

Amedeo Feniello Organising the grain trade in the early Renaissance Southern Italy. The Medici in Apulia*

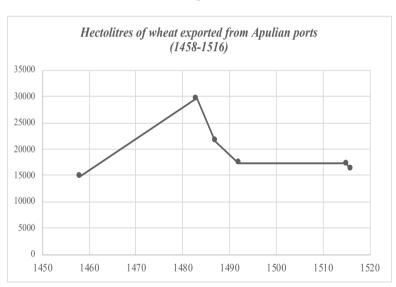
Il commercio di cereali dalla Puglia verso il Mediterraneo e l'Europa è stato, nel tardo Medioevo, un asset fondamentale dell'economia del Regno di Napoli. Un commercio che, tuttavia, non era condotto da mercanti locali ma da mercanti provenienti da aree commercialmente più sviluppate, con un ruolo centrale svolto da élite commerciali provenienti da Firenze. Una storia che nella seconda metà del XV secolo ebbe tra i suoi protagonisti l'impresa mercantile-bancaria dei Medici.

The international trade established by foreign elites in southern Italy during the late Middle Ages relied heavily on Apulian wheat as a key resource. By the 14th century, the distribution network for Apulian wheat was already extensive. This is evidenced by Francesco Balducci Pegolotti's Pratica di Mercatura, the most renowned trade guide of the 14th century, which offers detailed information on routes, ports, markets, fairs, traded goods, and their prices across a vast geographic area, stretching from northern Europe to China. This source highlights the significance of wheat as one of the most prominent products traded in Europe¹. Source providing basic information on one of the main products traded in Europe: wheat. In Italy, wheat from Apulia arrived to Ancona, Bologna, Corneto (the former name of the port of Civitavecchia serving the city of Rome), Florence, Genoa, L'Aquila, Naples, Pisa, Rimini, Sicily and, of course, Venice. In France, it reached Aigues-Mortes, Arles, Marseille, Montpellier, Narbona, Nîmes. In Northern Europe, Bruges and London. In Spain, Barcelona, Cadiz, Majorca, Seville. On the Dalmatian coast, Istria, Kotor, Zadar and Ragusa. In the Aegean sea, Candia, Cyprus, Negroponte, the Peloponnese, Rhodes and

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¹ Balducci Pegolotti, *La pratica della mercatura*. See also Abulafia, *Grain traffic*, pp. 25-35: 25.

Thessalonica. In the Byzantine Empire, Constantinople and Pera. In the Middle East, Egypt and North Africa, Laiazzo and Acre, Alexandria, Bona, Biaia, Tripoli and Tunis, widespread European and mediterranean space that can still be found, for example, in the following century in other books like the *Pratica* of Giovanni Antonio da Uzzano and in the Libro de mercatantie ("book of commerce") of the pseudo-Chiarini². Defining precisely how much weath was produced in Apulia and exported from this area poses a difficult task; scarce data are available for the fourteenth century, while estimates are easier for the fifteenth and the beginning of sixteenth, albeit still fragmentary.



Graph.13

Cross-referencing the data, the maximum peak of exports was reached in the 1483 (with 15,000 carri⁴, equivalent to more or less 30,000 hectolitres), with a probable growth that began in the 1450s. Afterwards, a period of decline started, with exports settling, at the end of the fifteenth century and the first decades of the following century, between 8,200

² Romano, *A propos du commerce*, pp. 149-161: 150-151.

³ Data from Sakellariou, Southern Italy, pp. 266-267.

⁴ The Kingdom of Naples, in which Apulia was part, had several measures employed to measure cereals. The standard was a carrus equivalent to 36 tomoli (each

and 8,700 *carra*, 17,363 hectolitres. However, the exported quantities remained relevant for the time, as a sign of a massive export. A trade that needed an integrated market system, with a distribution belt that would allow moving the grain from the producer to the consumer, from Apulia to the outside. In the late fifteenth century, those who managed to respond better to this need were not the local merchants, who lacked organisation and sufficient know-how but the merchant communities coming from abroad – Venetians, Lombards, Catalans, Dalmatians, Tuscans. The latter represented the leading group, with a central role played by the Medici company. One of the main commercial and banking companies in Florence and one of the most important in Europe at the time. A company founded by Giovanni di Bicci and Cosimo il Vecchio and the basis of the family's power in the city and for the creation of the seigniory of Lorenzo il Magnifico⁵.

Raymond De Roover dedicated very few pages of his classic book on the Medici bank⁶ to the presence of this company in Apulia. He considered the importance of the Apulian cereal production area as one of the most strategic for Europe and the Mediterranean: a fundamental crossroads of unequal exchange with, in exports, foodstuffs and, especially, cereals; and in imports, manufactured goods and textiles. But he attributed to the Medici an inconsistent role. Things didn't exactly turn out that way. The Medici, as many testimonies show, were anything but outsiders: they were capable to build a system proportionate to their international attitude between the 1470s and 1480s, in three distinct moments and with a different organizational structure. And they were able to follow in the footsteps already traced by other Florentine companies, which, during the same period, consolidated their role as the driving force of southern-Italian trade and strengthened their

of 55 litres), for a total of 1,980 litres, 19,8 hectolitres. These measures have been adopted in this study. As for the currencies used in the Kingdom, the main one was the ounce, corresponding to 5 gold florins of Florence (the florin was, at that time, the most important currency in Europe, similar to the dollar today for the world economy). The ounce was followed as a submultiple by the tarì (one ounce = 30 tari). The tarì was followed by wheat (1 tari = 20 grains).

