart – and sparks our interest – is the footprint and the dramatic growth rate of facilities. By nature, logistics requires large spaces, and the restructuring of the global economy has made logistics operations more and more essential for high-income countries like Italy. This explains the timing of the development of these spaces, which have become constitutive of operational landscapes especially in the last couple of decades. Just like it can be appreciated by plain empirical observation, macro-level analyses reveal tremendous growth: simple dots on a map exhibit the ubiquitous presence and the expansion of logistics.

As discussed in the previous chapter, most of the research on logistics in Italy refers either to the domain of territorial development or to critical approaches from sociology and political science. While these works have the merit of opening the debate on such a crucial element of contemporary capitalism, they seem to elude the question of its emergence. Logistics may well be an economic goal or instrument or a locus of socio-political struggle, but first, *how* does logistics materialize in a territory?

We set to interpret this process by using the tools of political-economic geography. The tangible aspects of the geography of logistics – fixed and mobile, human and non-human – show traces of the determinants of logistics development. As will be exposed later, we argue that the geographies of capital and actors involved accurately expose the dynamics of this development. In other words, we advance a framework rooted in political economy. From this perspective, multiple questions arise: where does the growth of logistics facilities originate from? What is the rationale behind their spatial distribution and its evolution? What actors revolve around its development? What political and financial resources are mobilized? How does this play out across spatial scales?

To address these questions, we shall first delineate how the growth of logistics fits within the wider realm of urban studies. Subsequently, we will advance the instruments of political economy as an epistemology for

logistics development, and examine how the primacy of finance in contemporary economy, and especially in real estate, affects the sector.

Logistical hinterlands within planetary urbanization

A building block of contemporary urban landscapes, the term ‘logistics’ started to gain traction – but was left in the background – around the time the ‘global turn’ in urban studies emerged. This new stage in the academic debate began in the 1990s, when the notion of ‘global city’ was popularized (Sassen, 1991). The global city, originally characterized by Sassen through a study of New York, London, and Tokyo (1991), was later more clearly defined as the notion of an urban core where the dispersed functions of the economy are managed. Paradoxically, this encourages a trend of agglomeration of the ever more complex specialized services that are needed for transnational corporations to function. This also positions in them in an integrated system helping them expand or relocate across the network of cities as needed. All of this is backed by the flexibility in capitalist organization logistics offers (Neilson, 2012).

Whatever their growth strategy, global cities benefit from the need of corporate firms for a physical base – a ‘glocal’ structure reproducing uneven development (Swyngedouw, 2004). However, Sassen also posits that “the economic fortunes of these cities become increasingly disconnected from their broader hinterlands or even their national economies [and] draw their importance from these transnational networks” (Sassen, 2005, p. 30). This may well hold true within the author’s preoccupation with the territorial unboundedness of neoliberal political economy (Sassen, 2013), but it also seems to turn a blind eye to the material anchoring Sassen herself attributes to global cities.

The focus on specialized services and the decoupling of the global city from its surroundings has first been called into question by the development of urban political ecology (Swyngedouw, 1996; Swyngedouw & Heynen, 2003). In response to the popularity of the flowlike, trans-territorial

depictions of the urban inspired by early works on globalization (Castells, 1989), urban political ecology aims to refocus on the very material nature of urban metabolisms (Cronon, 1991), engaging with the evolution of socio-environmental relations along that of global cities. While conceding that the local hinterlands may not be a primary focus of the economy of global cities, these works suggest that we look at the material flows of the global city at a planetary scale, just like it is done for capital and information.

With the refocusing on the role of material metabolism, the urge to observe the urban beyond the built-up city only grew. While there were different, sometimes opposing views (Angelo & Wachsmuth, 2015; Connolly, 2019), the debate itself demonstrated a widespread awareness of the issue of 'methodological cityism', i.e., the misinterpretation of the 'urban question' as something to be investigated and resolved within the city. The turning point may be identified with Brenner and Schmid's works on planetary urbanization (2014, 2015). Their merit lies in structuring a host of observations dating much earlier (Monte-Mór, 1994), including cornerstones of urban theory (Lefebvre, 1970), into a comprehensive epistemology of the apparent 'complete urbanization of society' – not as in an arbitrary tipping point where urban population had become larger than rural population, whatever that meant (UN-Habitat, 2006), but in terms of urban living. Especially resonating with our subject is the 'moment' of "extended urbanization", that is "the operationalisation of places […] far beyond dense population centers to support […] urban life […] the construction […] of infrastructures in support of these operations [and] the enclosure of land from established social uses [for] profit-oriented modes of appropriation" (Brenner & Schmid, 2015, p. 167). With the notion of extended urbanization, the authors started to frame the unstoppable appropriation of resources at the global scale as an urban question.

The epistemology behind this image has spurred a heated debate on its allegedly patriarchal, colonial, totalizing gaze from the city onto a passive outside (Goonewardena, 2018; Jazeel, 2018; Peake et al., 2018). Brenner and Schmid were blamed, like in other debates (Buckley & Strauss, 2016, pp. 626–627; Stone, 2015, pp. 107–109), for devising an all-encompassing 'big

theory' of a tentacular urban – which the authors and other authors insist is not (Angelo & Goh, 2021; Brenner, 2018; Schmid, 2018), instead reaffirming the logic of planetary urbanization within the multiplicity of views of urban studies. Without eliding other perspectives, Brenner and Schmid provide a vantage point on the flows of planetary urbanization, one especially practical for looking at logistics.

It is through the lines of planetary urbanization that we peek at the operations of logistics. As further elaborated (Brenner & Katsikis, 2020), the material needs of metabolisms effectively urbanize an overwhelming part of the globe's surface. These 'planetary hinterlands', "the variegated non-city spaces that are swept into the maelstrom of urbanisation, whether as supply zones, impact zones, sacrifice zones, logistics corridors or otherwise" (Brenner & Katsikis, 2020, p. 24), are operationalized as (not necessarily identical) origins and destinations of metabolisms, which keep capitalist urbanization going with massive material throughput. The networks these spaces are inscribed in stretch across the planet – an emblematic case is lithium extraction in Chile and Argentina fuelling decarbonization in the Global North (Valz Gris, 2023) – but also produce hinterlands much closer to population centres, like with logistics hubs, functioning as touch-down points for supply chains on their way to consumers or to further steps of production and distribution.

In light of these considerations, we begin to visualize the nature of *logistical hinterlands*. These comprise warehouses and related services, such as parking lots and rail and road access, as well as more complex aggregations of the former in the shape of logistics parks and intermodal terminals. Logistical hinterlands are meant to support the processes of production and consumption associated with near, or less so, urban agglomerations – again, topographical measures here are only relatively relevant insofar as the hinterland is enmeshed in a far-reaching, multiscalar network which has, indeed, a very material dimension. This should not lead to exclusively frame logistical hinterlands in a Global North-Global South dynamic. The fact that they are often located in the vicinity of large urban

cores of high-income countries suggests that their development must be investigated as much at the local as at the global scale.

Within a framework of planetary metabolism, the hinterland is not to be assumed as a completely passive element. Even though the term itself evokes a hierarchy – 'hinterland' being the 'land behind' something else that, we imagine, controls it – the hinterland is to be conceived as embroiled in multiscalar and multipolar networks whose configurations defy the linear, unidirectional city-hinterland relation. To some, the very existence of the hinterland implies a planetary hinterland network. This is best argued through the diverging theory of the 'global suburb'. Denouncing Brenner's apparent dismission of the suburb as just a cog in a mechanism controlled elsewhere, Keil (2018) sheds light on those Lefebvrian 'disjunct fragments' that "begin to display a life of their own" as their get enmeshed in an autonomous global suburban network. As powerless as they may look from the global hubs of command and control, suburbs have become a "a prime site for the realization of exchange value, especially in an era of financialization" (Keil, 2018, p. 5) and are the starting point for understanding the contemporary urban fabric. In another work 'from below', Phelps delves into what he calls 'interplaces', the suburban spaces hosting "those economic activities that are only weakly attached to places by virtue of their being undertaken on the move or concerned principally with the movement of people, goods, and ideas" (Phelps, 2017, p. 23). He underlines the materiality of Global Production Chains (GPNs), the very physical way in which they touch down and produce specific socio-environmental relations and urban forms (Silver, 2021). In this materialization we see "the value of a logistics and transport perspective within GPNs[, the fact that] this process produces intermediate geographies – intermediate places" (Phelps, 2017, p. 224). Brenner's, Keil's and Phelps' actually complement each other, and quite pacifically so. What Keil and Phelps do is to emphasise that sub- and inter-urban spaces are where planetary operations are best observed, i.e., from the ground.

The growth of logistics benefits from and intersects with a widespread return of infrastructure in investment priorities. A global "infrastructure turn"

(Dodson, 2017) has taken place in political arenas whereby infrastructure is put at the core of national development strategies, in low- and high-income countries alike. This emphasis is nothing new in national policies, but it returns, as opposed to the past, in a globally oriented form: seaport expansions, new railways, highways, intermodal terminals and so on are designed with the aim of integrating regions within supranational or global networks, implying that this is key to foster an inexorably globally integrated economy. These investments have a transnational reach, both in that they connect territories with the global economy and because they are often located outside the national borders and funded by international investors (Schindler & Kanai, 2021). Supported by the neoliberal apparatus of international trade agreements – in a way, an immaterial infrastructure itself – infrastructure lays the groundwork for expanding the range of capitalist operations through logistics, i.e., it provides a "logistical fix" (Danyluk, 2018).

The resurgence of infrastructure in the global development discourse signals an evolution of the relationship between the State and the economy. In a "State capitalism redux" (Alami & Dixon, 2020), governments display a renewed activism in steering the market through financial giants such as sovereign wealth funds and state-operated enterprises. This is to be approached avoiding the traditional clear-cut dichotomies between the State and the market (Whiteside et al., 2023), as looking at such trends as the reconfiguration of state-operated enterprises and supranational multilateral institutions proves (Alami et al., 2022). The return of State capitalism is typically associated with, but not prerogative of, the growth of Global South countries, as is exemplified by massive transport infrastructure development schemes in the European Union (European Commission, 2022).

Differently from 20th-century Keynesian logics, the presence of the State behind infrastructure and logistics development does not imply redistributional goals. Grand projects with massive budgets provide 'infrastructural promises' to hinterlands (Kanai & Schindler, 2019), fueling the growth of the logistics sector, or rather a narrative of its growth, in disregard of local needs and development aspirations. Rather than

responding to the latter, such (typically mega-)projects involving transport infrastructure are planned with a focus on global economic positioning and reproduce rather than alleviate uneven development (Wiig & Silver, 2019).

Overall, logistics begs us to break the academic walls of the city in search of the urban beyond the built-up. Whether through warehouses and their appendages or through the narrative of infrastructure, logistical hinterlands may emerge as an extension of the urban, but their development suggests an active role in terms of economic vibrancy and political activism of a territory which needs to be unpacked. It is in the intersection of these dimensions that we attempt to clarify the dynamics of logistics development.

A political economy of logistics

Key to make sense of how the geography of logistics develops is an epistemology of the power mechanisms behind its growth. We are especially interested in how political, and necessarily financial, resources are unfolded across space in the development of logistical hinterlands. Here, the complexity lies in the multipolar, scale-crossing nature of the process. Logistics can be pictured through the entanglement of moving goods, through the distribution network of a single firm, through the flow of money supporting these activities, through the web of business and governmental actors, or in a myriad of other ways, none of which can be comprehensive. That is why we settle for a multipronged approach, considering multiple scales and loci of political and economic involvement, that is, we observe the geography of logistics through the lens of political economy. We consider a liberal political economy, one with elected officials within a reasonable degree of freedom of political organization and with economic investments mostly in the hands of private actors – especially in a post-austerity context like the Italian public sector. Given this premise, our framework will have to pay special attention to the specificities of logistics development, such as its innately transnational nature, which is expressed in many terms: the production chains of logistics operators, the global pooling of capital for investments in logistics, the international coordination of logistics real estate intermediators. This will evidently extend down to the urban

hierarchies implicated in the hinterland question, engaging actors traditionally associated with urban political economy in a wider network. We will now proceed to analyze the role of logistics in territorial development, and in light of this we will delineate our political economy framework.

When it comes to local economy, logistics can be a need, an imposition, and an aspiration at once. Logistics has evolved from a mere service to a strategic piece of global production networks (Coe, 2014). The spread of logistics at the local level reflects the way national economies increasingly depend on international trade or make freight handling a business in itself – ironically, some heavily service-oriented economies end up 'exporting air' in the empty containers they have nothing to put in (Birtchnell et al., 2015, p. 8). Sea shipping is the preferred choice for long-distance transport, as it is by far the cheapest option for non-time sensitive goods such as raw materials and fuel, but air, rail and road transport are common for other value-added products. The amount of handled cargo and the complexity of distribution require ever-larger infrastructure that encroaches on and interacts with existing landscapes, developing specific forms of urbanization and the socio-environmental tensions that come with them (Danyluk, 2021; Silver, 2021; Wiig & Silver, 2019). Logistics-related infrastructure can reach far beyond the main hub, involving vast hinterlands in its operations. The 'regionalization' of logistics, typical of seaports, expands (or expels) goods handling operations far beyond the precinct of strictly defined landing points (Notteboom & Rodrigue, 2005; Raimbault, 2019). Besides infrastructure more strictly related to import-export operations, a vast system of assorted infrastructure and private facilities extends inland to service the manufacturing sector, delivery companies and the distribution networks of retailers. The staggering growth of demand for facilities brings logistics to previously unaffected areas, with the potential and the controversies of opening up to the sector. As we will see, the growth of logistics is a contradictory process encompassing actors and resources in a relational geography reaching all corners of the globe, where power does not only lie with formal governments, resulting instead from a negotiation between the multiple actors capable of directing investments.

From this angle, logistics can be framed as just one of the many opportunities for territorial development. In some instances, it is a corollary of a strong local economy, whose integration in larger trade networks needs adequate infrastructure. In other cases, it is the byproduct of the same context, but it is (de)localized in weaker, thus cheaper areas which are still *logistical enough* to serve the area, sometimes actively marketing themselves as ideal locations. This latter case seems to be especially typical. In the contemporary context of budgetary restrictions for local governments and little economic intervention from the state, it draws the attention of the usual suspects from the institutional and business spheres. A booming sector like logistics offers governmental actors both financial relief and material for a narrative of growth. For the local property business, as well as for higher-scale real estate intermediators, it has great potential, with large plots of developable land or existing industrial buildings sought from a single investor. As these actors are in a way 'closer to the ground', it is from the local scale that we can most practically start to climb up the multi-scalar relational geography of logistics.

This depiction is nothing new in liberal economies, neither is it in academia. Stone's Urban Regime Theory (URT) is counted among the classics in the field. As defined by the theorist itself, urban regimes are "the informal arrangements by which public bodies and private interests function together in order to be able to make and carry out governing decisions" (Stone, 1989, p. 6). URT was originally developed by Stone for studying Atlanta, and as such was molded on a North American political-economic environment. In spite of its American origins, URT has come to dominate the field of urban governance studies in the Global North, surviving several waves of critique and even reshaping itself during its three-decade long academic history (Stone, 1993, 2015). Even alternative propositions are rather framed as generalizations (Pierre, 2014) or extensions (Lambelet, 2019) of URT than completely distinct theories. We will see how the 'logistics regime' under study fits Stone's thirty years-old typology as a "development regime, concerned primarily with changing land use in order to promote growth or counter decline" (Stone, 1993, p. 18).

URT being a somewhat elusive concept, it is paramount to ensure its applicability to our case study. Here it is helpful to read Mossberger and Stoker's (2001) critique of the 'concept stretching' observed in many works using URT. They try to reconcile Stone's original propositions with derived work, conceptualizing URT as

> "[...] coalitions based on informal network as well as formal relationships with four core properties:
>
> - partners drawn from government and nongovernmental sources, requiring but not limited to business participation;
> - collaboration based on social production—the need to bring together fragmented resources for the power to accomplish tasks;
> - identifiable policy agendas that can be related to the composition of the participants in the coalition;
> - a longstanding pattern of cooperation rather than a temporary coalition."
>
> (Mossberger & Stoker, 2001, p. 829)

Based on other case studies (Raimbault, 2017), we can safely assume that the coalition for logistics development actors fulfils the first two properties. Whether it also pursues "*identifiable* policy agendas" through "*longstanding* cooperation" is less clear. The skepticism emerges from the unstable nature of contemporary regimes, where agendas mutate faster in response to the accelerated patterns of globalization. Stone's own update of URT (Stone, 2015) addresses concerns that his own theory is too localist in times of globalized and rescaled governance. He proceeds to outline his theory of Urban Political Order (UPO), "a cluster of evolving relationships anchored in the city and extending into an intergovernmental dimension and reflecting an ongoing process of globalization" (id., 2015, p. 109). While his piece inevitably delves into the specificities of the evolution of politics in

Atlanta, the overarching reflection applies to other reasonably compatible contexts. Post-industrialization and the shift towards human capital attraction, cited by Stone as distinctive of contemporary urban America, are just as central on the other side of the Atlantic. Also, even though the article's spatial focus on the urban core is dissonant with our interests, Stone's observations seem just as coherent with the chiefly hinterland-located development of logistics facilities. He notes how business engagement is dwindling and priority setting has become less 'strategic' and more 'ad hoc', in a pursuit of short-term profit (Stone, 2015, p. 111). Commenting on Stone, Smith notes how globalization has weakened business interests for specific locales (2019, 6). As the quintessential globalized business, and one especially sensitive to the spatial whims of supply chains, individual logistics operators are an ephemeral presence with a fast turnover of tenants, management, and workforce. While Smith uses this as an argument for doing away with URT, it works just as well as a case for UPO. With all due caveats, we can then settle for a 'globalized URT'. It may have been developed for a bygone era of urban governance, but the corpus of research based on it and the decades-long critique offer solid conceptualization. Besides, the use of URT in recent works on logistics (Barbier et al., 2019; Raimbault, 2017, 2022; Raimbault et al., 2016) hints at its enduring suitability.

Often paired with URT, and fittingly for our purposes, is Molotch's Growth Machine theory (GM). Incrementally developed in parallel to URT (Logan & Molotch, 1987; Molotch, 1976, 1993), the GM is, per the sociologist (Molotch, 1993, p. 31), "a version of urban political economy [where] nested interest groups with common stakes in development use the institutional fabric, including the political and cultural apparatus, to intensify land use and make money". Growth machines are run by coalitions of governmental and non-governmental actors striving to attract mobile capital in order to propel local growth and increase land values, while gaining the support of the local public for growth (Rodgers, 2009, p. 40). GMs follow the narration of competitivity of 'entrepreneurial cities' (Harvey, 1989) and work around the fragmented governance of city-regions (Scott, 2001). The originally stipulated narrative of an industry-induced urban growth (Molotch, 1976, p. 310), we believe, works

just as well for a ‘logistics growth machine’ – ironically, a sector meant to make up for the demise of the ‘manufacturing growth machine’.

The compatibility between URT and GM has been a matter of discussion. In his later elaborations, Molotch arguments that URT and GM are just two sides of the same coin, that of urban governance: the former concentrates on the coalition-building capacity of politicians, the latter on the strategies of growth-enabling strategies of entrepreneurs (Molotch, 1993, p. 32). However, some see the narrow concern of GM with landed interests as restrictive, arguing that URT better conceptualizes the multiple interests around which governing coalitions gather (Vojnovic, 2019, p. 7). Growth coalition would then be just “one possible constellation that an urban governing coalition can assume” (Lauria, 1999, p. 125). Within the realm of logistics, we argue that the ubiquity of facilities development is bound to shape local urban regimes into growth coalitions.

The use of GM has also been criticized for its obsolescence. Just like it has been pointed out for URT, the growth machine theory was developed at the dawn of real estate globalization. Today’s complex property industry features much more mobile participants and capitals stretching across all territorial scales. In this view, the nature of contemporary growth coalitions, if any, is volatile, making GM theory unworkable (Rodgers, 2009, p. 43). We argue that these objections fail to embrace the multi-scalar dimension of growth coalitions that makes them thrive even in a looser urban political economy. It is not constructive to just do away with the notion of local coalitions; rather, one should engage with the long-expressed need for ‘rescaling’ (Brenner, 2004). Concerned as he is (and his fellows are) with dismantling methodological ‘endogeneity traps’ (Angelo & Wachsmuth, 2015; Brenner & Schmid, 2015; Sassen, 2008), he proceeds to reconstruct the notion of growth machine as interscalar constructs, thereby giving legitimacy back to the theory (Brenner, 2019, Chapter 7). Key to studying growth machines is the “national institutional envelope of land-use regulation, the variegated national institutional framework of urban development, and the wide-ranging interscalar consequences of urban growth machine activities” (Brenner, 2019, p. 247). This, argues Brenner, is

not a distorted interpretation of Logan and Molotch's writings, but rather a reassessment of the authors' acute account of the interscalar nature of urban development. Urban growth machines, Brenner concludes, are also "key moments within the multiscalar processes of state spatial regulation through which the patterns and pathways of capitalist urbanization are forged" (2019, 252).

Another critical point of GM is its suitability in the institutional context of our study. While not explicitly framed as such by Molotch, it is an American-produced theory based on American experience. Its transferability to other locales has been questioned – including by the theorist himself (Molotch & Vicari, 1988; Vicari & Molotch, 1990). At a second glance this seems like a hurried dismissal. The weight of private actors in urban development was indeed much lower outside the US (Le Galès, 1995), but that was in the Nineties, when the long wave of the neoliberal turn was still reaching continental Europe. In the American case, it was the neoliberalized national 'envelope' that changed the rules, with the defunding of local governments forcing them to change their attitudes towards growth (Brenner, 2019, p. 250). 'Devolution' measures implemented in Italy in the late 1990s and early 2000s under the pressure of federalist movements had a similar effect (Fossati & Levaggi, 2001). A recent study of a massive corporate-centred development in the city of Milan, longing for its place in the league of global cities, is representative in these terms (Anselmi & Vicari, 2020). The latter study also introduces the financial sphere in the picture of real estate development, something apparent in logistics as well (Magnani et al., 2024; Raimbault, 2022), where it becomes a way to diversify investments. This also responds to another recent critique of GM usage outside the US (Cox, 2017) that excluded the possibility of finding American-style property capitals dynamics in Europe. As a whole, these developments in theory and practice support the ongoing viability of GM for our study.

The growth machine of logistics is shaped by wider territorial governance. Ekers, Hamel, and Keil (2012, 408) define governance as "a heuristic device angled towards understanding how different processes and issues are negotiated, regulated and struggled over". As elaborated above,

logistics facilities typically materialize in the hinterlands of city-regions. The relationship of these areas with the urban core leads to specific forms of territorial governance (Ekers et al., 2012; Phelps & Wood, 2011). Again, the authors of these two seminal papers concede that their works are strongly US-oriented, but some of their observations seem to fit a different context like ours. Among them is Ekers et al.'s description of the influence of capital accumulation on suburban governance, notably in shaping its urbanization. Lower land costs, easier to develop greenfield sites, less congestion and lower taxes made possible by jurisdictional fragmentation are a source of competitive advantage for firms (Ekers et al., 2012, p. 414).

Whether we dub it 'machine', 'coalition', 'regime' or 'order', we need a fitting approach to accommodate the embroidery of human relations onto the anonymity of financial flows and logistical hinterlands. The relations of the actors of logistics being central to this work, relational geography makes for an appropriate methodological point of entry. Accurately outlined by Bathelt and Glückler (2003), the relational approach strives for a shift towards the relational linkages among actors as the loci of economic geography analysis. The view of agents' behavior as atomistic should be ditched, emphasizing instead the contextuality of human action (Bathelt & Glückler, 2003, p. 125) to be found in the relations that structure the networks already pervasive of the literature of the day (Castells, 2010; Latour, 1996; Swyngedouw, 2004). Actors' capabilities emerge through their relations, the latter being still constrained by the institutional, cultural and regulatory context in which they are immersed (Boggs & Rantisi, 2003, pp. 111–112).

In the intricate relationship of governmental and non-governmental actors, a key dimension is that of power dynamics. It is paramount here to avoid flattening actors' networks and relations as though the focus on their connections disparaged the hierarchies they develop (Paasi et al., 2018, p. 91). Their relations and power imbalances build what can be pictured as 'relational geometries' (Yeung, 2005, p. 38), the latter being evolving configurations rather than socially given structures such as class or institutional hierarchies. Relational geometries, argues Yeung, reconcile the

polarization of network-like, fluid, topological with institutional, positional, reified frameworks, by seeing power as co-constituted by the position within a relational geometry and the practice enacted from this position. Actions emerge from geometries irrespective of established scales, echoing Amin's stress on connectivity (2004, 59). The preoccupation with relational geometries resonates in Stone's own revision of URT (Stone, 2015). Responding to concerns that URT is too localist for the globalized and rescaled, he proceeds to outline his theory of Urban Political Order (UPO), "a cluster of evolving relationships [...] reflecting an ongoing process of globalization" (id., 109). UPO accommodates for the more-than-urban tiers of the city-region – possibly up to the global.

Another quality of the coalition geometries is that power balances do not necessarily follow the hierarchical order of tiers. "Urban governance theory does not stipulate any particular loci or sources of political power", states Pierre in another critique to URT (2014, 874). In his paper, Pierre argues that URT is a *framework* rather than a theory in that its scope and assumptions are too restricted to apply to the generality of urban governance configurations. He advances that Urban Governance (UG) *theory* is more inclusive of the multiple shapes urban governance can take. Especially relevant to our interest is the broader definition of governance members and loci, as well as the evolving, ad-hoc property of governing arrangements (ibid.). Pierre's revision of URT as a subset of UG is not that far from the concessions Stone makes when evolving URT into UPO.

In sum, we trace a pluralist vision where the 'power to' (Dowding, 1991) is built by multiple stakeholders, through relational geometries among the political and economic sphere. Logistics development, though, globalizes the network of actors involved, coordinating investments and decisions well beyond the urban scale, which historically inspired the theorizations exposed above. We witness an evolution towards a 'financialized growth machine' (Anselmi & Vicari, 2020), where not only logistical infrastructure but also the investments for its expansion have global reach. To answer the age-old question "who governs?", we will have to look further upwards to

“distant investment committee boardrooms”, following a relational geography of actors across multiple scales.

Financialization and logistical real estate

Logistics development goes hand in hand with that of finance. Together with extraction and finance, it is arguably one of the central components of contemporary capitalism (Mezzadra & Neilson, 2013) – the ripened version of what was already defined “financialized capitalism” decades ago (Arrighi, 2010, p. ix). These realms intersect not only conceptually, but also in the very practical operations of logistics real estate development. Epstein (2005, p. 3) defines financialization as “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies”. In financialized capitalism, the logics of speculation and debt-credit relation are prime, displacing the historical tension of wage labour (Langley, 2021, p. 2). Specifically, real estate financialization is described as a ‘liquification’ of fixed assets (Halbert & Attuyer, 2016) or ‘real estate assetization’, the miraculous transformation of “the most spatially fixed investment class [...] into tradable financial assets” (Aalbers, 2019, pp. 8–9). Assetization puts real estate in a middle ground between property and commodity, in that it is not just owned and employed for rent, but it is not either a fluid commodity for exchange. Rather than for its immediate exchange value, a real estate asset is primarily valued for its future returns as compared to the cost of capital (Muniesa, 2017). The built environment, long identified as a ‘spatial fix’ for surplus capital (Harvey, 1985), is thus absorbed into the circuits of finance (Coakley, 1994). In turn, it is the market of real estate which transmits broader economic transformations onto the urban space (Haila, 2022, p. 21). This ever-tighter connection has not been without unfortunate outcomes – most notably in the Great Recession, but with good chances of repeating itself elsewhere (Ahmed et al., 2024).

In a financialized economy, the notion of the growth machine is reshaped (Boyer, 2000). The surge in demand of logistics facilities leads to the formation of financialized GMs, a turbocharged version of the ‘original’ GM

whose power is augmented by the rhythms of finance. Just like in the classic depiction of the growth machine, the financialized GM represents an attractive source of fast cash for revenue-seeking suburban municipalities, notably those afflicted by a historically poor manufacturing sector, where the resurgence of the industry sector would be all the more unlikely (Raimbault, 2022). It is important to note that while the growth of logistical real estate has much to do with the rhythms of financial investments, this process is not inexorable. As we will later see, assets "are made so: the asset form is not [the] consequence of some inherent or embodied quality" (Birch & Muniesa, 2020, p. 2). Real estate must first be framed as an asset before it can operationalized as such (Chiapello, 2020).

According to Halbert and Rouanet (2014, p. 472), the capacity to pull together financial resources is built through transcalar territorial networks (TTN). Capital "allocated in distant investment committee boardrooms" reaches a specific plot of land via interlinked actors across multiples scales (id., 474); in other words, TTNs describe the fundraising process of growth coalitions. The workings of this financialization are framed by some as socio-technical mediations. According to this viewpoint, financialized urban (re)development is best understood "beyond the screens of trading rooms" (Halbert & Attuyer, 2016, p. 1356). There we can observe the relations holding together this structure in novel – and extremely imbalanced – coalitions. Public agencies are ensnared in a situation where massive privately controlled logistics parks effectively dictate the local economy, in a risky game dominated by strong vertically integrated logistics firms. Free from institutional control or even scrutiny, these companies can build easily repurposable facilities where the turnover of logistics operators goes on unhindered by socio-economic considerations (Raimbault, 2022, pp. 1495–1496) – a remunerative "fungible space" (Danyluk, 2019) commodified for the logistics growth machine. Recent works show how financialization has crept into the fabric of real estate in Italy (Anselmi & Vicari, 2020). We argue this holds for logistics, too: market reports from asset management firms regularly promote logistics as a safe, expanding investment option within real estate, as proved by the exponential growth of invested money in the last

10-15 years (see e.g. PwC, 2023); unsurprisingly, the overwhelming majority of capital comes from foreign investors.

What happens in real estate is just a piece of the large-scale operations of contemporary urbanization. Despite its decisive role in neoliberal urbanization (Weber, 2010) and, fundamentally, its spatial nature (French et al., 2011), the transformative force of financial capitalism in the nexus of emergent logistics spaces, urban theory and urban governance has been underplayed (Halbert & Attuyer, 2016). True, finance is generally mentioned in the field, and a few studies (Arboleda, 2015; Toro & Navarrete-Hernandez, 2022) discuss financialization as a vector of extended urbanization – mostly in the Global South, where the materialization of finance-led dispossession and extraction is most apparent. Yet, we argue that the 'distanciation and infrastructuralisation' of contemporary operational landscapes (Brenner & Katsikis, 2020, p. 28) are a just as useful lens for the logistics urbanization of the Global North, and indeed the *financialized* nature of logistics makes this urbanization even more *distant* from its topographic localization than Brenner and Katsikis', Keil's or Phelps' criteria suggest. Not only are the flows of logistics disarticulated from their location, the financial vehicles for the development of logistics facilities themselves are – courtesy of assetization techniques. Investment funds often specialize in non-housing real estate portfolios with a regional or even global scope (Aalbers 2019, 9), and while the global city-regions channeling investments may serve as regional logistical hinterland command-and-control centers, they do so with international capital (Bassens & Van Meeteren, 2015).

One must be careful not to overstretch a notion that, somewhat like neoliberalism, has mushroomed all over the place (Christophers, 2015). Yet, we advance that financialization is not an odd or forced addition. Quite the opposite: in our account of logistics development, it strengthens the academically weak chain ring between land-based growth regimes and urban theory. As we have seen above, the now mature discussion on planetary urbanization might be treated as exhausted, as fresh positionings shift the focus on the role of capital in urbanization in the Global South (Apostolopoulou, 2021; Dodson, 2017; Kanai & Schindler, 2022; Taggart &

Power, 2024). This is, we argue, a legitimate South-facing urban perspective – an expected evolution, given the dissatisfaction with the Global North-inherited assumptions Brenner has been blamed for (Brenner, 2018) – and actually an incentive to freshen up the planetary urbanization perspective through financialization. What we deem relevant is that deciphering logistics real estate development as a form of political economy simultaneously unearths a practical materialization of finance in planetary urbanization.

Overall, we have a theoretical toolkit where we put well-established theories into dialogue with each other, in a bid to extend their reach. We argue that the ostensibly exhausted discussion on planetary urbanization and the hinterland actually still has a lot to offer, especially when one sets to materialize it on the ground. The weakness that is found in the immateriality and universality of this theory can be resolved looking at how the spheres of economy and politics produce such spaces. In the process, we integrate the issue of financialization, which we find to be the overarching force shaping the operations of the political economy of logistical real estate. The ubiquity of finance in contemporary capitalism, we argue, is manifest in real estate in the way it stretches the so-called growth machine across scales and polarities, which will have to be followed in the relevant locales. This will guide the choice of our case study and the methods used to best unearth what is ultimately a relational geography, extended across networks of capital and power, yet very anchored in the logistical hinterlands it contributes to shape.

Chapter 4

Methods and case selection: sketching a geography of the financialized growth machine of logistics

Having laid down a theoretical basis, we will now proceed to explore the methods to carry out this study and situate them in the socio-spatial context of Northern Italy. We will see how an initial choice of some typical tools of quantitative and qualitative analysis for political-economic geography needs to face the varying availability and quality of data, be it in sheer technical terms or, often, in the unavailability of actors to disclose information and opinions – an unsurprising issue in the corporate world.

Combining quantitative and qualitative methodologies

The choice of methods for this study lays its basis on its markedly socio-spatial perspective, insisting on the strong interplay between spatial organization and the mode of production in society in its broader sense, including cultural, political and social aspects (Gottdiener & Budd, 2005, p. 140; Jessop et al., 2008). This allows to combine an observation of the specific logistical geographies we will identify with the socio-technical processes that produce them. We first apply some quantitative assessments of the spatial distribution of logistics facilities, laying the foundations for a

critical appraisal of the relational geographies linking the constellations of actors of logistics development. Bearing in mind the issues of Italian sprawling urbanization and its reassessment in light of the notion of logistics hinterlands, our study puts logistics spatial distribution in a critical perspective. As already stated in literature about urban sprawl in Italy, the distinctive characteristics of the relationship between local and global economy and politics produce specific urbanization patterns in Northern Italy (Savino, 2009). This stimulates us to consider how this plays out in the case of logistics real estate. Quantitative elaborations will be produced to single out one or more outstanding case studies, where the interconnection of local logistics geographies with capital and politics will be more deeply explored. This will be carried out through a qualitative study of the relational geometries linking the actors of logistics real estate development. Naturally, the qualitative study will have to consider the multiple scales these actors work at. The case selection and in-depth study will be conducted bearing in mind the context of Northern Italy, which we will describe in more detail before delving into a more granular analysis of our case studies.

Quantitative methods: mapping logistical hotspots beyond logistics sprawl

The quantitative analysis depends on available data – which is not guaranteed, as it is mostly not open data. The goal is to identify outstanding cases of logistics hotspots and logistics sprawl and enrich the data with useful information for later analysis of the dynamics of logistics real estate. To begin with, literature on logistics sprawl shows that while methods are similar, each study is adapted to the widely varying data available depending on the region analyzed (Dablanc & Browne, 2020; Heitz, Launay, et al., 2017). Often, the most detailed and updated databases are those of real estate agencies or consultancies, which are unsurprisingly difficult to obtain.

That the growth of logistics facilities such as ‘big box’ warehouses, distribution centers and other categories was affecting land use and sprawl was first evidenced by Hesse (2004). A number of works on the locational choice of logistics facilities has followed these seminal reflections, with a

varying ratio of quantitative to qualitative methods depending on the study. The range of methods used in the literature results from one of the main challenges for logistics geography researchers, i.e., the widely varying availability, nature, and granularity of data. Besides the availability of data itself, a common problem is that the lines that separate logistics from manufacturing spaces are often blurred, and in some cases the law has not caught up with the specialization of logistics services as opposed to manufacturing – that is the case of Italian building permits, where there is one category for both manufacturing plants and warehouses. Also, logistics services are often part of larger facilities used for other activities, incorporating this sub-function within other labels. Finally, granular and up-to-date maps are more often than not the interest of private operators such as real estate agencies, making such valuable data hard to access. Data on facilities may be available with their exact location or be aggregated by municipality, ZIP code etc. The same goes for their footprint, a critical proxy for facility type, which is itself a nice-to-have attribute. Other characteristics include the landlord, tenant, and construction date. The result is that a certain level of creativity in gathering data is needed when dealing with the subject.

Warehouse distribution can be further elaborated to observe its evolution over time compared to, e.g., urban centres and transport infrastructure. Centroids and centroid variation are typically computed, where the centroid is the barycenter of all points (in this case, logistics facilities). Centroids may move towards a certain direction of a metropolitan area and get closer or farther away from the metropolitan core, hinting at sprawl or concentration. The centroid may also be weighted by facility footprint or employees, and separated centroids for each category of logistics facilities may be used to evidence different trends for the corresponding sub-sectors, such as parcel delivery or distribution centers for retail. Other socio-economic variables for each municipality or equivalent allow to speculate on the links between logistics locational trends and employment levels, education etc.

Many authors focus on the trend of logistics sprawl (Dablanc & Browne, 2020), but the evidence is not always in that direction. As logistics diversifies, different types of facilities might follow different distributional patterns to accommodate for the specific needs of the sector (Atelier Parisien d'Urbanisme, 2022). Also, some highlight that hyper-central locations might not necessarily be the best options to reduce mileage and emissions (Robichet & Nierat, 2021). With a rich scholarship on urban sprawl (Balducci et al., 2017; Bonomi & Abruzzese, 2004; Indovina, 1990, 2009; Turri, 2000), odds are that Northern Italy will show some elements of logistics sprawl. Still, the interactions between such elements as several busy seaports, strong polycentricity and a diversified manufacturing sector make for a complex and many-sided logistics landscape.

Just like it is highlighted in the literature on other countries (Heitz, Launay, et al., 2017), the variety of feasible quantitative elaborations for our study is limited by the availability and detail of data sources. First, no open comprehensive database from public institutions or other sources is available for logistics real estate stock. As explained above, proxies of logistics stock from public sources such as building permits are not open. SNPA/ISPRA[6], Italy's national environmental protection agency, part of Italy's National Research Council (CNR, Consiglio Nazionale delle Ricerche) has only recently started to build a logistics stock database for land use monitoring purposes, which has been analyzed in the latest yearly reports (Munafò, 2022, 2023, 2024)[7]. However, per the authors, data collection had to be reverse-engineered based on mixed methods of satellite imagery and desktop research, and therefore cannot aim to be a comprehensive survey of logistics real estate. Still, it can be used to double-check the evidence of other data. In light of the lack of satisfactory open (or at least public and available upon request) data sources, the second-best option is corporate expertise. For obvious reasons, real estate actors, and especially agencies, steadily monitor market developments, and while their methods cannot be

[6] See website www.isprambiente.gov.it

[7] The CNR logistics stock database is not directly available as open data but was kindly provided to the author by the research team.

disclosed, chances are their data is as detailed and accurate as possible to meet client requests. Through contacts with real estate actors, we were able to obtain a detailed nationwide logistics real estate stock map from 2017, produced by World Capital Group (WCG), a Milan-based real estate agency specialized in logistics[8]. The data has been yearly updated, but newer releases could not be made available for research, being fresh 'know-how' of the agency. Still, it can provide with an overview of development trends and give some hints as to the primary hotspots of logistics in the country. In turn, real estate data can be put into context via elaborations with socio-economic data, whose chief source is *Istituto Nazionale delle Statistiche*, Italy's National Statistics Institute[9] (ISTAT). As our elaborations will illustrate, the concentration of logistics in a given area is best shown by comparing its footprint with other indicators such as the total surface or the population. GIS data on administrative delimitations can also be obtained through ISTAT and open data from OpenStreetMap[10].

Table 1 Comparison of GIS logistics databases

fields	**WCG**	**CNR**
geometry	points	polygons
elements	2,893	1,582
total footprint	35,983,850 sqm	22,903,600 sqm

[8] See website www.worldcapital.it.

[9] See website www.istat.it.

[10] See website www.openstreetmap.org and data extraction tools such as QuickOSM for QGIS (plugins.qgis.org/plugins/QuickOSM/).

fields	**WCG**	**CNR**
construction timespan	no [2017 stock data]	yes [2006-2012, 2012-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022]
tenant	yes	no
ownership	yes	no
address	yes	no (can be retrieved from location)
size	yes	yes
use	yes [(3PL) logistics, shipping company, distribution center, intermodal terminal]	yes [retail/commercial, productive/industrial, shipping company]
loading bays layout	yes [cross-dock or traditional warehouse]	no

As Table 1 shows, neither source is comprehensive or consistent with each other. WCG data has more accurate commercial data, which can be useful to map the market of owners and tenants; it also provides with an overview of potential actors to get in touch with. In turn, it is just a snapshot of the market at a point in time – one that starts to be quite far from the picture we need for our study. In turn, the CNR database is focused on land use and harnesses satellite imagery to narrate the progressive surge of

logistics. However, its classification by usage is weaker and possibly less relevant to market needs than that of WCG. Finally, the inconsistencies between the number of elements and the total footprint suggest a cautious approach in the usage of either of the sources. For these reasons, the selected case studies will be further thoroughly investigated using sources such as satellite imagery history and street-level imagery on Google Earth and online business information research, using e.g. warehouse lists on corporate websites and address details on Google Maps, as well as news and press releases on media outlets. Finally, a precious, if not quite user-friendly, source is cadastral data from *Agenzia delle Entrate*, the Italian Revenue Agency (AdE), available on the relevant website (Agenzia delle Entrate, 2025). Italian digital identity (SPID) holders can freely access the database and retrieve information on the current and former ownership of any cadastral parcel (land plot and/or building) or browse all the properties of an individual or business based on their tax code. Queries have to be done in a time-consuming one-by-one fashion, but the process still provides with a lot of detail on specific locales, especially when it comes to such an opaque sector as financialized real estate. This should allow to enrich incomplete entries with construction years, size estimates, ownership history and so on.