⁵ The bibliography on Medici is endless. Please refer, to know the evolution of family history, to the recent book Tanzini, *Cosimo de' Medici* and Heers, *Le clan des Medicis*.

⁶ De Roover, *The Rise and Decline*, p. 369.

welding with the foreign market⁷. A simple glance, for example, to the Giornali (the ledgers in which to write down any operation day by day) of the Strozzi bank in 1473 and 14768, whose structure was centered on Filippo's bank in Naples, demonstrates how, with a triangulation of accounts, remittances left from and to Apulia, towards Florence and Venice. And, at the same time, we have the dimension of a market that ran along the Adriatic-Tyrrhenian axis, with Naples as final destination: where not only foodstuffs and cereals, but also silver, gold, jewelry, silk cloths, gall and spices passed. In short, the Florentines and the Medici not only managed the routes of goods and credit in Apulia, but also made a unifying contribution to the market, keeping together grain production, trade and maritime transport, capital movements, financial structures and techniques.

The presence of the Medici company in the Kingdom of Naples (fig. 1) follows a tortuous path. From 1426 to 1471 no banking branch was issued, either in Naples or elsewhere. They were represented by correspondents, who handled business on a commission: Benedetto Guasconi, Bartolomeo Buonconti and, above all, the Strozzi bank (since 1455). In 1471 the Medici opened their headquarters in Naples, driven by the centrality of the capital of the Kingdom, and following their interests, especially those in Apulia. As first director, Lorenzo dei Medici choses Agostino di Sandro Biliotti, who turned out not to be a happy choice. He was succeeded by Agnolo Serragli and later by Francesco di Filippo Nasi. They had a central position in the management of the grain trade⁹.

So, the link between the Medici and the Apulian wheat had three distinct phases. The first began in the 1470s and was based on the basic contribution of two partners: the Strozzi bank and the Neapolitan merchant group of the Coppola family. Its stronghold was the Gulf of Taranto, with a series of small ports (caricaturi). The second, instead, at the beginning of the 1480s, with the role of Agnolo Serragli. The third

⁷ Carabellese, Bilancio di un'accomandita, pp. 77-104; Cassandro, La Puglia e i mercanti, pp. 5-42; ID., L'irradiazione economica fiorentina, pp. 191-221; Barile, Uomini e commerci nella Capitanata, pp. 151-164; Rivera Magos, La Chiave de tutta la Puglia, pp. 63-99.

⁸ Il Giornale del Banco Strozzi (1473), and, for the ledger of 1476, Petracca, Banco Strozzi.

⁹ Bernato, Francesco Nasi.

was strongly influenced by the organisational and coordination capacity imposed by Francesco Nasi and appears to be articulated differently, with a pyramidal structure directed by Francesco from Naples and his agent in Apulia, Benedetto Benincasa. This organisation operated in the Adriatic ports, particularly in Barletta, Trani and Manfredonia (fig. 2).

Much is known about the first phase from the *Conto di grani mandati* a noi a Medici (Account of grains sent to us Medici), a precious source which is actually conserved at the State Archives in Florence¹⁰. As anticipated, the organisation was based on a triangular structure based on three groups that cooperated while maintaining different competences and roles. A grain joint venture was formed between: 1) the company of Pierfrancesco and Giovanni Medici, who were already active in Venice, took responsibility for financing the ships connecting Venice and Apulia. They covered the shipping costs, insurance, various tolls, duties, and taxes within Venetian territory, as well as the measurement, storage, and warehousing of goods in Venice2) Lorenzo and Filippo Strozzi, who received another third of the wheat and guaranteed their financial expertise and capital through a system of round trips; 3) The Coppola family (Luigi, Francesco and Matteo), operating in the territory with their network of intermediaries, as a link between the rural and the commercial world11. The partnership was equally divided among the members, who shared costs and profits with equal standing and fairness¹² and enjoyed two atouts: first, a considerable financial plafond, which allowed it to bear high investment costs which, including out-of-pocket expenses, wages, purchase of goods, etc., reached 4,464 ounces of gold (22,320 Florence florins). Secondly, a specialised staff who followed all the phases from the purchase to the loading of the grain («chon tutte spese fino charicho in nave»): a phase that Matteo Coppola dealt – on this organisation we will come back in detail.

What distribution capacity enjoyed the collaboration between the Medici, the Coppola and the Strozzi? A balance sheet can be drawn from the Account of 1475, where all the purchases made by the group

¹⁰ Carte Strozziane, V serie, reg. 29. See, on this source, Sansoni, Francesco Coppola, pp. 159-246.

¹¹ For example, Carte Strozziane, ff. 1, 2v, 4.

¹² Petracca, *Banco Strozzi*, p. 209.

are included, and which did not only concern the Ionian coast, but also the city of Otranto¹³.

Places	Quantities (carri)	Prices		
		Ounces	Tarì	Grains
Torre a Mare	410	422	12	14
Matera	194	170	8	16
Craco	112	134	16	
Marina della Amendolara	106	190	27	
Taranto	81	118	29	7
Laterza	59	54	17	11
Rocca Imperiale	30	26	29	12
Spinazzola	10	33	12	13
Tot	1002	1 152	3	13

Tab. 1. Joint-venture Medici/Strozzi/Coppola wheat purchases (1474-1475)

The quantities were conspicuous: 1002 carri, passed through eight different ports, the main one being Torre a Mare, where most of the production of the Metaponto area converged (fig. 3). The Medici's investment was 1,152 ounces and 3 tari (about 5,760 florins). But the Conto does not end here. It still reports 555 carri bought by the Prince of Salerno and 81 by the Count of Lauria. Other loads were carried out between 21 and 23 February 1475 in Otranto, for a total of 66 *carri*, and two at the Marina della Salandrella, for 132 carri. The other 1.666 carri mentioned in the Account on July, 20, 1475 must be added¹⁴. In the end, we have about 3.333 carri, equivalent to about 6,600 hectolitres. It should

¹³ Carte Strozziane, ff. 8v e ss.

^{14 «}Appresso diremo conto a noi Pierfrancesco e Giuliano de' Medici & compagnia de Vinegia di granicomprati e fatti comprare in questo regno a suo nome il terzo per voi e i due terzi per noi tomola 28910 ¼ na fornito Matteo Coppola il quale assegnato ebbe costo con tutte spese fino charicho in nave come apare al suo conto particolarmente once milleottocentoquindici tarì XXVIII grana 1 e ½ et per tomola 23200 a misura di Napoli e salme 476 a misura di Crotone carra 320 tomola 24 a misura di Puglia fornito per nostro hordine Luigi e Francesco Coppola i quali assegnano ebbe costi chon tutte spese fino charicho in nave come apare per il conto avutone da loro, particolarmente onze duemila seiciento quaranta otto tarì XXI grana XVIII e mezzo monta in tutto costo e spese de li predetti grani onze quattromila quattrocentosessantaquattro, tarì 20». Ibid., f. 21 r.

be specified that these quantities exceed, as we shall see, those managed by the subsequent Medici organisation in this trade under the control of Francesco Nasi and Benedetto Benincasa, which however provides for the years 1486-1487 more details on men, operations, and logistics.

Agnolo Serragli was a personality of great importance; he acted as Florentine consul in Trani at least until 1491, as general administrator of the Medici branch in the province of Barletta, and as partner of the merchant Carlo Borromei in Venice¹⁵. Agnolo was based in Trani. From here, from the beginning of 1482 until the end of 1485 he bought for the Medici wheat for 192,708 *tomoli* (or 5353 *carri*), about 104,989 hectolitres. The paid was 8,921 ounces and 18 tari. Much of this grain was bought in Manfredonia, but considerable loads were bought in Calabria and in the city of Cosenza, one of the most peripheral branches of the company. Almost all the goods bought were sent to Venice, through the company of Carlo Borromei. What remained was sold in a decreasing way between Naples, Florence, Barletta and Trani¹⁶.

The commercial organization directed by Francesco Nasi on the Adriatic coast. Francesco's company appears well delineated in the register of licenses of the mastrodatti and notary Bernardo d'Anghono, relative to the years 1486-1487, which forms almost the only surviving testimony on the customs revenue relative to Apulian wheat for the entire fifteenth century¹⁷. Here the company is headed by Lorenzo dei Medici in Florence, Francesco Nasi in Naples, and by the latter's agent in Apulia, Benedetto Benincasa (a document reads «Benedicto Beneincasa procuratori Francisci Naczi nomine et pro parte Laurentii de Medicis»). The organisation had this structure: 1) at the top is the head of the company, the lord of Florence Lorenzo dei Medici, who relied on Francesco to manage from Naples all the commercial and financial initiatives in the Kingdom; 2) his delegate Benedetto Benincasa coordinated in Apulia a wide range of agents (trattari), who carried out the work of hoarding and transporting grain to the boarding ports; 3) the group of agents was not in the company's usual service and consisted of a series

¹⁵ *Protocolli del carteggio*, pp. 44, 49. See also Carabellese, *La Puglia nel secolo XV*, p. 39; ID., *Bilancio di un'accomandita*, pp. 101 ss. Jacoviello, *Strozzi e Medici*, pp. 185-210: 202-203.

¹⁶ Cassandro, *La Puglia e i mercanti*, pp. 30-31.

¹⁷ Fonti Aragonesi VI. and Abulafia, Grain traffic, pp. 27 ss.

of autonomous operators who, occasionally, lent themselves to work for the Medici even in different locations; 4) some of these agents in turn employed sub-agents (mandatari), who in turn worked in the various ports.