The financial history of logistics assets is another paramount element. The identities behind the immaterial movements of capital and ownership and those mediating these processes, as well as the details of those in charge of the design and construction of assets, are crucial to enrich the topographical dimension of real estate stock data, which is useful but incomplete for our interests. This data is essentially unavailable in a structured form and will need to be assembled combining the incomplete hints from quantitative data with qualitative data from corporate information, media outlets and company databases, as will be better explained in the following section. Table 2 below summarizes the complex puzzle of details that can be extracted from the multiple data sources mentioned for the study[11]. All collected information will be structured as a

[11] Question marks indicate incomplete availability to be verified case by case.

GIS database with points and polygons as relevant, including the listed fields, as well as an extra “description” field for textual context, with links to related data sheets, real estate market news, etc.

Table 2 Comparison of details available in different logistics RE data sources

details	**AdE**	**CNR**	**Google Maps *or* Earth**	**corporate info *or* media**	**WCG**
location	×	×	×	×	×
size	?	×		?	×
construction date	?	×	×	?	
tenant			?	?	×
ownership *and/or* fund management	×		?	×	×
ownership history	×			?	
developer				×	
RE agency				×	

details	**AdE**	**CNR**	**Google Maps *or* Earth**	**corporate info *or* media**	**WCG**
use[12]		×	?	?	×

SLZs data require separate explanation. Despite the clearly defined extent of each land plot to be included – region-redacted application dossiers list cadastral plot in detail – no GIS map of SLZs has been made available as open data, requiring a lengthy manual delimitation of SLZ areas based on plot code lists or map previews from application documents (Approvazione proposta di prime perimetrazioni degli ambiti retroportuali della Zona Logistica Semplificata ZLS "'Porto e retroporto di Genova'" in Piemonte, ad integrazione del relativo Piano di Sviluppo Strategico, 2024; Autorità di Sistema Portuale del Mar Ligure Occidentale, 2021; Regione Emilia-Romagna, 2021b). This will allow to observe current and planned logistics and infrastructural developments within SLZ areas.

Qualitative methods: exploring the relational geography of logistics development

The subject of logistics development is just as spatial as it is political and economic. Therefore, we deem it appropriate to find a methodological approach that considers the network relations of actors involved in the spaces under study. Relational economic geography is concerned with how 'socio-spatial relations of actors are intertwined with broader structures and processes of economic change at various geographical scales' (Yeung, 2005,

[12] As shown in Table 1, categories used in CNR and WCG databases are not consistent. Warehouse use may also be inferred from textual descriptions available online on media outlets or corporate websites.

p. 37). Such an approach fits both with relations within intra-national scales and with the largest scale, that of globalization, in which logistics, by definition, means to be deeply integrated (Yeung, 2005, p. 42). It also incorporates the questions of strategic coupling (Coe et al., 2004), whose components in higher-tier logistics planning remains to be clarified.

Desktop research on mainstream and specialized material

An important contribution to the relational mapping of logistics will come from the study of documents, especially grey literature, produced by all actors involved (Table 3). All scales of government produce more or less binding documents which may or may not be mandated by planning norms: on top of urban plans by municipalities, Provinces write some sort of coordination plan, while Regions write lengthy territorial strategic plans. Interest groups such as employers' federations and chambers of commerce usually author reports, presentations and so on which are valuable material for narrating logistics hinterlands and lobbying the government for favorable legislation and infrastructure funding. Media are also involved in the production of this narrative. On the side of the market, both fund management firms and real estate intermediators routinely distribute market overviews. Developments are also promoted through press releases and on specialized media outlets. Dissecting this corpus of information will provide valuable information to support semi-structured interviews. For lack of a comprehensive, up-to-date database of logistics facilities, it will also help to reconstruct the geographies of financial and logistics actors connected to them. As needed, this information will be enriched by cadastral research of relevant buildings, giving a detailed breakdown of their ownership history[13].

[13] Cadastral data can be accessed on Italy's Revenue Agency portal with Italian digital identity services https://www.agenziaentrate.gov.it/portale/schede/fabbricatiterreni/visura-catastale/visura-catastale-online.

Company databases will also be useful to piece together the complex ownership structures of logistics hubs and investment funds[14].

Table 3 Sources of grey literature

governmental level/source	**Alessandria**	**Piacenza**
national	SLZ and SEZ legislation[15], national mobility and logistics strategies and planning documents (Ministero delle Infrastrutture e dei Trasporti, 2011; Ministero delle Infrastrutture e dei Trasporti & Consulta Generale per	

[14] Global company data is accessed on Moody's Orbis https://www.moodys.com/web/en/us/capabilities/company-reference-data/orbis.html, while country-specific data for Italian entities is retrieved on AIDA https://www.moodys.com/web/en/us/capabilities/company-reference-data/orbis/aida-orbis-for-italy.html via research institution subscriptions.

[15] For layout clarity, the references will be listed in footnotes as follows (Bilancio di previsione dello Stato per l'anno finanziario 2018 e bilancio pluriennale per il triennio 2018-2020, 2017; Bilancio di previsione dello Stato per l'anno finanziario 2020 e bilancio pluriennale per il triennio 2020-2022, 2019; Conversione in legge, con modificazioni, del decreto-legge 10 settembre 2021, n. 121, recante disposizioni urgenti in materia di investimenti e sicurezza delle infrastrutture, dei trasporti e della circolazione stradale, per la funzionalità del Ministero delle infrastrutture e della mobilità sostenibili, del Consiglio superiore dei lavori pubblici e dell'Agenzia nazionale per la sicurezza delle infrastrutture stradali e autostradali, 2021; Conversione in legge, con modificazioni, del decreto-legge 14 dicembre 2018, n. 135, recante disposizioni urgenti in materia di sostegno e semplificazione per le imprese e per la pubblica amministrazione, 2019; Conversione in legge, con modificazioni, del decreto-legge 16 luglio 2020, n. 76, recante misure urgenti per la semplificazione e l'innovazione digitale, 2020; Conversione in legge, con modificazioni, del decreto-legge 19 settembre 2023, n. 124, recante disposizioni urgenti in materia di politiche di coesione, per il rilancio dell'economia nelle aree del Mezzogiorno del Paese, nonché in materia di immigrazione, 2023; Conversione in legge, con modificazioni, del decreto-legge 20 giugno 2017, n. 91, recante disposizioni urgenti per la crescita economica nel Mezzogiorno, 2017; Conversione in legge, con modificazioni, del decreto-legge 28 settembre 2018, n. 109, recante disposizioni urgenti per la città di Genova, la sicurezza della rete nazionale delle infrastrutture e dei trasporti, gli eventi sismici del 2016 e 2017, il lavoro e le altre emergenze, 2018; Regolamento di istituzione di Zone logistiche semplificate (ZLS) ai sensi dell'articolo 1, comma 65, della legge 27 dicembre 2017, n. 205, 2024; Regolamento recante istituzione di Zone economiche speciali (ZES), 2018)

governmental level/source	**Alessandria**	**Piacenza**
	l'Autotrasporto e per la Logistica, 2012; Ministero dell'Economia e delle Finanze, 2016, 2017)	
regional	SLZ application dossier[16], regional mobility and logistics planning documents (Regione Piemonte, 2023)	SLZ application dossier (Regione Emilia-Romagna, 2021b), regional mobility and logistics planning documents (Regione Emilia-Romagna, 2021a)
provincial	planning documents (Piano Territoriale Provinciale, 2002)	planning documents and agreements with specific municipalities[17]
municipal	planning documents	planning documents
lobbies, interest groups etc.	reports and policy briefs from local employers federation, chamber of commerce and logistics development foundation (Confindustria Piemonte,	reports and policy briefs from local employers federation, chamber of commerce and logistics development foundation (ER.I.C., 2025; Istituto sui

[16] For layout clarity, references will be listed in footnotes as follows (Approvazione proposta di prime perimetrazioni degli ambiti retroportuali della Zona Logistica Semplificata ZLS "'Porto e retroporto di Genova'" in Piemonte, ad integrazione del relativo Piano di Sviluppo Strategico, 2024; Individuazione, in attuazione della D.G.R. 14-4382 del 22 dicembre 2021 degli ambiti territoriali da proporre ai fini dell'inserimento nelle perimetrazioni retroportuali della Zona Logistica Semplificata ZLS "Porto e retroporto di Genova"., 2022; Autorità di Sistema Portuale del Mar Ligure Occidentale, 2021)

[17] For layout clarity, references will be listed in footnotes as follows (Amministrazione Provinciale di Piacenza, 2000; Assessorato alla Programmazione e Sviluppo Economico del Territorio, Urbanistica, Politiche per la Montagna della Provincia di Piacenza, 2012; Provincia di Piacenza, 2024; Provincia di Piacenza et al., 2022)

governmental level/source	**Alessandria**	**Piacenza**
	2021; Sozzetti, 2021, 2022, 2023; Unioncamere Piemonte, 2024)	trasporti e la logistica, 2025; Unioncamere Emilia-Romagna, 2022)
institutional research institutes	socioeconomic data reports (Bargero & Avato, 2022)	socioeconomic data reports (Freddi, 2024)
real estate and logistics specialized outlets	RE agencies' quarterly/yearly market reports (e.g., Colliers Italy, 2023; Fantuzzi, 2024a; PwC, 2023; World Capital Group, 2022), RE and logistics news outlets[18]	
local media outlets	local politics and economic development news (e.g., Feola, 2023, 2024; Navaro, 2017; Tropeano, 2023)[19]	local politics and economic development news (Alfieri, 2023; Piacenza Sera, 2023; Rancati, 2021; Trespidi, 2022)[20]

[18] Major specialized outlets include Logisticamente (www.logisticamente.it), Logistica News (www.logisticanews.it), MonitorImmobiliare (www.monitorimmobiliare.it), Scenari Immobilari (www.scenari-immobiliari.it),The MediTelegraph (www.themeditelegraph.com).

[19] The main historic local newspaper is Il Piccolo (www.ilpiccolo.net) with its online partner AlessandriaNews (alessandrianews.ilpiccolo.net) while national newspapers such as Turin-based La Stampa (www.lastampa.it/alessandria) and Genoa-based Il Secolo XIX (www.ilsecoloxix.it/basso-piemonte) have local sections.

[20] Piacenza's main historic local newspaper is Libertà (www.liberta.it), while news websites include IlPiacenza (www.ilpiacenza.it) and Piacenza Sera (www.piacenzasera.it).

Drawing a relational map through interviews

When it comes to investigating the relational geographies, some of the actors are the usual suspects, others might not. Logistics operators are obviously involved, although not only in the obvious role of logistics workforce, but more and more often as orchestrators of complex outsourced logistics services. Several sub-sectors can be identified, typically logistics for manufacturing, handling components, raw materials etc. The other two main categories are parcel services, and lastly distribution centers (DCs), networks of warehouses meant to distribute goods for retail. Logistics hubs, when managed through a collective governance structure, are other valuable objects of inquiry. As a business sector like any other, logistics has its sector associations and lobbies and is a staple of chambers of commerce.

The other evident party are public institutions. Logistics might well handle ever-moving flows along topological networks, but to do so it must materialize along very topographical infrastructure corridors (Silver, 2021), where it interacts with local governments. Public bodies might also be interested in harnessing the economic potential of logistics, thereby taking the lead in logistics development. Some components of logistics chains are actually public entities, such as port authorities. All these components have a stake, although at different scales and with different levels of power, in the development of logistics.

Third come the less evident but extremely powerful actor of logistics development, real estate intermediators and fund managers. As evidenced in other case studies (Barbier et al., 2019; Raimbault, 2022), realtors are often the pioneers of logistics development in a given locale, and are key in igniting further growth of the area. They are also the link between logistics development and global financial circuits. As logistics serves the needs of transnational corporations, real estate agencies form international conglomerates hoping to cover all the regions their clients might be interested in.

Finally, the so-called ‘intermediary bodies’ are relevant entities where actors from all of the above categories gather to influence or exert power in

logistics development. These can be employers' federations, local development foundations, lobbies and so on. It is hard to categorize them within any of the above groups as they are intentionally shaped to blur the lines between them.

We investigate this relational geometry through semi-structured interviews. The interviews are mainly meant to cover the experiences of actors vis-à-vis their own sub-sector, their relationship with public institutions, their visions of the future of the market. The interviewees are to be selected among the categories listed above and work or have an expertise about the area of the case stud(ies).

The mapping of relational geometries and logistics strategies and narratives is qualitatively carried out through semi-structured interviews. The main categories of actors that we will reach out to are (1) governmental, such as elected representatives and government officials, (2) logistics operators, (3) real estate agencies, (4) financial actors such as investors and fund management firms, and, where available, (5) intermediary bodies representing the governmental, business and civic sphere, usually organized in interest groups such as lobbying associations, employers' organizations, etc. Among the landscape of involved actors, those that will be ultimately interviewed are listed in Table 12 in the Appendix.

Given the semi-structured format, the interviews avoid a strict bullet-point list of question. Common themes covered are:

1. Presentation of the interviewee and of the institution, company or other type of organization
2. Involvement in logistics real estate, possibly specific names to expand interview opportunities

The interview will develop differently depending on each actor's category. As they are either the client or the provider in the process, financial and real estate actors, and partly logistics operators, will share a set of themes:

1. Level of integration of logistics real estate development process: stages of real estate investment, development and management directly covered by the company
2. If actor is directly involved, questions on specific case study
3. Description of process through an example case: development type, investors, internal staff and external actors involved, difficulties…
4. Permitting process: stages, relations with government authorities
5. Mode of interaction with other actors: individual, through lobby…
6. Locational choice and asset type: criteria, planning constraints, local government requests…
7. Investor's preferences and effects on locational choice, asset features, lease contracts…
8. Power geometries with respect to external governmental and business actors
9. Relations with non-local government scales
10. Property management
11. Relationship with local economy and integration into local socio-economic fabric
12. Future outlook on market, regulation and opportunities (SLZs…)

Conversely, logistics operators will be asked about similar topics, considering their often-opposite perspective: lease contracts, locational choice, asset features, and, generally, their experience with a financialized real estate market, as well as their outlook on oncoming SLZs.

In the case of governmental actors, other topics will be explored, such as:

1. Role of governmental body in logistics development in relation to other governmental scales
2. History of logistics in the area
3. Permitting process, if applicable
4. Example case, if applicable
5. Power geometries with respect to other governmental and non-governmental actors

6. Outlook on current and future policies (SLZs…)

Interviews will be then elaborated and analyzed with ATLAS.ti[21], a computer-assisted qualitative data analysis software (CAQDAS), using qualitative coding and subsequently comparing and contrasting the statements of interviewed actors.

Context of the study: logistics hinterlands within Northern Italy's urban history

Everything hints at Northern Italy as a peculiar area for investigating logistics development. Its urbanization incorporates the layers of the centuries-long evolution of polities and production regimes with their respective urbanization forms (Felice, 2015). Highly populated and heavily industrialized – its core region, Lombardy, is one of the historical Four Motors for Europe (Four Motors for Europe, 2021) – it is a breeding ground for logistics facilities. These are some remarkable figures, but a neater picture of Northern Italy is needed to structure the study of its logistics urbanization. We shall first piece together the disparate elements of the region's urbanization history and find out how logistics fits in the process.

Urbanization trajectories along the economic history of the *Nord*

Northern Italy encloses a mosaic of multiple urban histories. It consists of eight Regions, mid-level entities invested with some territorial development functions, notably strategic plans – a controversial role, since their boundaries were established based on historic political formations rather than functional considerations. The imaginary of a unitary, uniform region promoted since the 1990s for political interests by federalist movements is not factual (Chiodi, 2005). Although some point to the economic primacy of the *Nord* ("North", as Northern Italy is commonly referred to) in comparison to the rest of the nation, the only incontrovertibly

[21] A subscription-based CAQDAS software available at www.atlasti.com.

common trait is topographical, and, to a limited extent, cultural (Barca et al., 2015).

The multiple histories of Northern Italian Regions are reflected in a composite urban picture. A handful metropolitan areas are unevenly interspersed with dozens of medium-sized cities. Some are expanding, some shrinking (ISTAT, 2023), some because of de-industrialization, some already have because their heyday as a seaport or an economic crossroads is centuries past (Malanima, 1998). Restricting the analysis from the Industrial revolution onwards, the first great surge in population involves the 'Industrial triangle' of Turin, Milan, and Genoa, in the North-west of the freshly unified Kingdom of Italy. A government and investor-backed phase of Fordist industrialization boosted the economy and population of these three cities in the early decades of the 20th century, drawing the urban landscape of the North-west around three monocentric polarities with a rather compact urban layout. As Fordism waned, the growth of strongly clustered and specialized small and medium enterprises (SMEs) ignited the development of formerly lagging areas of North-eastern and Central Italy (NEC). Labelled "Third Italy" (Bagnasco, 1977), NEC ultimately outcompeted the "First Italy" of heavy industry. Third Italy grew independently of national economic policies and fermented on a markedly polycentric area, creating the conditions for urban sprawl (Indovina, 1990). The NEC industrial model has proven relatively successful and resilient to economic shocks, strengthening the economy of the North-Eastern polycentric agglomeration and shifting the Western 'Industrial triangle' eastward (Buzzacchi et al., 2022), as Turin and Genoa struggle to find a way out of Fordism. For some, the (out)growth of Northern-Central Italy against the historically underdeveloped Southern regions has reframed the national economy in a renewed "Two Italies" divide (Cavasino, 2019).

With all these rearrangements, is there even such a thing as *one single* Northern Italy or should we look for *multiple* Northern Italies? The geographer can hardly elude the question if a political-economic analysis is in order. The existence of the *Nord* as a single entity has been advanced, sometimes more as a question than a statement (Bagnasco, 2009; Perulli,

2012). Both authors discuss Northern Italy's evolution towards and compatibility with the definition of a global city-region (Scott, 2001). Unsurprisingly, they highlight the local repercussions of globalization. Disrupting the economy with little regard for local specificities and saving the more internationalized small and medium enterprises best encapsulating the uniqueness of made-in-Italy, globalization has performed a natural selection in aging industrial districts. After the storm, it is the thriving "pocket-sized multinationals" (Colli 2002) that foster the national economy. Just like larger companies, they require the infrastructure linking them to global production networks, extending the demand for logistics to the whole of the North.

We glimpse a coalescing *Nord*, a global city-region in the making, its onset resulting from uncoordinated action. Its contours are blurred by the polycentricity of the region, frustrating endeavours to delineate the limits of this regional 'cloud' (Bagnasco, 2009, pp. 168–169). Not that this poses a problem: a distinguishing feature of city-regions as opposed to metropolitan regions is their "polycentric or multiclustered" morphology (Scott, 2001, p. 18). What is missing is a political instrument for a common territorial development strategy. Yet, if not a consolidated political entity, Northern Italy emerges as a not further defined 'region', making its way from the imaginary to the geographical.

Unrestrained sprawl in an inarticulate region

No matter the different substrates, one form of urbanization proliferates all over Northern Italy: urban sprawl. The phenomenon, first termed *città diffusa* ("diffuse city") in Italian scholarship (Indovina, 1990), was especially apparent in "Third Italy", a polycentric area that encountered industrial development after the highpoint of Fordism. In a vacuum of planning legislation, a sprawling pattern started to characterize residential and industrial urbanization. In the latter case, the exhausted model of colossal complexes attached to main cities gave way to a plethora of small firms scattered across towns big and small. This was exacerbated by the need for revenue of municipalities, ever more deprived of national fund transfers.

Scholarship has expanded beyond purely topographic considerations, engaging with international literature on globalization, post-metropolis and post-suburbanization (Bagnasco, 2009; Balducci et al., 2017; Bonomi & Abruzzese, 2004; Buzzacchi et al., 2022; De Vidovich, 2020; De Vidovich & Scolari, 2022; Savino, 2009; Turri, 2000). Today, urban sprawl has been popularized outside research in the imaginary of the Po Valley (D'Abbraccio et al., 2015; Vinci, 2019).

As evidenced by land consumption monitoring (see annual land use reports, e.g., Munafò, 2024), the awareness of such a problematic urban and environmental issue has not translated into stricter policies. The most exposed areas are those with a high percentage of land consumption and low population density, i.e., sprawling areas (Munafò, 2024, Table 63). A trend of peri- and suburbanization is especially evident around metropolitan areas (Munafò, 2024, p. 71).

Sprawl is even more apparent in non-residential use. The Northern Italian regions of Emilia-Romagna, Lombardy and Piedmont show the highest ratio of non-residential buildings to the total of built-up areas (Munafò, 2022, Figure 106). Massive greenfields have been sacrificed to suburban shopping malls, with logistics joining the land rush more recently. Separate monitoring of land use for logistics has only been recently implemented, but early data indicates that Northern Italy is most affected (Munafò, 2022, Table 78, 2023, Table 90, 2024, Table 70). A large part of the land used for logistics lies in municipalities below 50,000 inhabitants, hinting at a delocalization of logistics to cheaper, less congested hinterlands than the actual places of production and consumption (Munafò, 2022, Figure 142, 2023, Figure 138, 2024, Figure 82). As long as legislative instruments are insufficient or not enforced and the suitable territorial scales are not enabled to act in this direction, there is little chance of a trend reversal (Pileri, 2022).

The growth of logistics within Northern Italian urbanization

How does the growth of logistics play out in the stratified history of urbanization of Northern Italy? The oscillations of economic development

across the regions of the *Nord* are translated in multiple forms of residential and industrial urbanization – a polycentric, polymorphous urban landscape. Making sense of this chaotic formation, and the equally messy chronicles of planning in the country, is a daunting task we leave to the urbanist (Benevolo, 2012). In light of the scope of this study and considering our expertise, we believe a more informative strategy to our ends is to reverse the process. By mapping out a relational geography of logistics, one that visualizes the Northern Italian city-region through the actors of logistics development, we will proceed to explore their relationship with diverse urban contexts and planning practices. This is especially convenient in light of the jungle of territorial planning legislation, which is the prerogative of regions rather than the central government. Likewise, the diversity of urban histories across Northern Italy makes it more practical to work on the specificities of case studies once they will have been pinpointed.

The timeframe of logistics real estate financialization

The time span this study will focus on is closely linked with the that of financialization. As will be exposed in detail in Chapter 5 , real estate financialization has been made technically possible in Italy by legislation passed since the turn of the century, with the introduction of REIFs and other investment vehicles. This just encouraged the growth of a real estate sector that was going to boom anyway with the globalization of production chains. Predictably, the first substantial investments in logistics as an asset in the area of the study date back to the 2000s, with growing momentum and the 2010s and the boosting effect of Covid-19 in the last few years. This is consistent with other fundamental political-economic parameters, such as a post-recession, austerity-driven governance and an evolving yet irremediably globalized economy, which have more or less remained the same in Italy.

Yet, financialized logistics real estate does not emerge in a vacuum. Financialization has brought massive capital to a sector which had already developed or was on its way to develop in other ways. A deeper dive in the origins of logistics in our case studies – decades, when not centuries back –

will be necessary to make sense of its present configurations. Finally, both private strategies and public policies express a projection towards the future, whether it is short-term demand increase or long-term trade corridor growth. These scenarios clash with the unpredictability intrinsic to logistics, at the mercy of geopolitical whims, technological breakthroughs and economic cycles. On the whole, this study can build on several decades of evolution of logistics real estate in Italy, but speculations on its future should be done particularly cautiously.

Selecting two cases of logistics hinterlands

The evidence gathered is the result of an iterative process of development of quantitative and qualitative methods. As outlined above, a map of the *trends* of logistics spaces development is meant to lay the foundations for a relational geography of the sector. However, it is quite complex to obtain panel data, and, as outlined above and summarized in Table 2 on p. 42, data on logistics facilities itself is hard to reconstruct. The most granular GIS data on hand comes from the private real estate database from World Capital Group (WCG)[22], a Milan-based agency specializing in business real estate, while an early version of a database of logistics real estate is being developed by the National Research Council (CNR). However, at the time of writing only the 2017 data of the WCG has been made available, while the CNR database is so far incomplete and under validation. This means that a nationwide temporal trend of logistics spaces development cannot be studied yet, but some other preliminary analyses can still provide some useful insight, especially when it comes to selecting case studies.

[22] See website www.worldcapital.it.

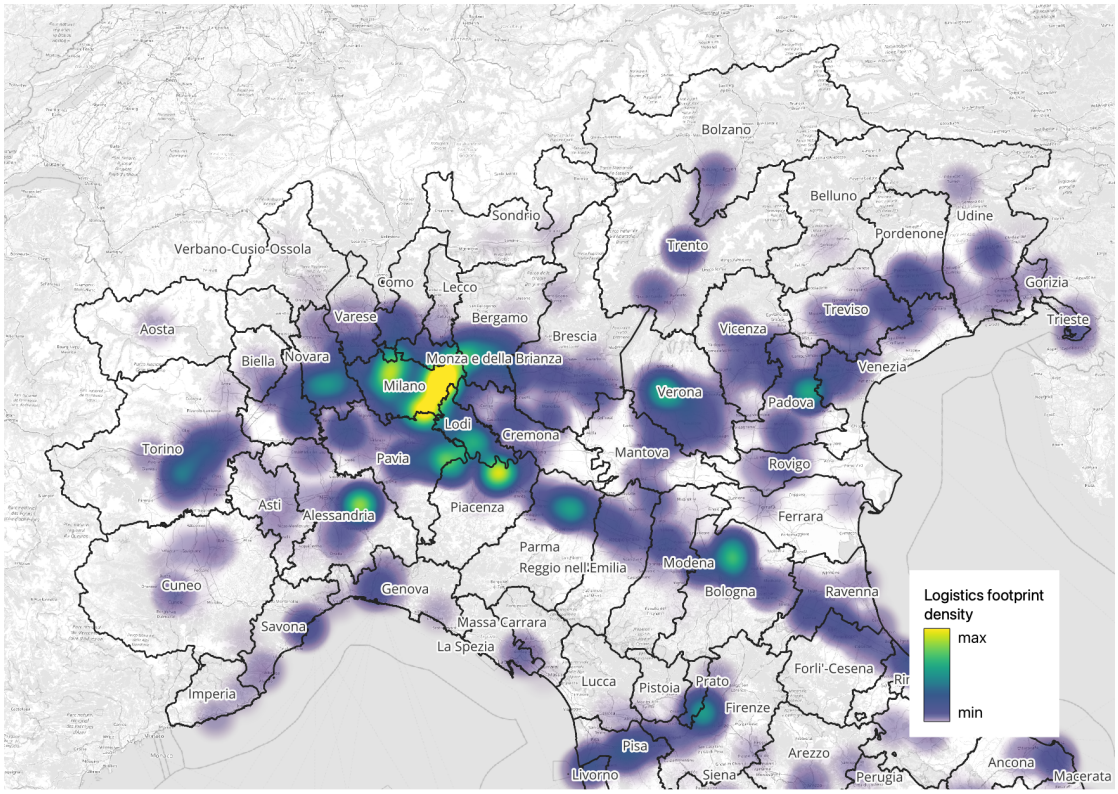

Figure 2 Logistics buildings footprint heatmap (World Capital Group, 2017)

A heatmap of logistics buildings footprint (Figure 2) with data from 2017 shows a relatively even distribution across the whole of the Po Valley. Besides the inevitably polarizing Milan metropolitan area, logistics seems to be very widespread, consistently with the polycentricity the region's urbanization is associated with. The blue cloud stretches eastward to cover the distinctly polycentric areas of Emilia-Romagna and Veneto, and it is barely separated from the cloud surrounding Turin and the concentration around the port of Genoa and its hinterland. What's most striking is the archlike hotspot around Alessandria and Piacenza. Excluding the bland concentrations around other middle-sized cities, this is the only hotspot that does not correspond to significant urban centers – neither area has a sizeable population, or a strong manufacturing sector for that matter. Is it possibly the archetypal 'hinterland'?

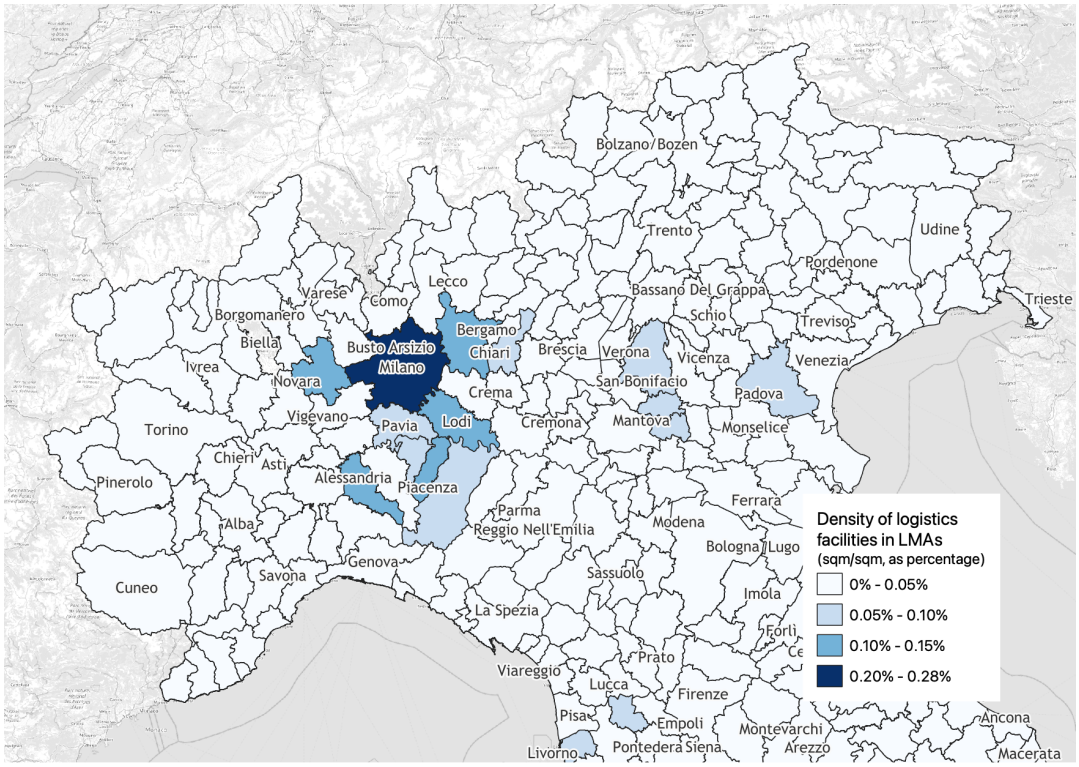

Figure 3 Logistics buildings density (ratio of logistics footprint to jurisdiction size) by LMAs (author's elaboration on ISTAT, 2021; World Capital Group, 2017)

Further elaborations substantiate the hypothesis of a specificity of these areas. A map of the density of logistics facilities as a ratio of logistics buildings footprint to jurisdiction area (Figure 3) still highlights Milan and surrounding Labour Market Areas[23] (LMAs) as the core of logistics, although the only darker LMAs not bordering Milan are the ones that correspond to the hotspots identified above. The ratio of logistics buildings footprint to

[23] Labour Market Areas (LMAs, in Italian "Sistemi Locali del Lavoro") are functional areas computed by clustering municipalities centered around an employment core based on commuting flows (ISTAT, 2019).

population (Figure 4) unmistakably points at those same cluster, implying that their surface is disproportional to the local market.

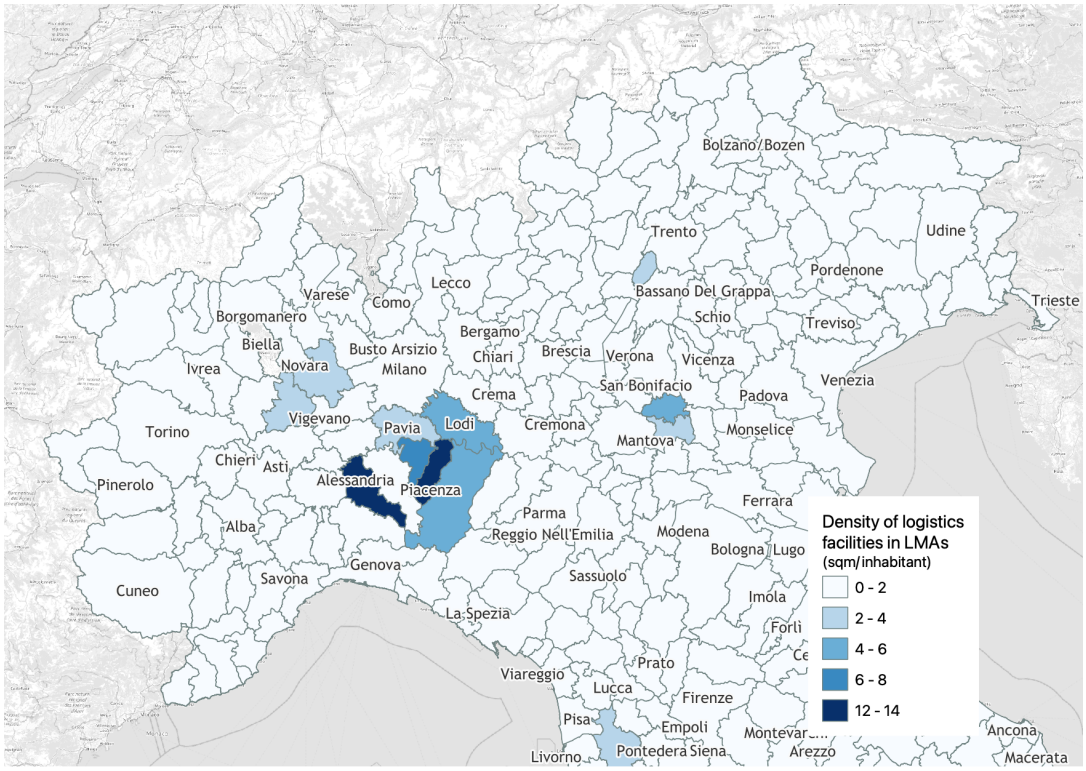

Figure 4 Logistics buildings density (footprint to population ratio) by LMAs (author's elaboration on ISTAT, 2021; World Capital Group, 2017)

A limited portion of the CNR logistics database, corresponding to the province of Alessandria, has kindly been validated and made available to the author by the research group. The database confirms that, despite a general expansion trend, hotspots are still roughly the same. Based on these results, we focus on the provinces of Alessandria and Piacenza (see summary in Table 4).

Alessandria: declining industry and logistical renaissance

Alessandria is the quintessential post-industrial area, with some of the worst socio-economic indicators of comparatively well-off Northern Italy. Recent figures show the highest unemployment rate in its region,

Piedmont, which in turn fares badly in the Northern Italian context; the same goes for per capita income (Bargero & Avato, 2022, pp. 12–14). The struggles of the labor market are reflected in a stark decline in population and a negative outlook of local households. How did this come about?

To understand the evolution of the area, we need to zoom out to the wider context of North-western Italy. At this spatial scale, we can locate Alessandria at the exact core of the so-called Industrial Triangle. This expression, labeling the area shaped by Milan, Turin, and Genoa, describes the geography of the first wave of mass industrialization in Italy. The three cities used to be the heart of the Fordist industry in the country, attracting masses of internal migrants from Southern and North-eastern Italy. With the decline of that phase, some areas have managed to reorient their economy, like Milan with the tertiary sector – the Italian "alpha city" with financial services, consulting firms etc. – while others have struggled to find a new identity, which is the case for Turin and Genoa. In this process, Alessandria has been swept by the wave of post-Fordist de-industrialization. Today, we witness a divide between smaller, struggling firms and bigger names which have managed to invest in innovation and higher value-added production (Bargero & Avato, 2022, p. 35).

Table 4 Main socio-economic features of the provinces of Alessandria and Piacenza

province	**Alessandria**	**Piacenza**
size	3,558 sq km	2,585 sq km
population (2015-2024)[24]	431,000 to 407,000	286,000 (stable)
unemployment rate (2015-2024)[24]	10% to 5%	7% to 5%

[24] Data evolution in the last decade (2015-2024), figures from the Italian Institute of Statistics (ISTAT) available at esploradati.istat.it.

province	**Alessandria**	**Piacenza**
main economic specializations	jewellery, plastic, chemical, metal, food & beverage, machinery, logistics[25]	machinery, energy, extraction, pharma, ho.re.ca, metal, logistics[26]
transport infrastructure	highways and conventional railways to Turin, Milan, Genoa (+ France and Switzerland); high-speed/high-capacity railway to Genoa under construction (TEN-T NSRM Corridor)	highways and conventional railway to Turin, Milan, Bologna, North-eastern Italy (+ Switzerland); high-speed/high-capacity railway to Milan and Bologna

What survives from the bullish times of the heavy industry is good transport infrastructure and some of the earliest Italian transport firms, as well as respectable volumes of handled bulk cargo. One of the biggest Italian transport firms – which later evolved into a conglomerate including all sectors of logistics and infrastructure development – was founded in the area in the post-war period (Gruppo Autosped G, 2024). Several major railway lines, among the earliest to be built in Italy, cross the province, leading to Genoa, Milan, Turin and thence to the French and Swiss borders; the same goes for road connections. There are also seven rail yards, of which two are especially relevant, Alessandria Smistamento and Rivalta Scrivia.

[25] Data from regional statistics service (Bargero & Avato, 2022, p. 37).

[26] Data from regional statistics service (Mancini, 2014).

The history of modern logistics in Alessandria begins with the Rivalta Scrivia terminal. The then-innovative terminal was developed in the 1960s by Giacomino Costa, a prominent entrepreneur from Genoa, with the aim of relieving the pressure on the seaport. Costa wanted to transfer to a 'dry port' all the activities that did not need to be done in the port, which had increased a surge in traffic after the end of the war. Today, the province of Alessandria hosts a handful logistics clusters, among which only Rivalta is a fully-fledged terminal. Nonetheless, many stand-alone developments have seen the light in a scattered fashion. This has partially revitalized demographic trends in some municipalities such as Alessandria and Tortona, but whether logistics employment will provide actual long-term benefits to the area is still to be seen.

The prominence of logistics in the area also has to do with grand infrastructural projects. The evolution of logistics to serve wider networks brings the promise of a new season of growth as an upgraded port hinterland for the port of Genoa and a primary logistics hub – a sustainable one, harnessing rail and intermodal transport. The promise of a 'logistics renaissance' transpires in the area – while private logistics grabs as much developable land as possible, massive rail infrastructure is under construction for the TEN-T North Sea-Rhine-Mediterranean Corridor (former Rhine-Alpine Corridor) stretching between the ports of Genoa and Rotterdam, in a bid to compete against Northern European ports (Sozzetti, 2021; Tadini, 2006). As of yet, though, this resurgence is more of a political and media narrative than an economic reality. The flagship infrastructural project, the Third Pass (Terzo Valico), a high-speed/high-capacity service railway whose main work is a 27 km-long tunnel between Genoa and the province of Alessandria, is far from completion – its opening has been postponed several times and is now supposed to be in 2027 (Curti Sacchi, 2024).

Piacenza: the Italian hub of modern logistics

While it borders Alessandria, the neighboring province of Piacenza has a slightly different economic context. In terms of industrial development, it

aligned with the rest of Northern Italy, catching up with industrial powers starting in the early twentieth century, and especially post-war. Much like the rest of the country, it has undergone de-industrialization, but it has proved more resilient. What emerges from research is that the Industrial Triangle mentioned above has, as it were, moved eastwards, connecting Milan with the regions of Emilia-Romagna and Veneto (Buzzacchi et al., 2022). Notably, the corners of this triangle are less distinct, meaning that factors of economic prosperity, such as innovation and performance, are more evenly spread across the whole area, including minor urban clusters such as Piacenza. Its economy might not be the best-performing compared to bordering provinces, but is definitively more positive than in Alessandria: while unemployment in the latter has hovered between 5-10% in the last decade, Piacenza has a rate of around 5-7% – in both cases, the figures are worse than regional values (Freddi, 2024).

The history of logistics in the province of Piacenza is much more recent. Even though the large military quarters in the city suggest its strategic position, Piacenza actually saw its first logistics developments in the 1990s. Then, fortuitous contacts between the local government and the wood industry brought IKEA to Piacenza, where the firm built a large warehouse for Southern Europe. At that time, the development of a logistics hub was only in the talks, and when such a big name chose Piacenza, the government had to arrange for its arrival hastily. Innumerable firms followed suit, attracted by the strategic location, at the crossroads of some major highways, developing essentially road-based logistics for consumer goods (Gazzola, 2022). Today Piacenza features many of the landmarks of contemporary globalized and financialized logistics, from fund-managed logistics hubs to huge Amazon distribution centers. Having pioneered modern logistics development in Northern Italy, the area has now nearly exhausted available land, in a region plagued by historically high land use for logistics (Munafò, 2022, pp. 208–213, 2023, pp. 234–241, 2024, pp. 140–146). The repercussions of a sector with questionable development potential make local communities wary of further expansions.

In Piacenza, logistics infrastructure development seems to be less of a priority in the political narrative. While the rail and road network is extensive, the area is not clearly linked to – and does not portray itself as – a key node of the TEN-T corridors. Piacenza is included in the Milan Logistical Region (Dallari & Curi, 2020), but it is also conveniently located to serve the markets of the whole of Northern and Central Italy. This, and the generally favorable economic indicators, might contribute to a lower interest in pushing for new infrastructure.