Tab. 2. Medici Firm. Nasi group in Apulia (1486-1487)

1. Lorenzo dei Medici									
2. Francesco Nasi									
Head branch of Naples									
	3. Benedetto								
	Procu	rator							
	4. Agents	(Trattari)							
A.	B.	C.	D.						
In Manfredonia	In Barletta	In Trani	In Bisceglie						
1. From	1. From Trani: 12	1. From Trani: 8	1. From						
Manfredonia: 13			Bisceglie: 1						
2. From Trani: 3	2. From Barletta: 2	2. Venetians: 2	2. Florentins: 1						
3. From	3. From	3. Lombards: 1							
Tuscany: 1	Tuscany: 1								
3. Florentins: 1	4. Florentins: 1	4. Dalmatians: 1							
4. Venetians: 1	5. Venetians: 1	5. Unspecified: 2							
6. Lombards: 1	6. From Raguse:								
	7. Dalmatians: 1								
	8. Unspecified: 3								
Tot. 20	Tot. 22	Tot. 14	Tot. 2						
	5. Sub-agents	(Mandatari)							
1. Gesualdo	1. Marino	1. Lorenzo							
Nuzzo, from	de Risis	de Raguse							
Trani	44 14010	at ragase							
2.Troyano de									
Mectulo from									
Manfredonia									
Tot. 2	Tot. 1	Tot. 1							

Benedetto Benincasa dealt with no less than forty people, converging on Manfredonia, Barletta, Trani and Bisceglie. Among the most important merchants there were the de Gello and the de Boctunis of Trani, who traded cereals both in their city and in Barletta and Manfredonia. Other merchants were foreigners. Tuscan, like the Pistoiese Rosso de' Rossi or the Florentines Giovanni Strozzi, Girolamo Rignadori and Giacomo Lippi. Venetians, such as Geronimo Michiel and Giovanni Bragadin (member of the well-known merchant family that extended its influence all over Apulia, with attorneys in Bari, Molfetta, Bitonto and other centres¹⁸) and Nicola da Ponte. Lombardi, like the Lodi-born Gian Luigi di Somaripa and the Milanese Nicola de Busso. Dalmatians: like Domenico Ettore, from Lesina (Hvar) or the Raguseo Nicola Primo. Finally, there was the great Catalan merchant Ramon de Parets, owner of a commercial company important as well for the cereals trade, who, through his procurator, Pere de Casasagia, obtained a licence in favour of the Medici for 133 carra and 12 barley tomoli.

What was the weight of the Nasi organisation in wheat exports from the ports of Adriatic Apulia? From the licence register of the Notary d'Anghono, relative to the two-year period 1486-1487, the general picture appears in Tab. 4:

¹⁸ Vitale, *Trani dagli Angioini*, pp. 111, 150, 177, 193-194, 204, 217, 519, 529, 580, 663, 670.

Tab. 3. Wheat and barley in Apulian ports. I September 1486 - 31 August 1487)

				_			_					_
		Barley	Carri Tomoli Carri Tomoli	9	28	32	-	35	35			28 1/2
		B	Сагті	1539	171	201	-	-				1914
-	TR.	Wealth	Tomoli	6 1/2	4	26	18	29	28	6	7	10914 19 1/2 1914
Total	101	We	Carri	3354	4892	2409	112	51	98	3	5	10914
		No. operations Operazioni		252	184	77	16	21	8	4	1	563
		Barley	Tomoli	18	28	24		35	35			32
dom		B	Carri	421	170	9	-					009
Production for the Kingdom	(mnu8	Wealth	Carri Tomoli Carri Tomoli	5	9	-	18	29	28			14
ion for	(Infra Regnum)	W _e	Сагті	385	1803	l	9	51	99			2312
Product)	No. Operations		65	64	1	8	21	9	1		166
		Barley	To- moli Carri Tomoli	24		44 1/2						32 1/2
(1000	(mmu)	B	Carri	1117	1	194						5 1/2 1313
Dog Dog	ra neg	Wealth	To- moli	1 1/2	34	26	-	-	-	6	7	5 1/2
0rt (Ev.	Expoit (<i>Exira Negnum</i>)	We	Carri To- moli	2969	3088	2409	106	-	20	3	5	8602
T. Carr	Exp	No. operations		187	120	92	8		2	3	1	397
Dorte	rous			Barletta	Manfredonia	Trani	Bisceglie	Mola	Polignano	Molfetta	Giovinazzo	Total

The exports from the Apulian ports were 10,914 *carri* of wheat (21,609) hectolitres). The main center for wheat was Manfredonia. Every year 4892 carri circulated here, with an average of 407.6 carri per month, i.e. about 805,86 hectolitres. Barletta followed, with an average of 279,5 carri, i.e. just over 552 hectolitres. And then Trani, with 200,7 carri; 396 hectolitres. All the other ports supplied small quantities, in all corresponding to 21,4 carri per month: just over 42 hectolitres. The most significant element in the table concerns exports outside the Kingdom: on a total of 563 operations, 397, 70.5%. Of these quantities, 187 are carried out in Barletta (33.2%), 120 in Manfredonia (21.3%), 76 in Trani (13.5%), 8 in Bisceglie, 3 in Molfetta, 2 in Polignano and 1 in Giovinazzo. In comparison with the operations carried out inside the Kingdom, the jump is clear: 166 operations in all, i.e. 29.5%, of which only 65 are made in Bari and 64 in Manfredonia: respectively, in comparison with the general share, just 11.5 and 11.3%. These percentages become even more significant if we look at the quantities: 8602 wheat carri (17,031.96 hectolitres) and 1313 barley carri (2,599 hectolitres) abroad, against 2,312 wheat carri (4,577 hectolitres) and 600 barley carri (1,188 hectolitres) inwards. Outside the Kingdom almost 79% of the wheat passing through the eight ports and 68.6% of the barley was exported.