Chapter 5

A geography of the actors of the financialized growth machine of Northern Italian logistics[27]

The voices of the actors of logistics real estate draw the ramifications of what does look like a financialized growth machine – a relational geography redrawing the topography of logistics real estate. Logistics investments are traded through the alpha city and channeled down to small municipalities in the city-region with good highway access. Developments, though, are not always the result of top-down projects: in some cases, local governments actively seek to attract logistics, either as a new sector or as a way to repurpose run-down industrial areas. The lower end of the 'machine' is also the most apparent, material element to look into a much more intangible relational geography. New facilities are usually covered by local media with press releases mentioning developers, agencies, investors or even the expected operators – Environmental, Social and Governance (ESG) elements such as jobs and environmental compensations are textbook selling points for the local community. Preliminary desktop research of academic and grey literature provides with a foundation of the logics and the actors of logistics real estate, and is completed by interviews of the relevant actors, starting from those that are manifestly most closely connected with logistics

[27] This and the following chapters strongly rely on the precious insights of the key experts interviewed as part of the thesis fieldwork. Several facts and figures come from these interviews and have not been cited or quoted for simplicity.

development. Before delving into the case studies illustrated before, we will trace an overview of the financialization of logistics in Italy and how it shapes the behaviors of the actors involved in the process.

The assetization of logistical real estate

The emergence of a financialized market of logistics facilities rests on the basic condition of its assetization. As we have previously illustrated, the financialization of real estate happens in the context of a wider absorption of financial logics and instruments by the economic sphere, trickling down to politics, culture, etc. What needs to be specifically framed here is how real estate undergoes assetization. Defined technically by the International Accounting Standards Board (IASB) as "a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity" (Burton & Jermakowicz, 2015, p. 39), an asset is something that "can be owned or controlled, traded, and capitalized as a revenue stream, often involving the valuation of discounted future earnings in the present" (Birch & Muniesa, 2020, p. 2); that is, the main point is to get revenue streams from it rather than buy and sell – even though it is possible, just not as flexibly as other financial instruments.

So how is real estate made into assets? As we have seen, the transformation of "the most spatially fixed investment class [...] into tradable financial assets" (Aalbers 2019, 8–9) is achieved through socio-technical mediation – Chiapello (2020) proposes a three-step process of "problematization", "tangibilization" and "financial structuring", referring respectively to the framing of something as a matter of investment, the materialization of this opportunity in contract form, and the organization of monetary flows to be accessed by investors. How this has taken shape in real estate is a decades-long story. The forerunner was, predictably, the U.S., where Real Estate Investment Trusts (REITs) were established in 1960 (Block, 2012, Chapter 6). REITs were meant to enable individual investor to access the advantage of real estate investment without the obstacle of acquiring entire properties and with the liquidity of other types of stocks. Also, REITs bundled the properties themselves *and* the business of generating income

from them, by way of leasing, trading and increasing their value through renovation and refurbishment. REITs may also leverage their existing properties to develop new assets. Much like a public company, REITs have fund managers taking care of the real estate assets, and investors are effectively the shareholders. Per their advocates, REITs are a safer bet than other financial products, as they perform as well as regular stocks but enjoy more stability (Block, 2012, Chapter 6). This, of course, applies to so-called public REITs, i.e., those whose shares can be publicly traded, known in Italy as *Società d'Investimento Immobiliare Quotate* (SIIQ). Along these, an alternative has later been developed in the form of 'private' REITs, i.e., non-publicly traded. Private REITs give up the extreme liquidity public ones enjoy in exchange for generally higher returns and are normally only accessible to high-budget investors.

The most common real estate investment vehicle in Italy – and in the cases we will be analyzing – are private REITs, or, more aptly, Real Estate Investment Funds (REIFs), English for *fondi d'investimento immobiliare* (Allodi & Cacciamani, 2023; Gabrielli, 2013). REIFs were introduced in Italy in 1999 and progressively liberalized with latter legislation; still, they are a way more conservative instrument than REITs, thus more palatable to all sorts of investors. REIFs are managed by asset management companies, known in Italy as *Società di Gestione del Risparmio* (SGR). While some REIFs are open to any investor (*retail funds*), most of them are limited to institutional investors, i.e., qualified investors who can both provide substantial capital (a minimum of EUR 100,000 by law, substantially more in practice) *and* are supposed to be more knowledgeable about financial instruments, including banks, insurance companies, pension funds or expert private investors. As we will see, the market of logistical real estate has historically been a prerogative of specialized investors, but has more recently opened to a broader public of generalist investors, the product having become more 'legible' to non-experts and the sector having shown better performance and stability than other real estate categories (Mattarocci & Pekdemir, 2017, Chapter 6).

Coming back to Chiapello's three phases of financialization, we can see how the financial nature of logistical real estate is made readable to investors. The financialization of real estate is most clearly signaled by logistics facilities being referred to as *assets*, implying they are conceived of and described in financial terms: "for [a] warehouse [...] to be fungible in the eyes of a distant investor, it must first be reduced to a set of measurements that suppress their inherent individuality and heterogeneity" (Tapp & Weber, 2022, p. 57). As assets, they are appraised for their value as shown by financial indicators. Perhaps the most crucial ones are the *cap(italization) rate* or *yield*, i.e., how the rate of return is usually referred to in real estate, roughly computed as a ratio of the yearly net income from an asset to its estimated value, and the *internal rate of return* (IRR), projecting the yield over the whole investment period. Depending on the strategy, the *capital gain* might be a key measurement too. These allow, among other things, to compare different investment options. A host of other indicators completes the ever more refined process of assetization, including the *vacancy rate* (how much of the asset is sitting vacant), the *yearly rent per sqm*, the *rent growth*, and so on. On top of conventional real estate investment metrics, the development of 'sustainable' finance has brought new priorities in the sector. Since the 2010s, the European Commission has been pushing for legislation on sustainability reporting, mandating sustainability assessments for many financial products. This goes beyond the strictly environmental impact of a real estate development, which can be and is often certified anyway. More comprehensive scores have been devised which are based on ESG dimensions and are actually meant to cover a whole portfolio, including its management. The scores have become a major factor both for institutional investors seeking to allocate their capital and tenants looking for good rental opportunities. Both parties often set themselves ESG goals that are reflected in investment or business choices, making it paramount for assets to be certified. This trend reflects a concern for matters well beyond the scope of sustainability. For tenants, ESG-compliant assets mean better infrastructure, thus better operations, as well as a comfortable workplace and a higher business reputation. Investors see 'sustainable' assets as a way to attract reliable tenants and to avoid depreciation of the asset over time. Ultimately, ESG compliance increases the value of assets and reduces

investment risk. In other words, it is a component of rather than an addition to real estate assets financial indicators, and is therefore taken into account in those terms rather than as a sustainability concern.

Logistical real estate financialization in the Italian market

After the introduction of REITs and REIFs, Italy saw the arrival of the first investors in logistical real estate in the 2000s – notably Prologis, the largest logistical real estate company in the world, but also other actors. Before then, logistics had been thought of as an internal service of companies which was ancillary to production. Warehouses were not considered a separate element to focus on and were generally owned by the companies themselves – 'owner-occupier' in real estate jargon. Globalization brought about an outsourcing trend and a general extension of global production chains, with an obvious effect on the importance of logistics. The financialization of manufacturing companies themselves pushed towards divestment from their own buildings, aptly referred to as 'assets', to get rid of as 'non-strategic'. Today, not only warehouses but the entire logistics services are typically outsourced to third-party logistics companies (3PL). It has become uncommon for clients to own the logistics facilities where 3PLs work; in turn, logistics companies tend to rent rather than own their spaces to accommodate for evolving spatial strategies. Such strategies go hand in hand with the development of a financialized rental market for logistics, and Italy has followed the trend – today, entire manuals are devoted to the management of logistics REITs (see e.g. Mattarocci & Pekdemir, 2017). The 'financialization wave' reached Italy in the early 2010s, somewhat later than other Western European countries, making it a new Eldorado for real estate investors coming from more mature markets:

> "In the last 8-9, maybe ten years, real estate funds have sort of done their shopping around the [Italian] territory, that is, from

the acquisition of existing logistics warehouses to the purchase of greenfield where they developed more of them."

[logistics real estate agent, author's translation]

Still, the ratio of logistics assets in RE fund portfolios remains lower than the European average, hinting at further growth in the coming years (PwC, 2022, 2023). Along with the absorption of logistics in financial circuits, demand is fueled by the sheer growth of logistics services, notably e-commerce. As a latecomer in online retail (Statista, 2024; UNCTAD, 2024), the country is slowly catching up with comparable Western European economies, and so is its logistics facilities supply.

With such a bullish market, there is a lot of room for international capital. Fund managers handle overwhelmingly foreign capital – nearly 90% (Fantuzzi, 2024b) – with the likes of Blackstone and sovereign funds among the investors. A handful asset management companies (*Società di Gestione del Risparmio*, or *SGR*, in Italian) lead the market – notably DeA Capital RE, Kryalos, and Prelios[28], with a market share of around 10% each – but since this type of asset has been popularized as a safe bet and a relatively simple product to analyze, more generalist funds have joined:

"The first ones who entered [the market] were Prologis and SEGRO between 2010 and 2012-13 [...] two investors specialized in logistics. Just after them, Blackstone-Logicor joined in 2013-14 [...] and Blackstone was a generalist investor, ok? This led more generalist investors to enter in the following years. And meanwhile other specialized investors decided to come to Italy who maybe only had marginal presence [...] many institutional, international investors who jumped into logistics. So, finally a lot of capital arrived [...] All the capital from international institutional investors was needed to meet the demand for spaces."

[28] See corporate websites: www.deacapitalre.com, www.kryalossgr.com, prelios.com

[logistics asset manager, author's translation]

In the words of asset managers, the image of logistics as a technical sector for specialized investors is now a thing of the past, with all sorts of funds interested in 'core'[29] investments, from big names in insurance to pension funds. Logistics is also appreciated by the managers themselves for its relative simplicity, which is reflected on easier management practice. For example, building norms are simpler than those for buildings in built-up contexts, let alone for heritage, and for any given asset the amount of tenants is lower than, say, a shopping mall, thus easier to manage. These are among the reasons why non-specialized actors have joined the market, which now features two big categories. On the one hand, the 'integrated circuit' of specialized actors managing both investments and developments in-house is still prominent (Raimbault, 2022). On the other hand, a fluid 'fragmented circuit', not unlike those dealing with other asset types, is now accustomed to logistics. This is apparent from the different histories of the main REIFs mentioned above. Prologis, which expanded to Italy in the 2000s, is the archetypal integrated company, covering as many parts of the process as possible: from development (i.e., construction and related aspects) to fund management (financial aspects) and asset/property management (operational management of buildings). Conversely, Kryalos has a fragmented approach: despite its position as the largest logistics REIF in Italy, its focus is limited to fund management, while development and asset management are completely outsourced. The industry does not seem to be going either way, with many examples of both management styles.

[29] 'core' is the category of investment products with the lowest risk. The classification goes from 'core' to 'core plus' to 'value-add' up to 'opportunistic' (highest risk).

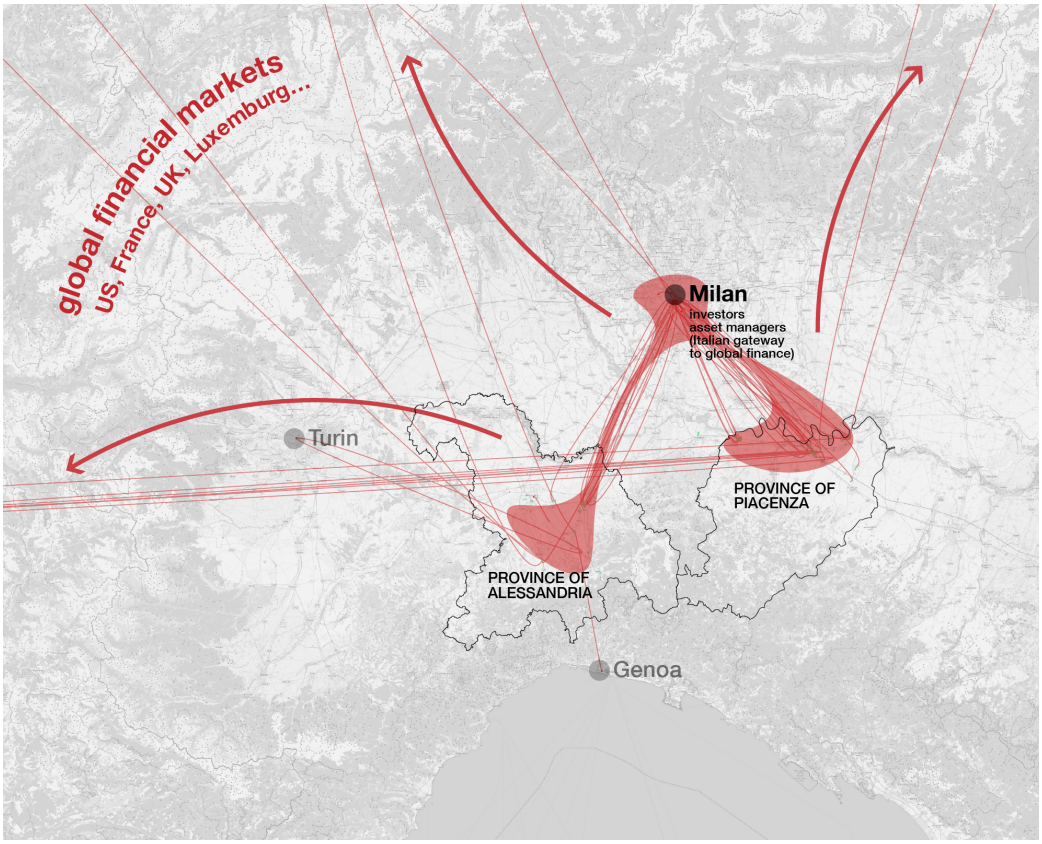

Figure 5 Relational map of links between logistics facilities and investors/fund managers (author's elaboration)

The geography of financial actors in Italy is essentially anchored to Milan, and real estate makes no exception (Figure 5). As the map shows, the overwhelming majority of investors and asset managers logistics facilities in Alessandria and Piacenza are in the hands of are centered in Milan, and through its intermediators to global markets[30]. The fact that logistics REIFs are overwhelmingly institutional, i.e., access is restricted to qualified investors, and the large share of international capital, make it all the more strategic to have a base in the financial center as opposed to conventional investment options targeted at the retail market. This seems to act as a

[30] As no comprehensive open databases of logistics facilities ownership are available, the map was built based on cadastral data (Agenzia delle Entrate, 2025) and ownership information available on online media. Lack of details also prevented from routing national investment links to international investors through the Italian intermediator, who would most likely have been located in Milan.

magnet for other actors of the logistics growth machine, who end up concentrating around financial actors in spite of the sprawling location of logistics facilities. As we engage with the other components of this network, we will see how the financial sphere is brought close to the logistical ground.

The multiple configurations of developers

As financialization unbundles the elements of the economy of logistics real estate, investors need the collaboration of specialized developers to materialize real estate projects. Developers are, in general terms, professionals entrusted with the engineering, construction and upkeep of real estate. As a completely different expertise from the financial strategies of asset management, this is often outsourced. However, this market shows a variety of geometries, reflecting the presence of both the integrated and the fragmented circuits in different nuances, as mentioned above. Those who have consolidated their business as investors-developers are usually logistics giants with transnational market coverage. In Italy, this includes Goodman, Prologis, Segro (which acquired the Italian logistics developer Vailog), VGP and more, most of which are American or British corporations. These have developed into integrated logistics (and often industrial) real estate companies where as many phases of the development and life of assets as possible are covered internally. This comes at the cost of covering only one sector of real estate – but a promising one so far. In Italy, integrated companies entered the market in the 2000s, sometimes through mergers and acquisitions of local logistics developers, which were already widespread but had not built up a financialized structure. With the expansion of the logistics market and its growth as a real estate asset, the market has attracted a more diverse public. Generalist investment companies, eager to join the promising market of logistics, have started to outsource the development and facility management of their assets. Today, the two companies with most logistical assets under management in the country, Kryalos and DeA Capital Real Estate, are actually not specialized in logistics and do not have a fully internal development department, rather focusing on managing and making a relatively unfamiliar category of assets understandable to generalist investors. Naturally, the geography of

developers mostly follows that of their financial clients, with a concentration around Milan (Figure 6)[31].Figure 6 Relational map of links between logistics facilities and developers (author's elaboration)

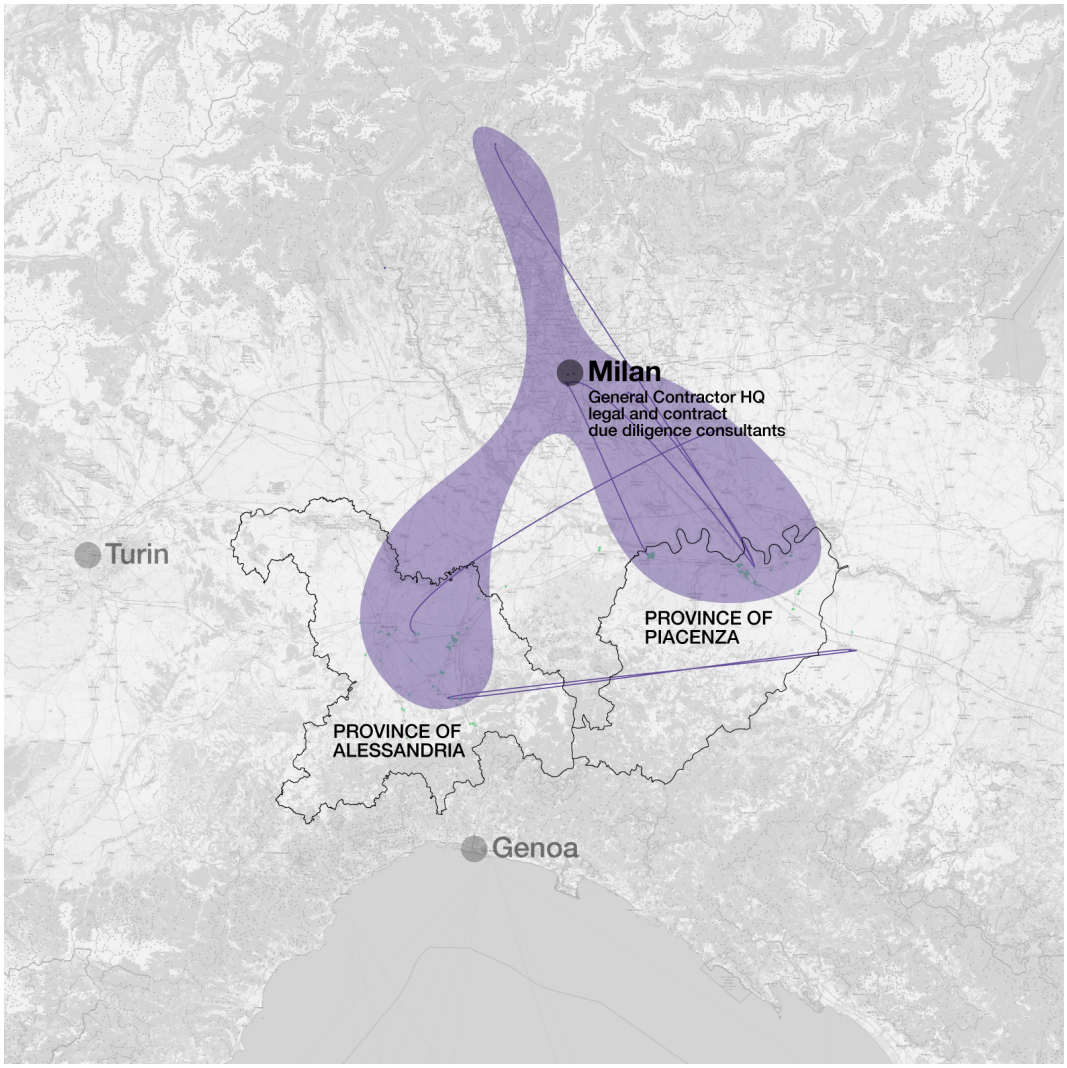

Figure 6 Relational map of links between logistics facilities and developers (author's elaboration)

Besides the strictly construction-related aspects, the most critical service developers provide investors with is due diligence. With budgets in the tenths of millions, projects cannot be given the green light before a

[31] Due to map complexity and lack of data, Figure 6 only considers the main actor of the development process, disregarding commonly involved consultants, usually hired by general contractors for legal due diligence. The latter also mostly gravitate around Milan.

thorough assessment of the technical, environmental and administrative situation of the building through documental research and physical inspection of the building. This an especially heated matter in the conundrum of Italian planning legislation, where bureaucratic uncertainty can lead to great delays or even cancellations if projects are deemed too risky. This stage is aptly defined “pre-development” and is just as common in integrated as in fragmented companies. The decision lies with the fund’s board, which may include external investors in integrated companies too, and is separated from the technical functions anyway. Of course, legal and financial considerations are taken into account, too, but this is normally evaluated by the fund management and the real estate agency.

Once the due diligence is cleared, the development can be designed in detail and, upon approval, construction can begin. These steps are often further outsourced, as investors may open a tender for the construction part, or the same developer might go on with construction phase, now working as a general contractor, i.e., taking care of the practical aspects of the construction, including workforce and materials. Once construction is complete and the asset is ready for the tenant, developers might still be involved as facility managers, taking care of maintenance, utilities and other technical aspects needed in the day-to-day operations of the property.

The development phase can work very differently depending on whether the product is an investment or not. Investors aim at an easily marketable product which can cover most of the (well-paying) demand. Lacking the technical expertise, they will rely on developers to devise an ideal design ticking the boxes of market standards, including ESG, and therefore looking like a reliable candidate for the investment vehicle’s business plan. Conversely, those having a warehouse built for their own company, the so-called owners-occupiers, will have a much clearer idea of the product they need:

> “When there is a speculative investment, the investor is looking for something different from the private investor. The investor with a speculative development is looking to build something that can be put on the market. So they have standard

> [...] criteria that make that property appealing from a commercial standpoint. So there are investors with clearly defined standards; there are investor who trust our expertise more, but the goal is to build a property that's as marketable as possible. Conversely, the private investor who builds the property for themselves knows their logics and needs."
>
> [developer, author's translation]

The 'build-to-suit'[32] concept is also applied in limited cases for tenants with a proven track record who guarantee long leases. A typical build-to-suit tenant is Amazon, which has specific requirements for features such as layout, height, extra floors, loading bays, etc. In such cases, the higher construction expenses are offset by long-term contracts with reliable industry names.

Real estate agencies as a crucial global-local link

In the multiscalar structure of the logistics growth machine, a primary role is covered by real estate agencies. Their comfortable position at the core of this global constellation illustrates how real estate provides the crucial link between capital and logistical hinterlands. While asset managers are the reference for mostly international capital reaching the Italian market, region-specific know-how is needed to materialize it into real estate assets. Most of the market is covered by the 'Big Four' Milan-based transnational real estate agencies (CBRE, Colliers, Cushman & Wakefield, JLL) and a few Italian runners-up (such as DILS and WCI)[33].

[32] Real estate jargon for a custom-designed building.

[33] See the relevant websites: www.cbre.it, www.colliers.com/it-it, www.jll.it, www.cushmanwakefield.com/it-it/italy, dils.com, www.worldcapital.it

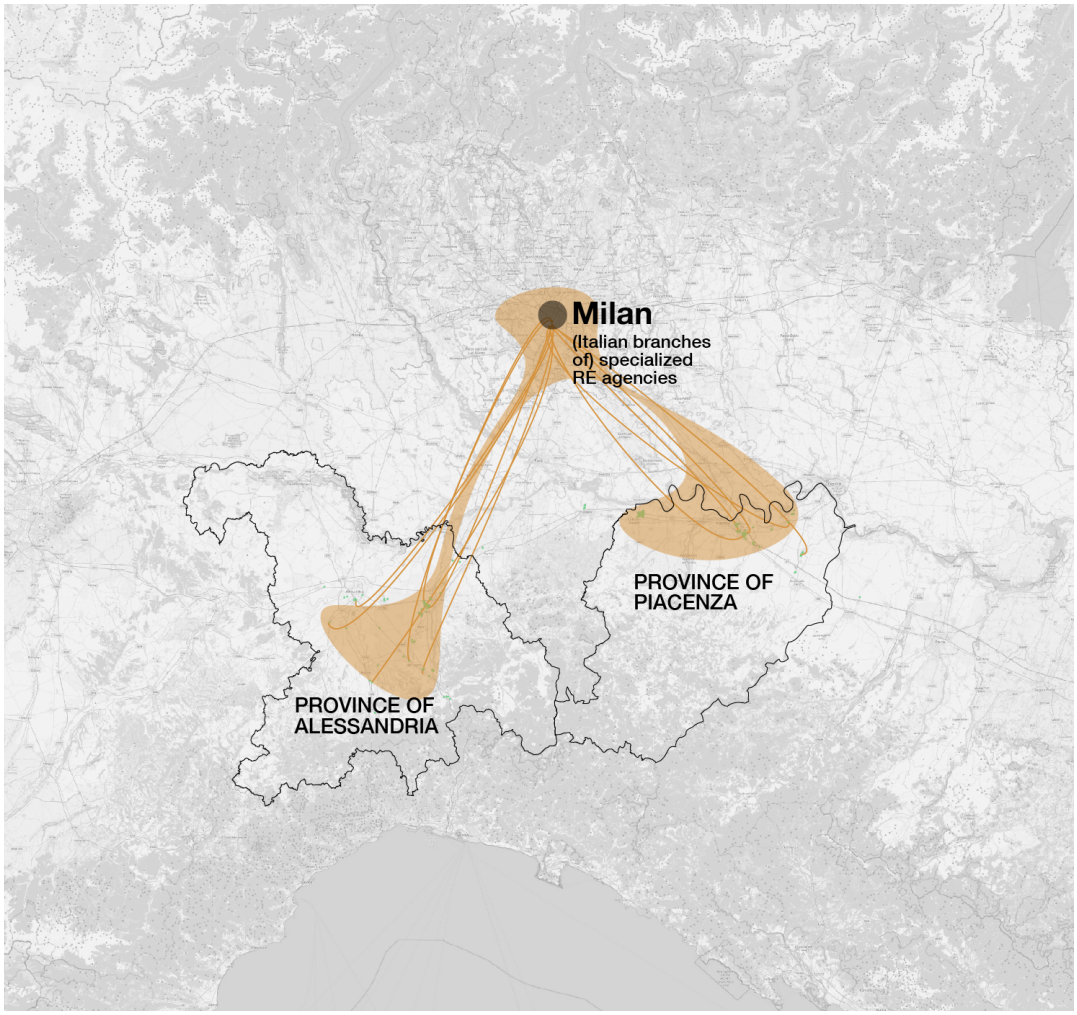

Figure 7 Relational map of logistics facilities and real estate agencies in charge of them (author's elaboration)

As the map shows[34] (Figure 7), their strength lies in the ability to cater for large, often multinational corporations, thanks to their nationwide coverage of standing assets and development opportunities, whether it is for logistics operators looking for facilities or funds building their portfolio. Their extensive knowledge of market trends across regions is essential to find suitable opportunities and diversify investments:

[34] As no comprehensive open database is available, data was collected on real estate agencies websites, promotional material, media, etc.

> "In the last few years we've been having many newcomers [...] companies who were strong in other European countries and saw Italy, especially Northern Italy, as a natural step forward in their strategy. And usually, when they arrive, they need to understand which type of product they should focus on [...] they have yields in mind, "our capitals need yield *X*" So we have to reach their targets, which are for the whole fund. So the fund buys something in Germany, in Spain, in Italy, so it meets the IRR [...] in Italy we try to understand what return the investor needs, what risk they can take [...] We used to only look at 'standing asset' products, that is, already rented out, which produce little risk and immediate returns, but low ones. Now we always try to mix instead, because it's harder and harder for standing assets to have returns in line with the market [...] But since in this phase vacancy in Italy is among the lowest in Europa, it's interesting for investors to try and mix [...] I can take more leasing risk, that is, buying empty assets, unbuilt assets [...] speculative. I can mix the two things."
>
> [real estate agent, author's translation]

This way, agencies foster the relentless absorption of real estate into the financial market. The tipping point in the financialization of logistics real estate in Italy is often positioned in the early 2010s, when the logistics facilities assetization gained momentum. Today, around half of logistics footprint is estimated to be in the hands of investors. A runner-up in comparison to the rest of Western Europe, Italy is still in its golden age of logistics development and has consistently been the most attractive asset class for real estate investors in Italy in the last few years, with a vacancy rate as low as 1-2% of the available footprint.

Real estate agencies are involved at the early advisory stage. Along with technical assessments usually produced by developers, a commercial due diligence report is crucial to appraise the feasibility of what is as much an investment as it is a building. Such analyses as market forecasts and strategic competition analyses are used to understand the potential of an asset in its specific context. This is to assess whether the investment will

reach the target yield for the investor, which is the ultimate driver for the project. Marketing and brokerage, more commonly associated with the role of agencies, begin at a later moment and might be outsourced to a different provider. Assets are often actively marketed to potential tenants and not the other way round, the market being relatively small and specialized. Targeting only a specific subset of logistics operators is actually in the interest of agents, as reliable tenancy ensures compliance with investors' objectives. To enhance the appeal of assets, agents may also work with investors and developers to customize projects for the prospective tenants.

Evidently, good tenancy is linked to a good location and the features and quality of the asset itself. Highway access is of course essential, but ESG certifications, such as LEED and BREEAM, are becoming the standard. Both investors and tenants might require ESG compliance for their sustainability policies, pushing an already undersupplied market in that direction, and driving less ambitious operators out of the market. Investors also require a minimum asset size in the tens of thousands sqm, which is meant to make the whole procedure worthwhile and acts as a further selection criterium, restricting the pool to companies that are large and solid enough to afford such spaces. Anyway, the assets must not differ too much from the standard, so as to guarantee their profitability: investors prefer a one-size-fits-all design that can meet the bulk of the demand, reducing vacancy risk.

Logistics companies as tenants

The predictable outcome of a financialized logistical real estate market is a trend for operators to become tenants of warehouses rather than owning them. While this process has been fostered in the last couple of decades by the growing control of warehouse supply by investors, in a way it also suits the rationalities of logistics. We have mentioned how finance, extraction and logistics are the fundamental components of the entanglements of contemporary capitalism. How this plays out in practice can be observed in the real estate market, where the different forms of fluidity of finance and of logistics come to interact. The goal of investors is to maximize the cap rate, fine-tuning the target return depending on the risk profile of the investment.

Lease contracts are adjusted to this, offering varying degrees of flexibility. In Italy, the standard for industrial properties, under which logistics falls, is of a minimum of six years with automatic renewal unless terminated by either party (Cacciamani & Ielasi, 2023, p. 118). This is already a short span by industrial standards, yet it is often further broken down into two periods of three years with a 'break option' in between where termination does not need to be justified, as opposed to standard terms where 'serious reasons' are required:

> "Let's distinguish between 3PL users and end users. 3PLs generally make so-called back-to-back contracts, that is, if they have to handle their client's goods for three years, they will make a three-year lease contract. So their contracts are on average shorter than those of end users, who manage their own logistics internally and sign much longer contracts. So, for example I am DHL, I'm going to handle Company So-and-so's goods for three years, so I sign a three-year lease contract because I have a three year [3PL] contract. Then, in three years we'll see what happens."
>
> [real estate agent, author's translation]

While this timing might sound relatively hectic for long-term investment strategies like those of 'core' logistical real estate funds, break options and renewals can serve the interests of both parties. For investors, break options allow for frequent adjustment of rent, which is key if returns are to follow the rest of the market. This is especially true of logistics, a sector that is particularly exposed to the whims of the market and to the reverberations of distant events on the supply chain – think of Covid or the war in Ukraine to name but a few:

> "For logistics, we usually start from the 6+6 [contract] with no exceptions, because [...] signing a contract today with someone we will be bound to as long as possible is absolutely financially counterintuitive for us. [...] I'll find myself with a contract performing below market for 15 years. So, the idea is to always have 12 years with break options [...] we open renegotiation

> windows, so at the third year of the second six years period we can notify them that market conditions are different and they can leave [...] or in some cases for several reasons we have safeguard clauses, such as structural remodeling [...] The goal is always to have as much and smooth mobility within assets."
>
> [investor-developer, author's translation]

On the tenants' side, short-term leases allow for greater flexibility in rearranging logistics network. This is particularly important for 3PLs, which represent roughly half of logistics tenants. 3PLs generally take care of securing the needed assets, such as trucks and warehouses, and need to be ready with the right network at the right moment to fit the client's requirements. However, 3PL contracts are usually shorter than lease contracts, often less than three years, forcing logistics firms to take the risk on themselves. While this alignment is suboptimal for 3PLs, it still gets as close to their needs as possible in such a market. In sum, lease contracts in logistics are adapted to the oddities of financialized capitalism and globalized production chains through incomparable levels of flexibility.

In terms of features of the asset, tenants' expectations may or may not be met depending on the alignment with investors' priorities and other external constraints. Both owners and tenants express a preference for logistics hubs, for multiple reasons. Tenants have higher chances of finding more space to rent if needed, given the size of hubs and the turnover of other companies. This allows 3PLs to absorb sudden or seasonal peaks in demand and optimize workflows thanks to the proximity of extra space. Logistics hubs are also more likely to provide common facility services, such as maintenance and security, as well as amenities for employees and truck drivers. Like in other industries, hubs foster agglomeration economies, networking opportunities, etc. All of this comes at the cost of high mandatory service fees, which might drive tenants away in favor of cheaper options where these expenses can be independently managed. There is also a less obvious implication of clustering so many logistics companies together. As a labor-intensive industry, logistics can exhaust the available labor pool in an area, finding itself in labor shortage. This also gives workers more bargaining

power, both in terms of supply and demand and in very practical, tactical terms – single-access hubs are an easier target of pickets. This has made labor pools an increasingly important consideration in locational choice. In any case, we will see how logistics hubs are uncommon in our study area and more broadly in Italy. Poor high-scale planning and inconsistent regulations across different regions do not encourage cluster developments. Most of Northern Italy is also heavily urbanized, leaving few opportunities for large logistics hubs. This produces a lot of stand-alone developments wherever land is available, basic road access requirements are met, and, as will be illustrated below, local governments are favorable.

Small governments and big investors

Logistics real estate financialization has a substantial influence in the relationship between private actors and government. While several scales of government have to do with the multiple stages of urban planning and real estate development, municipalities are the most involved. Town plans are designed by municipalities with minor interventions from higher-level government scales, which are supposed to harmonize local plans within a regional-scale vision but often fail to do so, as the 'strategic plans' they produce work rather as guidelines than as binding documents. The same goes for permitting: even though some authorizations have to be cleared through other governmental agencies, especially for large-footprint developments like logistics hubs, the final decision to issue a building permit lies with the municipality. This gives local government a lot of power – and responsibility.

While autonomy in planning is not necessarily detrimental, it becomes riskier when big developments such as those in logistics are at stake. The sector is land-hungry by nature, and the budgets such massive projects require have to be collected from big investors. This leads to a situation where investments are promoted by well-funded, expert actors with transnational experience in the sector. By contrast, Italian municipalities are chronically underfunded and understaffed, struggling to deal with the technicalities of such developments. This is all the harder in smaller

municipalities, which, ironically, are typical targets of logistics developments. As land prices and greenfield scarcity drive logistics away from urban cores, cheap, developable land is scouted for in suburban communities farther away from cities but with good access to road infrastructure, producing what is known as “logistics sprawl” (Dablanc & Browne, 2020). Here, local governments find themselves dealing with multi-million investments with a large impact on multiple dimensions of their communities. Of course, big logistics developments entail major environmental impacts, from land use to landscape degradation to increased road traffic. However, municipalities might be tempted to trade off environmental degradation against socio-economic and financial potential. Large real estate developments provide public finances with much-needed revenue, and extra infrastructure can be bargained on top of regular planning fees and property tax. Logistics also offers (pseudo) blue-collar job opportunities – non-specialized jobs that can replace waning opportunities in the industrial sector – in areas where manufacturing is often declining, and while contracts are worse and career opportunities less likely, it is still seen as an opportunity for lagging-behind areas (Fico, 2023).

The ambiguity of logistics development produces different reactions in different areas. As illustrated above, some municipalities welcome investments as a panacea to declining socio-economic conditions, considering jobs and revenue as an acceptable trade-off for sacrificing environmental quality. This can happen at the cost of social tensions in the community, but with the ultimate success of the project, not least because generally proposed developments are already technically allowed by the zoning and can only be canceled by political pressure. In other cases, there is stark opposition from local authorities, which translate it into legal instrument to discourage logistics. Since planning norms do not require to distinguish ‘manufacturing activities’ from ‘warehousing’, it is up to individual municipalities to specify it in their zoning – and some municipalities resort to clear bans of logistics through restrictive zoning. A softer but effective approach is to make logistics development financially unappealing by a steep increase in planning fees. Besides formal instruments, soft power can be used to hinder or expedite authorization

processes, adding costs and uncertainty to projects. It is significant to observe that these hostile strategies emerge in municipalities with a history of logistics development and excessive land use. This is possibly the result of previous logistics developments that mushroomed unregulated, leading to a U-turn in the relationship with investors and developers. A preference for other economic sectors may also contribute. While in some areas logistics is seen as a new, promising opportunity in an otherwise stagnant local economy, other locales are interesting for logistics exactly because they are prosperous, and that is thanks to other, more remunerative sectors. Logistics services to these areas may end up far removed from the very manufacturers and consumers they serve because of the lower value added of the sector.

Chapter 6

Between decline and promises: the geography of logistics in Alessandria

The lines we have traced in the previous chapter take life in our first case study, the logistical hinterland of Alessandria. We will see how the logics of real estate financialization permeate logistics development in the area and intersect with public policy and interest groups. As outlined in Chapter Chapter 1321132544 above, the context of the province of Alessandria is one of a post-industrial area with worsening socio-economic conditions, as is most of North-western Italy, and it fares worse not only than other better-off regions of industrialized Northern Italy, but also than most neighboring areas of the North-west itself. Yet, it can count on good infrastructure endowment thanks to its historical role of port hinterland for Genoa and gateway to Northern Italy and European markets. These infrastructural assets are being exploited and expanded to further develop the ostensible logistical potential of the area. We will explore this process through a description of a few major elements of logistical infrastructure and facilities in the area and then look into the actors revolving around them. While our coverage of local specificities cannot be exhaustive, we have selected some local cases we believe to illustrate the multiple configurations logistics growth can take in the area.

Logistics in the context of planning legislation in Piedmont

The growth of logistics in the province of Alessandria is inscribed in planning norms established at the regional level. Specific regional and provincial plans are meant to take care of multiple topics and align them at a higher scale. This can result in fragmentation, with logistics developing differently across locales. While regional planning instruments follow a fundamental law that is very dated – its original version is from 1977 – and has had to be amended multiple times (Regione Piemonte, 2025), other policy documents have been introduced more recently to guide transport and logistics development (Regione Piemonte, 2023) – interestingly with the input of local business and civic stakeholders. The Regional Logistics Plan focuses on general territorial development paths, and even when it describes the envisaged geography of logistics infrastructure and facilities, this works at best as a form of guideline rather than as a prescription (see Figure 8). Even the "Actions" (Regione Piemonte, 2023, pp. 93–141), which are meant to be the final outcome of the whole (somewhat participatory) planning process, still prove quite nebulous.

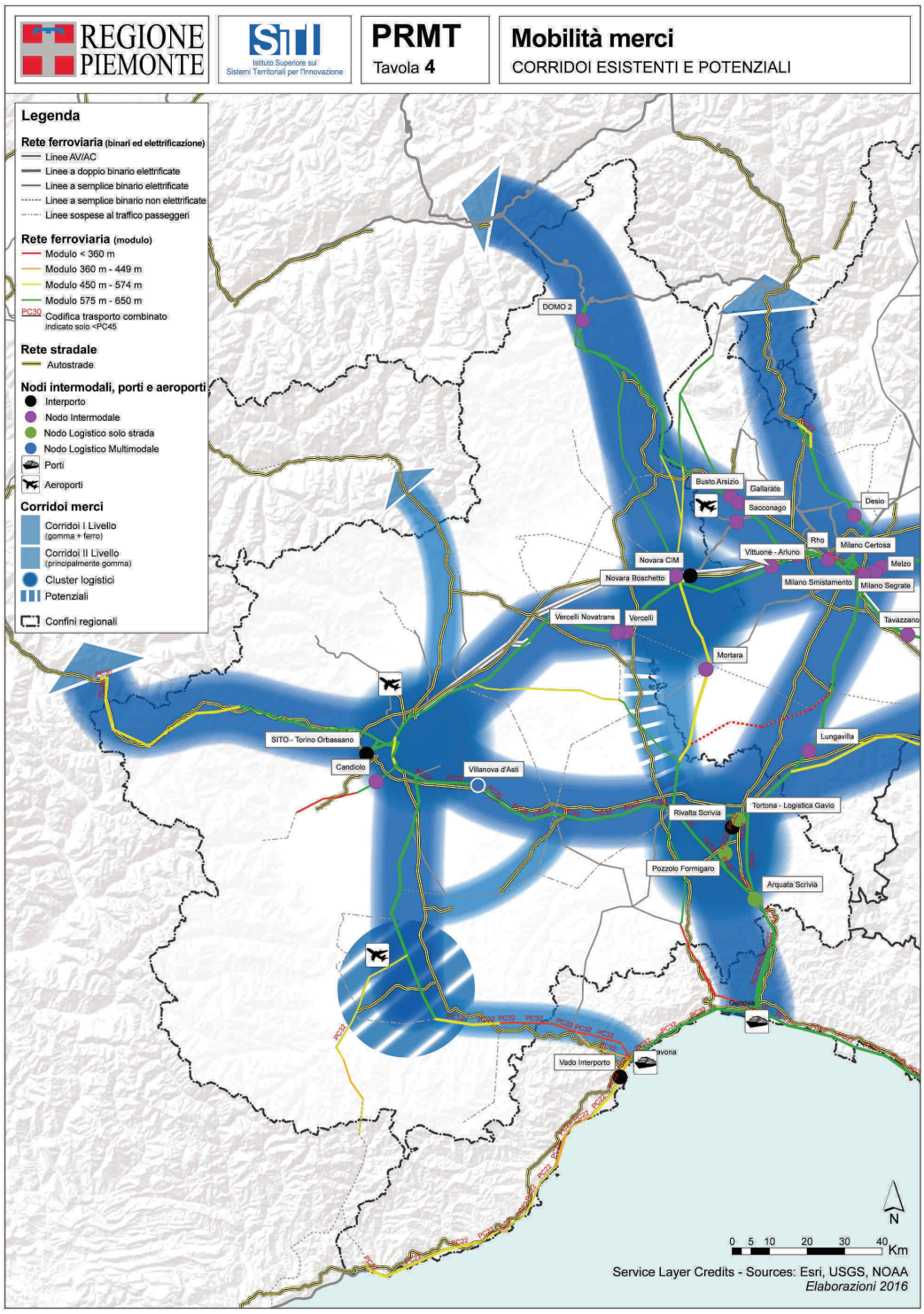

Figure 8 Existing and potential freight transport corridors plan from regional planning documents (Regione Piemonte, 2023, p. 74)

By admission of regional officials themselves, the actual power on logistics planning is in the hands of municipalities, which work based on their urban plans and have substantial margin if they need to amend them for new developments. Besides the power dynamics between governmental scales, a crucial issue lies in the discrepancies between the components of planning legislation, which leaves room for discretionality, to the advantage of real estate development interests:

> "No, well… Planning is no exact science […] so there is room for discretionality. We have witnessed the reference norms on land use changed because of a small addendum that was changed […] As you can understand, we are not the ones writing laws, we do not decide how laws are changed, how… We find ourselves having to manage continuously evolving situations […] Municipalities try and use these changes to their advantage, so to speak"
>
> [interview with Regione Piemonte planning official, author's translation]

The main elements of logistical infrastructure in Alessandria

In the province of Alessandria, we can identify extensive logistics infrastructure in the shape of transport corridors and hubs or terminals. They seem to be located in a scattered fashion, with a degree of overlap between multiple copies of similar infrastructure whose role is ostensibly the same. This needs to be investigated through the intertwined histories and interests that have shaped logistics development in the area.

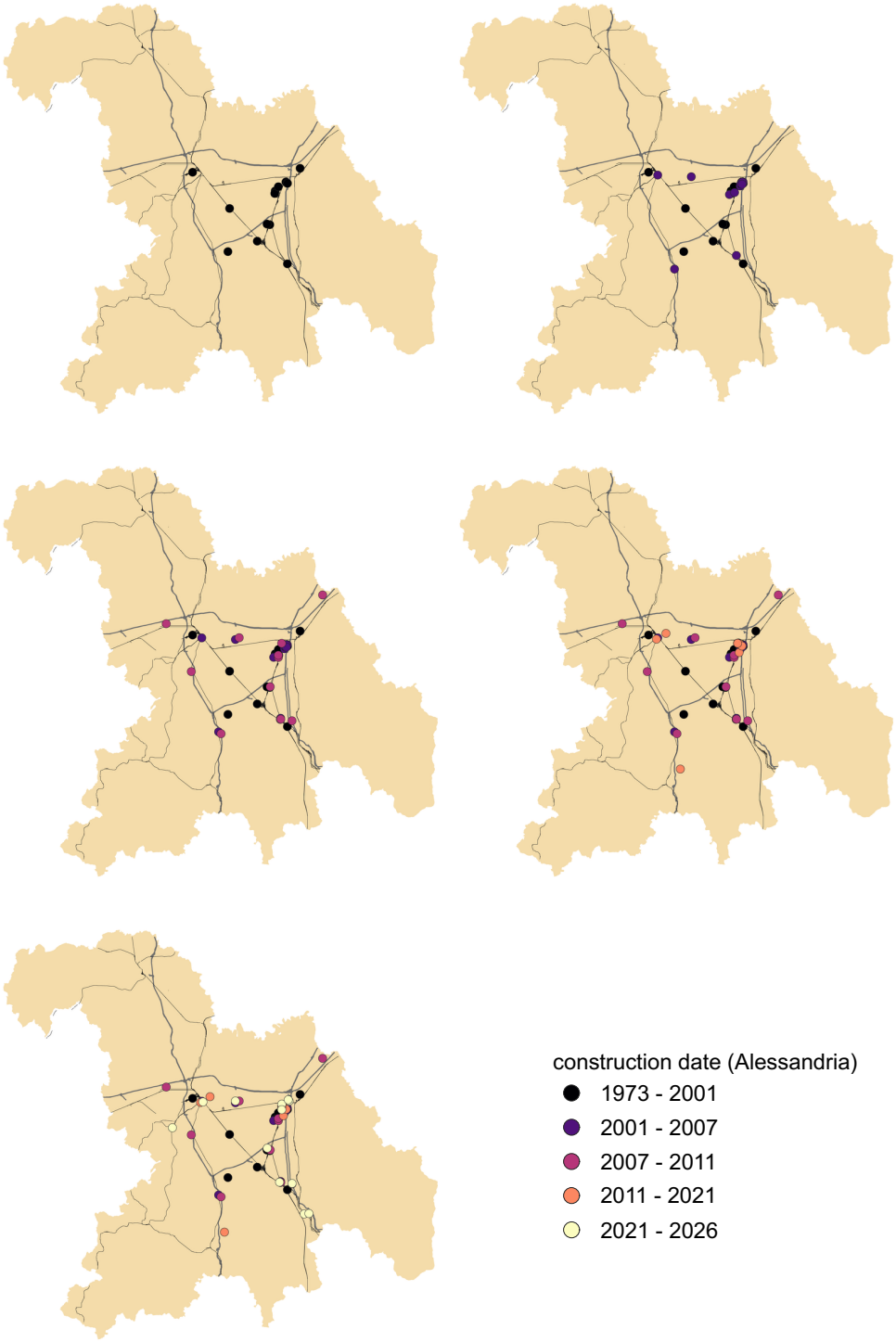

Figure 9 Timeline of warehouse development in the province of Alessandria (author's elaboration on own database – see Chapter 4)

As exposed in Chapter 4 , the history of logistics in Alessandria is long, dating back well earlier than the notion of logistics itself emerged. The strategic location of the province, linking major Northern Italian industrial areas among them and with the port of Genoa, ignited the growth of transport infrastructure and of the shipping industry much earlier than the arrival of globalized logistics. This can be appreciated through the maps above (Figure 9), showing the growth of logistics facilities in quintiles[35]. As we can see, 20% of the facilities were already built before 2001, with another period of strong growth in the 2000s and sustained but slower growth after 2011[36].

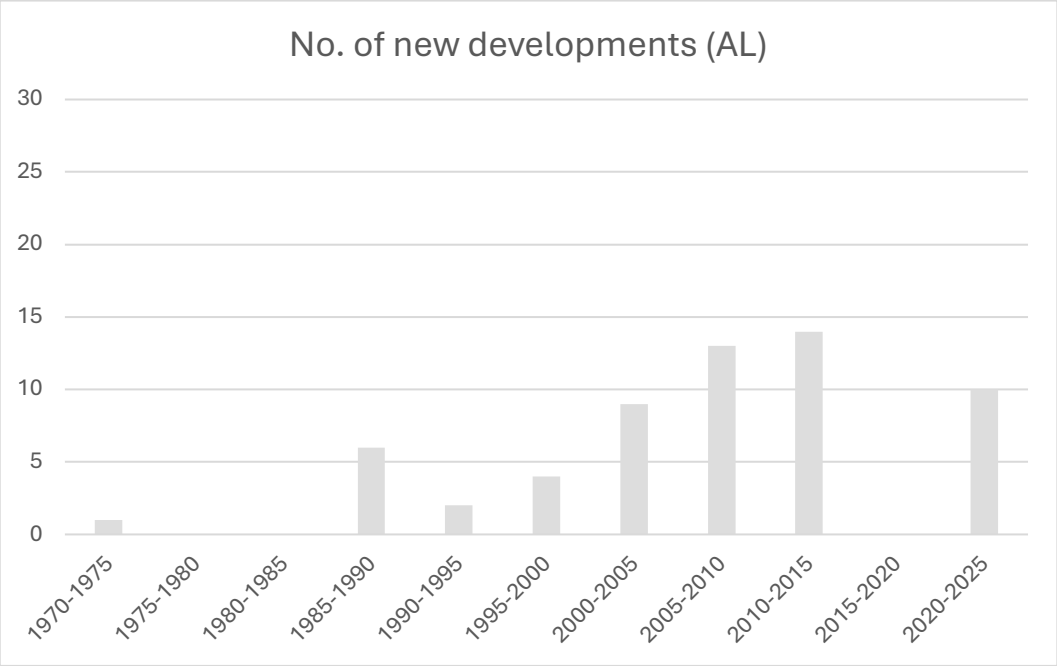

Figure 10 New logistics developments in the province of Alessandria across five-year periods

Observing the same growth by five-year periods (Figure 10), the heyday of logistics appears to be across the 2000s, with some recovery after Covid. However, it is noteworthy that early developments were already in the last

[35] The total of logistics facilities in the province from the author's database was split into quintiles (five groups with equal amounts of items) and maps were produced adding quintiles incrementally.

[36] Owing to lack of data, this elaboration does not consider the crucial element of facilities' size, with the risk of creating a distorted image of growth. However, it gives an insight into the trends of logistics real estate in the province.

decades of the 20th century. As we will later see, the growth patterns in Piacenza reflect a younger history of the sector in that province.

Going into detail, the most outstanding element of logistics in Alessandria is the Rivalta Scrivia terminal. Located in the municipality of Tortona, it lies at the most strategic point at the core of the triangle formed by Turin, Milan and Genoa, both topographically and in terms of rail and road. Albeit not the busiest hub in Northern Italy, it is nonetheless very significant, especially for its proximity to the port of Genoa. Its origins are to be found in a plan developed in the 1960s by Giacomino Costa, a prominent entrepreneur from Genoa. The then-innovative idea was to relieve the pressure on the crammed seaport, where the steep geography of the coast left little room for port operations, by transferring goods by rail and road to a larger location and taking care of everything that did not need to be done at the dock. In practice, it was an early version of what we would call an intermodal terminal, and it was wholly privately built and operated.

Confusingly, the terminal is split up in several components (Figure 11) with different ownerships (Table 5). First, there is a logistics hub, originally owned by Costa and other entrepreneurs as Rivalta Scrivia Ente Sviluppo Traffici Internazionali Porti Nord Italia SpA, which was later renamed Interporto di Rivalta Scrivia SpA (*interporto* meaning "intermodal terminal"). In 1997 a majority stake of the latter was sold to Alessandro Fagioli, another entrepreneur who was also involved in shipping and transport. In 2009, Fagioli sold 22.7% of the company's shares to F2i SGR – Fondi Italiani per le Infrastrutture, a major Italian asset management company specialized in infrastructure and utilities, only to buy them back in 2011 after unsatisfactory performance (F2i SGR, 2011). In 2012, Fagioli's majority stake of 90.125% was sold to Belgian logistics company Katoen Natie (Euromerci, 2012) and has since kept this corporate structure, with a minor share owned by Italian infrastructure and logistics behemoth Gavio Group through its subsidiaries. As such, it is the largest privately-operated intermodal terminal in Italy, with more than 400,000 sqm of warehouses and a total footprint of around 1.5mln sqm (Katoen Natie, 2025). The hub has a rail spur to the

railway to Genoa running alongside, but most rail freight is handled by the neighboring Rivalta Terminal Europa.

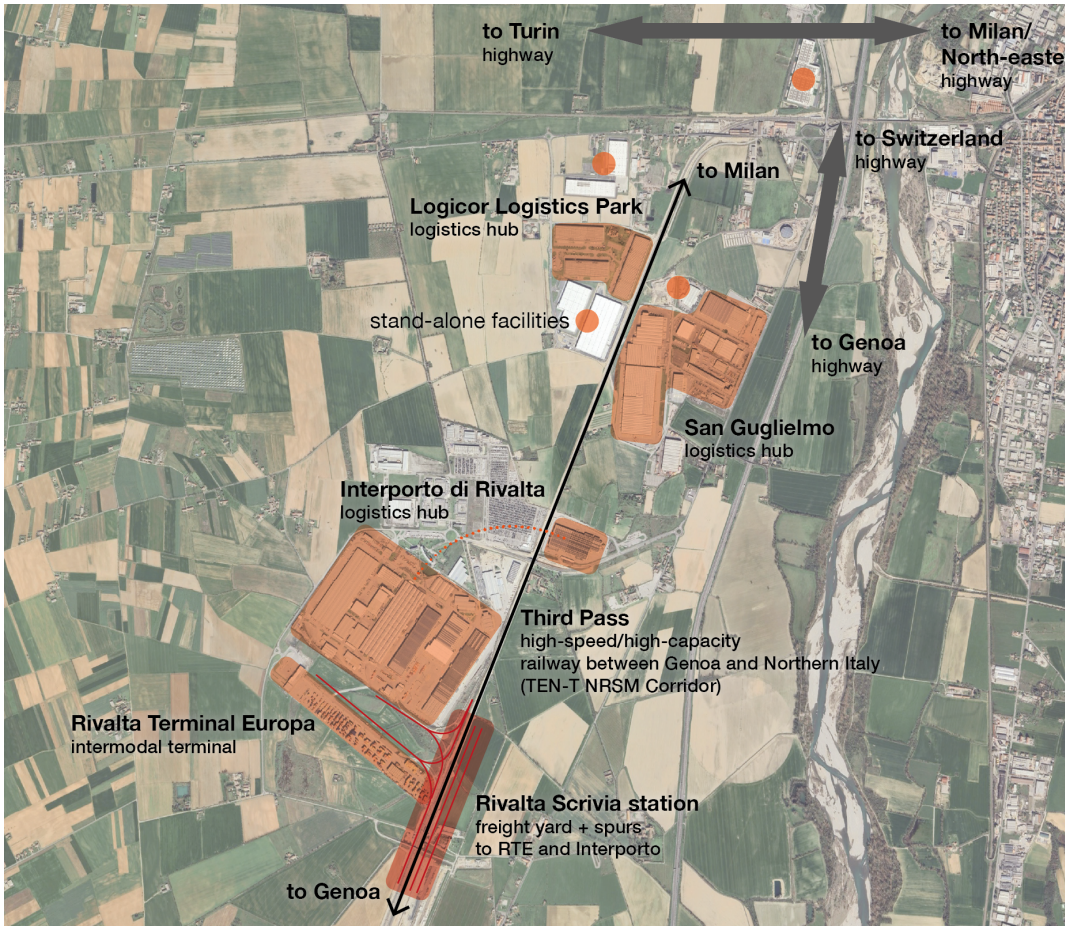

Figure 11 Components of Rivalta Scrivia sprawling logistics terminal (author's elaboration)

Along the logistics hub, a separate structure, Rivalta Terminal Europa (RTE)[37], offers intermodal services. The intermodal terminal was established in 2006 by Interporto di Rivalta Scrivia and later as a 50/50 joint venture between Interporto di Rivalta Scrivia – therefore becoming a part of Katoen Natie – and ASTM[38], a Gavio Group subsidiary. In addition, a series of other entities hold a very small share, including Unione degli Industriali di Alessandria, the local employers' federation, the Western Ligurian Sea Port

[37] See website www.rivaltaterminal.com.

[38] See website www.astm.it.

Authority, and the municipalities of Alessandria and Tortona. It boasts a paved surface of more than 250,000 sqm and five European standard-compliant rail tracks connected to the railway to Genoa (separately from the spur to Interporto). In turn, the railway has been recently upgraded and is going to be part of the Third Pass, the high-capacity/high-speed line connecting Genoa and Northern Italy. Operations are managed by Rail Hub Europe (RHE)[39], which was established by Autosped G (Gavio Group) and in 2024 was split up between the former and Medlog[40], a subsidiary of (formerly Italian) Swiss corporation MSC, the world's largest container shipping company, in a 50/50 joint venture. Freight trains shuttle daily from and to the port of Genoa, as well as other Ligurian ports and several mainland destinations in Northern Italy. Were business to scale up, the terminal is already authorized to expand up to a total surface of 1mln sqm, which the company hopes will happen with the upgrading of railway infrastructure. Importantly, both the logistics hub and the intermodal terminal lie within a bespoke "Port Hinterland" customs area which was granted in 2014, allowing for foreign goods shipped to Genoa to be loaded onto trains and reach the terminal without clearance (Agenzia delle dogane e dei Monopoli, 2025).

[39] See website www.rhespa.eu.

[40] See website https://www.medlog.com.

Table 5 Actors of Rivalta Scrivia logistics hub

facility	owner/asset manager	operator
Interporto di Rivalta Scrivia	Katoen Natie	several (shipping, retail, wholesale, industry)
Rivalta Terminal Europa (RTE)	ASTM (Gavio Group, IT) + Interporto di Rivalta Scrivia (Katoen Natie, BE)	Rail Hub Europe: Autosped G (Gavio Group, IT) + Medlog (MSC, CH)
Logicor Logistics Park	Logicor (Government of China), managed by Kryalos SGR (Milan, IT)	several (shipping, retail)
San Guglielmo	Appia and Aurelia (Gavio Group, IT)	several (shipping, retail, wholesale, industry)
stand-alone assets	Aquila Capital (Milan, IT/HQs in DE), Ecoprogram (Milan, IT), Prelios (Milan, IT)	several (shipping, retail)

On top of these two original components, several other logistics actors have gathered in Rivalta, assembling a makeshift hub. A major player is the aforementioned Gavio Group, historically rooted in the area. Founded in nearby Castelnuovo Scrivia, Gavio was a family company whose business began in goods transport and later expanded to civil engineering and infrastructure investment – notably highways, where the family-owned company ASTM is the world's second-largest operator. Today Gavio is one of

the main names in Italy's entrepreneurial scene, and despite its transnational expansion Gavio's companies maintain a strong presence in and around Rivalta. Gavio's subsidiaries offer warehouse operations, intermodal transport, rail car maintenance, etc. Part of their business is warehouse leasing itself: the subsidiary Appia Srl owns and manages 250,000 sqm of warehouses in San Guglielmo, less than 2 km away from the terminal proper. The hub is a chance for the group to wholly integrate their logistics services offer, providing clients with all sorts of options, from warehouse operations to transport to facility management and even further real estate development. Another major element is Logicor Logistics Park, a 103,000 sqm gated private logistics hub owned by the eponymous European (but China-controlled) logistics giant and managed by Milan-based Kryalos SGR. The hub is located in Gerola, not bordering but still very close to the main terminal.

Besides these larger terminals and hubs, Rivalta Scrivia features at least a dozen other stand-alone assets scattered around the area. Their construction date ranges from the late 1990s to present, and property can be direct (owner-occupier), rented out directly by the owner, or, in many recent instances, in the hands of an investor. They form a sizeable part of the whole hub, expressing the interest of the market beyond historical logistics infrastructure. Even for businesses who do not work with the port, Rivalta remains a great location at the heart of North-western Italy, with quick highway access in all directions.

While Rivalta is by far the most relevant hub, the logistical potential of the area is demonstrated by the amount of logistics facilities sprawling around the province. A few other locations stand out, notably the municipalities of Alessandria and Arquata Scrivia, the rest of logistics facilities being scattered around, typically along the many highways crisscrossing the province. Even though some of the developments also lie close to the extensive railway infrastructure, most goods are still transported on road – Italy has very weak modal shift policies. The priority for highway access over rail connections is evident in the words of real estate actors and

operators, who often work with sectors such as retail and e-commerce, where the flexibility of road transport is unmatched.

The case of the municipality of Alessandria exposes a different configuration, where the usual array of warehouses is paired with grandiose government-sponsored projects. The town, struggling with economic transformation, had planned vast zoning for industrial developments without much success. In the last few years, there has been a comeback with several high-profile logistics development, notably two Amazon facilities (a larger regional-scope hub and a local distribution center) and several other build-to-rent investments. Private investments are paired with an ambitious public project: the refurbishment of the Alessandria's freight yard (*Scalo Merci di Alessandria* or *Alessandria Smistamento*). The freight yard had a long story. After massive wartime bombing, the yard was modernized in the 1960s, becoming Italy's second-largest freight yard, with more than forty tracks and total footprint exceeding 1mln sqm (SLALA, 2007, p. 18). Over time, traffic declined, with little demand and a relatively less interesting location than that of nearby terminals, which were better suited to catch the busy North Sea-Genoa traffic. Revitalization of the vastly underexploited freight yard has been discussed for decades now, at times with the involvement of Fondazione SLALA, a logistics development public-private foundation which was tasked with a feasibility study by Regione Piemonte, the regional government. The stalemate finished when in 2018, when the post-Morandi Bridge collapse *Decreto Genova* allocated some initial funding for refurbishment plans (Conversione in legge, con modificazioni, del decreto-legge 28 settembre 2018, n. 109, recante disposizioni urgenti per la città di Genova, la sicurezza della rete nazionale delle infrastrutture e dei trasporti, gli eventi sismici del 2016 e 2017, il lavoro e le altre emergenze, 2018), igniting the institutional machine that led to a new timeline for the project. A technical and economic feasibility plan for the rail service was first prepared, followed by a call for proposals for the surroundings, which was won by the masterplan "X-Change", designed by renowned names in Italian logistics and architecture. With the slogan "Logistics, Nature, People, Energy", the masterplan highlights the potential for integrating the would-be intermodal terminal within the town's nature resources and energy network, and

repurposing run-down areas for housing, education and other services (Figure 12). The terminal is now under the guidance of the Third Pass commissioner, in an attempt to streamline the refurbishment process, which, according to the masterplan proponents, would take some five years. According to the plan drafted by RFI (*Rete Ferroviaria Italiana*, Italy's State-controlled rail network company), the whole yard would be upgraded to 750-metre European standard-compliant tracks, with four crane-equipped tracks and nine extra tracks for the rest of the yard (Rete Ferroviaria Italiana, 2024). At present, works have been announced to begin in 2025 but funding availability is unclear (OTI Piemonte, 2025). The future configuration of the Alessandria terminal vis-à-vis Rivalta Scrivia and the Third Pass, as well as the other five private freight yards – notably Novi San Bovo, on the same railway and with roughly ¾ of the yearly traffic of Alessandria and almost as much as that of Rivalta – has not been defined yet.

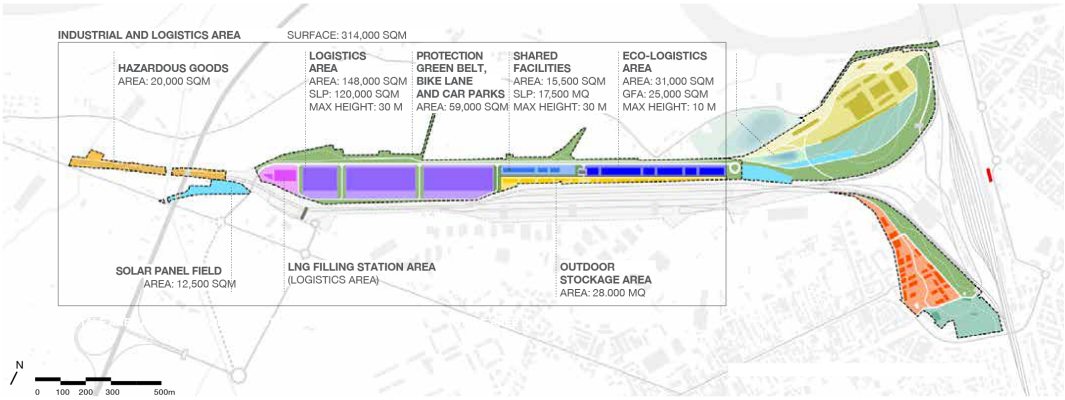

Figure 12 Alessandria Smistamento "X-Change" terminal renovation masterplan (author's elaboration on Blossom Avenue et al., 2024)

The promises of Simplified Logistics Zones

A major element in the development of logistics in Alessandria is the ongoing implementation of the Simplified Logistics Zones (SLZ), English for *Zone Logistiche Semplificate* (ZLS). SLZs were introduced in Italy in 2017-2018 (Bilancio di previsione dello Stato per l'anno finanziario 2018 e bilancio pluriennale per il triennio 2018-2020, 2017) after pressure from Northern Italian regions to be provided with benefits comparable to Special Economic Zones, which had been granted to more struggling Southern Italian regions

(Conversione in legge, con modificazioni, del decreto-legge 20 giugno 2017, n. 91, recante disposizioni urgenti per la crescita economica nel Mezzogiorno, 2017). SLZs are legislative instruments in the family of Special Economic Zones meant to promote logistics-related development through economic and bureaucratic incentives, such as tax breaks and smoother, faster authorization processes. Companies can apply through an *Autorizzazione Unica* ("Single Authorization"), which conflates several bureaucratic requests into a single process and dodges many planning regulations. Delays for environmental clearance are greatly reduced, as are other authorization processes, and tax credits are granted, as well as a customs area proponents can ask for on a limited portion of the SLZ. On paper, they are meant to attract investments and employment. The unbearable length of the legislative process – the SLZ is still not in effect after it was first established in 2018 – has so far driven away prospective investors, but some recent legislative developments seem to show that it will soon be operative.

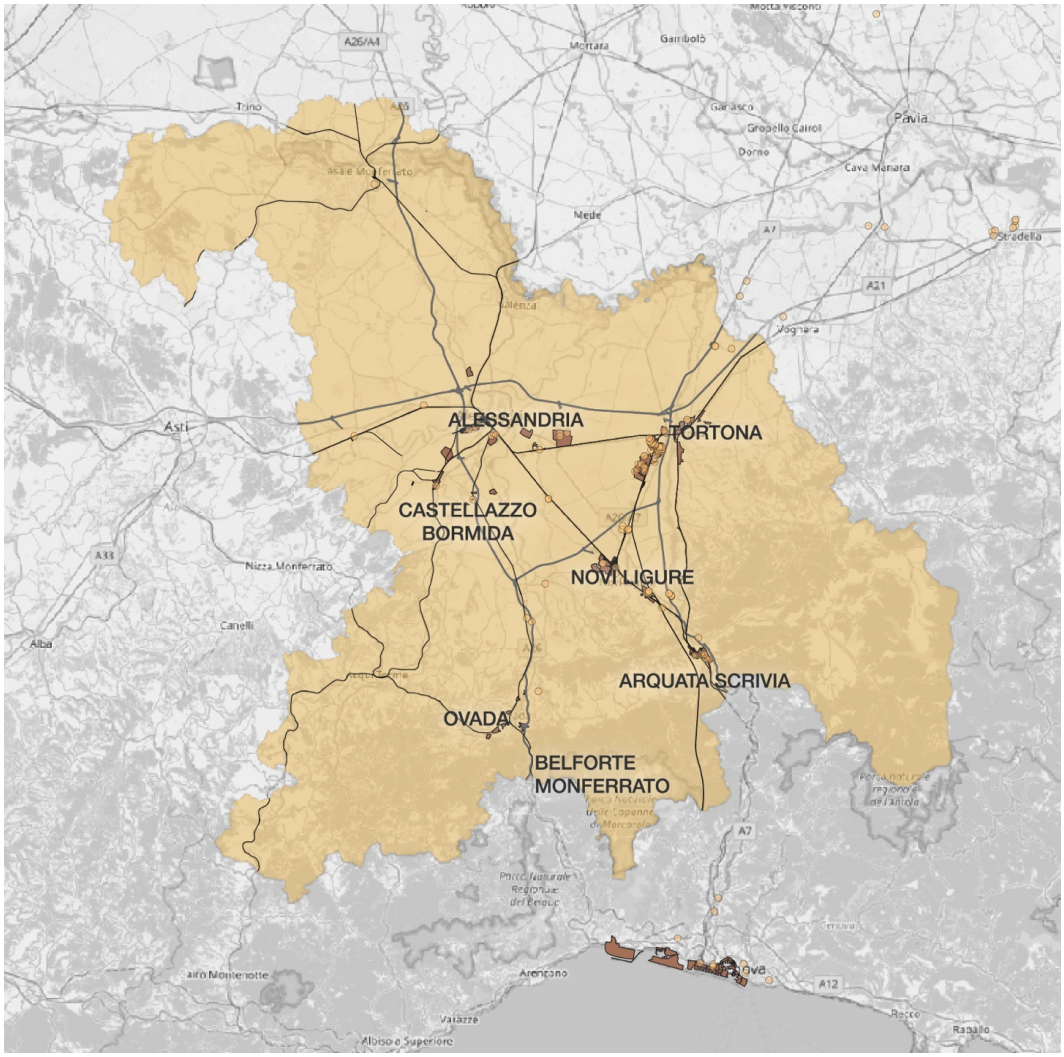

Figure 13 SLZ areas (brown) and logistics facilities (yellow) in the province of Alessandria (author's elaboration)

We will first go through the complex legislative history of the SLZ. This is a necessary step to appreciate the complexity of the legislative process and the power geometries among the government scales involved. The bill establishing the SLZ framework required Regions to apply for one by identifying a key seaport and submitting a "Strategic development plan"; landlocked Regions could partner with neighboring ones with a seaport, provided they could demonstrate a 'functional link' among their proposed SLZ areas and the seaport. In the case under analysis, the SLZ was established by decree instead. Indeed, it was called the "Genoa and Inland Port *Extraordinary* SLZ" (Conversione in legge, con modificazioni, del

decreto-legge 28 settembre 2018, n. 109, recante disposizioni urgenti per la città di Genova, la sicurezza della rete nazionale delle infrastrutture e dei trasporti, gli eventi sismici del 2016 e 2017, il lavoro e le altre emergenze, 2018). This move was meant to foster economic recovery after the Morandi Bridge collapse in Genoa (Redazione ANSA, 2018), a key road infrastructure for the long-distance traffic and a piece of the convoluted urban puzzle of the city. The collapse also interrupted railways to Northern Italy, bringing port and other logistics operations to a gridlock. The decree also listed seven municipalities located in the province of Alessandria[41] – which is part of another Region, Piedmont, but was considered as a part of the inland port of Genoa (Region Liguria). While the rationale of the law was to support the recovery of the seaport, the SLZ turned out to be an opportunity for an area that was struggling well before the bridge collapse. Despite its original goal, the SLZ would end up covering substantial areas in the province of Alessandria, whether they were already involved in logistics or not, as a comparison of the distribution of warehouses (yellow dots) with SLZ zones (brown shapes) suggests (Figure 13).

The economic promises of the SLZ have long been set back by its exasperating implementation process. The required "Strategic development plan" was sent by Region Liguria on behalf of all the involved Regions in July 2021 (Individuazione, in attuazione della D.G.R. 14-4382 del 22 dicembre 2021 degli ambiti territoriali da proporre ai fini dell'inserimento nelle perimetrazioni retroportuali della Zona Logistica Semplificata ZLS "Porto e retroporto di Genova"., 2022). However, it was not until 2024 that an "implementation decree" (Regolamento di istituzione di Zone logistiche semplificate (ZLS) ai sensi dell'articolo 1, comma 65, della legge 27 dicembre 2017, n. 205, 2024) gave practical indications on how to put the SLZ into practice. In the meanwhile, Regions did what was in their power to further enrich the potential of the SLZ. After the first SLZ law of 2018, in 2021 a new law (Conversione in legge, con modificazioni, del decreto-legge 10

[41] The list included the municipalities or localities and terminals of Rivalta Scrivia, Arquata Scrivia, Novi San Bovo, Alessandria, Castellazzo Bormida, Ovada and Belforte Monferrato, with the specific land plots included in the SLZ to be later delimited.

settembre 2021, n. 121, recante disposizioni urgenti in materia di investimenti e sicurezza delle infrastrutture, dei trasporti e della circolazione stradale, per la funzionalità del Ministero delle infrastrutture e della mobilità sostenibili, del Consiglio superiore dei lavori pubblici e dell'Agenzia nazionale per la sicurezza delle infrastrutture stradali e autostradali, 2021) allowed Regions to submit proposals to extend the SLZ to other areas following the same 'functional link' rationale. The Piedmont regional government opened a call to municipalities, which resulted in the admission of 14 more zones[42], including two intermodal hubs (Individuazione, in attuazione della D.G.R. 14-4382 del 22 dicembre 2021 degli ambiti territoriali da proporre ai fini dell'inserimento nelle perimetrazioni retroportuali della Zona Logistica Semplificata ZLS "Porto e retroporto di Genova"., 2022), and, after the 2024 decree, proceeded to submit a specific delimitation of eligible zones (Approvazione proposta di prime perimetrazioni degli ambiti retroportuali della Zona Logistica Semplificata ZLS "'Porto e retroporto di Genova'" in Piemonte, ad integrazione del relativo Piano di Sviluppo Strategico, 2024). Next was another governmental act establishing the "Steering Committee" (Dipartimento per le Politiche di Coesione, 2024), which lists the roles of members of the board, with a strong emphasis on central government actors: the President of Region Liguria, the Port Authority and several representatives from relevant ministries, as well as industrial development representatives. Other regional and local actors have a non-binding role, including municipal representatives, suggesting a high-profile vision for the management of the SLZ with limited local scale power. Once the relevant actors are nominated, it is in the hands of the committee to enact the SLZ. The first meeting was held in April 2025, with great expectations for deployment of the instruments.

The position of market actors with respect to the SLZ is not as clear-cut. The years-long effort of the government in making the SLZ operational has

[42] The bill lists twelve municipalities in and outside of the province of Alessandria (Asti, Basaluzzo, Borghetto di Borbera, Casale Monferrato, Castelletto Monferrato, Castelnuovo Scrivia, Mondovì, Pozzolo Formigaro, Serravalle Scrivia, Silvano d'Orba, Tortona, Villanova d'Asti), as well as two more intermodal hubs in other areas of Piedmont which were not included in the first version of the SLZ (SITO Torino and CIM Novara).

been complemented with massive display of the great territorial development prospects the instrument was going to offer. However, the (very Italian) legislative hiccups and the sheer length of the process have not contributed to make the SLZ particularly attractive to prospective investors. Before 2024, most interviewed real estate actors were generally uninterested or plainly unaware of the oncoming SLZ – understandably, legislative clarity and predictable timing, rather than promises with an unclear horizon, are the priority in business. Still, nothing prevents the situation to evolve given the recent progresses – regional officials mention growing pressure from the business sphere towards the implementation of SLZ measures.

Actors and power geometries in Alessandria

Having assembled an overview of the pieces of the logistical puzzle of the province of Alessandria, we will now proceed to populate them with the relational geography bringing them to life. As the epistemologies of political economy suggest, we can best group the constellation of involved actors based on their formal and financial power, identifying three main groups: governmental actors, market actors, and intermediary bodies (lobbies or alternative arrangements). As we will see, these groups are everything but consistent entities. They (inter)act in multipolar and multiscalar configurations, navigating the common interest in logistics-based growth according to their variable goals. As our outline of the territorial context suggests, the area has been experiencing a difficult time in socio-economic terms, making the growth of logistics an opportunity to fill a void in employment opportunities and industrial strategies. This results, in most cases, in a positive attitude towards logistics, conveying the common vision of a beneficial element of local development. Of course, the local geography of logistics is more multifaceted than this, and we will do our best to expose its several facets.

As we can see from a relational map showing the links between logistics operators in the area and their respective HQs[43], Alessandria is the logistics hinterland of reference for several categories of companies (Figure 14). Predictably, several maritime logistics companies from Genoa have warehouses in the area, sometimes in proximity of freight yards. On top of this long-term presence, we can see a number of links going to Milan, where many Italian or transnational consumer product companies have their national HQs. A minority of facilities is connected to the wider landscape of Northern Italy, which, as discussed before, has a strong manufacturing fabric. These multiple directions and their balances suggest that while the province of Alessandria has become a logistics hinterland for many large-scale networks, its historic roots as a port hinterland with a local focus are still visible, with many companies showing topographical and relational proximity to the area.

[43] The client company and/or its 3PL provider were included, depending on available data. As no comprehensive database is available, data collection could only be performed gathering information from incomplete sources such as company websites, online map data, media, etc.

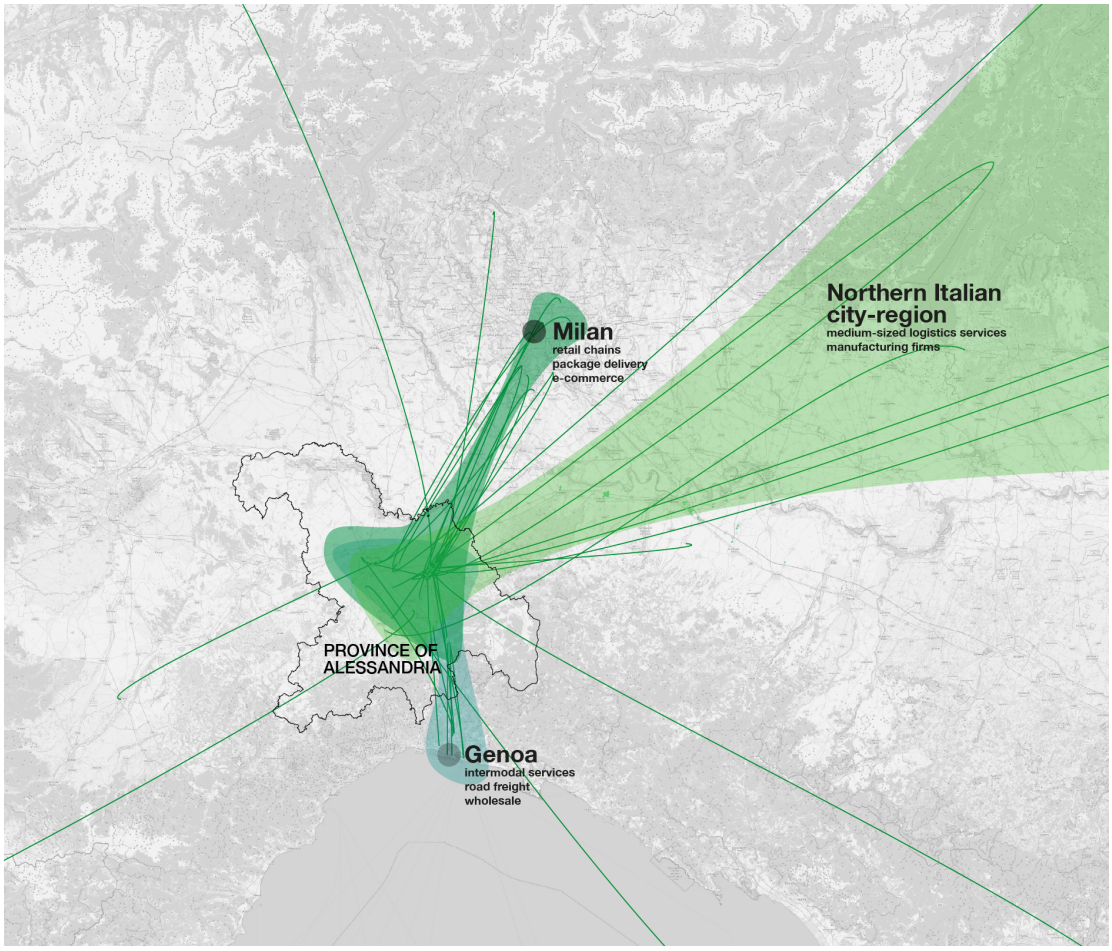

Figure 14 Relational map of warehouses and their respective HQs in the province of Alessandria (author's elaboration)

The governmental sphere sees the participation of multiple scales with varying degrees of responsibility and involvement. The local and regional scales are definitely the ones most involved in both the process of logistics planning and in actual real estate developments. As explained above, this has to do with planning regulations, which invest local governments (*Comuni*) with authorization processes. The regional government (*Regione*) is involved *ex ante*, i.e., has the power to approve a local zoning plan or require amendments, but does not have an active role in its design. As we have seen, regional planning has a guideline role – an admittedly non-binding one, where the keywords are the 'alignment' and 'consistency' of the multiple plans and strategies. A handful regional plans cover such areas as 'territorial coordination' and mobility – the latter with a sub-plan for logistics – with

generic recommendations on land use, strategic locations and so on (Regione Piemonte, 2023). In practice, this gives local governments a lot of leeway when it comes to building permits. Logistics warehouses may already be allowed in the approved zoning, or the latter can be amended ad hoc through a *Variante* ("variance"). Some variances below given thresholds do not need regional approval, effectively circumventing the aforementioned regional strategies. For example, a recently built massive Amazon warehouse – 350,000 sqm – was authorized by the town council of Alessandria without the need of approval by regional authorities. This gives the measure of the level of autonomy of local governments even for significant projects.

While the narrative of a logistical territory is pervasive and cohesive, the interests and goals of specific locales can greatly differ. The willingness to welcome logistics is a way more complex matter than a plain evaluation in terms of business or political return. With a rich stratification of industrial, logistical and infrastructural histories, local dispositions towards logistics vary considerably. Albeit partial, our in-depth analysis of a few municipalities with significant logistics developments reveals this diversity. The municipalities of Alessandria, Arquata Scrivia and Tortona are specimens of multiple histories of logistics and exhibit different attitudes to present projects and promises. A key factor lies in the origins of the local logistics industry, which are traced in a variety of configurations of actors and capital. In the case of Arquata, the first signs of logistics *avant la lettre* are to be found in the construction of privately-owned "general warehouses" in the early 1900s by entrepreneurs based in Genoa. These large warehouses were also connected with a spacious freight yard. Although the company name, SADAS – Società Anonima Docks di Arquata Scrivia, included "docks", this was common practice in Italy at the time and did not imply a direct link with maritime operations. The town later hosted many heavy industry plants and some refineries with fuel pumped up directly from the seaport. Most of these companies are now closed and have left derelict plants and heavily polluted ground to be reclaimed. This is where logistics comes into the equation: as a land use- and labor-intensive sector, it is evoked as a solution to overcome the scars deindustrialization has left – the plant covers around 160,000 sqm

and offered, at its peak, 700 jobs (Carbone, 2024). While local officials do not seem to be enthusiastic about logistics development, it provides with a cost-free way to get rid of abandoned industrial plants and bring back some much needed jobs – countering the trend of other comparable areas of Northern Italy, the town has lost residents since a peak in the 1970s. Logistics turns out to be a practicality, a necessary evil for tackling long-standing territorial development issues:

"Logistics, maybe, is not the best solution [...] Our logistics is not an effort to create logistics hubs, we are looking for investors that can fix situations that could be problematic in the future. Because 160,000 sqm [polluted and] abandoned by the company, that no one takes care of, sooner or later will..."