The incidence of the Medici group on total exports outside the Kingdom – as can be seen from the following table – was very high. It covered 33.4% of total wheat and almost 70% of barley, with an average per operation for wheat and barley of 38,8 and 53,7 *carri* respectively. Numbers that give the size of this company's presence, with a centrality based on Trani and Barletta, where, through 68 operations, a total of 1,148 wheat *carri* and 914 barley *carri* passed through – numbers far from those of Manfredonia, from where only 805 wheat *carri* were exported.

		Wheat			Barley		
	Opp.	Carri	Tomoli	Орр.	Carri	Tomoli	
Trani	26	1131	13	2	22	16	
Barletta	25	1017	35	15	892		
Manfredonia	19	804	32				
Bisceglie	4	77					
Polignano		13					
Tot.	74	2878	8	17	914	16	

Tab. 4. Medici's transactions (1486-1487)

If we compare the scale of Medici exports with that of other merchants interested in wheat, the difference is evident. The most relevant case concerns the Catalan Ramon de Parets¹⁹ who also collaborated with the Medici. He also used a procurator, Pere de Casasagia, who, with a scheme similar to Nasi company, used local merchants in the various localities of Manfredonia, Barletta and Trani. The de Parets wheat circuit, controlled by Casasagia, was not small. It involved about twenty merchants (12 in Bari, 6 in Trani and 5 in Barletta). Some names overlap with agents the Medici employed, such as the de Gello and the de Boctunis. It is striking how, in a case involving a 48 carrage load, the de Parets company is run by the same Medici, who put their supply chain in place starting from the sub-agent Baldassarre de Barisano²⁰.

Altogether, the de Parets group moved, with 37 operations, 1,244 wheat carri, 14.2% of total exports: an excellent result but one that did not bridge the gap with the Medici, who exported more than twice as much wheat (2.877 wagons out of 1,224); not to mention that there is no trace of barley in de Parets' business. Excluding de Parets, there were no other traders of the same weight. There was the business of the Pistoiese Giacomo de Rossi, related to Rosso, who specialised in the export of wheat to Naples²¹ with an organisation based mainly on the help he received from the same Rosso, who acted as his procurator on

¹⁹ About him, son of Barthomeu and brother of March, both merchants, *Il Giornale* del Banco Strozzi (1473), p. 555, n. 149. About Casasagia, Fonti Aragonesi VI, pp. 13-16, 23, 38-40, 42-43, 56-59, 72-73.

²⁰ *Ibid.*, p. 57.

²¹ *Ibid.*, pp. 18-21, 44.

six occasions²². Also participating with Giacomo were the Florentine Nicola Lippi, Giuliano Gentile from Manfredonia and in Barletta the Medici procurator, Benedetto Benincasa.

What about local operators? It was not possible to expect great performances from them. More than anything else they played the role of mediators, on the margins of large commercial companies, such as the Medici. We are in front of a mass of people, from which four or five major families emerged: de Boctunis, de Gello, Capuano, de Florio, Sardullo. Besides them, the number of wheat sellers is pulverized, marking the difference between the big exporters and a lot of medium, small and very small operators, with big differences between those who worked in exporting outside the Kingdom and those who were interested in selling inland. For example, of the 35 merchants of Manfredonia, who, on average, carry out small loads, only one exceeds 50 carri, four exceed 40, as many exceed 30, eight exceed 20, while everything else is between 5 and 15 carri, with even three merchants interested in licences for only one carrus. The same situation was visible in the movement of grain from Apulia towards the interior of the Kingdom, where small transshipments prevailed with few exceeding 40 carri and often amounting to a few tomoli. A condition that was found in all the other centres, from Barletta to Trani

The conclusions are as simple as they are evident: the Medici's Florentine company is the only large commercial enterprise capable of effectively managing the Apulian grain trade, with an organisation and volume of exports able to crush any antagonist. Its strength of control of the local circuit is clearly visible, thanks to its vast network of collaborators and a turnover that reached almost three thousand carri of wheat and just over nine hundred carri of barley per year, which represent respectively more than 30 and 70% of the total. Its fundamental role was barely confronted with the rest of the market participants who moved on much more modest shares, with a few exceptions: the Catalan de Parets, the Pistoiese Rosso and Giacomo de' Rossi, the Venetian Geronimo Michiel and, then, the local merchants, de Boctunis, de Gello, etc. The result was a condition of dependence on local commerce, while the Medici created an organisation that was able to condition production, logistical equipment, distribution network and loading areas.

²² *Ibid.*, p. 21.