[Arquata Scrivia town council officials, author's translation]

New projects put forward by real estate investors align with standard road freight logistics and do not take advantage of the purported advantage of nearby railways. An intermodal terminal cited in provincial and regional logistics planning in the 2000s has never been built out of the existing freight yard (Piano Territoriale Provinciale, 2002); large plots surrounding the railway are now included in the SLZ, but technical constraints such the position of the freight yard relative to the railway and the limited length of tracks make Arquata a suboptimal candidate for contemporary-standard rail freight operations. The upcoming completion of the Third Pass will also cut off this part of the line – which does not mean that all traffic will be diverted, but it raises questions on the relationship between the multiple infrastructural and political rationales at stake.

With its extensive infrastructure and political activism, the municipality of Tortona looks closest to a fully-fledged logistical growth machine. As illustrated above, the town has effectively assembled all the components of a primary logistics hub, mainly – but not only, as Third Pass connections under construction show – thanks to private initiative. Over time, the geometries of logistics development have morphed, following political and economic evolutions. While the precondition for success in the sector

certainly lies in its location and in fast rail and road access, the prime movers, i.e., the backers of the Interporto, were entrepreneurs from nearby Genoa looking to improve their transport operations, at a prosperous time for both the seaport and the province of Alessandria. The second major development of this type was Gavio Group's logistics hub – a transnational company on paper, a very local actor in practice, completing its infrastructure and transport business with logistical real estate to verticalize services. Both have maintained a strong position in following expansions logistics infrastructure, partnering in the development of the intermodal terminal RHE. Starting from the 2000s, a change in the composition of business actors can be noticed. First, the Interporto was sold to transnational giant Katoen Natie, an integrated logistics company dealing both renting out the warehouses and offering logistics services. Second, a new generation of logistics facilities started to mushroom in proximity of the original logistics core. Logicor Logistics Park, completed in 2009, was the first notable example of a private financialized logistics hub, hosting more tenants at a time in a gated space. It was followed by several other investments, mostly managed by Milan-based asset management companies with foreign capital. This seems to be the current trend, with a couple of new developments promoted by global investors. Most of them also lie within the perimeter of the SLZ, but this is hardly the priority for current investments, given the very recent approval of SLZ land plots and their sloppy legislation and implementation process. The opening of the Third Pass is also supposed to greatly benefit the intermodal terminal and the logistics hub in broader terms, but so far this has been more of a promise than evidence. Local politics is very invested in promoting the sector, which is clearly more dynamic than other industry sectors in the area. The current town council has worked to produce a comprehensive *Variante generale*, a variance of the local urban plan, to accommodate for further logistics development. The effort to attract the sector is such that once Tortona exhausted the amount of developable land it could legally put in its plan, officials negotiated with the Region to get extra quotas from neighboring municipalities in exchange for revenue (*oneri di urbanizzazione*, i.e., planning fees) transfer, a sort of compensation system known as *perequazione*. These measures went together with something along the lines of a marketing

strategy, whereby former prospective investors were contacted again, guaranteeing improved planning regulation and a welcoming attitude:

> "…the idea was to bring back some centrality through the economic fabric. So, we took our briefcase and got going […] the experience with previous administrations had disappointed them, and the word given by this administration was worthless. So, we asked them to trust us one more time […] and this trust was well rewarded, because they have seen that we managed"
>
> [interview with Tortona town council planning councilor, author's translation]

Of course, public officials can only be implicated so much in the business process. It is noteworthy, however, to see how the development of a financialized asset such as foreign investment-backed warehouse can actually be *co-built* through the interest of local politics. As we will see, this is not always the case, but it suggests a much more nuanced process, where the pressure of finance is not the only powerful force in shaping a logistical hinterland. Pre-existing conditions of socio-economic disadvantage and an attractive location are likely ingredients of logistical real estate development, but the geometries its actors build differ.

The variability in local attitude to logistics is easy to appreciate when we move on to neighboring Alessandria. The town is somehow historically related to logistics, but less univocally so than Tortona. While the city had a primary role in Modern Era military logistics thanks to its massive fortress, this did not translate into civilian logistics importance (Marotta, 1991). In the context of Alessandria's infrastructure 'triangle', logistics development seems to have favored the Arquata-Tortona axis, along transport infrastructure to Milan, over the edge pointing to Alessandria, on the way to Turin. The growth of the sector may well benefit from the wider aura of logistical suitability of the area, but it is happening with different temporalities, strategies and geometries. As mentioned above, the presence of the massive and underutilized freight yard looms over the credibility of logistical success both from the past – as a planning failure – and towards

the future – a grandiose masterplan with up to 300,000 sqm of logistics space which is still more of a promise than an actual fund-backed project. Still, even without a strong logistical backbone like the one in Rivalta Scrivia, Alessandria has been attracting multiple investments since the 'financial turn'. Most notable are two recent developments for Amazon, which had a distribution center (2021) and a larger hub (2023) built on the outskirts of the city. SLZ benefits do not seem to have been a priority, as one of the assets was built well before the zones were approved and timing was more crucial in the business strategy anyway. In Alessandria, logistics has been a matter of contention in local politics – the last mayor election was fundamentally fought over a logistics development the incumbent council had approved through a custom zoning *Variante* in spite of the availability of other developable plots (Feola, 2023). Elected officials do not declare themselves against logistics, but maintain that all parties involved should contribute to reduce impacts from asset development and operations, signaling limited enthusiasm for the growth of the sector in the town. This includes public bodies, like higher-scale authorities in charge of issues such as road capacity. The experience of nearby municipalities and Northern Italy in general might be the reason why great emphasis is put on the need to cluster logistics facilities in quasi-hubs, which is currently not encouraged enough by higher scale planning regulation, leaving municipalities alone in managing massive investment offers:

> "We are trying to give positive replies, but we do not want to say "yes" to any proposal from any private [investors] who comes and says "I want to locate myself there and only there" [...] why should we stress out and say "oh yes, they must absolutely come to Alessandria"? This poses the risk of only meeting mayors' delusions of grandeur, but then there is nothing concrete. What is crucial is that regional and provincial and town-level planning is in place, which there is, and must therefore be followed"
>
> [interview with Alessandria's mayor, author's translation]

Involvement in and funding for educational opportunities in logistics operations and management is also promoted, suggesting, again, a logic

where businesses should take into account all the implications of their presence. Overall, what transpires is a quite cautious approach to logistics growth.

While municipalities are assumed to be the core governmental actor, an influential role is held by other governmental and non-governmental actors, who demonstrate strong activism for logistics development. Provincial and regional authorities are involved to some extent in terms of permitting, but the role of higher government scales goes much beyond paperwork. While the regional government has little direct power on logistics, networking events such as *Stati Generali della Logistica del Nord-ovest* ("North-western Logistics Convention") are organized with bordering regions, Liguria and Lombardy, to coordinate planning and to lobby the central government for swift regulation approval, infrastructure funding, etc. While they may lack formal power, but they do exercise soft power – the strongest weapon at the regional level, since the massive funding needed for key transport infrastructure is managed at the national level. This happens in close connection with employers' federations, chambers of commerce and related groups, such as relevant *Confindustria* chapters and *Unioncamere*. The latter are keen to use their expertise to produce reports and recommendations for logistics development, which are then used to lobby the governmental levels involved (see Confindustria Piemonte, 2021; Unioncamere Piemonte, 2022). The most comprehensive yearly report on infrastructural development in Piedmont, the *Osservatorio Territoriale Infrastrutturale* ("Territorial Infrastructural Observatory") is actually jointly produced by these groups[44]. Their work implements or even replaces governmental efforts, especially when resource-stripped and unskilled local governments cannot deal with the magnitude of logistics projects. The local chapter of Italy's employers' organization, Confindustria, goes as far as to scout local greenfield or brownfield opportunities for interested investors and operators and to negotiate with local governments to promote developments. The closeness and the common interests of these actors is

[44] See website www.otipiemonte.it.

epitomized by Fondazione SLALA[45], a foundation reuniting local, provincial and regional governments, universities, employers' organizations, local bank foundations and logistics operators with an interest in logistics development in North-western Italy, especially in the province of Alessandria.

SLALA produces annual reports on the local logistics environment and future scenarios and organizes conferences and other events aimed at promoting the logistics cluster of Alessandria. In these instances, the line between public and private interests is blurred, and more often than not it is the latter that takes space from the former. The expertise and resources of a well-structured and business-oriented foundation make up for the lack of resources of small municipalities:

> "there is the municipality that says: "I want to do something, but I lack the tools, the skills. But we believe that infrastructure, if it were to be built, would be useful". So what does the Foundation do? It did – I am using this example to clarify – the first thing it did was a study. So a specialized transport engineer studied the area, flows, presences, who is there, what are trade flows"
>
> [interview with SLALA representative, author's translation]

Among members we can also find some relevant real estate actors, but they are not a sizeable part. What is relevant here is the relational potential of the foundation, where governmental and non-governmental actors join their efforts in producing knowledge and narratives about logistics. Thanks to the presence of multiple interest groups from the sector, the foundation also works as a networking space for finding locations for real estate development opportunities.

Looming above all the local maneuvers of logistics are the dynamics of real estate investments. The province of Alessandria is in the horizon of the market, but it is not necessarily the most sought-after area in Northern Italy – the main geographical criterion for the market has long been the Milan

[45] See website www.slala.it

Logistical Region (Dallari & Curi, 2020), from which Alessandria lies just outside. Still, the strong demand for logistics real estate has pushed the boundaries of what was once considered a prime location for investments and has brought investments outside the more crammed, expensive spots. As we have seen, the province also benefits from a long-term engagement with the sector, with a legacy of infrastructure and services. This has attracted an increasing number of investments, which have spread around the province in a sprawling fashion. After all, only Rivalta Scrivia qualifies as something close to an actual logistics hub – a makeshift, private-led one, as it looks more like the result of multiple investment logics than of an urban planning vision – and the municipality can barely keep pace with demand. Meanwhile, the new Alessandria intermodal terminal is still on paper. While clustering assets is also in the interest of investors, ineffective planning and the general lack of large developable land plots have resulted in a mushrooming of stand-alone developments. The sphere of real estate does not seem to keep close ties with local interest groups, but rather work with relevant local actors on a case-by-case basis. The main point of logistical real estate being a financial asset rather than a means of production, there is little reason to mingle with local economic development questions. The massive impact of new logistics facilities is a major matter, which often leads to negotiations on revenue and compensations (see, e.g., La Stampa, 2019). The pressure on road infrastructure is both a good reason and excuse to get some of it renovated or expanded as a bargaining chip. On the investor side, this will count as an ESG measure, translating compensations into favorable financial product credentials. In sum, the stakes are often too high for small municipalities looking for revenue and jobs to turn down investment proposals, and it is hard to grasp their complexity when small, unprepared staff find themselves appraising major projects.

This analysis of the logistics landscape of the province of Alessandria suggests two main development axes along which actors align (Table 6). On one side, we can observe the relationship between financialized actors, government scales and intermediary bodies in the context of private facilities development. Here, the only relevant presence from the governmental sphere is that of municipalities, whose interest in welcoming logistics can

vary, yet is affected by the short-term financial gains from logistics real estate development. The capitals and expertise of financialized actors give them the upper hand when negotiating new developments with small, unprepared municipalities. This power imbalance, together with the ambiguous attitudes of local officials vis-à-vis logistics, often results in disorderly logistics growth. When it comes to public infrastructure, the involvement of all government scales is predictably stronger. As the bulk of funding comes from the State (as internal budget or from the EU), lower echelons coalize and lobby to get allegedly 'crucial' infrastructure funded. This is especially visible in the case of Alessandria, where last decades' economic downturn has led politics to build a strong narrative around the potential of transport and logistics infrastructure, i.e., the Third Pass, Alessandria Intermodal Terminal and connected interventions, as well as the introduction of business-friendly Simplified Logistics Zones. This axis does not see substantial involvement from financialized actors, hinting at different logics, from the obvious short vs long-term investment rationale to the misalignment of logistics real estate from the supposed advantages of new infrastructure and legislation.

Table 6 Two axes of logistics growth coalitions in the province of Alessandria

actors	**private facilities (warehouses, hubs…)**	**public infrastructure**
national government	-	provides with funding from State and EU budget for transport and logistics infrastructure (Third Pass, Alessandria Intermodal Terminal)

actors	**private facilities (warehouses, hubs…)**	**public infrastructure**
regional government *(Regione Piemonte)*	has *ex ante* planning role, broad logistics development guidelines	lobbies the national government for favorable legislation (SLZ implementation and eligible areas expansion) and funding for infrastructure (Third Pass, Alessandria Intermodal Terminal) together with bordering regions and intermediary bodies
local government *(municipalities of Alessandria, Tortona, etc.)*	promote themselves as logistics destinations (Tortona) or the opposite (Alessandria), negotiate over urban plan *Varianti* and compensation measures (notably Tortona with neighboring municipalities)	lobbies relevant authorities for funding
intermediary bodies *(SLALA, Confindustria Alessandria, Unioncamere)*	assist newcomers in finding suitable facilities, produce market reports	lobby for funding together with governmental actors, assist local governments with expertise for infrastructure development

actors	**private facilities (warehouses, hubs…)**	**public infrastructure**
financialized actors chain: global investors, asset managers, developers, RE agencies[46]	keep in touch with local governments and landowners for investment opportunities, negotiate over *Varianti* and compensation measures, co-design logistics planning with municipalities	-

[46] For an overview of financialized actors in the area, see Table 5.

Chapter 7

Logistical records and regrets: the geography of logistics in Piacenza

The second case under study lies at a short spatial and temporal distance from Alessandria, yet enough to have brought about its own peculiar nature of logistics development. The province of Piacenza is in region Emilia-Romagna and lies just close enough to Milan to be considered a part of its logistical region. Both Emilia-Romagna and Lombardy, Milan's region, are thriving areas with a rich industrial fabric as well as among the few with growing population projections in the country, and while Piacenza is not among the frontrunners of the region, it has carved itself a logistical niche. Despite a great location, at the crossroads of several highways going all directions of the country, it had not been a relevant hub for (civilian) logistics until relatively recently. Having developed a logistics market at a later time, we can notice how this has turned out to have some variations in the politics and economics of the process. It has also resulted in different spatial configurations, with priorities given to other transport modes, facility clustering and so on. We will now proceed to describe the main elements of logistical infrastructure in the area, noting the higher focus on private developments as opposed to the impressive State-sponsored projects that characterize the case of Alessandria. Again, the influence of the financial sphere will prove crucial in making sense of the logistical map we are drawing.

The epitome of Italian logistics[47]

> "You have to understand that inside the IKEA [warehouse], if it could be packed well, the whole historic center of the city [of Piacenza] would fit inside. An architect computed this… The whole city inside historic walls fits in, the city there inside IKEA, which is enormous, never ends"
>
> [key expert of logistics in Piacenza, author's translation]

In Italian literature and mainstream discourse, the logistics hub of Piacenza is often described as the (infamous) example of unplanned, chaotic cluster that got shaped by private initiative without any governance whatsoever, with logistics now sprawling across the province in multiple major and minor hubs (Figure 21). How did this come about?

Just like with the case of Alessandria, we will start with a timeline of logistics growth in Piacenza to get an overview of its history and peculiarities. As shown in (Figure 15) the quintiles[35] of logistics facilities growth in Piacenza have later timespans than those in Alessandria, showing that the sector gained momentum afterwards.

[47] We owe a lot of insights in this chapter to interviews found in the book "Città della logistica. Piacenza territorio lavoro" (Gazzola, 2022), for which we are thankful to author and editor Eugenio Gazzola.

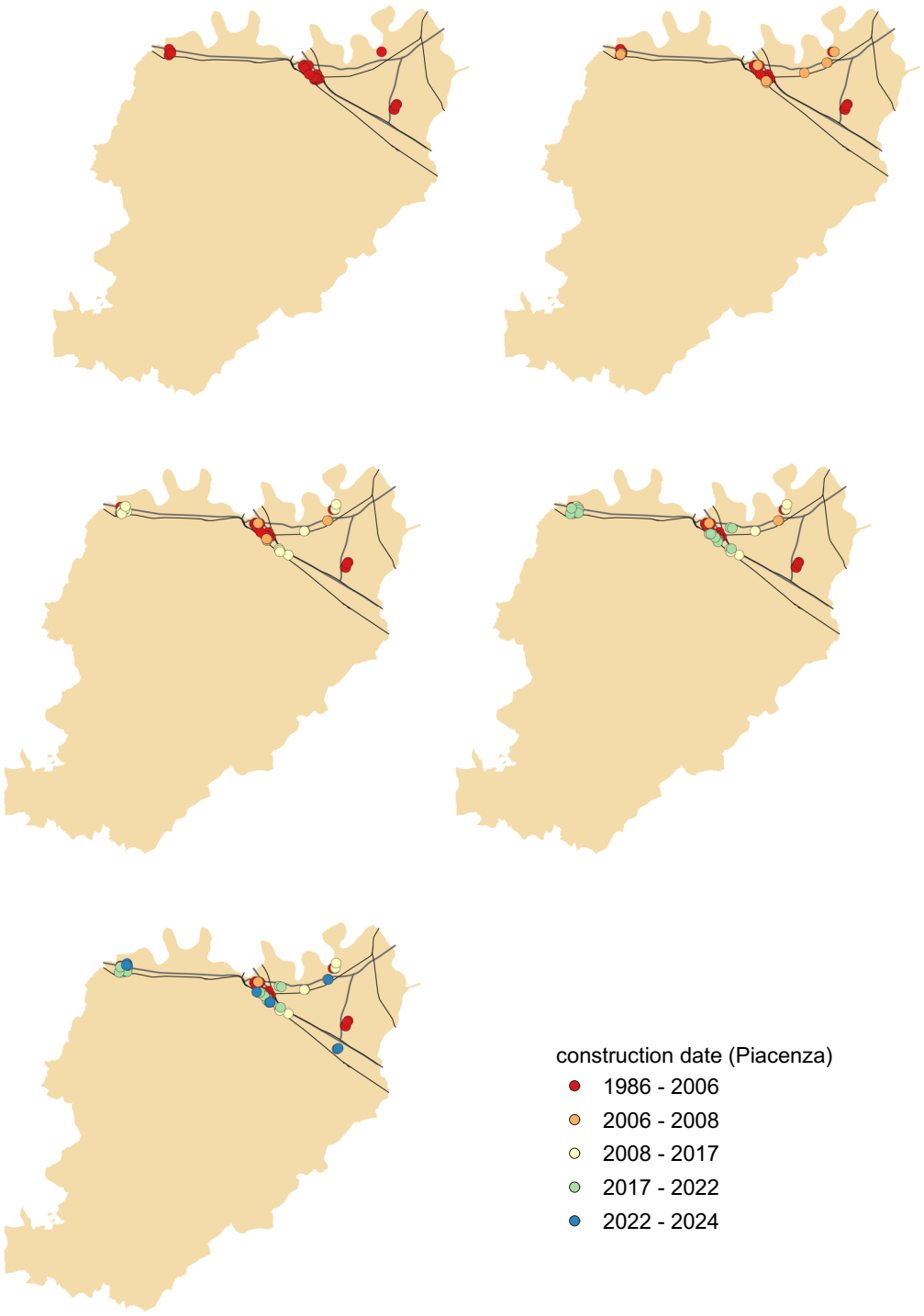

Figure 15 Timeline of warehouse development in the province of Piacenza (author's elaboration on own database – see Chapter 4)

This is even more apparent when logistics development trends are analyzed as new developments over time periods (Figure 16). The peak of logistics growth is clearly skewed towards the late 2000s, with a steady trend afterwards and a new peak after Covid. This growth is particularly explosive considering that logistics was barely a thing in the area before the 1990s.

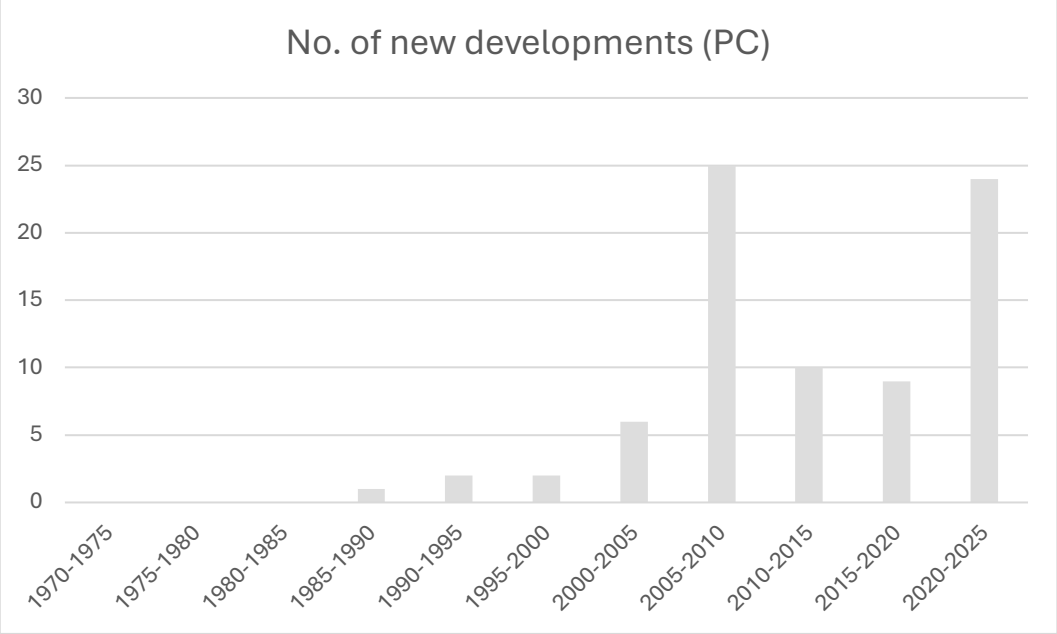

Figure 16 New logistics developments in the province of Piacenza across five-year periods

A direct comparison between the two cases exposes the different trends even more clearly (Figure 17): logistics in Piacenza emerges later with massive growth in the last decades, while Alessandria has a longer history and a steadier trend, looking less affected by the recent developments of the sector.

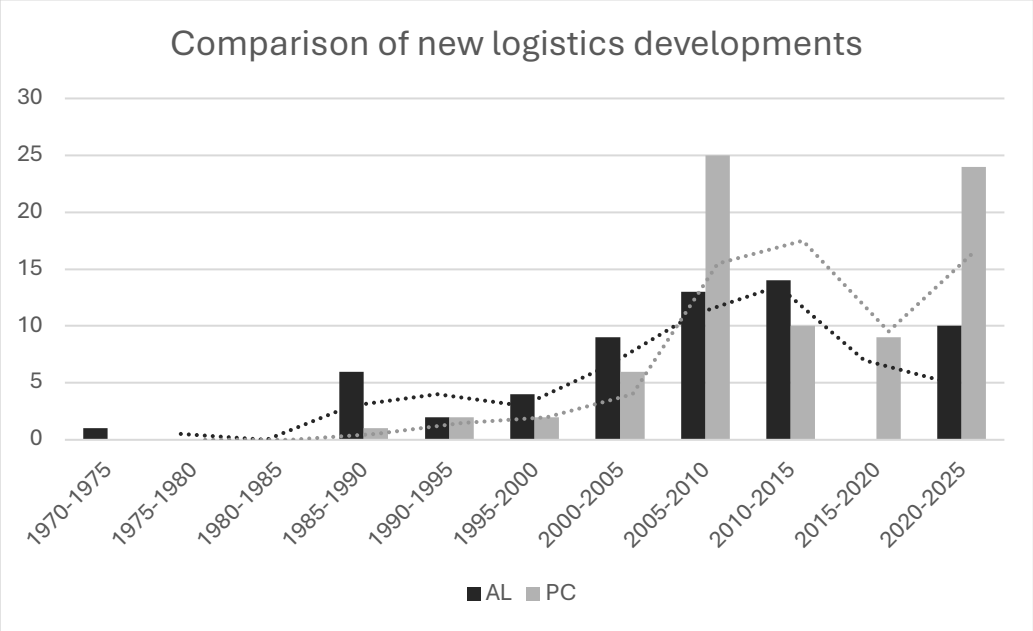

Figure 17 Comparison of logistics growth between Alessandria and Piacenza in five-year periods

The impressions we get from these statistics will be reflected in the history of the advent of logistics we are about to cover – more precisely, the history of what happened *before* logistics in Piacenza. In the 1970s, the last few years of Fordist industrial growth for the area, the local left-wing town council had been working on a government-led industrial plan under the public-private company SALIND, *Società per l'Attivazione e Localizzazione Industriale* ("Company for Industrial Activation and Localization"). The idea was to promote industrial development on available public-owned land, allowing for a better management of companies and keeping control of land in the long term. This vision was heavily opposed to by local business actors, and its boycott ultimately led to a wholesale of large land plots to private investors. The swansong of industrial Piacenza was what actually pushed for a renewal of territorial development strategies, including, incidentally, logistics. 1994 council elections were won by a progressive coalition of non-politician experts led by prominent economist Giacomo Vaciago. Their strategy to bring high value-added functions to the town, reversing the brain drain to nearby Milan. Logistics was not in their agenda, but a group of road transport companies successfully lobbied to get their support, and together established Piacenza Intermodale, a limited company with 19 associates

from the sector, which was meant to manage commonly owned land and rail facilities later on. Projecting massive growth, a vast surface of 2mln sqm was zoned in the urban plan for industrial and logistics. The area could count on great transport infrastructure, but there was no experience in (civilian) logistics to back the claim that it could turn into a primary hub – indeed, the waning industrial fabric was a compelling argument that there was not much to export from Piacenza: this was the logic why a primary intermodal terminal had just been built by the national rail in nearby (and wealthier) Parma. Of course, this was short-sighted at a time of great reshaping and extension of production chains, but it did, at first, frustrate the proponents' ambitions. The response came from the market: through contacts in the carpentry industry, in 1998 IKEA managers chose Piacenza for what would become a primary logistics hub for Southern Europe. Belgian logistics company Katoen Natie also expressed an interest. Such noteworthy names helped local official to get funding for rail infrastructure. The gamble was starting to pay off.

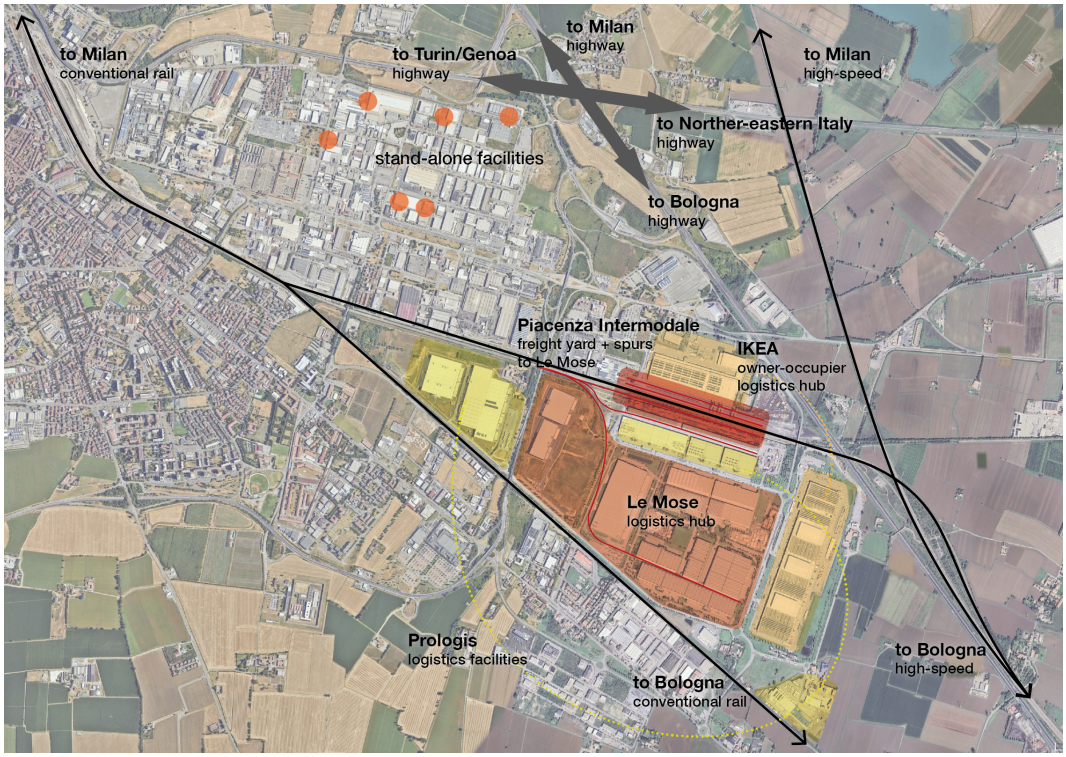

Figure 18 Components of Piacenza Le Mose sprawling logistics terminal (author's elaboration)

A crucial element of the plan was to set up an effective and fair governance system that would protect the public interest. A survey of other Italian and international logistics hubs showed that a public-private partnership looked like the ideal instrument. Piacenza Sviluppo was established between the city council and the members of Piacenza Intermodale, the local Chamber of Commerce and other interest groups among the partners. The partnership was supposed to jointly manage the land of the future logistics hub, which had been bought out from the indebted AUSL, the local healthcare authority. This was when the problems arose: the local court did not clear the registration of Piacenza Sviluppo. In 1997, the council resorted to a *PIP* or *Piano Integrato Produttivo* ("Integrated Production Plan"), a form of public auction allowing them to select the most suitable applicant and to offer a 99-year concession instead of selling the land for good. The perspective of a new power balance which would give the government much more control probably alarmed local real estate notables, who managed to obstruct the logistics hub project and scare off heavy-weight investors like Katoen Natie – which, interestingly, ended up in Rivalta Scrivia a few years later. The failure of the Piacenza Sviluppo plan ultimately led to standard land sales, notably to Italian insurance behemoth Generali, and to private-led development plans. In 2002, IKEA and other local investors presented their own plan to officials, and in 2004 a controversial expansion of the hub from 700,000 sqm to 2.5mln was approved – meanwhile, logistics companies agreed to pay EUR 1,850,000 as an environmental compensation for their operations. Over the following decades, the logistics hub would tremendously expand in a disorderly fashion (Figure 18), and, most importantly, without coordination in terms of industrial development plans, resulting in today's piecemeal ownership and management (Table 7).

Table 7 Piacenza hub logistics actors

facility	owner/asset manager	operator
Le Mose logistics hub	Generali Real Estate	several (industry, retail, shipping, 3PL...)
Piacenza Intermodale freight yard	Hupac (leasehold) and Piacenza municipality (land)	Hupac (intermodal operator)
Prologis (multiple warehouses)	Prologis	several (retail, shipping, 3PL...)
IKEA (multiple warehouses)	IKEA (owner-operator)	
stand-alone assets	major (Kryalos, Unicredit Leasing) and minor asset managers	several

Piacenza's logistics hub is complemented by an equally primary logistics hub in nearby Castel San Giovanni (Figure 19). Lying some 20 km from Piacenza, the 15,000-resident town hosts one of the largest logistics hubs of the country, with a total footprint of around 2mln sqm, developed over time with successive expansions. Unlike Piacenza, it is mostly in the hands of the local government, with logistics companies in charge of most of the aspects of the upkeep. Albeit the starting conditions were not dissimilar from those in Piacenza, the governance of logistics that emerged took another path.

Just like Piacenza, Castel San Giovanni was mentioned in provincial plans for industrial-logistics clusters (Amministrazione Provinciale di Piacenza, 2000, p. 96) and received funding to build a freight yard. The local

economy was, again, undergoing the transformations of globalization, and transitioning from delocalizing industry towards more promising sectors was a great concern for the local government. The town itself lies in an optimal location for logistics: it is a railway line connecting Turin and Genoa with the rest of Northern Italy and the same goes for the highway, with direct access from industrial facilities. This had put Castel San Giovanni under the radar of logistics at same time as Piacenza – in 1996, an operator like IKEA was considering it (and ultimately going for Piacenza, possibly thanks to cheaper land and swift bureaucracy, as the Le Mose hub was at a more advanced stage of approval). What gave momentum to the project was a big acquisition of greenfield from a bankrupt farm by a local real estate investor. His interest to develop industrial assets aligned with the town council's hunt for alternative employment opportunities for residents. This led to a political debate as to the goal of new developments, including the sectors deemed more desirable, compensation measures, etc. Importantly, the town council reserved a substantial part of fixed-price developable land – 50,000 sqm, later expanded – to local businesses, so the whole project would also benefit local businesses.

Figure 19 Components of Castel San Giovanni logistics hub (author's elaboration)

The logistics hub itself was first planned for a total area of 880,000 sqm. While the land itself was owned by two investment partners through the local company Vailog[48], the development was designed through negotiation with the town council, so the local government would still have some control over the developments, the future tenants and the general management of the hub. All developments were managed by Vailog through general contractor Engineering 2K[49], which has then been in charge of all subsequent developments. After completion, Vailog remained their owner and leased them as a real estate investor[50]. The success of the first few years led to

[48] A major real estate company controlled by local entrepreneur Bertola. In 2015, Vailog was absorbed by logistics real estate investor-developer SEGRO. See website www.segro.com/countries-repository/italy.

[49] Engineering 2K is a general contractor specialized in logistics real estate and is part of Gruppo FBH (controlled by entrepreneur Bertola, who also managed Vailog). See website www.eng2k.com.

[50] Some assets were later sold to other international investors (hatch pattern in Figure 19).

shape a fully-fledged *Parco logistico di Castel San Giovanni* ("Castel San Giovanni Logistics Park"), which was officially established in 2004. The developers were put in charge of providing an array of extra services for warehouse workers and truck drivers, as well as the maintenance of common areas and security services with a single point of access. The high quality of the hub and the vision behind it made it easier for developers to attract high-level names as tenants, which is something government officials acknowledge as key to the success of the operation:

> "At least more than 60% of the success of this hub is the work of those who first proposed it. I think the town council did its bit well by reducing bureaucracy to the bare minimum. We managed to give clear replies to companies, between the time of their application and the moment they could begin with the construction no more than four months would pass. And I think this was the trump card to lure several companies into choosing this hub: a careful and qualitative service from the investor and an effort to do its bit by the town council"
>
> [former mayor of Castel San Giovanni, author's translation]

In the following years, the logistics hub was a victim of its own success, attracting multiple big names in the sector (see Table 8 for a summary of owners and operators). While its growth put it on the map of strategic areas for regional and provincial planning, securing some crucial transport infrastructure, logistics companies put pressure on the municipality for further developments, leading to as many as five expansion phases, which were built outside the original premises of the logistics park (see stand-alone developments in Figure 19). In the rush, these expansions were not designed as carefully. Like in many other municipalities, the use of *Variante* became the standard, bringing fast money to the municipality but ignoring the long-term potentials and risks of installing more logistics:

> "In the meantime [the hub] di not grow anymore with an organic project, but *Variante* after *Variante*, which is beneficial from the point of view of revenues for the municipality, because

> they brought in a lot of money [but] did not allow to design a harmonious project. I think an administration must pursue two goals: one is economic, which is needed for local development, and the other one is that of services. The hub of Castel San Giovanni [is] really well managed. What might have been missed is that the potential spillover on this town's wealth was not appreciated."
>
> [interview with former Castel San Giovanni town official, author's translation]

In 2012 a new big name expressed its interest: Amazon, on the hunt for its first warehouse in the country, whose managers ultimately chose the location partly thanks to the good PR of town officials. Today, Amazon's warehouse is in the hands of Italian asset manager Coima SGR[51]. Besides the infrastructure, the selling point for the municipality proved to be the openness and efficiency of local officials and bureaucracy, attracting a host of high-level tenants, such as Geodis, DB Schenker and GXO, as well as some value-added logistics, with high-end fashion brand Moncler's global logistics hub and QA facility. Crucially, this policy was kept over time by the following town councils – an effective form of territorial marketing. To this day, Castel San Giovanni is regarded as a best practice in logistics development, with a history of good governance and tolerance by the local community.

[51] See website www.coimasgr.com.

Table 8 Castel San Giovanni hub logistics actors

facility[52]	owner/asset manager	operator
Castel San Giovanni Logistics Park	SEGRO (formerly Vailog) + minor owners (AEW, Axa RE IM, Coima SGR, Savills IM)	several (industry, retail, shipping, 3PL… notably Amazon, DB Schenker, GXO, Renault, SDA)
Amazon	Coima SGR	Amazon
P3 Castel San Giovanni	P3 Logistics Parks	Geodis

The third and much less relevant logistics hub in the province is that of Monticelli d'Ongina, also known as Magna Park. Located along the same highway as Castel San Giovanni, it lies at approximately the same distance from Piacenza but at the opposite end. A small community of 5,000 residents, at the time of the first logistics developments its situation in terms of economic development was similar to that of the other towns we are analyzing. Falling under the umbrella of the logistical area of Piacenza, Monticelli found itself targeted by business interests even without actively working to attract the sector. In 2002 Lyreco, an international office supplies company, reached out to the town council to propose a 100,000+ sqm warehouse on a greenfield that was not developable according to the urban plan of the time. Still, the proposal was submitted to the relevant officials in the Province, who approved the development – after the urban plan had been designed, the municipality had been mentioned in regional planning as a potential logistics hub, so there was an argument to support to the decision.

[52] Irrespective of the developer, all facilities were designed by Engineering 2K.

This led to another massive development by logistics developer Gazeley[53]. In 2005 the company requested a *Variante* to develop 362,000 sqm of greenfield and agreed to pay for the implementation of road infrastructure. The disorganized development was finally addressed in 2010's *Piano Territoriale di Coordinamento Provinciale* ("Provincial Territorial Coordination Plan"). The plan mandated that the municipalities of Monticelli and neighboring Caorso draft an *Accordo territoriale* ("Territorial agreement") to coordinate a plan for a new logistics hub. The regional plans were adamant that logistics facilities should only be developed in specific industrial and intermodal clusters. The total developable surface was established at a comfortable 4mln sqm. The hub, it was stressed, ought to have some form of coordinated governance. However, the *Accordo territoriale* was never followed by an executive plan and expired at the end of 2022 thanks to new regional planning norms. The town council tried to pass a logistics development plan at the last minute before the expiry of the old norms (Piacenza Sera, 2021a), but it was rejected by provincial authorities (Piacenza Sera, 2021b). What were well-meaning territorial plans of mid-scale governments got stuck in the mud of bureaucracy and political tactics and ultimately failed to establish an effective form of governance for a massive logistics hub like the one that was envisaged (and has not materialized to such extent yet), with poor implementation of zoning and of compensation measures such as ecological corridors and landscape conservation.

The most recent addition to the logistics landscape in the province of Piacenza is the planned logistics hub in Fiorenzuola d'Arda. Again, the 15,000-resident town lies around 20 km away from Piacenza and is optimally connected to road infrastructure, with an access to A1, the main North-South highway of the country. Fiorenzuola was already mentioned as a primary industrial hub in provincial planning, along with all the other locations analyzed above (Amministrazione Provinciale di Piacenza, 2000),

[53] Gazeley was an important European logistics developer which was later acquired by GLP. See www.glp.com/global/article/glp-completes-acquisition-gazeley-and-establishes-two-new-european-funds.

but it did not proceed to draft a specific plan for logistics. New regulations from 2017's *Piano territoriale di area vasta* ("Greater Area Territorial Plan"), which have replaced the *Piano territoriale*, require an *Accordo territoriale* to proceed with 'significant' industrial-logistics development plans. In 2022, the municipality of Fiorenzuola produced one together with the neighboring municipality of Cortemaggiore, located just across the highway, with the approval of the Province (Provincia di Piacenza et al., 2022). This was not without controversy, as the agreement seemed, again, to be reached just in time to avoid forthcoming, more restrictive regulation which would eventually be included in the urban plan in the works (Trespidi, 2022). Regulation is very clear as to the responsibilities of the relevant authorities to implement and enforce the agreement, and the planned developments, facilities and compensations look sensible – on paper. Not much has happened at the time of writing, but hopefully experience with previous case histories will guide the municipalities in relationship with the power and influence of real estate actors.

These chronicles leave on to wonder whether regional planning has taken note of last decades' shambolic growth of logistics. The most recent regional integrated transport plan or *PRIT* (Regione Emilia-Romagna, 2021a) illustrates hubs and mobility corridors along which further developments should concentrate (Figure 20). While detailed infrastructure planning and related land use are not what the document is supposed to regulate, the PRIT concedes that past developments have led to logistics sprawl and lists the usual recommendations to steer away from it, e.g., functional specialization, modal integration, digitalization, European TEN-T standard upgrading, interregional coordination, etc. It also highlights the responsibility of authorities in monitoring the locational choice of future and growth of existing logistics hubs. These indications are backed up by land use reductions mandated by the new regional planning law (Disciplina regionale sulla tutela e l'uso del territorio, 2017). According to regional policymakers and planning officials, the whole framework of the planning law is designed to clarify the responsibilities of each administrative levels and avoid land use and sprawl by encroaching on the planning prerogatives of other government levels.

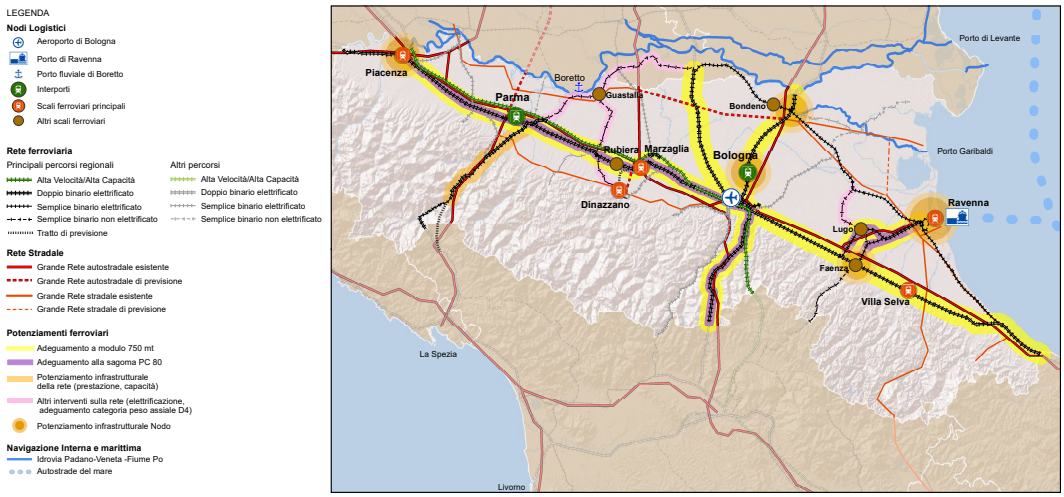

Figure 20 Map D "Logistical system" from Emilia-Romagna regional integrated transport plan (Regione Emilia-Romagna, 2021a)

The multiple Simplified Logistics Zones of Piacenza

As a strategic logistics hotspot, Piacenza has also been included in a Simplified Logistics Zone – actually, several. The municipality of Piacenza was listed in the first decree establishing the Genoa SLZ (Conversione in legge, con modificazioni, del decreto-legge 28 settembre 2018, n. 109, recante disposizioni urgenti per la città di Genova, la sicurezza della rete nazionale delle infrastrutture e dei trasporti, gli eventi sismici del 2016 e 2017, il lavoro e le altre emergenze, 2018), recognizing its potential as a part of the port's hinterland (Figure 13). Later on, the same areas were also included in the application of another SLZ designed by Regione Emilia-Romagna based on the port of Ravenna, a smaller seaport on the Adriatic Sea (Regione Emilia-Romagna, 2021b), resulting in SLZ areas in Piacenza being eligible for both SLZs (Figure 21). Even though Piacenza itself is not included, another SLZ has been proposed based on the port of La Spezia which includes several areas in the neighboring province of Parma, highlighting the functional link of Western Emilia-Romagna with multiple ports on the Tyrrhenian Sea (Regione Liguria, 2024). The SLZ was approved in late 2024 (DPCM del 10 ottobre 2024, 2024) and its board nominated shortly

after (DPCM del 9 gennaio 2025, 2025). The fiscal and bureaucratic benefits are the same as the ones described in the previous chapter, with the addition of EU-approved State aid for virtually all areas of the municipality of Piacenza and many of the surrounding ones (Dipartimento per le politiche di coesione e per il sud, 2025). The overlay of multiple SLZs and other measures was troublesome for authorities, who had to navigate between different regulations planned with different logics.

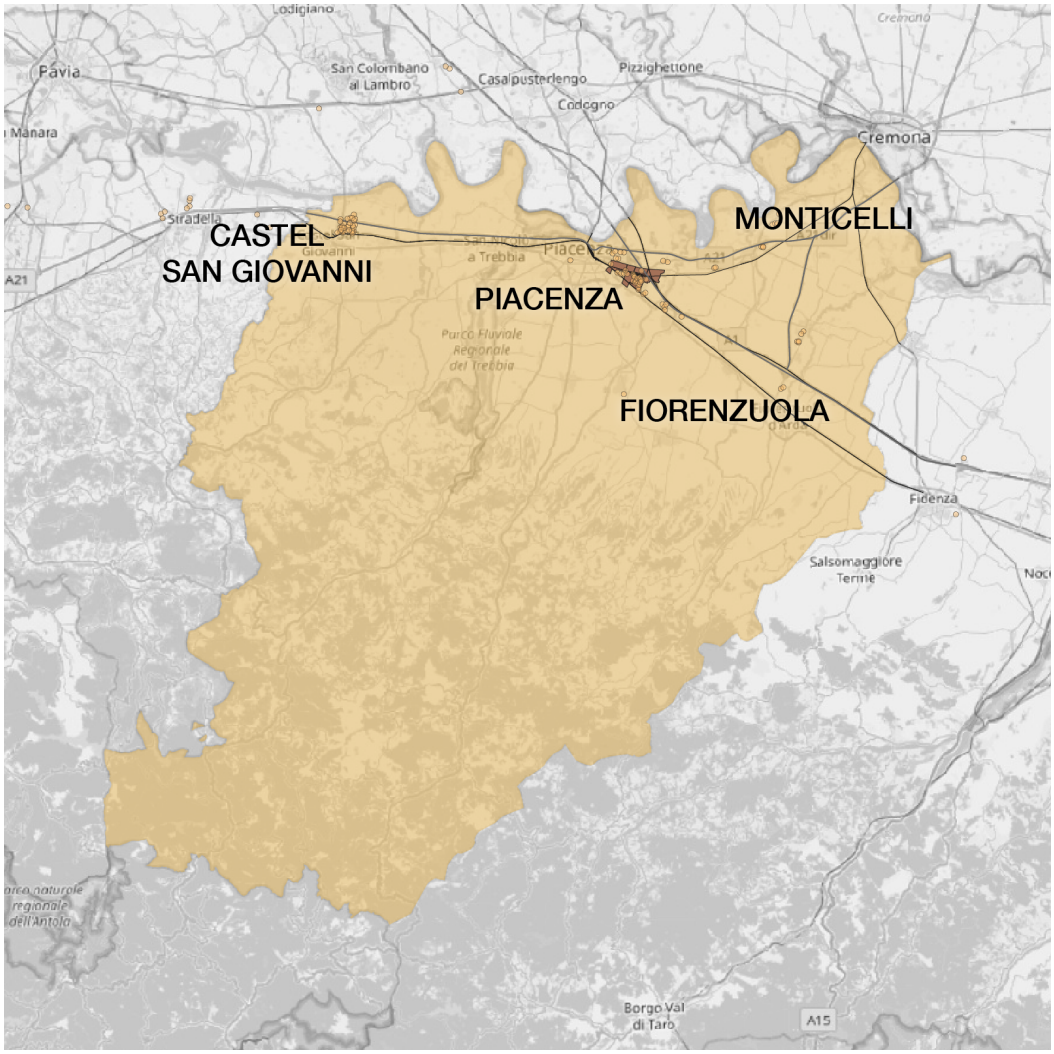

Figure 21 Map of logistics facilities (yellow dots) in the province of Piacenza, with SLZs in brown (author's elaboration)

The SLZ development plan was drafted through a public consultation with local authorities as well as business stakeholders and workers unions,

and with support from public and private research entities, such as region-owned 'sustainable growth' research institute ART-ER[54], logistics and transport-focused research foundation Fondazione ITL (more on this below) and SRM Services[55], an economic development research foundation backed by Italy's biggest bank, Intesa Sanpaolo. In contrast to the application phase, which had a clear bottom-up nature, the governance of the SLZ is much more concentrated in the hands of the central government. As established by the SLZ implementation decree (Regolamento di istituzione di Zone logistiche semplificate (ZLS) ai sensi dell'articolo 1, comma 65, della legge 27 dicembre 2017, n. 205, 2024), the steering committee includes the President of the relevant Region, the President of the Port Authority (who is designated by the central government) and four representatives of relevant ministries. Local elected officials, such as mayors of SLZ municipalities, do not have voting rights. Therefore, the governance of the SLZ gets a much more centralized character, making it a potentially more political instrument than it might otherwise look. Anyway, SLZs in Piacenza do not seem to stimulate as much interest and political momentum as they do in Alessandria – possibly logistics is already so thriving that it does not need to be overemphasized.

Actors and power geometries in Piacenza

Just like in the case of Alessandria, the geography of logistics in Piacenza is shaped by multiple actors with matching or conflicting interests and varying degrees of power to enact their agendas. There are some peculiarities to this case which may be traced back to the specific infrastructural and socio-economic landscape of the area and, most importantly, the temporality of the development of logistics. Still, we will appreciate how the ingredients of logistics real estate growth are roughly the same in both cases, including the mounting external pressure of finance.

[54] See website https://www.art-er.it.

[55] See website https://www.srmservices.it.

First, the geography of logistics operators shows how crucial this province is for logistics networks in the country, explaining the pressure of the market for development opportunities. As the map shows, the province of Piacenza hosts logistics facilities linked to companies from the whole country (Figure 22): in addition to the polarity of Milan, many warehouses point to Rome and Central Italy, where a comparatively smaller yet sizeable number of logistics operators as well as Italian or transnational companies have their headquarters. In turn, this links them to the global behemoths of logistics based in other Western European countries and in the US. Like in the case of Alessandria, some warehouses are also linked to manufacturing companies from Northern Italy. The general impression is that Piacenza works as a country-level hub, with no specific rooting in the local economy – of course, the proximity to the urban areas of Milan and its city-region make the province a strategic hub, but the presence of primary 'big boxes' of corporations like IKEA and Amazon, as well as the massive investments from the likes of Prologis and SEGRO, indicates a primary role.

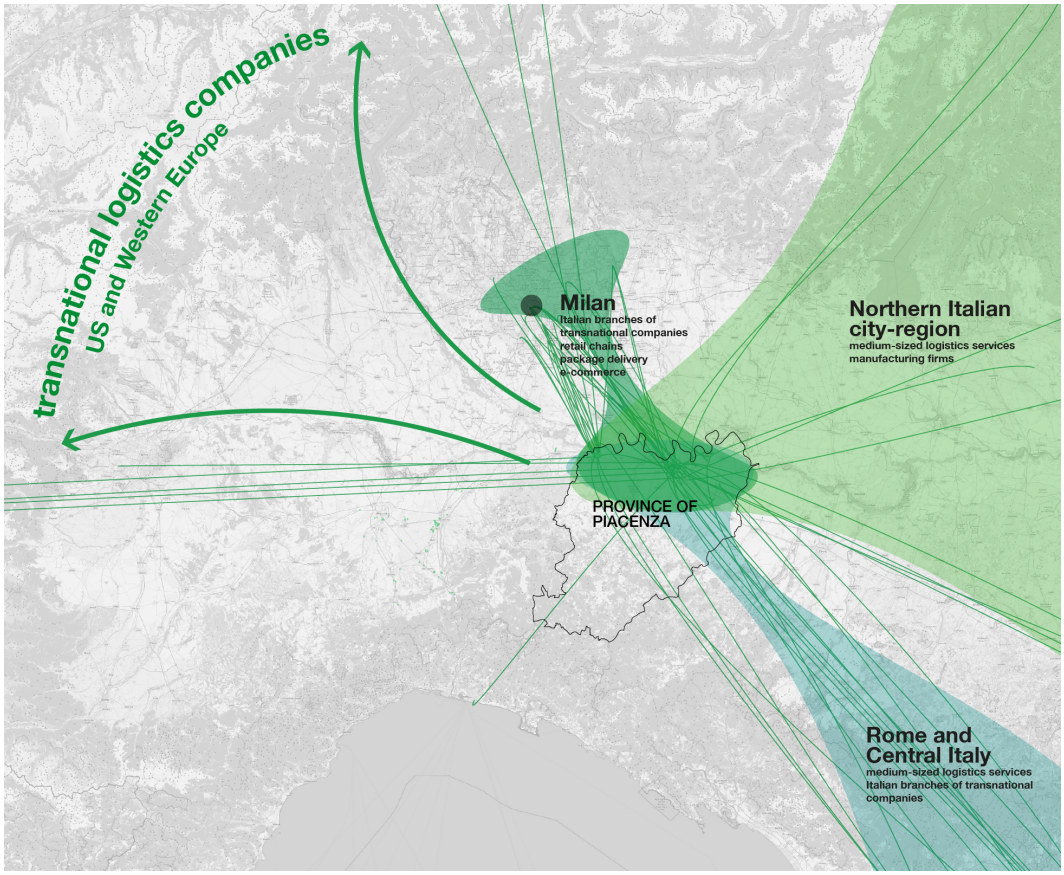

Figure 22 Relational map of warehouses and their respective headquarters in the province of Piacenza (author's elaboration)

The histories of logistics in the province of Piacenza highlight, once again, the primacy of local government initiative in spurring logistics development – to be more precise, the responsiveness of local governments to investors' interests and the alignment of their agendas. In the case of the municipality of Piacenza, the spark that lit the interest in logistics was the interest of local shipping companies, whose lobbying was well received by the town council and channeled in an ambitious development program. In Castel San Giovanni, the first move came from local real estate investors, whose ambitions to develop a logistics hub were listened to by the local government. Still, free rein was not given to private actors – at the cost of missing some substantial opportunities, like IKEA which went for Piacenza – but plans were carefully discussed and devised in the interest of the local community and economy. The advent of logistics in Monticelli looks more like many other unfortunate instances of unplanned logistics development

small municipalities in the area have suffered. Massive greenfield was transformed into developable land under the pressure of an 'unmissable' opportunity, only leading to more logistics growth. Planning came downstream of these early developments and, even then, was still biased by the pressure of logistical frenzy. A similar pattern can be seen for Fiorenzuola, as well as in several other small communities which may or may not be favorable to the sector (Il Piacenza, 2021; Salviamo il paesaggio, 2021).

These various sagas of logistics growth in different locales also show the limited, yet present, extent of higher scales of government. On paper, regional and provincial planning are meant to provide municipalities with clear guidance at a higher scale, which is supposed to be the ideal level to govern logistics – and is also the most practical way, given the federalist approach to urban planning in Italy, with different legislation in each region. Our cases expose how planning regulations turn out to be very fickle and can be easily reshaped to accommodate the evolving political positions on logistics. When an opportunity is convincing enough, exceptions to land use restrictions are easily obtained by negotiating over *Variante* implementations, while projects on legitimately developable land end up being blocked if popular and political opposition gains momentum. This seems to mirror an arc in the enthusiasm for 'logistics promises', where an early interest from local politics in logistics investments progressively grows into an overload, overwhelming the local community and spurring hostility. After decades of logistical chaos, it does not surprise that provincial plans highlight the need to cluster logistics only in already existing hubs (Provincia di Piacenza, 2024), and the municipality of Piacenza is willing to enforce strict land use standards and require that an actual common logistics hub management be established (Il Piacenza, 2025). According to regional officials, the general design of plans may not be transfigured for new development projects if they are not consistent with guidelines:

> "You try to fit this new project in, which you had not considered before, you try to understand if this new project is still consistent with the Plan strategy [...] *Variante* procedures do not

> allow for exemptions. [...] If I told you that you cannot do that there, it is not like you can do it if you do a *Variante*. If I told you you cannot do that [...], but you can do it under these conditions, then we can look into it and see if it still fits in the strategy of the higher-scale Plan... So the exchange is always about the compatibility between the strategies of the two plans"
>
> [interview with Regione Emilia-Romagna planning official, author's translation]

The regional government takes pride in being at the forefront of land use reduction (Regione Emilia-Romagna, 2023, 2024), going as far as to have a public dashboard tracking compliance with the 3% land use limit for each municipality (Regione Emilia-Romagna, 2025). Responsible land use is supposedly at the heart of the planning law, whose new version was approved in 2017, but critics have been wary of the actual goals of the new law even before its approval (Agostini, 2017). After the first few years, civic actors are dissatisfied with the implementation of the law, noting loopholes in legislation and little interest in enforcing the principles (Legambiente Emilia-Romagna, 2024). The SLZ norms themselves jeopardize attempts at governing land use, as delays for authorization are shorter, giving authorities less time to analyze projects, and stakes are high for massive projects, putting pressure on government authorities to accommodate 'unmissable' opportunities (Maggiori, 2025). All in all, a shift in the opinion on logistics seems to be happening in the political narrative and in planning, but its translation into an effective praxis is dubious. Experience shows it is the attitudes of individual political and business actors that ultimately shape logistics development, in spite of hierarchical planning or stated objectives.

When it comes to private actors, we notice some specificities in the history of logistics development in Piacenza. It still ends up evolving into today's mostly financialized market of logistics assets, but Piacenza exposes a different way this was attained. The two pioneering logistics development projects in the province, Piacenza Le Mose and Castel San Giovanni, share a history of political activism and business interests in real estate. In both municipalities, logistics real estate development allowed to align political

interests with business interests. In the former case, politics saw the opportunity to open up to a new economic sector to develop in town and a way to dispose of non-strategic assets, paying off debt in the process, while business actors such as shipping companies and real estate developers lobbied to meet the pressure of logistics companies. In the latter case, decision-makers worked to meet the demands of real estate actors without turning a blind eye to the issues of massive logistics facilities development, ensuring long-term sustainability of the sector for the local community (and finances). The 'logistics rush' reflects an era of optimism, when logistics was a new, ostensibly promising sector in the challenging endeavor of replacing a wilting industrial sector. The hasty way it was implemented probably has to do with this, as well as with the mounting pressure of investors navigating a whole new market. In addition, Piacenza could not count on one primary historical actor in the sector who could lay the foundations of local logistics infrastructure and possibly ensure a steady growth path over a longer timeframe. That these two cases parted ways despite their quite similar origins is telling of how crucial the ever-evolving geometries of governmental and non-governmental actors are. Following instances of logistics development seem to follow a more trivial plot of expertise imbalance between developers and local authorities combined with the promise of quick money for struggling municipalities. It was not until the last few years that higher-level planning (has been stating to) be working on taking back control of logistics-related land use, with long-term effects still to be assessed. Still, the attractivity of such massive developments and the detachments of investors and, to an extent, logistics operators, from the local community favor a trend that hardly takes into account the future of these areas. The latter is a crucial difference between financialized logistics and traditional industries, which, by design, were much more strongly engaged with the local community. This divide is limitedly reduced by compensation efforts, which come out more of ESG compliance and PR textbooks than from a genuine interest of far-removed logistics investors.

Similarly to Alessandria, local public stakeholders have gathered in a logistics-focused alliance. *Istituto sui Trasporti e la Logistica* (ITL)[56], a public institution-led foundation, was established in 2003 and includes local and regional authorities as well as universities and the port authority of Ravenna, the region's only seaport. While not among its official members, the foundation's board includes a local Confindustria (employers' federation) representative. Its "strategic mission" consists in "fostering relationship networks among local authorities, companies and educational institutes" with the stated aim of "contributing to the development of transport and logistics [...] through research, consultancy and training" (Istituto sui trasporti e la logistica, 2025, translated by the author). The foundation is involved in many EU-funded research projects and provides logistics operators (or really any kind of company that is interested) with consultancy services, as well as assisting local authorities with logistics-related issues. (Interestingly, a long-time ITL R&D employee, Monica Patelli, was elected President of the Province of Piacenza in 2022, after more than a decade of experience in logistics.) ITL boasts a long list of public and private clients, expressing an ostensible effort by local governments to promote well-planned logistics. Compared to Alessandria's SLALA, what transpires from ITL is less of a focus on territorial marketing. We rather observe an effort at a more flexible approach to logistics development through the vehicle of a foundation. Possibly, the demand for logistics is such that there is no need to narrate the prophecy of a logistical renaissance – quite to the contrary, the scars logistics has left in the area now make it harder to sell it with the usual set of arguments. Perhaps for the same reason, neither the government nor business actors seem to be very concerned with the development of more transport infrastructure. Highway access is optimal and multimodal transport has not proved crucial for the success of local logistics so far – both Le Mose and Castel San Giovanni have had virtually inactive freight yards for decades which are now being reactivated, at least according to political declarations (Il Piacenza, 2024a, 2024b), but the purported goal is modal shift rather than development of freight volumes, as the priority is to

[56] See website www.fondazioneitl.org.

appease the local community's bitterness with the consequences of road freight. The regional government has also set up an agreement with public and private partners working in intermodal transport, *Emilia-Romagna Intermodal Cluster* (ERIC)[57]. ERIC is meant as a tool of territorial marketing for the intermodal infrastructure the region can boast, organizing conferences, joining international business fairs, etc. Albeit differently, ITL and ERIC echo the soft power of Alessandria's SLALA in promoting the logistical potential of their territory and steering policies in the interest of governmental and non-governmental actors. The purely financial actors do not seem to interact with these organizations, possibly because their involvement is strictly limited to optimizing yields no matter the underlying economic sector.

An analysis of logistics development axes in the case of Piacenza (Table 9) reveals some notable differences with respect to Alessandria (Table 6). The first column describes the relationship between financialized actors, government scales and intermediary bodies in the context of private facilities development. Compared to the previous case, here the regional government insists on its role as planner, with updated planning instruments that are meant to prevent further logistics sprawl. This contrasts with the attitude of municipalities, which lack the resources or incentives to rein in the pressure of financialized logistics. This is all the harder considering the massive footprint of private logistics hubs in the area. As for public infrastructure, the actors' effort (and narrative thereof) is unambiguously lower. Compared to Alessandria's case, which is currently benefitting from substantial infrastructural investments and lobbying for further funding, in the case of Piacenza the interest for new infrastructure seems lower. This might be because there is currently no need for major investments – road access is optimal and rail freight transport is barely used in major logistics hubs in the area. Another reason might be that demand for logistics is already strong, and with a globally healthy economy there is no need to push for an alleged economic panacea.

[57] See website https://www.ericintermodal.it.

Table 9 Two axes of logistics growth coalitions in the province of Piacenza

actors	**private facilities (warehouses, hubs…)**	**public infrastructure**
national government	-	provides with funding from State and EU budget for transport and logistics infrastructure (rail yards implementation)
regional government *(Regione Emilia-Romagna)*	has *ex ante* planning role, promotes change of planning paradigm to avoid *Variante* misuse and unrestrained sprawl	focuses on consolidating existing infrastructure to favor the consolidation of logistics hubs
local government *(municipalities of Piacenza, Castel San Giovanni, etc.)*	active actors of logistics development promotion, with stronger (Castel San Giovanni) or weaker (Piacenza and smaller municipalities) control over outcomes	have an ex-post approach to infrastructure implementation, the priority being revenue
intermediary bodies *(ITL, ERIC)*	promote the region as a logistics destination	produce logistics expertise for governmental and non-governmental actors

actors	**private facilities (warehouses, hubs…)**	**public infrastructure**
financialized actors chain: global investors, asset managers, developers, RE agencies[58]	independently manage massive logistics hubs (Le Mose, Prologis in Piacenza), keep in touch with local governments and landowners for investment opportunities, negotiate over *Varianti* and compensation measures, co-design logistics planning with municipalities	-

On a final note, the author finds it remarkable that many governmental actors involved with the massive growth of logistics in the municipality and the province of Piacenza did not agree to an interview. This was also the experience of other researchers and reporters working with this case study. No matter the very cautious attitude of current logistics strategies and a narrative of sensible planning and land use reduction, an atmosphere of regret for past laissez-faire policies seems to loom. Of course, the spatial perspective being used intersects with many other sensitive issues, especially in the sphere of labor, but even the utter political and economic aspects of the history of local logistics remain a raw nerve for local politics.

[58] For an overview of financialized actors in the area, see Table 5.

Chapter 8

Discussion

The two cases we have just illustrated expose the intricated relational geometries involved in logistics real estate. While the histories of logistics in Alessandria and Piacenza are anchored in different temporalities, political contexts, economic histories and, trivially but crucially, topographies, their intersections offer food for thought in the realm of logistics development. We will now reassess the experience and data collected on the field in relationship to the theoretical framework built earlier in this work.

Incorporating finance in the geography of logistics

This study has embarked on dissecting the blurry "intersection of finance, extraction and logistics, [sectors that] play a central role in shaping contemporary capitalism" (Mezzadra & Neilson, 2013, p. 8). This work takes on the challenge of dissecting it through the relational geographies that, quite literally, build logistics. The development of logistics real estate is seen from the perspective of political economy and framed as a 'financialized growth machine' that extends beyond the traditional urban realm to connect global capital and local actors of a growth-oriented regime. This is complemented by an effort to provide logistics hinterlands with infrastructure and business-friendly legislation, producing contradictory but possibly synergetic actions.

As we have seen, the driving force behind the most recent phase of logistics real estate growth is its financialization. Logistics typifies the perfect globalized real estate sector global capital can easily penetrate. It

produces standardized ‘assets’ that can be – should be, ideally – replicated across territories and jurisdictions, preparing the field for likewise globalized tenants. Financialization started to penetrate the Italian market of logistics facilities since the 2000s, with an acceleration after 2010. This trend has not spared the cases under study, where massive developments have mushroomed in dedicated logistics hubs, or, often, in sprawling stand-alone projects wherever greenfield was available. From the perspective of investors and, by extension, their asset managers, development opportunities are interchangeable as long as they meet investment-grade standards. In both cases, and most likely across the country, the market is managed as a whole by a handful actors of real estate investment, development and intermediation. Their wide reach, monitoring all the region or even the country, provides capital with all sorts of development opportunities. This system brings the volatility of finance into the real estate market. As investor-owned warehouses grow to become a sizeable part of the market, so does the influence of investors over the assets. Financial logics dictate development choices so as to maximize returns, with ‘prime’ locations and state-of-the-art ESG standards for the safest ‘products’ or more risky refurbishments of older or remote industrial buildings for ‘opportunistic’ investors. From the perspective of investment strategies, there is little incentive to contribute to a long-term vision of territorial development. On the contrary, high-profile financialized logistics tends to select an elite of ‘high profile’ tenants from equally notable names, which may or may not have a relationship with the local context. Besides, the instability of logistics vis-à-vis the local context is intrinsic to its nature of a rent-based system. Within this structure, most logistics operators are tenants and lease contracts are short-term, allowing for ‘break options’ as often as every three years and frequent repricing of rents. Unsurprisingly, the vast majority of logistics facilities found in our case studies – virtually all of the large-sized ones – are ‘build-to-rent’ rather than with an owner-occupier. The owners themselves frequently change, in a reshuffling of assets among investment funds. These techniques allow for logistics to effectively liquify itself and become ‘footloose’: logistics space is rendered ‘fungible space’ (Danyluk, 2019), just like its workforce.

The arrival of financialized logistics into Northern Italy's landscape

The force of financialization is deployed onto the evolving urban landscape of Northern Italy. We observe a coalescing city-region with a history of heavy industry-led urbanization, and a more recent evolution towards a globalized economy via the transformation of Milan into a 'global city'. Conveniently located at the crossroads of key transport infrastructure, the provinces of Alessandria and Piacenza share a history and present of logistics hotspots for Northern Italy, absorbing the thirst for investments coming from financial actors, as well as that of transnational logistics operators looking for flexible solutions. Via this process, Alessandria and Piacenza take the shape of *logistical hinterlands*: supply zones for the urban metabolism where the impalpable flows of capital and goods touch the ground. Logistical hinterlands, more or less far removed from the built-up city, emerge where the social, spatial and political-economic conditions are ideal. Clearly, the extent of logistical facilities in these areas is out of scale with the local needs of consumers or industries, but this should not come as a surprise as we consider the higher scale logistics networks deal with. It is precisely their relative emptiness within their extended urban context that makes them so appealing. Albeit with different historical backgrounds, the two areas under study converge in their suitability for logistical facilities, and the financial engine of logistics turbocharges their growth. Given the incentives to local communities and the limited power of higher-scale planning authorities, logistics development tends to spiral out of control of local and regional governments, leading to disorderly logistics sprawl. The speed of this process is illustrated by the direct contact between financial actors and local authorities, dodging higher government echelons – crucially, those invested with territorial planning. Naturally, the relative weight of the actors involved leads to think that the logistical hinterland is a passive canvas for investment plans to spread out on. While some in some instances it might indeed look so, in others we observe an active effort to make a location palatable for logistics companies. The histories of Le Mose in Piacenza, of Castel San Giovanni, of Rivalta Scrivia and Alessandria recount

the multiple strategies local business actors and government officials have strived to ‘get the territory right’ for logistics (Schindler & Kanai, 2021). This includes, of course, infrastructure implementation, but also plain old marketing.

With the impressive growth that ensued these marketing attempts, municipalities got overwhelmed by the power of the market, losing control of logistics growth and starting to look more like passive hinterlands. That is what has happened both in Piacenza Le Mose and in Rivalta Scrivia, the main logistics hub in the province of Alessandria, which are systematically fully let, pushing new developments in neighboring municipalities. The isolated, unplanned nature of these projects means local governments – mostly small, understaffed municipalities without the skills and preparation to deal with massive projects – do not have a plan for logistics development or the ability to negotiate and can only take advantage of planning taxes and compensation measures at the expense of long-term visions. A ‘growth imperative’ also tends to trump other considerations. While some older projects were initiated by local entrepreneurs or real estate investors, like Rivalta Scrivia, or even local authorities, such as in Piacenza, in more recent instances projects are put forward by faceless, mostly international, investors. The disconnect between the latter and the local community gives even less incentive to work on mutually beneficial projects beyond what is needed to comply with ESG standards. The mechanisms of finance may join global capital and hinterlands, but it also results in anonymity and disconnect between the actors involved.

The topography of Northern Italian logistics: logistics sprawl

The encounter between the power of finance, an optimistic real estate market and the ambiguity of governmental actors gives way to unhindered logistics sprawl. While large warehouses are only a piece of the assemblage of infrastructure making logistics operations possible, their footprint is substantial, and their scattered locations magnify their impact. Without the enforcement of regional-scale logistics planning and with developable land

getting scarcer and expensive in existing logistics hubs, investors scout greenfield wherever transport infrastructure is good enough and workforce is potentially available. This pattern is even more straightforward in the stand-alone developments that have become more common in the last decade. Sprawl is hardly limited by higher-scale authorities: while projects must be submitted to Regions for approval, this is performed as a double check on urban regulation rather than a step in a co-decision process. Developers are not interested or required to interact with mid-level government scales, and if ever regulations are stricter in a given Region, the widespread road network and the short distances make for an easy loophole. The same goes at the municipal level. Neighboring municipalities are not mandated to plan land use comprehensively, so developments can just jump a few minutes away towards friendlier authorities. Unless enforced, building large, single-landlord logistics hubs is not the aim. In principle, managing a whole hub as a single property would effectively privatize its management, defying public scrutiny over logistics operators, but there are downsides. Besides the likelihood of higher costs and the complexity of several landlords to gather land from, there is a risk of exhausting the local labor pool or expose warehouses to 'choke points', where hubs with limited road access become an easy target of strikes and blockades (Chua et al., 2018). In addition, even though large, single-landlord logistics hubs are ideal for investors, since the likelihood of zero-vacancy is higher with many potential operators in proximity, large undeveloped plots are a luxury. In the thick urban fabric of Northern Italy, many opportunities lie in small municipalities looking to capitalize on cheap greenfield. As demand is still higher than supply in the ripening Italian market, it is common practice to build speculative developments, i.e., obtain building permissions or even start constructing before securing tenants. After all, most logistics activities are not overly specific in their layout or feature requirements. The buildings themselves are designed for easy customization: the 'big boxes' can be split or merged relatively easily. This way, the immaterial flexibility of warehouses as assets is replicated in their material features.

The relational geography of Northern Italian logistics: local, global, and everything in between

Between hyper-global and -local polarities, a multitude of actors complexifies the growth of logistics real estate. In both cases, we observe the limited ability of regional authorities to steer logistics, in spite of their prerogative on territorial planning. Their self-described role is expressed through a vocabulary of “coordination”, “alignment”, “consistency” and so on, but whether this is enforced in practice is not clear. Emilia-Romagna advertises its ostensible effort at reversing land use, possibly as a reaction to past laissez-faire policies and recent floods blamed on soil sealing (Imperatore & Frazzetta, 2024). Piedmont is less vocal about the issue, with an older planning law and, probably, little political interest in governing logistics-related land use, as denounced by opponents (Serra, 2025). In this planning context, the power to authorize logistics developments turns out to be a matter of direct negotiation between global capitalism and local governments (Cidell, 2011), while higher government scales are excluded from the logistics growth machine. Besides, regions are irrelevant in infrastructure building, as power and, especially, funding is in the hands of the central government. Countering normative powerlessness is the pronounced political activism for logistics-based economic development. The interest in fostering the sector is expressed by the promotion of variously shaped public-private coalitions working on multiple dimensions of logistics such as business development, research, training and marketing. In Emilia-Romagna, ITL brings together government, research institutions and industry lobbies to provide consultancy services to public and private clients. It also partners with local vocational training institutions to produce logistics specialist curricula. In Piedmont, SLALA has a stronger growth-oriented attitude, with substantive territorial marketing efforts. Among its members there is a higher ratio of non-governmental representatives, giving it the shape of a lobbying initiative rather than that of a consultancy. While it also provides consulting services to local authorities, it has a clear focus on

promotion: yearly reports are published on different angles of the region's, and especially Alessandria's logistics potential and the resulting need for specific infrastructure or legislation, sometimes in collaboration with other groups of interest (Sozzetti, 2021, 2022, 2023; Unioncamere Piemonte, 2024). Although with a more general reach, employers' federation Confindustria also lobbies for logistics in similar ways (Confindustria Piemonte, 2021). In addition to these amphibious institutions, regional governments themselves also contribute to the networking and marketing effort. The neighboring regions of Piedmont, Lombardy and Liguria have been organizing yearly "North-western Logistics Conventions" since 2017, where stakeholders from all scales of government, transport and logistics authorities and other public officials meet with business actors and groups of interest to align on progress in the sector, coordinate policies and lobby for funding and favorable legislation. Since 2024, the event has been replicated by a "North-eastern Logistics Convention" among the regions of Veneto, Lombardy, Emilia-Romagna, Trentino-Alto Adige and Friuli-Venezia Giulia. The intermingling of logistics stakeholders in these configurations weakens barriers and roles in the government of logistics, with the direct involvement of extra-governmental groups in planning and negotiation with operators through consultancy.

Governmental actors also take differing postures according to their distinctive territorial context and experience with the sector. In the strained economic context of Alessandria, the return of logistics is portrayed as godsend. Hopes are expressed, or even prophecies are made, that the upcoming delivery of flagship infrastructural projects like the Third Pass high-capacity railway and the Alessandria Intermodal Terminal, jointly with the complete overhaul of intermodal infrastructure in the port of Genoa and the new breakwater, will bring a new season of logistics-based prosperity to the province. Alongside material infrastructure, the legislative framework of the Special Logistics Zone still has to prove itself, having been effective only since 2025. Meanwhile, private investments in massive warehouses are welcomed with little regard for land use or sprawl. In contrast, in Piacenza logistics is increasingly seen as a necessary evil and frowned upon. What transpires from as diverse sources as observers, institutions and media is

the vision of something that cannot be completely disposed of, given the infrastructure already built, the cluster economies and the high demand, but that needs to be properly justified and that territorial planning steers away from. After all, the experience of Piacenza is one of abrupt and outsized growth without background in the sector. The mismanagement of logistics development has left scars in the landscape and in public perception, and today local governments keep a low profile on further investments on logistics – not to mention the atmosphere of embarrassment and secrecy around the history of logistics development policies. In the province of Alessandria, the need for economic recovery goes together with an established industry of transport services by local operators and the fascination of new corridor infrastructure, urging to make the territory more connected and narrate it as such, in order to finally make it more attractive no matter how (Schindler & Kanai, 2021). These visions are not necessarily universally shared by stakeholders, notably by local elected officials, who experience logistics hinterlands in their utmost materiality and deal with their political implications. In the province of Alessandria, the municipality of Tortona, where the logistics hub of Rivalta Scrivia lies, aligns with the narratives of higher-scale political and business actors, while the municipality of Alessandria is much more wary of sprawling logistics growth and is only open to specific, climate-friendly, plans. In the smaller town of Arquata Scrivia, officials see logistics as a suboptimal strategy to refurbish derelict industrial brownfield. Likewise, Piacenza and Castel San Giovanni show completely opposite stances despite comparable involvement in the sector, and the reason is easily found in the mismanagement of early logistics developments. Smaller projects in nearby towns have to put up with the bad reputation the sector has earned in the area. The interplay of past positive or negative experiences, political alignment with higher scales, local business interests, external investment pressure and, of course, opinions on logistics as a territorial asset produce a multifaceted image of logistics hinterlands.

Table 10 Roles of non-governmental actors at different scales: a seamless relational geography from between global and local scales

<table>
<tr><th>scale</th><th>investors & asset managers</th><th>developers</th><th>real estate agencies</th><th>logistics operators</th></tr>
<tr><td>global</td><td>capital gathered from institutional investors or by investor-developer itself and pooled in transnational investment vehicles</td><td>(developers might also be investors in vertical corporate structures)</td><td>transnational agencies can cater for equally transnational corporations looking to expand abroad</td><td>transnational 3PLs and manufacturing firms coordinate operations across borders</td></tr>
<tr><td>national</td><td rowspan="2">national headquarters manage country assets and scout investment opportunities through contact with local authorities and landowners</td><td rowspan="2">specialized developers cater for high-end logistics developments country-wide, aid municipalities in planning for logistics</td><td rowspan="2">national branch monitors the whole market in high-end logistics</td><td>logistics network in prime locations</td></tr>
<tr><td>local</td><td>individual warehouses rented on short-term basis to increase flexibility</td></tr>
</table>

At a general level, two main axes can be recognized around which logistics development actors align and produce their agendas. The first is what we have called the financialized growth machine of logistics real estate (Table 10). This is the engine behind the massive growth of build-to-lease warehouses owned by investment funds, whose pressure to meet demand

resulted in a hasty construction pace with poor planning, leading to logistics sprawl. Italian branches of transnational asset management companies and real estate agencies facilitate access to the local market for international investors and offer turnkey investment solutions, taking care of development and post-development directly or through contractors, or work as an integrated structure as investors-developers, with comparable results. This structure reduces contact with governmental actors to a minimum, working mostly with municipalities, which are the governmental level most involved in the permitting process and zoning variances. The daily operations and maintenance of the premises are mostly contracted out to third-party services, owners do not see themselves as the public 'face' of the logistics facility once it is in operation, avoiding further engagement with the local community – this is rather the role of logistics operators who rent those spaces and are therefore involved in local employment and, often, labor issues. Quite simply, the key principle is return in the financial sense, and any action – locational choice, compensations to the municipality, ESG measures such as leisure facilities and green infrastructure – follows this logic. The second revolves around the policies and narratives of logistics governance and development (Table 11). Here, the involvement of governmental scales is extended up to the national level – even supra-national, if we consider the European plans for transport networks. Authorities are supported and sometimes steered by groups of interests and lobbies into approving or pushing for logistics-friendly planning regulations. Grand infrastructural projects – rather than promising freight flows projections – are deemed crucial to enable logistics-based growth and funding is heavily lobbied for by producing reports, organizing stakeholder meetings, sponsoring preliminary designs and so on. Whether this activism meets market trajectories or expectations is anything but clear. The uncertain, exasperating timing of public intervention are incompatible with the rhythms of private logistics market, and sometimes public plans for logistics may just not be that much strategic for investors. The case of the Simplified Logistics Zone and the history of all the new intermodal infrastructure being built in and around Genova and Alessandria lays bare the questionable interest of some apparent political priorities vis-à-vis finance-driven logistics growth. Interestingly, the situation in Alessandria

clashes with the inexorable growth of logistics facilities in Piacenza, where infrastructural projects are much less prominent. In any case, it is moot to try to assess the success of these projects as they are barely finished or still under construction – we can just speculate on the behavior of investors in response to these political priorities.

Table 11 Roles of governmental actors at different scales: between territorial marketing, lobbying for funding and controversial planning practices

scale	**central government**	**regional government**	**local government**	**intermediary bodies**
EU and global	marketing as business-friendly infrastructural and logistical corridor, lobbying for EU funding	territorial marketing, lobbying for EU funding	direct contact with global capital through market actors of logistics	territorial marketing, lobbying for EU funding
national	SLZ legislation, infrastructural development	lobbying for favorable legislation and funding for infrastructure	/	lobbying for funding and favorable legislation
regional	approval of regional SLZ plans and infrastructural requests	planning legislation, regional logistics plans	negotiation over regional regulation on logistics	cooperation for territorial marketing, lobbying for funding, ZLS implementation
local	/	supervision of local logistics development projects	local urban plan, zoning variances, negotiation with neighboring municipalities	consulting for logistics development, lobbying for market actors

The distinct polarities and their agendas do not preclude the development of a consistent phenomenology of this geography of logistics. We have identified multiple actors holding formal power, financial resources or both, acting across scales to foster logistics growth. How this is meant to be achieved is not agreed upon, and in some instances the very point of logistics-based growth is challenged. However, positions can evolve in light of the experience with past developments, as well as evolving socio-economic conditions, legislation and market dynamics. These can align as needed and foster logistics growth, whether that means warehouses, infrastructure or regulation. We will proceed to systematize this in the conclusion below.

Chapter 9

Conclusion

Our attempts at drawing a geography of logistics in Northern Italy have revealed much more than a topography of warehouses. In the context of a densely urbanized region with sprawling built-up areas, as well as industrial zones and all sorts of infrastructure, logistics has taken centre stage, but has remained so far imprecisely associated with the general dynamics of sprawling urbanization, which is a historically much better explored subject in Italian urbanization. While an observation of logistics landscapes was an inevitable starting point, the nature of logistics as a globalized real estate sector hinted at the need to observe its growth topologically to appreciate its multipolar and multiscalar nature. This relational dimension of our geography of logistics was bound to emerge, as our original research question and hypotheses, which we will henceforth recall and unpack, prefigured:

What is the geography of governmental and non-governmental actors behind the financialized growth of logistical hinterlands in Northern Italy?

Based on our preliminary knowledge of international literature and territorial context, we posited that:

(1) The development of logistics facilities in Northern Italy is pursued through financialized growth coalitions of governmental and non-governmental actors ranging from the global to the local scale.
(2) The peculiar geographies of logistics in Northern Italy result from the multiple configurations of power between governmental and non-governmental actors.

(3) The financialization of logistics real estate produces logistical hinterlands.