The comparison between the data of 1475 and those of ten years later leads us to believe that the group's investments in cereals should have been around 5,000 ounces per year (25,000 florins), for quantities varying on 3,000-3,300 carri of wheat per year. If this was the case – and in the cases I estimated it to be the case – how was it possible to move so many goods and so much capital at the same time? The structure put in place by the Medici relied on multiple factors, largely linked to a much more advanced mercantile capacity, which included credit, information management, availability of capital, vast commercial relations, with a complementarity that embraced the entire Euro-Mediterranean area; with an exceptional capacity for organisation for that time that found few comparisons in other European areas. A high level which corresponded to a widespread level of penetration into the local economic tissue, capable of setting up a supply chain that really allowed the link between production and exchange. A capillarity of intervention that was the very soul not only of the Medici company but of all Florentine trade in Southern Italy during the early Renaissance; able to fit into the economy of Southern Italy which was without financial means, characterized by the absence of money and poorly connected to the final collectors: the fairs, the city markets, the ports. In short, a context that was often impervious to the access of big business, which had to be fed by adapting it to the needs of the market. It was necessary to guarantee loading, transport by land, storage of the product for sale in boarding centres, transshipment on ships, travel by sea; this was accompanied by agreements for shipments, freight, customs and transit payments, approaching any sellers, etc.: passages that were guaranteed by the company's staff on site. While the director, often far away, was interested in decision making, i.e. a mixture of planning, general coordination and speed of execution, because if business was running higher the profit on the capital employed became higher.

If unfortunately we know nothing about the overland movements of the company led by Serragli and Nasi, the Grain Account of 1475, related to the Medici-Coppola-Strozzi joint venture, describes them in detail. Their action gravitated around Taranto, a city which, after the middle of the fifteenth century, had taken on the function of a sorting centre for local production, with an economic rhythm of original connotations and a growing specialisation as an interchange space²³. In this area the commercial power of the Coppola family dominated. especially with Matteo, who in the 1470s gave to the Medici company the concrete contribution, in men and assets, to allow the transit of large quantities of cereals. The exchange ran from the internal centres of Matera, Craco, Laterza, Bitonto, Spinazzola, Pisticci, Castellaneta, Acerenza, Stigliano, Sant'Arcangelo, Pomarico, Amendolara, the feuds of the Prince of Bisignano and the Count of Lauria to the small ports of Torre a Mare, Rocca Imperiale, the marinas of Salandrella, Amendolara and Policoro; and, finally, the city of Taranto. The best observatory is Torre a Mare, a small port located in the area of ancient Metaponto. The logistics costs amounted to 44 ounces, 16 tari and 17 and a half grain²⁴. The list contains various items, starting with the *charregiatura*, a term that indicated the transport and loading of the grain, which arrived in Torre a Mare in two ways. By land, through the work of viaticharii czoé vecturali, vectural similar to those coming from Matera, which was paid a salary of 20 tari and 1 grain and a half. Or, by river, along the Bradano river. At the mouth, the grain was transshipped on wagons and taken to Torre a Mare, where it was first placed in silos for storage and then to the Medici warehouse for sale. From the warehouse, the grain was taken to the boats for cabotage transport to Taranto, which seems to be the most common way. But there is no lack of information on cargoes directly placed on transport ships for trips on the high seas. At Torre a Mare, the joint-venture was able to withstand a certain amount of incoming grain flow, with a total capacity that certainly exceeded 500 carri per year 6 ounces, 22 tarì and 11 grana were spent in customs duties for the export of 8,902 tomoli and a half, approximately 250 carri of wheat: a tax for which the Medici group obtained a 50% discount per tomolo and which, consequently, reduced the amount by half, which should have been around 12 ounces²⁵

We don't have too much information on the silos and the warehouse. However, a certain amount of attention was given to the *annettatura*, i.e. the cleaning of both the silos and the warehouse, to avoid break-

²³ Vantaggiato, *I mercanti nel Principato*, pp. 199-212, and Feniello, *Aspetti dell'economia tarantina*, pp. 423-438.

²⁴ Carte Strozziane, ff. 1v-2r.

²⁵ Ihid

downs. Local labourers were used for the storage (the so-called ammontellatura and palegiatura), who were paid minimum wages of up to 8 grains for the first operation and 6 grains for the second. To these two operations is added that of measuring the grain, necessary for the sale. In this regard, the Medici paid a total of 20 tari and 4 grain. It is curious, among other things, how they also took care of the security of the warehouse, which had to be preserved from theft and for which 7 grains were spent²⁶.

Wage analyses show an ongoing interest in maintaining the network with the production areas. First of all, there was the salary of the intermediaries for the purchase of the grains. A certain Lionetto de Monte received a salary of 4 ounces and 20 tari, with the task of going directly to the places of purchase and paying in cash, sometimes assisted by a sort of shoulder guard when the money to be transported was too much, as is the case with his trip to Craco. This was followed by Matteo Coppola's expenses, «to go twice from Taranto to Torre di mare et al machazeno di San Basilio and back», who was paid 8 tarì and 10 grana. Under them, a series of couriers were moving. To them there are several items related to *boccha* expenses – a sort of daily travel reimbursement per diem – ; while others remember the rental of horses to travel from the coast to the hinterland to reach the suppliers²⁷.