These premises led us to mobilize specific corpora of works from the fields of urban and political-economic geography. These interpret logistics as the core of material and immaterial flows, aiming at a comprehensive vision of all these elements. The established strand of literature on planetary urbanization (Brenner & Schmid, 2015), later articulated in the notion of hinterlands as operational landscapes (Brenner & Katsikis, 2020), has first given an idea of how the sprawling development of logistics facilities could be made sense of within the bigger picture of contemporary urban studies. The notion of logistics as hinterlands has also proved to be a consistent and captivating complement to the emergence of a financialized market of logistics real estate (Magnani et al., 2024; Raimbault, 2022), to be unveiled by retracing the relational geographies of the manifold actors of the sector. In this light, the interactions of the latter are best appreciated within a political economy framework, which can accommodate for the intricacies of formal power and financial influence logistics development entails.

The logistics hinterlands that have been selected as case studies, the provinces of Alessandria and Piacenza in North-western Italy, do expose the ever-growing dominance of a financialized market of logistics real estate. Both in Alessandria and Piacenza, our analysis highlights the hectic pace of asset development and a chaotic locational choice, suggesting weak planning and negotiation skills and strong incentives for local governments to ease permitting procedures. These early yet crucial revelations about the unexplored geography of Northern Italian logistics expose the power of (predominantly international) investors and the real estate industry vis-à-vis struggling hinterland governments while highlighting the substantial exclusion of higher governmental scales formally invested with territorial planning. The vertical, partly exclusionary integration of these coalitions, extending between global and local actors from the governmental and financial spheres reflects our first hypothesis.

Such a straightforward analysis, however, overlooks the variety of geometries the actors of logistics development can build. We sense that

uncritically applying the label of hinterlands would not do justice for the many configurations that can emerge from the encounter of logistics stakeholders. Between and within case studies we notice a variety of histories of logistics depending on such factors as socio-economic context, temporalities, political arrangements, infrastructure. The different and evolving attitudes towards logistics in different locales also deconstruct the cliché of the hinterland as a passive prey of rent extraction. We rather frame these dynamics as a *regime*, referring to the (old but well-aged) Urban Regime Theory (Stone, 1993) and its more contemporary iteration, the Urban Political Order (Stone, 2015). From this perspective, financialized logistics development is not a linear plot where real estate actors manipulate formal power – what would be a simplistic reading of a *growth machine* (Molotch, 1993) – but it opens up to more nuanced understandings. In the diverse histories of logistics in our case studies we can read evolving strategies, contrasting attitudes, opposite power balances. A regime-like framing also helps make sense of the logistics- and infrastructure-related activism vehemently performed by public institutions and lobbies. Our analysis shows how the latter engage in various forms of lobbying and networking to obtain funding for expensive transport infrastructure projects or logistics-friendly legislation. Such events, campaigns and materials are often produced by public-private logistics-focused local development organisations, which prove more or less formal arenas for market actors to steer policies. What is not clear is how much these measures are in the actual interest of logistics investors and operators and how much they are part of a 'logistical renaissance' narrative for struggling territories. In any case, it demonstrates how seemingly irrelevant parties strive to gain a foothold in the relational geography of logistics.

Our case studies of logistics hinterlands have exposed how different the relations, temporalities and spatialities of their regimes can turn out to be. In the province of Alessandria, a longer tradition of logistics is traced back to the heyday of Fordist industrialization, whose ultimate demise leaves local actors scrambling for alternative opportunities and going all in on the sector. In the province of Piacenza, the more recent but tumultuous growth of logistics has left scars on the territory, making logistics a controversial – if

not undesirable – topic. Above these local dynamics loom the logics of financialized real estate, whose workings are meant to develop and manage logistics facilities as assets, disrupting the conventions of real estate development, industrial development and relations with local contexts. These findings echo our second hypothesis. The diversity of the regimes we analyse is reflected in the topographical geography of these logistics hinterlands, whose relational features interact with the shape and distribution of logistics hubs and stand-alone assets, as well as that of relevant infrastructure. These geographies can be rightfully labelled as logistics hinterlands. Their relative topographical distance from urban cores and, more crucially, the quest for cheap, well-connected, suburban greenfield pairs with a relational distance between the affected locales and those who seem to reap the profits of these developments. Such spatial outcomes are the inevitable results of the logics of financialized real estate, whose motives lead to disregard local considerations and treat very material real estate developments just like immaterial assets. In a way, this replies to our third hypothesis, but our evidence suggests that we observe it with more nuance. As discussed above, we insist on problematizing the established notion of hinterland, appreciating it as groundwork, yet enriching it with our interpretation of hinterlands as co-producers of their own geography. As formulated, our hypothesis can accommodate for this conceptual amendment, but we wish to specify it to avoid a linear, unidirectional reading of its meaning.

For a political economy of logistics hinterlands: Territorial Logistics Regimes

The variety of the actors and their strategies for logistics development witnessed in this study begs for a systematization. To this end, we advance the category of Territorial Logistics Regimes (TLRs): transcalar and multipolar coalitions of governmental and non-governmental actors pursuing different goals and benefits from the development of warehouses and other logistics infrastructure. The constellation of actors forming these regimes includes actors from all governmental scales, such as municipal representatives and

provincial, regional and national politicians and officials; logistics market actors, such as shipping companies, third-party logistics providers and other firms; the financial and real estate sector, with investors, asset managers, real estate agencies, developers; and, last but not least, intermediary bodies and interest groups. The notion of TLR, we argue, embodies the multiple shapes the political economy of logistics can have and takes the evolution of its power geometries into account. By helping to reconstruct the relational geography of logistics through its material and financial flows, it also reconciles the social and spatial dimensions of logistics real estate and infrastructure development. Retracing the trajectory of this study between logistics hinterlands and the financialization of real estate, we find the category of TLRs to provide with an excellent tool to make sense of what happens in between these two global and local poles of planetary urbanization – what enables the sphere of finance to permeate and produce logistics hinterlands.

Besides its heuristic function, the notion of TLRs displays how the nebulous narratives of the 'operations of capital' become very concrete when capital flows are tracked down to local operations. Logistical hinterlands embody the often-elusive notions of financialization and operational landscapes by materializing these processes and TLRs help to navigate how this happens. This is crucial not only for its interpretative properties, but also to inform territorial policies in what we have seen to be a complex multiscalar and multipolar relational geography of stakeholders. Even in the limited extent of this study we have encountered multifarious positions with respect to logistics, with differing, variably effective, policies having to deal with such a complex phenomenon eluding their bureaucratical stiffness.

This tentative theorization opens the way to multiple avenues of research. To begin with, more experimentation is needed to assess the validity of TLRs as an effective tool for studying the geography of logistics in contexts alike and unlike those of this study. Admittedly, our theorization is based on the peculiar political-economic configurations of Italian territorial policies within specific socio-economic conditions and financial markets

penetration. Yet, we are confident that the idea of a regime is solid but flexible enough to accommodate for the variations the elements we just listed can express. We also observe with interest other lively debates around the geographies (and akin disciplines) of logistics and infrastructure, such as the literature on infrastructure-led development, connectivity and State capitalism (see, e.g., Alami & Dixon, 2020; Dodson, 2017; Schindler & Kanai, 2021; Whiteside et al., 2023) and many others, and are open to engage with these complementary views to evolve our initial theorization[59].

[59] The theorization of LTRs is also exposed by the author in a recent co-authored paper (Silvestro et al., 2025).

Appendix

Interview list

Table 12 List of interviewed actors

actor category	**name**	**position**	**company/institution**[60]
asset management	Giovanni Maria Scarabelli	Fund Manager	DeA Capital RE SGR
asset management	Carlo Passaniti	Logistics Fund	COIMA SGR
developer	Nicola Oddi	planner of Castel San Giovanni hub	Studio Oddi Associati architects
developer	Marianna Filippi Pioppi	engineer	SFRE
developer	Sara Mangialardo	Business Development Manager	GSE
intermediary body	Matteo Ferraris	In charge of Logistics and Transport	Confindustria Alessandria
investor-developer	Marco Colombo	Vice President, Southern Europe Leasing & Customer Experience Lead	Prologis
investor-developer	Daniele Licchelli	Asset Manager for Piacenza Le Mose hub	Generali Real Estate
investor-developer	Sasa Rikalo	planner for Piacenza Le Mose hub	Generali Real Estate

[60] See corporate/institutional websites www.deacapitalre.com, www.coimasgr.com, www.studiooddi.it, sfre.it, gsegroup.it, www.confindustria.al.it, www.prologis.com, www.generalirealestate.com, www.slala.it, comune.tortona.al.it, comune.alessandria.it, comune.arquatascrivia.al.it, www.comune.castelsangiovanni.pc.it, www.comune.piacenza.it, rhespa.eu, confindustria.piemonte.it, www.metrocargoitalia.it, www.tntorello.com, www.hupac.com, dachser.fercam.it, www.cbre.it, www.colliersitaly.it, www.cushmanwakefield.com, dils.com, www.worldcapital.it, www.regione.piemonte.it, www.regione.emilia-romagna.it.

actor category	**name**	**position**	**company/institution**[60]
key expert	Enrico Sozzetti	freelance journalist and PR for SLALA	SLALA
key expert	Eugenio Gazzola	author and reporter	(independent)
local government	Fabio Morreale	deputy mayor, urban planning councilor	Tortona town council
local government	Federico Chiodi	mayor	Tortona town council
local government	Giorgio Abonante	mayor	Alessandria town council
local government	Monica Ubaldeschi	planning town official	Arquata Scrivia town council
local government	Alberto Basso	mayor	Arquata Scrivia town council
local government	Carlo Cappelli	former mayor of Castel San Giovanni	Castel San Giovanni town council
local government	Mino Politi	former economic development councilor at Piacenza town council	Piacenza town council
logistics operator and *intermediary body*	Ascanio Borchi	CEO of Rivalta Hub Europa *and* Logistics and Trasport Division representative for Confindustria Piemonte	Rivalta Hub Europa *and* Confindustria Piemonte
logistics operator	Guido Porta	CEO	Metrocargo
logistics operator	Niccolò Parente	Technical Office Engineer	Torello
logistics operator	Piero Solcà	Director Terminal Infrastructures & Services (Piacenza)	Hupac
logistics operator	Stefano Zambelli	Facility Manager	Dachser Fercam
real estate agency	Alessandro Petruzzi	Head of Logistics & Industrial	CBRE
real estate agency	Faustino Mussicco	Head of Logistics, Last Mile & Data Centers	Colliers

actor category	**name**	**position**	**company/institution**[60]
real estate agency	Marzio Granata	Co-Head of Industrial & Logistics Italy - Logistics & Development	Cushman & Wakefield
real estate agency	Alfredo Mauri	Head of Logistics & Industrial	DILS
real estate agency	Marco Clerici	Head of Research and Advisory	WCI
regional government	Daria Marzuoli	Eastern Piedmont Urban Planning Division official	Regione Piemonte
regional government	Sabrina Mingozzi	Logistics and Goods Transport Division official	Regione Emilia-Romagna
regional government	Irene Evangelisti	Planning Division official	Regione Emilia-Romagna

References

Aalbers, M. B. (2019). Financialization. In D. Richardson, N. Castree, M. F. Goodchild, A. Kobayashi, W. Liu, & R. A. Marston (Eds.), *International Encyclopedia of Geography* (1st ed., pp. 1–12). Wiley. https://doi.org/10.1002/9781118786352.wbieg0598.pub2

Agenzia delle dogane e dei Monopoli. (2025). *Ufficio delle Dogane di Rivalta Scrivia—Retroporto di Genova*. Agenzia Delle Dogane e Dei Monopoli. https://www.adm.gov.it/portale/en/-/ufficio-delle-dogane-di-rivalta-scrivia-retroporto-di-genova

Agenzia delle Entrate. (2025). *Visura catastale online* [Dataset]. https://www.agenziaentrate.gov.it/portale/schede/fabbricatiterreni/visura-catastale/visura-catastale-online

Agenzia per la coesione territoriale. (2017). *ZES – Zone Economiche Speciali*. Agenzia per la coesione territoriale. https://www.agenziacoesione.gov.it/zes-zone-economiche-speciali/

Agostini, I. (Ed.). (2017). *Consumo di luogo. Neoliberismo nel disegno di legge urbanistica dell'Emilia-Romagna*. Pendragon.

Ahmed, S., Banerjee, A. K., James, W., & Moussa, F. (2024). Is the Evergrande crisis spilling beyond China? *Research in International Business and Finance*, *67*, 102080. https://doi.org/10.1016/j.ribaf.2023.102080

Alami, I., & Dixon, A. D. (2020). State capitalism(s) redux? Theories, tensions, controversies. *Competition & Change*, *24*(1), 70–94. https://doi.org/10.1177/1024529419881949

Alami, I., Dixon, A. D., Gonzalez-Vicente, R., Babic, M., Seung-Ook Lee, Medby, I. A., & Graaff, N. D. (2022). Geopolitics and the 'New' State Capitalism. *Geopolitics*, *27*(3), 995–1023. https://doi.org/10.1080/14650045.2021.1924943

Alfieri, M. (2023, March 7). «Big Box Piacenza», come sta cambiando il cuore della logistica italiana 25 anni dopo la prima Ikea. *Il Sole 24 ORE*. https://24plus.ilsole24ore.com/art/big-box-piacenza-cuore-logistica-italiana-AEGrW5wC

Allen, W. B. (1997). The Logistics Revolution and Transportation. *The Annals of the American Academy of Political and Social Science*, *553*(1), 106–116. https://doi.org/10.1177/0002716297553001010

Allodi, E., & Cacciamani, C. (2023). I fondi immobiliari: Tipologie e disciplina. In C. Cacciamani & F. Ielasi (Eds.), *Real estate: Economia, diritto, marketing e finanza immobiliare*. Egea.

Amin, A. (2004). Regions Unbound: Towards a New Politics of Place. *Geografiska Annaler. Series B, Human Geography*, *86*(1), 33–44. JSTOR.

Amministrazione Provinciale di Piacenza. (2000, July 25). *Piano territoriale di coordinamento provinciale*. https://www.provincia.pc.it/PTCP/Presenta/PDF/relazion.pdf

Angelo, H., & Goh, K. (2021). Out in Space: Difference and Abstraction in Planetary Urbanization. *International Journal of Urban and Regional Research*, *45*(4), 732–744. https://doi.org/10.1111/1468-2427.12911

Angelo, H., & Wachsmuth, D. (2015). Urbanizing Urban Political Ecology: A Critique of Methodological Cityism. *International Journal of Urban and Regional Research*, *39*(1), 16–27. https://doi.org/10.1111/1468-2427.12105

Anselmi, G., & Vicari, S. (2020). Milan makes it to the big leagues: A financialized growth machine at work. *European Urban and Regional Studies*, *27*(2), 106–124. https://doi.org/10.1177/0969776419860871

Antoine, S., Sillig, C., & Ghiara, H. (2017). Advanced Logistics in Italy: A City Network Analysis. *Tijdschrift Voor Economische En Sociale Geografie*, *108*(6), 753–767. https://doi.org/10.1111/tesg.12215

Antoine, S., Sillig, C., Ghiara, H., & Ginet, P. (2020). Adapting the world city network to the scale of regional economics. The case of the logistics sector in Italy. *Annales de Géographie*, *735*(5), 81–100. Cairn.info.

Apostolopoulou, E. (2021). Tracing the Links between Infrastructure-Led Development, Urban Transformation, and Inequality in China's Belt and Road Initiative. *Antipode*, *53*(3), 831–858. https://doi.org/10.1111/anti.12699

Approvazione proposta di prime perimetrazioni degli ambiti retroportuali della Zona Logistica Semplificata ZLS "'Porto e retroporto di Genova'" in Piemonte, ad integrazione del relativo Piano di Sviluppo Strategico, Deliberazione della Giunta Regionale 10 giugno 2024, nn. 15-8749 Decreto legge n. 109/2018 (convertito in legge n. 130/2018), articolo 7, comma 1, Giunta Regionale della Regione Piemonte, n. 24 Bollettino Ufficiale (2024). https://www.regione.piemonte.it/governo/bollettino/abbonati/2024/24/siste/00000241.htm

Arboleda, M. (2015). Financialization, totality and planetary urbanization in the Chilean Andes. *Geoforum*, *67*, 4–13. https://doi.org/10.1016/j.geoforum.2015.09.016

Armondi, S., Di Vita, S., & Galimberti, B. (Eds.). (2024). *Geografie operazionali nel Nord Italia. Figurazioni e strategie spaziali*. FrancoAngeli. https://francoangeli.it/Libro/Geografie-operazionali-nel-Nord-Italia?Id=29363

Arrighi, G. (2010). *The long twentieth century: Money, power, and the origins of our times*. Verso.

Assessorato alla Programmazione e Sviluppo Economico del Territorio, Urbanistica, Politiche per la Montagna della Provincia di Piacenza. (2012, January 26). *Accordo territoriale relativo al Polo di sviluppo territoriale n. 2 denominato "San Nazzaro-Caorso", ai sensi dell'art. 15, comma 2, della l.r. N. 20/2000 e degli artt. 85 e 114 delle norme del Piano Territoriale di Coordinamento Provinciale*.

Assoporti. (2024). *Movimenti TEU "Northern Range"—Mediterraneo UE - Italia*. Assoporti. https://www.assoporti.it/it/autoritasistemaportuale/statistiche/statistiche-mondiali/movimenti-teu-northern-range-mediterraneo-ue-italia/

Atelier Parisien d'Urbanisme. (2022). *L'immobilier logistique dans le Grand Paris. Portrait et évolution par filière et territoire*.

Autorità di Sistema Portuale del Mar Ligure Occidentale. (2021, April). *Piano di sviluppo strategico della Zona Logistica Semplificata "Porto e Retroporto di Genova."* https://www.politichecoesione.governo.it/media/g4xitj0r/piano-di-sviluppo-strategico.pdf

Baglio, M., Dallari, F., & Garagiola, E. (2019). *Logistica 5.0. Magazzini di qualità per servizi d'eccellenza*. Guerini e Associati. https://www.guerini.it/index.php/prodotto/logistica-5-0/

Bagnasco, A. (1977). *Tre Italie: La problematica territoriale dello sviluppo italiano*. Il Mulino.

Bagnasco, A. (2009). Il Nord: Una città-regione globale? *Stato e mercato*, *86*(2), 163–186. https://doi.org/10.1425/30172

Balducci, A., Fedeli, V., & Curci, F. (2017). *Oltre la metropoli. L'urbanizzazione regionale in Italia*. Edizioni Angelo Guerini e Associati. https://books.google.it/books?id=M7DKDgAAQBAJ

Barbier, C., Cuny, C., & Raimbault, N. (2019). The production of logistics places in France and Germany: A comparison between Paris, Frankfurt-am-Main and Kassel. *Work Organisation, Labour & Globalisation*, *13*(1), 30–46. https://doi.org/10.13169/workorgalaboglob.13.1.0030

Barca, F., Pavolini, E., & Trigilia, C. (2015). Sulle tracce dell'identità italiana: Somiglianze e differenze tra le regioni in "L'Italia e le sue Regioni." In *L'Italia e le sue Regioni*. Treccani. https://www.treccani.it/enciclopedia/sulle-tracce-dell-identita-italiana-somiglianze-e-differenze-tra-le-regioni_(L'Italia-e-le-sue-Regioni)

Bargero, C., & Avato, M. T. (2022). *Rapporto di Quadrante. Il Sud-Est*. Istituto di Ricerche Economico Sociali del Piemonte. https://www.byterfly.eu/islandora/object/librib:1256106

Bassens, D., & Van Meeteren, M. (2015). World cities under conditions of financialized globalization: Towards an augmented world city hypothesis. *Progress in Human Geography*, *39*(6), 752–775. https://doi.org/10.1177/0309132514558441

Bathelt, H. (2006). Geographies of production: Growth regimes in spatial perspective 3 - toward a relational view of economic action and policy. *Progress in Human Geography*, *30*(2), 223–236. https://doi.org/10.1191/0309132506ph603pr

Bathelt, H., & Glückler, J. (2003). Toward a relational economic geography. *Journal of Economic Geography*, *3*(2), 117–144. JSTOR.

Benevolo, L. (2012). *Il tracollo dell'urbanistica italiana*. Laterza.

Bernes, J. (2013, September). Logistics, Counterlogistics and The Communist Prospect. *Endnotes*, *3*, 248.

Bilancio di previsione dello Stato per l'anno finanziario 2018 e bilancio pluriennale per il triennio 2018-2020, 205/2017, Parlamento Italiano, Gazzetta Ufficiale (2017). https://www.gazzettaufficiale.it/eli/id/2017/12/29/17G00222/sg

Bilancio di previsione dello Stato per l'anno finanziario 2020 e bilancio pluriennale per il triennio 2020-2022, 160, Parlamento italiano, Gazzetta Ufficiale (2019). https://www.normattiva.it/atto/caricaDettaglioAtto

Birch, K., & Muniesa, F. (Eds.). (2020). *Assetization: Turning Things into Assets in Technoscientific Capitalism*. The MIT Press.

Birtchnell, T., Savitzky, S., & Urry, J. (Eds.). (2015). *Cargomobilities: Moving Materials in a Global Age* (1st ed.). Routledge. https://doi.org/10.4324/9781315866673

Block, R. L. (2012). *Investing in REITs: Real estate investment trusts* (4th ed). Bloomberg Press/J. Wiley & Sons.

Blossom Avenue, Carlo Ratti Associati, LAND, Mobiliter, TeA Consulting, Get Consulting, & DILS. (2024). *Nuovo scalo merci innovativo per Alessandria*. https://hdl.handle.net/11311/1282202

Boggs, J. S., & Rantisi, N. M. (2003). The 'relational turn' in economic geography. *Journal of Economic Geography*, *3*, 109–116.

Bonacich, E., & Wilson, J. B. (2008). *Getting the goods: Ports, labor, and the logistics revolution* (1st ed.). Cornell University Press.

Bonomi, A., & Abruzzese, A. (2004). *La città infinita*. Bruno Mondadori.

Bottalico, A. (2021). The Logistics Labor Market in the Context of Digitalization: Trends, Issues and Perspectives. In M. Klumpp & C. Ruiner (Eds.), *Digital Supply Chains and the Human Factor* (pp. 111–124). Springer International Publishing. https://doi.org/10.1007/978-3-030-58430-6_7

Boyer, R. (2000). Is a Finance-led growth regime a viable alternative to Fordism? A preliminary analysis. *Economy and Society*, *29*(1), 111–145. https://doi.org/10.1080/030851400360587

Brenner, N. (2004). *New State Spaces: Urban Governance and the Rescaling of Statehood*. Oxford University Press.

Brenner, N. (2018). Debating planetary urbanization: For an engaged pluralism. *Environment and Planning D: Society and Space*, *36*(3), 570–590. https://doi.org/10.1177/0263775818757510

Brenner, N. (2019). *New Urban Spaces: Urban Theory and the Scale Question*. Oxford University Press. https://doi.org/10.1093/oso/9780190627188.001.0001

Brenner, N., & Katsikis, N. (2020). Operational Landscapes: Hinterlands of the Capitalocene. *Architectural Design*, *90*(1), 22–31. https://doi.org/10.1002/ad.2521

Brenner, N., & Schmid, C. (2014). Planetary Urbanization. In N. Brenner (Ed.), *Implosion/Explosions: Towards a Study of Planetary Urbanization*. Jovis.

Brenner, N., & Schmid, C. (2015). Towards a new epistemology of the urban? *City*, *19*(2–3), 151–182. https://doi.org/10.1080/13604813.2015.1014712

Buckley, M., & Strauss, K. (2016). With, against and beyond Lefebvre: Planetary urbanization and epistemic plurality. *Environment and Planning D: Society and Space*, *34*(4), 617–636. https://doi.org/10.1177/0263775816628872

Burton, G. F., & Jermakowicz, E. K. (2015). *International Financial Reporting Standards* (1st ed.). Routledge. https://doi.org/10.4324/9780203522356

Buzzacchi, L., De Marco, A., Governa, F., & Salone, C. (2022). Lo spostamento del triangolo: Densità e trasformazioni economiche nella differenziazione spaziale del Nord Italia. *L'Industria*, *1/2022*, 37–79. https://doi.org/10.1430/103956

Cacciamani, C., & Ielasi, F. (Eds.). (2023). *Real estate: Economia, diritto, marketing e finanza immobiliare*. Egea.

Carbone, G. (2024, November 21). *La Cementir sarà demolita: Per Arquata finisce un'era*. La Stampa. https://www.lastampa.it/alessandria/2024/11/21/news/arquata_scrivia_cementir_demolita-14824065/

Carlucci, F., Cirà, A., Forte, E., & Siviero, L. (2017). Infrastructure and logistics divide: Regional comparisons between North Eastern & Southern Italy. *Technological and Economic Development of Economy*, *23*(2), 243–269. https://doi.org/10.3846/20294913.2015.1070768

Castells, M. (1989). *The informational city: Information technology, economic restructuring, and the urban-regional process*. Blackwell.

Castells, M. (2010). *The Information Age: Economy, Society and Culture: Vol. I The Rise of the Network Society* (2nd ed.). Wiley-Blackwell.

Cavasino, D. (2019). Dalle tre Italie alle due Italie. Le conseguenze della transizione alla Terza Rivoluzione Industriale sul sistema produttivo italiano. *L'industria*, *2*, 319–336. https://doi.org/10.1430/94136

Centro Studi e Piani Economici. (1971). Progetto '80: Proiezioni territoriali. In *Urbanistica* (Vol. 57, pp. 1–65). Edizioni Rivista Urbanistica.

Chiapello, E. (2020). Financialisation as a Socio-technical Process. In P. Mader, D. Mertens, & N. Van Der Zwan (Eds.), *The Routledge International Handbook of Financialization* (1st ed., pp. 81–91). Routledge. https://doi.org/10.4324/9781315142876

Chiodi, G. (2005). Lega lombarda. In *Federiciana*. Treccani. https://www.treccani.it/enciclopedia/lega-lombarda_(Federiciana)

Christophers, B. (2015). The limits to financialization. *Dialogues in Human Geography*, *5*(2), 183–200. https://doi.org/10.1177/2043820615588153

Chua, C., Danyluk, M., Cowen, D., & Khalili, L. (2018). Introduction: Turbulent Circulation: Building a Critical Engagement with Logistics. *Environment and Planning D: Society and Space*, *36*(4), 617–629. https://doi.org/10.1177/0263775818783101

Cidell, J. (2011). Distribution Centers among the Rooftops: The Global Logistics Network Meets the Suburban Spatial Imaginary. *International Journal of Urban and Regional Research*, *35*(4), 832–851. https://doi.org/10.1111/j.1468-2427.2010.00973.x

Coakley, J. (1994). The Integration of Property and Financial Markets. *Environment and Planning A: Economy and Space*, *26*(5), 697–713. https://doi.org/10.1068/a260697

Coe, N. M. (2014). Missing links: Logistics, governance and upgrading in a shifting global economy. *Review of International Political Economy*, *21*(1), 224–256. https://doi.org/10.1080/09692290.2013.766230

Coe, N. M. (2020). Logistical geographies. *Geography Compass*, *14*(10), 1–16. https://doi.org/10.1111/gec3.12506

Coe, N. M., Hess, M., Yeungt, H. W., Dicken, P., & Henderson, J. (2004). 'Globalizing' regional development: A global production networks perspective. *Transactions of the Institute of British Geographers*, *29*, 468–484. https://doi.org/10.1111/j.0020-2754.2004.00142.x

Colliers Italy. (2023). *Logistics Market Overview. Snapshot Q3 2023*. Colliers. https://www.colliers.com/it-it/research/logistics_market_overview_q3

Confindustria Piemonte. (2021, October). *Documento di posizione—Position paper. Logistica e Infrastrutture per il Piemonte e il Nord Ovest*.

Connolly, C. (2019). Urban Political Ecology Beyond Methodological Cityism. *International Journal of Urban and Regional Research*, *43*(1), 63–75. https://doi.org/10.1111/1468-2427.12710

Conversione in legge, con modificazioni, del decreto-legge 10 settembre 2021, n. 121, recante disposizioni urgenti in materia di investimenti e sicurezza delle infrastrutture, dei trasporti e della circolazione stradale, per la funzionalità del Ministero delle infrastrutture e della mobilità sostenibili, del Consiglio superiore dei lavori pubblici e dell'Agenzia nazionale per la sicurezza delle infrastrutture stradali e autostradali, Serie Generale n. 156, Parlamento Italiano, Gazzetta Ufficiale (2021). https://www.normattiva.it/atto/caricaDettaglioAtto?atto.dataPubblicazioneGazzetta=2021-11-09&atto.codiceRedazionale=21G00170&atto.articolo.numero=0&atto.articolo.sottoArticolo=1&atto.articolo.sottoArticolo1=0&qId=&tabID=0.6352309984780948&title=lbl.dettaglioAtto

Conversione in legge, con modificazioni, del decreto-legge 14 dicembre 2018, n. 135, recante disposizioni urgenti in materia di sostegno e semplificazione per le imprese e per la pubblica amministrazione, 12/2019, Parlamento Italiano, Gazzetta Ufficiale (2019). https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=2019-02-12&atto.codiceRedazionale=19G00017&isAnonimo=false&tipoSerie=serie_generale&tipoVigenza=originario&normativi=false&currentPage=1

Conversione in legge, con modificazioni, del decreto-legge 16 luglio 2020, n. 76, recante misure urgenti per la semplificazione e l'innovazione digitale, 120/2020, Parlamento italiano, Gazzetta Ufficiale (2020). https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=2020-09-14&atto.codiceRedazionale=20G00139&isAnonimo=false&tipoSerie=

serie_generale&tipoVigenza=originario&normativi=false&currentPage=1

Conversione in legge, con modificazioni, del decreto-legge 19 settembre 2023, n. 124, recante disposizioni urgenti in materia di politiche di coesione, per il rilancio dell'economia nelle aree del Mezzogiorno del Paese, nonché in materia di immigrazione, 162, Gazzetta Ufficiale (2023). https://www.normattiva.it/atto/caricaDettaglioAtto?atto.dataPubblicazioneGazzetta=2023-11-16&atto.codiceRedazionale=23G00175&atto.articolo.numero=0&atto.articolo.sottoArticolo=1&atto.articolo.sottoArticolo1=0&qId=&tabID=0.987777740650025&title=lbl.dettaglioAtto

Conversione in legge, con modificazioni, del decreto-legge 20 giugno 2017, n. 91, recante disposizioni urgenti per la crescita economica nel Mezzogiorno, 123/2017, Parlamento italiano, Gazzetta Ufficiale (2017). https://www.normattiva.it/atto/caricaDettaglioAtto?atto.dataPubblicazioneGazzetta=2017-08-12&atto.codiceRedazionale=17G00139&atto.articolo.numero=0&atto.articolo.sottoArticolo=1&atto.articolo.sottoArticolo1=0&qId=&tabID=0.605847775773889&title=lbl.dettaglioAtto

Conversione in legge, con modificazioni, del decreto-legge 28 settembre 2018, n. 109, recante disposizioni urgenti per la città di Genova, la sicurezza della rete nazionale delle infrastrutture e dei trasporti, gli eventi sismici del 2016 e 2017, il lavoro e le altre emergenze, 130/2018, Parlamento italiano, Gazzetta Ufficiale (2018). https://www.normattiva.it/atto/caricaDettaglioAtto?atto.dataPubblicazioneGazzetta=2018-11-19&atto.codiceRedazionale=18G00157&atto.articolo.numero=0&atto.articolo.sottoArticolo=1&atto.articolo.sottoArticolo1=0&qId=&tabID=0.06683421459401162&title=lbl.dettaglioAtto

Coppola, F. S., Panaro, A., & Carreras, C. (2007). Trasporti, logistica e sviluppo regionale: I risultati di un'indagine territoriale in un confronto

Nord-Sud. *Rivista economica del Mezzogiorno*, *3–4*, 925–964. https://doi.org/10.1432/26362

Cowen, D. (2014). *The Deadly Life of Logistics*. University of Minnesota Press.

Cox, K. R. (2017). Revisiting 'the city as a growth machine.' *Cambridge Journal of Regions, Economy and Society*, *10*(3), 391–405. https://doi.org/10.1093/cjres/rsx011

Creazza, A., & Dallari, F. (2006). Settore immobiliare per la logistica: Panoramica europea, analisi del mercato italiano e studio delle strategie localizzative. *Liuc Papers*, *195*. http://www.biblio.liuc.it/liucpapersita.asp?codice=203

Cronon, W. (1991). *Nature's metropolis: Chicago and the Great West* (1st ed.). W. W. Norton.

Cuppini, N., Frapporti, M., & Pirone, M. (2015). Logistics Struggles in the Po Valley Region: Territorial Transformations and Processes of Antagonistic Subjectivation. *South Atlantic Quarterly*, *114*(1), 119–134. https://doi.org/10.1215/00382876-2831323

Cuppini, N., & Peano, I. (2019). *Un mondo logistico. Sguardi critici su lavoro, migrazioni, politica e globalizzazione*. Ledizioni LediPublishing.

Curi, S., & Bologna, S. (2019). Relazioni industriali e servizi di logistica: Uno studio preliminare. *Giornale di diritto del lavoro e di relazioni industriali*, *161*(1). https://doi.org/10.3280/GDL2019-161006

Curti Sacchi, P. (2024, November 25). Rfi conferma i tempi lunghi per Terzo Valico e Milano-Genova. *TrasportoEuropa*. https://www.trasportoeuropa.it/notizie/infrastrutture/rfi-conferma-i-tempi-lunghi-per-terzo-valico-e-milano-genova/

D'Abbraccio, F., Facchetti, A., Galesi, E., & Minelli, F. (2015). *Atlante dei Classici Padani*. Krisis Publishing. https://www.krisispublishing.com/prodotto/atlante-classici-padani/

Dablanc, L., & Browne, M. (2020). Introduction to special section on logistics sprawl. *Journal of Transport Geography*, *88*, 1–2. https://doi.org/10.1016/j.jtrangeo.2019.01.010

Dablanc, L., & Rakotonarivo, D. (2010). The impacts of logistics sprawl: How does the location of parcel transport terminals affect the energy efficiency of goods' movements in Paris and what can we do about it? *Procedia - Social and Behavioral Sciences*, *2*(3), 6087–6096. https://doi.org/10.1016/j.sbspro.2010.04.021

Dallari, F., & Curi, S. (Eds.). (2020). *Regional Logistics Performance: La Regione Logistica Milanese e l'Europa a confronto*. CCIAA Milano Monza-Brianza Lodi.

Dallari, F., Grizzetti, S., Petriccioli, R., & Rossi, E. (2015). La geografia dei nodi logistici italiani. *Logistica*, *46*(4, aprile 2015), 15–25.

Danyluk, M. (2018). Capital's logistical fix: Accumulation, globalization, and the survival of capitalism. *Environment and Planning D: Society and Space*, *36*(4), 630–647. https://doi.org/10.1177/0263775817703663

Danyluk, M. (2019). Fungible Space: Competition and Volatility in the Global Logistics Network. *International Journal of Urban and Regional Research*, *43*(1), 94–111. https://doi.org/10.1111/1468-2427.12675

Danyluk, M. (2021). Supply-Chain Urbanism: Constructing and Contesting the Logistics City. *Annals of the American Association of Geographers*, *11*(7), 2149–2164. https://doi.org/10.1080/24694452.2021.1889352

De Lara, J. D. (2018). *Inland shift: Race, space, and capital in Southern California*. University of California Press.

De Vidovich, L. (2020). The outline of a post-suburban debate in Italy. *Archivio Di Studi Urbani e Regionali*, *129*(3), 127–151. https://doi.org/10.3280/ASUR2020-129006

De Vidovich, L., & Scolari, G. (2022). Seeking polycentric post-suburbanization: A view from the urban region of Milan. *Urban Geography*, *43*(1), 123–133. https://doi.org/10.1080/02723638.2020.1858587

Dipartimento per la programmazione e il coordinamento della politica economica. (2022). *I dati trasportistici dal 2000 ad oggi*.

https://www.programmazioneeconomica.gov.it/sviluppo-dei-dati-trasportistici-e-in-particolare-portuali-dal-2000-ad-oggi/

Dipartimento per le politiche di coesione. (2020). *Zone Logistiche Semplificate—ZLS*. https://politichecoesione.governo.it/it/strategie-tematiche-e-territoriali/strategie-territoriali/zone-logistiche-semplificate-zls/

Dipartimento per le Politiche di Coesione. (2024, November 12). *Istituzione del Comitato di indirizzo della Zona logistica semplificata della Regione Liguria "Porto e Retroporto di Genova."* https://politichecoesione.governo.it/media/1hpalpto/dpcm-comitato-indirizzo-zls-genova_firmato.pdf

Dipartimento per le politiche di coesione e per il sud. (2025). *Aiuti a finalità regionale per l'Italia 2022-2027*. Dipartimento per le politiche di coesione e per il sud. http://politichecoesione.governo.it/it/politica-di-coesione/la-programmazione-2021-2027/risorse-2021-2027/aiuti-a-finalita-regionale-2022-2027/

Disciplina regionale sulla tutela e l'uso del territorio, Legge regionale n.24 del 2017, Giunta regionale dell'Emilia-Romagna, 340/2017 Bollettino Ufficiale Regionale (2017). https://demetra.regione.emilia-romagna.it/al/articolo?urn=er:assemblealegislativa:legge:2017;24#

Dodson, J. (2017). The Global Infrastructure Turn and Urban Practice. *Urban Policy and Research*, *35*(1), 87–92. https://doi.org/10.1080/08111146.2017.1284036

Dowding, K. M. (1991). *Rational choice and political power*. Edwan Elgar.

DPCM del 9 gennaio 2025 (2025). https://politichecoesione.governo.it/media/ddgjmlyo/dpcm-istitutivo-comitato-di-indirizzo_09_01_2025.pdf

DPCM del 10 ottobre 2024 (2024). https://politichecoesione.governo.it/media/egchatne/dpcm_10_10_2024_rer_firmato.pdf

Dubie, M., Kuo, K. C., Giron-Valderrama, G., & Goodchild, A. (2020). An evaluation of logistics sprawl in Chicago and Phoenix. *Journal of*

Transport Geography, *88*, 102298. https://doi.org/10.1016/j.jtrangeo.2018.08.008

Easterling, K. (2012). We Will Be Making Active Form. *Architectural Design*, *82*(5), 58–63. https://doi.org/10.1002/ad.1461

Easterling, K. (2014). *Extrastatecraft. The Power of Infrastructure Space*. Verso. http://kellereasterling.com/books/extrastatecraft-the-power-of-infrastructure-space

Ekers, M., Hamel, P., & Keil, R. (2012). Governing Suburbia: Modalities and Mechanisms of Suburban Governance. *Regional Studies*, *46*(3), 405–422. https://doi.org/10.1080/00343404.2012.658036

Epstein, G. A. (Ed.). (2005). *Financialization and the world economy*. Edward Elgar.

ER.I.C. (2025). *ER.I.C. – Emilia-Romagna Intermodal Cluster*. ER.I.C. https://www.ericintermodal.it/

Euromerci. (2012, October 11). *Rivalta Scrivia, completata l'operazione di cessione del pacchetto di controllo*. Euromerci. https://www.euromerci.it/le-notizie-di-oggi/rivalta-scrivia-completata-loperazione-di-cessione-del-pacchetto-di-controllo.html

European Commission. (2022). *Trans-European Transport Network (TEN-T)*. European Commission. https://transport.ec.europa.eu/transport-themes/infrastructure-and-investment/trans-european-transport-network-ten-t_en

F2i SGR. (2011, October 18). *F2i cede la partecipazione di Interporto Rivalta Scrivia*. F2i SGR. https://www.f2isgr.it/static/upload/f2i/f2i_cede_la_partecipazione_di_interporto_rivalta_scrivia.pdf

Fantuzzi, F. (2024a). *Italian Market Overview 2023*. JLL.

Fantuzzi, F. (2024b). *Logistics Snapshot. Q4 2023 – Market Overview* (Logistics). JLL.

Felice, E. (2015). Lo sviluppo economico delle regioni: Dalle tre Italie alle due Italie. In *L'Italia e le sue Regioni: Vol. 1: Istituzioni*. Istituto della

Enciclopedia Italiana. https://www.treccani.it/enciclopedia/lo-sviluppo-economico-delle-regioni-dalle-tre-italie-alle-due-italie_%28L%27Italia-e-le-sue-Regioni%29/

Feola, M. (2023, June 2). *Caso Pam, la maggioranza: "Ascoltare le istanze dei cittadini è dovere di chi amministra."* AlessandriaNews. https://alessandrianews.ilpiccolo.net/2023/06/02/caso-pam-la-maggioranza-ascoltare-le-istanze-dei-cittadini-e-dovere-di-chi-amministra/

Feola, M. (2024, June 28). *Arquata: Paullo Investimenti, un progetto da oltre 160.000 mq*. Il Piccolo. https://www.ilpiccolo.net/2024/06/28/arquata-paullo-investimenti-un-progetto-da-oltre-160-000-mq/

Fico, A. (2023, June 19). Le politiche di Amazon nei territori svantaggiati. *L'Essenziale*. https://www.internazionale.it/essenziale/notizie/antonio-fico/2023/06/19/amazon-lavoratori-precari

Forte, E. (2017). Logistica economica, portualità e Zone Economiche Speciali per lo sviluppo del Mezzogiorno. *Rivista giuridica del Mezzogiorno*, *4*, 969–1000. https://doi.org/10.1444/88903

Forte, E., & Miotti, D. (2014). Dal modello eurocentrico al modello euromediterraneo, il ruolo centrale del Mezzogiorno. Le Filiere territoriali logistiche, strumento di sviluppo dell'area. *Rivista economica del Mezzogiorno*, *4*, 965–990. https://doi.org/10.1432/79501

Forte, E., & Miotti, D. (2018). Filiere Territoriali Logistiche e trasversalità intermodale: Leve per lo sviluppo del Sud. *Rivista economica del Mezzogiorno*, *1-2/2018*, 265–306. https://doi.org/10.1432/91444

Forte, E., & Siviero, L. (2011). Le Filiere Territoriali Logistiche per il rilancio strategico del Mezzogiorno. *Rivista economica del Mezzogiorno*, *1*, 147–190. https://doi.org/10.1432/35220

Forte, E., & Siviero, L. (2020). Logistica economica, corridoi co-modali e ZES per il rilancio dell'economia del Sud e dell'Italia. In SVIMEZ (Ed.),

Rapporto Svimez 2020: L'economia e la società del Mezzogiorno (pp. 601–621). Il Mulino.

Fossati, A., & Levaggi, R. (Eds.). (2001). *Dal decentramento alla devolution: Il federalismo fiscale in Italia e in Europa* (1st ed.). Angeli.

Foucault, M. (2012). *« Il faut défendre la société ». Cours au Collège de France (1975-1976)*. Gallimard/Le Seuil.

Four Motors for Europe. (2021, October 15). *Four Motors for Europe*. 4 Motors. https://www.4motors.eu/about/about-4-motors

Freddi, D. (Ed.). (2024). *Osservatorio sull'economia e il lavoro in provincia di Piacenza*. IRES Emilia-Romagna. https://ireser.it/wp-content/uploads/2024/12/OEL-PC_2024.pdf

French, S., Leyshon, A., & Wainwright, T. (2011). Financializing space, spacing financialization. *Progress in Human Geography*, *35*(6), 798–819. https://doi.org/10.1177/0309132510396749

Gabrielli, L. (2013). Fifteen Years of Italian Real Estate Investment Funds Across Different Market Cycles. In R. Sotelo & S. McGreal (Eds.), *Real Estate Investment Trusts in Europe: Evolution, Regulation, and Opportunities for Growth* (pp. 149–168). Springer. https://doi.org/10.1007/978-3-642-36856-1

Gazzola, E. (Ed.). (2022). *Città della logistica. Piacenza territorio lavoro*. Edizioni Scritture.

Gerebizza, E., & Taglieri, F. (2020). *La grande illusione. Zone economiche speciali e mega corridoi infrastrutturali, la strada giusta?* Re:Common.

Ghiara, H., & Sillig, C. (2007). Il cluster logistico-portuale genovese. In *Ancorare i porti al territorio: Dai traffici alla marittimizzazione*. McGraw-Hill. http://hdl.handle.net/11567/234077

Gillham, O. (2002). *The Limitless City: A Primer on the Urban Sprawl Debate*. Island Press.

Goonewardena, K. (2018). Planetary urbanization and totality. *Environment and Planning D: Society and Space*, *36*(3), 456–473. https://doi.org/10.1177/0263775818761890

Gottdiener, M., & Budd, L. (2005). *Key concepts in urban studies*. SAGE Publications.

Grappi, G. (2016). *Logistica*. Ediesse.

Gregson, N., Crang, M., & Antonopoulos, C. N. (2017). Holding together logistical worlds: Friction, seams and circulation in the emerging 'global warehouse.' *Environment and Planning D: Society and Space*, *35*(3), 381–398. https://doi.org/10.1177/0263775816671721

Gruppo Autosped G. (2024, December 9). *History*. Gruppo Autosped G. https://www.gruppoautospedg.com/en/history/

Haila, A. (2022). Land as a Financial Asset: The Theory of Urban Rent as a Mirror of Economic Transformation. In M. Hyötyläinen & R. Beauregard (Eds.), *The Political Economy of Land: Rent, Financialization and Resistance* (1st ed.). Routledge. https://doi.org/10.4324/9781003280255

Halbert, L., & Attuyer, K. (2016). Introduction: The financialisation of urban production: Conditions, mediations and transformations. *Urban Studies*, *53*(7), 1347–1361. https://doi.org/10.1177/0042098016635420

Halbert, L., & Rouanet, H. (2014). Filtering Risk Away: Global Finance Capital, Transcalar Territorial Networks and the (Un)Making of City-Regions: An Analysis of Business Property Development in Bangalore, India. *Regional Studies*, *48*(3), 471–484. https://doi.org/10.1080/00343404.2013.779658

Handfield, R. B., & Nichols, E. L. (1999). *Introduction to supply chain management*. Prentice Hall.

Harvey, D. (1985). *The urbanization of capital* (Vol. 2). Blackwell.

Harvey, D. (1989). From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism. *Geografiska*

Annaler: Series B, Human Geography, *71*(1), 3–17. https://doi.org/10.1080/04353684.1989.11879583

Heitz, A., Dablanc, L., & Tavasszy, L. A. (2017). Logistics sprawl in monocentric and polycentric metropolitan areas: The cases of Paris, France, and the Randstad, the Netherlands. *REGION*, *4*(1), 93. https://doi.org/10.18335/region.v4i1.158

Heitz, A., Launay, P., & Beziat, A. (2017). Rethinking Data Collection on Logistics Facilities: New Approach for Determining the Number and Spatial Distribution of Warehouses and Terminals in Metropolitan Areas. *Transportation Research Record: Journal of the Transportation Research Board*, *2609*(1), 67–76. https://doi.org/10.3141/2609-08

Hepworth, K. (2014). Enacting Logistical Geographies. *Environment and Planning D: Society and Space*, *32*(6), 1120–1134. https://doi.org/10.1068/d13044p

Hesse, M. (2004). Land for Logistics: Locational Dynamics, Real Estate Markets and Political Regulation of Regional Distribution Complexes. *Tijdschrift Voor Economische En Sociale Geografie*, *95*(2), 162–173. https://doi.org/10.1111/j.0040-747X.2004.t01-1-00298.x

Hesse, M. (2008). *The City As a Terminal*. Ashgate Publishing, Ltd.

Hesse, M. (2020). Logistics: Situating flows in a spatial context. *Geography Compass*, *14*(7). https://doi.org/10.1111/gec3.12492

Hesse, M., & Rodrigue, J.-P. (2004). The transport geography of logistics and freight distribution. *Journal of Transport Geography*, *12*(3), 171–184. https://doi.org/10.1016/j.jtrangeo.2003.12.004

Il Piacenza. (2021, October 10). *No logistica, la raccolta chiude con 1920 firme e «Si pensa ad un coordinamento dei vari comitati a livello provinciale»*. Il Piacenza. https://www.ilpiacenza.it/attualita/no-logistica-gossolengo-piacenza-raccolte-1920-firme-si-pensa-a-coordinamento-comitati-a-livello-provinciale.html

Il Piacenza. (2024a, July 6). *Primo treno al polo logistico di Castello: Inaugurato il raccordo ferroviario*. Il Piacenza.

https://www.ilpiacenza.it/attualita/trasporto-merci-primo-treno-al-polo-logistico-di-castello-inaugurato-il-raccordo-ferroviario.html

Il Piacenza. (2024b, July 19). *«Il vero Green Deal è spostare persone e merci dalla gomma alla rotaia»*. Il Piacenza. https://www.ilpiacenza.it/politica/polo-del-ferro-firma-ministro-salvini-tarasconi-stazione-le-mose-scalo-merci.html

Il Piacenza. (2025, January 25). *«Limiteremo l'espansione della logistica, solo a Le Mose e a certe condizioni»*. Il Piacenza. https://www.ilpiacenza.it/politica/pug-centrosinistra-maggioranza-limiteremo-l-espansione-della-logistica-solo-a-le-mose-e-a-certe-condizioni.html

Imperatore, P., & Frazzetta, F. (2024). Narratives of extreme weather events as a field of conflict: A media comparison between the Emilia Romagna and Marche floods. *Italian Political Science*, *18*(3), 316. https://doi.org/10.69101/ips.2023.18.3.7

Individuazione, in attuazione della D.G.R. 14-4382 del 22 dicembre 2021 degli ambiti territoriali da proporre ai fini dell'inserimento nelle perimetrazioni retroportuali della Zona Logistica Semplificata ZLS "Porto e retroporto di Genova"., Deliberazione della Giunta Regionale 18 febbraio 2022, nn. 12–4660, Giunta Regionale della Regione Piemonte, n. 10 Bollettino Ufficiale (2022).

Indovina, F. (1990). La città diffusa. In *La città diffusa* (pp. 21–43). Daest-IUAV.

Indovina, F. (2009). La nuova dimensione urbana: L'arcipelago metropolitano. In F. Indovina, L. Doria, L. Fregolent, & M. Savino, *Dalla città diffusa all'arcipelago metropolitano* (pp. 175–197). FrancoAngeli.

Into the Black Box. (2018). *Critical Logistics: A Manifesto*. Into the Black Box. http://www.intotheblackbox.com/manifesto/critical-logistics-a-manifesto/

Into the Black Box. (2022). *Le frontiere del Capitale. Come la nuova organizzazione logistica e il potere degli algoritmi hanno cambiato il mondo*. Red Star Press.

http://www.intotheblackbox.com/pubblicazioni/le-frontiere-del-capitale/

Into the Black Box. (2024). *Futuro presente. Il dominio globale del mondo secondo Amazon*. Red Star Press. https://www.redstarpress.it/prodotto/futuro-presente/

ISTAT. (2019). *Labour Market Areas*. Istituto Nazionale Di Statistica. https://www.istat.it/en/labour-market-areas

ISTAT. (2021). *IstatData* [Dataset]. https://esploradati.istat.it/databrowser/

ISTAT. (2022). *Trasporto marittimo: Merci per porto di imbarco e sbarco, tipo di carico e merce NST 2007*. ISTAT. http://dati.istat.it/index.aspx?queryid=25396

ISTAT. (2023, March 31). *Profili delle città metropolitane—Anni 2020-2022*. ISTAT. https://www.istat.it/it/archivio/280436

Istituto sui trasporti e la logistica. (2025). *Chi siamo*. Istituto sui trasporti e la logistica. https://www.fondazioneitl.org/chi-siamo/

Jazeel, T. (2018). Urban theory with an outside. *Environment and Planning D: Society and Space*, *36*(3), 405–419. https://doi.org/10.1177/0263775817707968

Jessop, B., Brenner, N., & Jones, M. (2008). Theorizing Sociospatial Relations. *Environment and Planning D: Society and Space*, *26*(3), 389–401. https://doi.org/10.1068/d9107

Kanai, J. M., & Schindler, S. (2019). Peri-urban promises of connectivity: Linking project-led polycentrism to the infrastructure scramble. *Environment and Planning A*, *51*(2), 302–322. https://doi.org/10.1177/0308518X18763370

Kanai, J. M., & Schindler, S. (2022). Infrastructure-led development and the peri-urban question: Furthering crossover comparisons. *Urban Studies*, *59*(8), 1597–1617. https://doi.org/10.1177/00420980211064158

Kang, S. (2020). Why do warehouses decentralize more in certain metropolitan areas? *Journal of Transport Geography*, *88*, 102330. https://doi.org/10.1016/j.jtrangeo.2018.10.005

Kanngieser, A. (2013). Tracking and Tracing: Geographies of Logistical Governance and Labouring Bodies. *Environment and Planning D: Society and Space*, *31*(4), 594–610. https://doi.org/10.1068/d24611

Katoen Natie. (2025). *Katoen Natie Rivalta Scrivia*. Katoen Natie. https://www.katoennatie.com/italia-rivalta-scrivia/

Keil, R. (2018). Extended urbanization, "disjunct fragments" and global suburbanisms. *Environment and Planning D: Society and Space*, *36*(3), 494–511. https://doi.org/10.1177/0263775817749594

Klauenberg, J., Elsner, L.-A., & Knischewski, C. (2020). Dynamics of the spatial distribution of hubs in groupage networks – The case of Berlin. *Journal of Transport Geography*, *88*, 102280. https://doi.org/10.1016/j.jtrangeo.2018.07.004

La Stampa. (2019, August 14). *Il Gruppo Gavio ridisegna l'area industriale di Rivalta Scrivia e farà opere pubbliche per oltre un milione*. La Stampa. https://www.lastampa.it/alessandria/2019/08/14/news/il-gruppo-gavio-ridisegna-l-area-industriale-di-rivalta-scrivia-e-fara-opere-pubbliche-per-oltre-un-milione-1.37347374/

Lambelet, S. (2019). Filling in the Resource Gap of Urban Regime Analysis to Make It Travel in Time and Space. *Urban Affairs Review*, *55*(5), 1402–1432. https://doi.org/10.1177/1078087417740974

Langley, P. (2021). Assets and assetization in financialized capitalism. *Review of International Political Economy*, *28*(2), 382–393. https://doi.org/10.1080/09692290.2020.1830828

Latour, B. (1996). On actor-network theory: A few clarifications. *Soziale Welt*, 369–381.

Lauria, M. (1999). Reconstruting Urban Regime Theory: Regulation Theory and Institutional Arrangements. In A. E. G. Jonas & D. Wilson (Eds.), *The Urban Growth Machine: Critical Perspectives, Two Decades Later*. State University of New York.

Le Galès, P. (1995). Du gouvernement des villes à la gouvernance urbaine. *Revue française de science politique*, *45*(1), 57–95. https://doi.org/10.3406/rfsp.1995.403502

Lefebvre, H. (1970). *La révolution urbaine*. Gallimard.

Legambiente Emilia-Romagna. (2024, December 4). Consumo di suolo—I dati ISPRA per l'Emilia-Romagna. *Legambiente Emilia-Romagna*. https://www.legambiente.emiliaromagna.it/2024/12/04/consumo-di-suolo-i-dati-ispra-per-lemilia-romagna/

Logan, J. R., & Molotch, H. L. (1987). *Urban Fortunes: The Political Economy of Place*. University of California Press.

Luzzatto, G. (2013). *An Economic History of Italy: From the Fall of the Empire to the Beginning of the 16th Century* (1st ed.). Routledge. https://doi.org/10.4324/9781315019505

Maggiori, L. (2025, February 26). L'impatto delle Zone logistiche semplificate sui territori. Il caso dell'Emilia-Romagna. *Altreconomia*. https://altreconomia.it/limpatto-delle-zone-logistiche-semplificate-sui-territori-il-caso-dellemilia-romagna/

Magnani, M., Sanfelici, D., Adisson, F., & Halbert, L. (2024). Assetising Brazilian logistics: Power, spaces and scales under asset management capitalism. *Finance and Space*, *1*(1), 240–258. https://doi.org/10.1080/2833115X.2024.2359564

Malanima, P. (1998). Italian Cities 1300-1800. A quantitative approach. *Rivista Di Storia Economica*, *2*, 91–126. https://doi.org/10.1410/9865

Mancini, M. (2014). *Le specializzazioni produttive regionali attraverso i Censimenti Industria e Servizi 2001 e 2011*. Regione Emilia-Romagna. https://statistica.regione.emilia-romagna.it/studi-analisi/pubblicazioni-ricerche/specializzazioni_censimento_industria

Marotta, A. (1991). *La Cittadella di Alessandria. Una fortezza per il territorio dal Settecento all'Unità*. SO.G.ED. Edizioni. https://www.fondazionecralessandria.it/biblioteca/la-cittadella-di-alessandria/#dflip-df_2836/1/

Mattarocci, G., & Pekdemir, D. (2017). *Logistic Real Estate Investment and REITs in Europe*. Springer International Publishing. https://doi.org/10.1007/978-3-319-69206-7

Mezzadra, S., & Neilson, B. (2013). Extraction, logistics, finance. Global Crisis and the Politics of Operations. *Radical Philosophy*, *78*, 8–18.

Ministero delle Infrastrutture e dei Trasporti. (2007). *Il territorio come infrastruttura di contesto. Contributi alla programmazione 2007-2013*.

Ministero delle Infrastrutture e dei Trasporti. (2011). *Piano nazionale della logistica: Analisi demo-socio-economica e infrastrutturale delle piattaforme logistiche territoriali*.

Ministero delle Infrastrutture e dei Trasporti & Consulta Generale per l'Autotrasporto e per la Logistica. (2012). *Piano Nazionale della Logistica 2012-2020*. https://www.otinord.it/allegati/39.pdf

Ministero dell'Economia e delle Finanze. (2016). *Strategie per le infrastrutture di trasporto e logistica*. Ministero dell'Economia e delle Finanze. https://www.rgs.mef.gov.it/VERSIONE-I/attivita_istituzionali/previsione/contabilita_e_finanza_pubblica/documento_di_economia_e_finanza/2016/index.html

Ministero dell'Economia e delle Finanze. (2017). *Connettere l'Italia: Fabbisogni e progetti di infrastrutture*. Ministero dell'Economia e delle Finanze. https://mit.gov.it/node/5430

Molotch, H. (1976). The City as a Growth Machine: Toward a Political Economy of Place. *American Journal of Sociology*, *82*(2), 309–332. JSTOR.

Molotch, H. (1993). The Political Economy of Growth Machines. *Journal of Urban Affairs*, *15*(1), 29–53. https://doi.org/10.1111/j.1467-9906.1993.tb00301.x

Molotch, H., & Vicari, S. (1988). Three Ways to Build: The Development Process in the United States, Japan, and Italy. *Urban Affairs Quarterly*, *24*(2), 188–214. https://doi.org/10.1177/004208168802400202

Monte-Mór, R. L. (1994). Urbanização extensiva e lógicas de povoamento: Um olhar ambiental. In *Território, globalização e fragmentação* (pp. 169–181). Hucitec.

Mossberger, K., & Stoker, G. (2001). The Evolution of Urban Regime Theory: The Challenge of Conceptualization. *Urban Affairs Review*, *36*(6), 810–835. https://doi.org/10.1177/10780870122185109

Munafò, M. (Ed.). (2022). *Consumo di suolo, servizi ecosistemici e dinamiche territoriali*. Report SNPA 32/22. https://www.snpambiente.it/2022/07/26/consumo-di-suolo-dinamiche-territoriali-e-servizi-ecosistemici-edizione-2022/

Munafò, M. (Ed.). (2023). *Consumo di suolo, servizi ecosistemici e dinamiche territoriali*. Report SNPA 37/23. https://www.snpambiente.it/2023/10/25/consumo-di-suolo-dinamiche-territoriali-e-servizi-ecosistemici-edizione-2023/

Munafò, M. (Ed.). (2024). *Consumo di suolo, servizi ecosistemici e dinamiche territoriali*. Report ambientali SNPA. https://www.snpambiente.it/temi/suolo/consumo-di-suolo-dinamiche-territoriali-e-servizi-ecosistemici-edizione-2024/

Muniesa, F. (2017). On the Political Vernaculars of Value Creation. *Science as Culture*, *26*(4), 445–454. https://doi.org/10.1080/09505431.2017.1354847

Navaro, I. (2017, April 3). *I privati pronti a investire 18 milioni: «Arquata e Novi scali strategici»*. Il Secolo XIX. https://www.ilsecoloxix.it/basso-piemonte/2017/04/03/news/i-privati-pronti-a-investire-18-milioni-arquata-e-novi-scali-strategici-1.30792269

Nefs, M., & Daamen, T. (2023). Behind the Big Box: Understanding the planning-development dialectic of large distribution centres in Europe. *European Planning Studies*, *31*(5), 1007–1028. https://doi.org/10.1080/09654313.2022.2057792

Neilson, B. (2012). Five theses on understanding logistics as power. *Distinktion: Journal of Social Theory*, *13*(3), 322–339. https://doi.org/10.1080/1600910X.2012.728533

Notteboom, T., & Rodrigue, J.-P. (2005). Port regionalization: Towards a new phase in port development. *Maritime Policy & Management*, *32*(3), 297–313. https://doi.org/10.1080/03088830500139885

OTI Piemonte. (2025, February 20). *Scalo ferroviario Alessandria Smistamento*. OTI Piemonte. http://www.otipiemonte.it/progetti/scalo_ferroviario_alessandria_smistamento

Paasi, A., Harrison, J., & Jones, M. (2018). *Handbook on the Geographies of Regions and Territories*. Edward Elgar Publishing. https://doi.org/10.4337/9781785365805

Peake, L., Patrick, D., Reddy, R. N., Sarp Tanyildiz, G., Ruddick, S., & Tchoukaleyska, R. (2018). Placing planetary urbanization in other fields of vision. *Environment and Planning D: Society and Space*, *36*(3), 374–386. https://doi.org/10.1177/0263775818775198

Peano, I. (2020). Conflitti e sinergie della logistica: Enclavi agro-industriali, migrazioni e ZES. *Quaderni Di Scienza & Politica*, *11*, 135–154. https://doi.org/10.6092/unibo/amsacta/6520

Perulli, P. (2012). Introduzione. E se il Nord esistesse davvero? In P. Perulli (Ed.), *Nord. Una città-regione globale*. Il Mulino. https://www.darwinbooks.it/doi/10.978.8815/309785

Phelps, N. A. (2017). *Interplaces: An Economic Geography of the Inter-urban and International Economies*. Oxford University Press. https://doi.org/10.1093/oso/9780199668229.001.0001

Phelps, N. A., & Wood, A. M. (2011). The New Post-suburban Politics? *Urban Studies*, *48*(12), 2591–2610. https://doi.org/10.1177/0042098011411944

Piacenza Sera. (2021a, October 16). *Legambiente: "Sei No alla logistica a Monticelli."* Piacenza Sera. https://www.piacenzasera.it/2021/10/legambiente-sei-no-alla-logistica-a-monticelli/402981/

Piacenza Sera. (2021b, December 17). *Maxi Logistica a Monticelli, bene la bocciatura della Provincia*. Piacenza Sera.

https://www.piacenzasera.it/2021/12/logistica-a-monticelli-bene-la-bocciatura-del-maxi-progetto-di-2-milioni-di-mq/411816/

Piacenza Sera. (2023, October 13). Bene lo stop alla logistica diffusa, ma per Piacenza la viabilità resta una criticità. *Piacenza Sera*. https://www.piacenzasera.it/2023/10/bene-lo-stop-alla-logistica-diffusa-ma-per-piacenza-la-viabilita-resta-una-criticita/504777/

Piano Territoriale Provinciale, No. 29/27845, Provincia di Alessandria (2002). https://provincia.alessandria.it/2016/06/10/piano-territoriale-provinciale/

Pierre, J. (2014). Can Urban Regimes Travel in Time and Space? Urban Regime Theory, Urban Governance Theory, and Comparative Urban Politics. *Urban Affairs Review*, *50*(6), 864–889. https://doi.org/10.1177/1078087413518175

Pileri, P. (2022). Logistica, territorio e consumo di suolo. Un elefante in cristalleria. *Trasporti & Cultura*, *62–63*, 19–27.

Provincia di Piacenza. (2024, September 25). *Piano Territoriale di Area Vasta*. Provincia Di Piacenza. https://www.provincia.pc.it/pagina.php?IDpag=374&idbox=82&idvocebox=400

Provincia di Piacenza, Comune di Fiorenzuola d'Arda, & Comune di Cortemaggiore. (2022). *Accordo Territoriale tra la Provincia di Piacenza, il Comune di Fiorenzuola d'Arda e il Comune di Cortemaggiore relativo al Polo Produttivo di Sviluppo Territoriale (PPST) n. 4 denominato "Barabasca CA.RE.CO."*

Pugliese, G. (2020). Italy and China: Much Ado about an MoU. *East Asian Policy*, *12*(04), 73–89. https://doi.org/10.1142/S179393052000032X

PwC. (2022). *Real Estate Market Overview | Italy*. https://www.pwc.com/it/it/publications/assets/docs/pwc-real-estate-2022.pdf

PwC. (2023). *Real Estate Market Overview | Italy*. https://www.pwc.com/it/it/publications/docs/pwc-real-estate-market-overview-2023.pdf

Raimbault, N. (2017). Le développement logistique des grandes périphéries métropolitaines: Régimes (péri)urbains et privatisation silencieuse de la production des espaces logistiques. *Métropoles*, *21*. https://doi.org/10.4000/metropoles.5564

Raimbault, N. (2019). From regional planning to port regionalization and urban logistics. The inland port and the governance of logistics development in the Paris region. *Journal of Transport Geography*, *78*, 205–213. https://doi.org/10.1016/j.jtrangeo.2019.06.005

Raimbault, N. (2022). Outer-suburban politics and the financialisation of the logistics real estate industry: The emergence of financialised coalitions in the Paris region. *Urban Studies*, *59*(7), 1481–1498. https://doi.org/10.1177/00420980211014452

Raimbault, N., Douet, M., & Frémont, A. (2013). Les implantations logistiques entre réseaux et territoires. *L'Espace géographique*, *42*(1), 32–43. Cairn.info. https://doi.org/10.3917/eg.421.0032

Raimbault, N., Jacobs, W., & van Dongen, F. (2016). Port Regionalisation from a Relational Perspective: The Rise of Venlo as Dutch International Logistics Hub. *Tijdschrift Voor Economische En Sociale Geografie*, *107*(1), 16–32. https://doi.org/10.1111/tesg.12134

Rancati, M. (2021, October 14). Nuova logistica per 1,9 milioni di metri quadri: Monticelli accelera. *Libertà*. https://www.liberta.it/news/economia-e-politica/2021/10/14/nuova-logistica-per-19-milioni-di-metri-quadri-monticelli-accelera/

Redazione ANSA. (2018, August 18). Genova, le 43 vittime del crollo del ponte Morandi. *Agenzia ANSA*. https://www.ansa.it/liguria/notizie/2018/08/18/-le-43-vittime-del-crollo-del-ponte-morandi_9f53cd46-1b85-45ae-a23a-dc92c9c5cef3.html

Regione Emilia-Romagna. (2021a). *Piano Regionale Integrato dei Trasporti*. https://mobilita.regione.emilia-romagna.it/pianificazione/prit-piano-regionale-integrato-dei-trasporti/prit-2025-elaborati-tecnici

Regione Emilia-Romagna. (2021b, October 6). *Piano di Sviluppo Strategico della Zona Logistica Semplificata Emilia-Romagna*. https://demetra.regione.emilia-romagna.it/al/articolo?urn=er:assemblealegislativa:delibera:2022;70&dl_t=pdf&dl_a=y&dl_id=6&pr=correlati,documentazione

Regione Emilia-Romagna. (2023, November 28). *Consumo di suolo e rigenerazione urbana: Un primo bilancio della L.R. 24/2017*. Regione Emilia-Romagna. https://territorio.regione.emilia-romagna.it/urbanistica/formazione-ed-eventi/convegni/consumo-di-suolo-rigenerazione-urbana

Regione Emilia-Romagna. (2024, December 5). *Consumo di suolo: In Emilia-Romagna con la legge regionale salvati oltre 21mila ettari già destinati a urbanizzazione dai Comuni, oltre il 50% in zone a rischio alluvione*. Regione Emilia-Romagna. https://territorio.regione.emilia-romagna.it/notizie/attualita/2024/consumo-di-suolo-in-emilia-romagna-con-la-legge-regionale-salvati-oltre-21mila-ettari-gia-destinati-a-urbanizzazione-dai-comuni-oltre-il-50-in-zone-a-rischio-alluvione

Regione Emilia-Romagna. (2025). *Consumo di suolo—Verifica del 3%*. Regione Emilia-Romagna. https://territorio.regione.emilia-romagna.it/urbanistica/monitoraggio-lr-24-2017/monitoraggio/piani-urbanistici-comunali/verifica_tre

Regione Liguria. (2024, June 13). *Piano di Sviluppo Strategico della Zona Logistica Semplificata "Porto e Retroporto della Spezia."* https://decretidigitali.regione.liguria.it/ArchivioFile/AMM2024595/REG_AMM_A_595_2024.pdf

Regione Piemonte. (2023). *Piano Regionale della Mobilità e dei Trasporti*. https://www.regione.piemonte.it/web/temi/mobilita-trasporti/pianificazione-della-mobilita-dei-trasporti/piani-settore-prmop-prlog

Regione Piemonte. (2025). *Normativa Urbanistica*. Regione Piemonte. https://www.regione.piemonte.it/web/temi/ambiente-territorio/territorio/urbanistica/normativa-urbanistica

Regolamento di istituzione di Zone logistiche semplificate (ZLS) ai sensi dell'articolo 1, comma 65, della legge 27 dicembre 2017, n. 205, 40/2024, Consiglio dei Ministri, Gazzetta Ufficiale (2024). https://www.gazzettaufficiale.it/eli/id/2024/04/02/24G00056/sg

Regolamento recante istituzione di Zone economiche speciali (ZES), DPCM 12, Presidente del Consiglio dei Ministri, Gazzetta Ufficiale (2018). https://www.normattiva.it/atto/caricaDettaglioAtto?atto.dataPubblicazioneGazzetta=2018-02-26&atto.codiceRedazionale=18G00033&atto.articolo.numero=0&atto.articolo.sottoArticolo=1&atto.articolo.sottoArticolo1=0&qId=&tabID=0.6352309984780948&title=lbl.dettaglioAtto

Rete Ferroviaria Italiana. (2024). *Scalo merci di Alessandria: Prosegue lo sviluppo dell'hub intermodale*. https://www.rfi.it/content/rfi/it/news-e-media/comunicati-stampa-e-news/2024/3/4/rfi---scalo-merci-di-alessandria--prosegue-lo-sviluppo-dell-hub-.html

Robichet, A., & Nierat, P. (2021). Consequences of logistics sprawl: Order or chaos? - the case of a parcel service company in Paris metropolitan area. *Journal of Transport Geography*, *90*, 102900. https://doi.org/10.1016/j.jtrangeo.2020.102900

Rodgers, S. (2009). Urban Growth Machine. In R. Kitchin & N. Thrift (Eds.), *International Encyclopedia of Human Geography* (pp. 40–45). Elsevier. https://doi.org/10.1016/B978-008044910-4.01090-7

Salone, C. (2005). Polycentricity in Italian Policies. *Built Environment*, *31*(2), 153–162. JSTOR.

Salviamo il paesaggio. (2021, December 7). Polo logistico di Calendasco: Il Sindaco dice NO e arriva il ricorso. *Salviamo il paesaggio*. https://www.salviamoilpaesaggio.it/blog/2021/12/polo-logistico-di-calendasco-il-sindaco-dice-no-e-arriva-il-ricorso/

Sassen, S. (1991). *The global city: New York, London, Tokyo* (1st ed.). Princeton University Press.

Sassen, S. (2005). The Global City: Introducing a Concept. *Brown Journal of World Affairs*, *XI*(2), 27–43.

Sassen, S. (2008). *Territory, authority, rights: From medieval to global assemblages* (Updated ed., 4. print., 1. paperback print). Princeton Univ. Press.

Sassen, S. (2013). When Territory Deborders Territoriality. *Territory, Politics, Governance*, *1*(1), 21–45. https://doi.org/10.1080/21622671.2013.769895

Savino, M. (2009). Governare la complessità. Il Veneto come caso esemplificativo ma non paradigmatico. In F. Indovina, L. Doria, L. Fregolent, & M. Savino, *Dalla città diffusa all'arcipelago metropolitano*. FrancoAngeli.

Schindler, S., & Kanai, J. M. (2021). Getting the territory right: Infrastructure-led development and the re-emergence of spatial planning strategies. *Regional Studies*, *55*(1), 40–51. https://doi.org/10.1080/00343404.2019.1661984

Schmid, C. (2018). Journeys through planetary urbanization: Decentering perspectives on the urban. *Environment and Planning D: Society and Space*, *36*(3), 591–610. https://doi.org/10.1177/0263775818765476

Scott, A. J. (Ed.). (2001). *Global city-regions: Trends, theory, policy*. Oxford University Press.

Senato della Repubblica. (2022). *Commissione parlamentare di inchiesta sulle condizioni di lavoro in Italia, sullo sfruttamento e sulla sicurezza nei luoghi di lavoro pubblici e privati* (No. XXII-BIS, N. 11). Senato della Repubblica. https://www.senato.it/leg18/30377

Serra, O. (2025, April 8). *"Maggioranza incapace, rifiuta ogni contributo". In Regione polemica Pd-centrodestra sulla logistica*. La Stampa. https://www.lastampa.it/novara/2025/04/08/news/maggioranza_incapace_rifiuta_ogni_contributo_in_regione_polemica_pd-centrodestra_sulla_logistica-15094372/

Silver, J. (2021). Corridor urbanism. In C. McFarlane & M. Lancione, *Global Urbanism* (1st ed., pp. 251–258). Routledge. https://doi.org/10.4324/9780429259593-33

Silvestro, E., Valz Gris, A., & Salone, C. (2025). Per una political economy degli hinterland logistici: I regimi territoriali della logistica. *Semestrale di Studi e Ricerche di Geografia*, *1/2025*.

SLALA. (2007, March). *Studio di fattibilità Scalo Smistamento e servizio ferroviario*. https://www.slala.it/retroporto-di-alessandria.html

Smith, J. M. (2019). Urban Regime Theory. In A. M. Orum, *The Wiley Blackwell Encyclopedia of Urban and Regional Studies* (1st ed., pp. 1–9). Wiley. https://doi.org/10.1002/9781118568446.eurs0389

Sozzetti, E. (2021). *La logistica del Terzo Millennio nel basso Piemonte*. LAReditore. https://www.slala.it/la-logistica-del-terzo-millennio-nel-basso-piemonte.html

Sozzetti, E. (2022). *Logistica, nuovi orizzonti tra sviluppo e sostenibilità*. LAReditore. https://www.slala.it/logistica-il-baricentro-del-nord-ovest.php

Sozzetti, E. (2023). *Logistica, il baricentro del Nord Ovest*. LAReditore. https://www.slala.it/logistica-il-baricentro-del-nord-ovest.php

Spampinato, M. (2001). Trasporto e logistica inland nel Mezzogiorno: Una nota sugli interporti nascenti. *Rivista economica del Mezzogiorno*, *4*, 841–860. https://doi.org/10.1432/4234

Statista. (2024). *Number of e-commerce users in selected European countries from 2019 to 2029*. Statista. https://www.statista.com/forecasts/1288106/e-commerce-users-in-select-european-countries-by-country

Stone, C. N. (1989). *Regime politics: Governing Atlanta, 1946-1988*. University Press of Kansas.

Stone, C. N. (1993). Urban Regimes and the Capacity to Govern: A Political Economy Approach. *Journal of Urban Affairs*, *15*(1), 1–28. https://doi.org/10.1111/j.1467-9906.1993.tb00300.x

Stone, C. N. (2015). Reflections on Regime Politics: From Governing Coalition to Urban Political Order. *Urban Affairs Review*, *51*(1), 101–137. https://doi.org/10.1177/1078087414558948

Strale, M. (2020). Logistics sprawl in the Brussels metropolitan area: Toward a socio-geographic typology. *Journal of Transport Geography*, *88*, 102372. https://doi.org/10.1016/j.jtrangeo.2018.12.009

Swyngedouw, E. (1996). The city as a hybrid: On nature, society and cyborg urbanization. *Capitalism Nature Socialism*, *7*(2), 65–80. https://doi.org/10.1080/10455759609358679

Swyngedouw, E. (2004). Globalisation or 'glocalisation'? Networks, territories and rescaling. *Cambridge Review of International Affairs*, *17*(1), 25–48. https://doi.org/10.1080/0955757042000203632

Swyngedouw, E., & Heynen, N. C. (2003). Urban Political Ecology, Justice and the Politics of Scale. *Antipode*, *35*(5), 898–918. https://doi.org/10.1111/j.1467-8330.2003.00364.x

Tadini, M. (2006). La regione logistica del Nord-Ovest: Una prospettiva perseguibile? *Ambiente Società Territorio*, *6/2006*, 12–18.

Tadini, M. (2017). La logistica nel Novarese: Un esempio di radicamento territoriale. In E. Dansero, M. G. Lucia, U. Rossi, & A. Toldo (Eds.), *(S)radicamenti* (pp. 867–873). Società di Studi Geografici. http://hdl.handle.net/11579/92628

Tadini, M. (2018). Il corridoio ferroviario euro-asiatico: Le barriere ai flussi logistici. In M. Fuschi (Ed.), *Barriere/Barriers* (Vol. 16, pp. 151–158). http://hdl.handle.net/11579/99685

Tadini, M. (2019). Il trasporto aereo delle merci: Recenti evoluzioni, scenari geografici e ruolo di Malpensa. *Bollettino della Società Geografica Italiana*, *2*(2), 49–64. https://doi.org/10.13128/BSGI.V2I2.705

Tadini, M., Ferrario, C., & Gavinelli, D. (2020). La Belt and Road Iniziative: Le scelte strategiche, gli equilibri regionali e la ridefinizione dei confini. In *Confin(at)i/Boundaries*. Società di Studi Geografici. http://hdl.handle.net/11579/118805

Taggart, J., & Power, M. (2024). Rendering development investible: The anti-politics machine and the financialisation of development. *Progress in Human Geography*, *48*(5), 552–574. https://doi.org/10.1177/03091325241240741

Tanchum, M. (2020). *Italy and Turkey's Europe-to-Africa Commercial Corridor* (No. 10/2020; AIES Fokus, pp. 1–5). Austria Institut für Europa- und Sicherheitspolitik. https://www.aies.at/publikationen/2020/fokus-20-10.php

Tapp, R., & Weber, R. (2022). Buildings As Financial Assets. In M. Hyötyläinen & R. Beauregard (Eds.), *The Political Economy of Land: Rent, Financialization and Resistance* (1st ed.). Routledge. https://doi.org/10.4324/9781003280255

Thrift, N. (2007). *Non-Representational Theory: Space, Politics, Affect*. Routledge. https://doi.org/10.4324/9780203946565

Toro, F., & Navarrete-Hernandez, P. (2022). A "Financialised Production of Space". Analysing Real Estate Investment Funds through Lefebvre's Spatial Triad. *Housing, Theory and Society*, *39*(3), 359–379. https://doi.org/10.1080/14036096.2021.1968486

Trespidi, L. (2022, October 14). *Logistica tra Fiorenzuola e Corte: «Territorio saturo, non porta sviluppo»*. Il Piacenza. https://www.ilpiacenza.it/attualita/logistica-barabasca-careco-fiorenzuola-cortemaggiore-cambiamo-fiorenzuola-consiglio-12-10-2022.html

Tropeano, M. (2023, May 8). Dario Gallina: "Porto di Genova, alta velocità, logistica. 10 anni per il nuovo triangolo industriale." *La Stampa*, 43.

Tsing, A. (2005). *Friction: An ethnography of global connection*. Princeton Univ. Press.

Tsing, A. (2009). Supply Chains and the Human Condition. *Rethinking Marxism*, *21*(2), 148–176. https://doi.org/10.1080/08935690902743088

Tsing, A. (2012). On Nonscalability: The Living World Is Not Amenable to Precision-Nested Scales. *Common Knowledge*, *18*(3), 505–524. https://doi.org/10.1215/0961754X-1630424

Turri, E. (2000). *La megalopoli padana*. Marsilio Editori. https://www.marsilioeditori.it/libri/scheda-libro/3177556/la-megalopoli-padana

UNCTAD. (2019). World Investment Report 2019—Special Economic Zones. In UNCTAD, *World Investment Report* (pp. 128–206). United Nations Conference on Trade and Development. https://unctad.org/webflyer/world-investment-report-2019

UNCTAD. (2024). *UNCTAD B2C E-commerce Index* [Dataset]. https://prosperitydata360.worldbank.org/en/indicator/UNCTAD+B2C+RANK

UN-Habitat. (2006). State of the World's Cities 2006/7. In *The millennium development goals and urban sustainability: 30 years of shaping the habitat agenda*. Earthscan London.

Unioncamere Emilia-Romagna. (2022, July). *Libro Bianco sulle priorità infrastrutturali dell'Emilia-Romagna*.

Unioncamere Piemonte. (2022, October). *Libro Bianco sulle priorità infrastrutturali del Piemonte*.

Unioncamere Piemonte. (2024). *Studio sugli scenari di sviluppo per la logistica del Sistema Piemonte*. https://pie.camcom.it/infrastrutture/osservatorio-territoriale-infrastrutture-2024-piemonte

Valz Gris, A. (2023). Beyond the boom. Genealogies of corridor urbanism in the making of the Lithium Triangle, Argentina and Chile. *Geoforum*, *147*(103913). https://doi.org/10.1016/j.geoforum.2023.103913

Vicari, S., & Molotch, H. (1990). Building Milan: Alternative machines of growth. *International Journal of Urban and Regional Research*, *14*(4), 602–624. https://doi.org/10.1111/j.1468-2427.1990.tb00159.x

Vinci, S. (2019). *Rovina*. Einaudi.

Vojnovic, I. (2019). Growth Machine Politics. In A. M. Orum, *The Wiley Blackwell Encyclopedia of Urban and Regional Studies* (1st ed., pp. 1–9). Wiley. https://doi.org/10.1002/9781118568446.eurs0128

Weber, R. (2010). Selling City Futures: The Financialization of Urban Redevelopment Policy. *Economic Geography*, *86*(3), 251–274. https://doi.org/10.1111/j.1944-8287.2010.01077.x

Whiteside, H., Alami, I., Dixon, A. D., & Peck, J. (2023). Making space for the new state capitalism, part I: Working with a troublesome category. *Environment and Planning A: Economy and Space*, *55*(1), 63–71. https://doi.org/10.1177/0308518X221140186

Wiig, A., & Silver, J. (2019). Turbulent presents, precarious futures: Urbanization and the deployment of global infrastructure. *Regional Studies*, *53*(6), 912–923. https://doi.org/10.1080/00343404.2019.1566703

World Capital Group. (2017). *Logistics Facilities in Italy* [GIS]. www.worldcapital.it

World Capital Group. (2022). *Borsino Immobiliare Logistica*. World Capital Group.

Woudsma, C., Jakubicek, P., & Dablanc, L. (2016). Logistics Sprawl in North America: Methodological Issues and a Case Study in Toronto. *Transportation Research Procedia*, *12*, 474–488. https://doi.org/10.1016/j.trpro.2016.02.081

Yeung, H. W. (2005). Rethinking relational economic geography. *Transactions of the Institute of British Geographers*, *30*(1), 37–51. https://doi.org/10.1111/j.1475-5661.2005.00150.x