Where did the Medici group picked up the cereal? There is no doubt that the production system based on the large manor reserves, i.e. the socalled *masserie*, was the central supply pivot, especially in the Apulian Capitanata area. However, by examining the Account of the grains of 1475, between Basilicata and Metapontino, a real system of little farms emerged which integrated with the large manor enterprise²⁸; system that became the further interlocutors to which the Medici-Coppola-Strozzi joint venture turned, with a complementarity that took on a truly vivid outline. For examples, in the four centres of Laterza, Matera, Bitonto and Spinazzola 436 *carri* of wheat are purchased, with this subdivision:

²⁶ *Ibid.*, f. 5r.

²⁷ *Ibid.*, f. 4.

²⁸ Visceglia, *Territorio, feudo*, p. 133.

	No.	Wheat	Ounces	Tarì	Grains
	operations	(in carri)			
Castellaneta	11	22,2			
Laterza	6	74,3	79	2	4
Matera	4	193,8	170	8	16
Bitonto	1	106	190	27	0
Spinazzola	1	40	54	4	0
Tot	23	4363	494	17	0

Tab. 5. 1475. Laterza, Matera, Bitonto, Spinazzola. Sales account

In the port of Torre a Mare not only the goods obtained by the work of the mediators arrived, but it was the place where a tide of small producers poured in to sell their grain to the joint-venture. In 24 days, from 24 June to 1 September 1475, 305 operations were carried out, for the total purchase of 5,665 tomoli, more than 311 hectolitres. A world of small farmers, small owners, representatives of the world of craftsmanship, the bourgeoisie of the offices and the local notary public collaborated with the Medici, selling the grain produced by them. Many people, about three hundred, who managed to guarantee a productive stock that was equal to one third of all the cereals that the company managed at the port. The frequency of trade was increasing in the month of July. with 19 days dedicated to purchases. This was followed by August, with 4 days, while in June and September there was only one day of activity for each month (the 24th and the first respectively). July was, in short, the "hot" month for business, with a frequency ranging from a minimum of 2 operations per day (the eleventh of July) to a maximum of 46 (the twenty-two), with shares that differed considerably, ranging from a maximum of 300 tomoli to a minimum of between one and three tomoli.

Establishing the distances covered by the sellers to reach Torre a Mare helps to understand the range of action ensured by the joint venture. Of all the approximately three hundred sellers, it was possible to isolate the origin for 90 of them:

Tab. 6. Sales to the joint-venture. Microproducers Provenance/distances from the port

Provenance	Distance (in Km)	No. of sellers
Pisticci	33	33
Ginosa	32	10
Monte Scaglioso	34	8
Torre a Mare	0	8
Laterza	38,6	6
Stigliano	68	5
Craco	44	5
Castellaneta	40	4
Pomarico	39,3	3
Montalbano Ionico	32,3	3
Tursi	47,7	2
Amendolara	65	1
Sant'Arcangelo	65,6	1
Rocca Imperiale	43,4	1
Tot.		90

The sellers came from those centres between the homonymous plain of Metaponto and the hilly area overlooking it, from Ginosa to Stigliano. The distances were between 30 and 40 km, to be covered, for the outward and return journeys, in one or two days, counting, for the more distant centres, to be able to stop in the intermediate villages. The largest group of these farmers/traders came from Pisticci, which is 33 km from the small port. Ginosa follows, which is 32 km away, with ten sellers. Eight sellers also came from the surroundings of Torre a Mare. There were also some who came from further afield, such as Amendolara, now in the province of Cosenza, which is about 65 km from the small port. The organisation, in the end, was the key that allowed the continuous relationship with the places of production, with a processus that involved both the production centres under the control of the great feudal nobility to hundreds and hundreds of small, anonymous farmer: with a reversal where, the producer went towards the merchant!

The grain cycle ended at the sea. The joint-venture did not have their own navy, neither of small cabotage nor of high seas. They hired ships, relying on a variable and changing fleet, composed, as we can read in the Conto, of ships owned by Venetians. They were:

Tab. 7. Exports Joint-venture Medici/Strozzi/Coppola. Shipowners (1474-1475)

Name	No	Departure point	Loaded
	of Trips		quantities (in staia)
Giovanni de Maczorbo	2	Taranto	2,815
		marina dell'Amendolara	
Giovanni de Giorgio	2	Otranto	2,116
		Rocca Imperiale	
Iacopo di Lorenzo	2	Taranto	2,100
		Torre a Mare	
Daniele Gittis	2	Otranto	1,819
		Marina della Salandrella	
Benedetto Ghiondini	1	Taranto	7,482
Natale Dandolo	1	Rocca Imperiale	3,100
Antonio Chopo	1	Marina della Salandrella	3,000
Michele Tonnirer	1	Torre a Mare	1,982
Giovanni de Pare	1	Otranto	1,834
Michele Liberali	1	Taranto	1,721
Tot.	14		27,969

With 14 voyages, 10 Venetian ships transported 27,969 staia of wheat. equal to 2,330 hectolitres²⁹. The loads they boarded were of different sizes. Perhaps only once was the maximum capacity reached, on 24th December, when on Benedetto Ghiondini's ship there were 7,482 staia of wheat, more than 623 hectolitres. In other cases, there were rarely more than 3,000 staia (249 hectolitres). If this is the situation for the period 1474-1475, even the organisation directed by Francesco Nasi and Benedetto Benincasa did not use their own navy, with a much more complex situation, both for the number of ships used and because they relied on a much larger group of ship-owners: mainly Dalmatians, people from the Venetian possessions in the Adriatic (Stato da Mar, the State of the Sea), from Ragusa, people coming directly from Venice and, to a much lesser extent, owners of the Kingdom and Catalans.

²⁹ One *staia* corresponded to 83,31 litres.

Manfredonia Trani Tot. Bari Ragusa Trani Lesina Curzola Venice Catalunya Cattaro Arbe Sebenico Split Cherso Bari Calamotta Barletta Florence Bisceglie N.P. Tot.

Tab. 8. Exports Nasi' group. Shipowners (1486-1487)

The number of shipowners working for the Medici is 61. Among them, the Ragusans and Dalmatians are in the majority. There are nine shipowners from Ragusa and Calamotta (today Koločep), including Marino Pasquale, Paolo Luce, Nicola de Calamotta, Dobrasan de Ragusa and Marino de Martino³⁰. Many more come from the Dalmatian coast, a total of 23: 7 from Hvar: 5 from Korčula: 4 from Kotor: 3 from Rab: 2 from Sibenik; 1 from Split and Cres. There are five Venetians: Giovan Antonio de Ugolino, Matteo Tinto, Francesco Galli, Giovanni Agostino and one Rusco from Venice (de Venezia)31. Among the Catalans, we remember Galzeran Andrea, Joan Ruis Buscavni and also Ramon de Parets, who acts as shipowner³². The position of the Kingdom's shipowners is limited to the group of eight tranesi shipowners, among which the members of the Grandazzo family³³ stand out, since in Barletta and

³⁰ Fonti Aragonesi VI, pp. 14, 21, 27, 34, 35, 36, 66.

³¹ *Ibid.*, pp. 29, 35, 41, 51.

 $^{^{32}}$ *Ibid.*, pp. 9-10, 33, 53; on the other one, pp. 32 e 44.

³³ *Ibid.*, pp. 35, 38, 51, 56, 61, 65, 74.

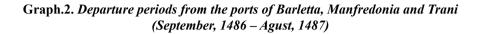
Bisceglie there are only two of them. The impression of the predominance of the Dalmatian-ragusea shipping is transformed into certainty if you look at the shipowners who were entrusted by other merchants to export their grain. As did the other great foreign grain merchant, the Catalan Ramon de Parets, for whom were working in Manfredonia, Barletta and Trani shipowners from Hvar, Rab, Pag), Kotor, Korcula, Làgosta, Ossira (Lošinj), Krk, Cres, Zadar, Dragura³⁴, Antivari, Split, Stagno (today's Ston), Sibenik, Calamotta, Budua. There were very few shipowners coming from the Kingdom, who were counted on the tip of one hand, someone from Apulia and the island of Lipari³⁵. In conclusion, the Adriatic wheat fleet in the late fifteenth century had a single face and spoke Dalmatian. It was the real driving force of the maritime exchange between the Peninsula and the Balkans and, specifically, the third leg of the Medici-Nasi system, which flanked the financial and operational one on the territory. Without it, the movement of wheat in the Adriatic would not have existed, organised on a tried and tested mechanism made up of dozens of ships moving in unison with more than one voyage a day, at a cadence that knew no great interruptions except in autumn³⁶.

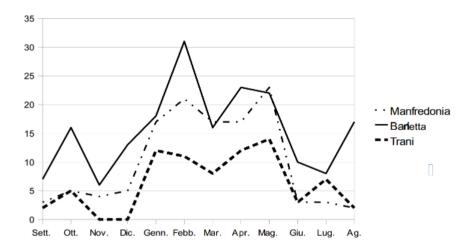
³⁴ May be Moscenika Draga, 30 km from Rieka.

³⁵ A similar comment for the Venetian Geronimo Michiel, who on several occasions used Giovanni Peri and Matteo di Giorgio from Lesina as shipowners; in one the *barzocto* of Marco de Ragusa; in one the boat (*navigio*) of Giorgio Grandighio from Zara.

³⁶ *Ibid.*, pp. 3-17 (Manfredonia), 25-43 (Barletta), 50-60 (Trani).

The highest number of departures took place between January-February, as is evident in this graph:





In these two months the curve reached the highest level in Barletta (with 31 departures), and in April-May, where both Manfredonia and Trani achieved the best result (40 departures from the first port; 26 in the second). In the autumn months, on the other hand, loading activities were drastically reduced, to the point that in Trani, between November and December, there were no departures, while in Bari there were 19 and in Manfredonia only 9. In the most dynamic months, even more loads were carried out on the same day.

Wheat is a poor, heavy and voluminous merchandise that, in order to transport, required special, round and capacious boats, moved exclusively under sail, of a greater tonnage than the traditional Mediterranean boat, the galea³⁷. However, our ships did not have to be huge, certainly smaller than those used for the grain trade in the sixteenth century, which started from a minimum load of 150 carri, equivalent to 360 barrels³⁸. In general they seemed to carry between 10 and 50 carri medium, that is more or less between 20 and 120 barrels; but,

³⁷ Lane, Venetian Shipping, pp. 229-239.

³⁸ Aymard, Venise, Raguse et le commerce, pp. 62-63.

exceptionally, there were transports close to 300 carri (720 barrels), as in the case of the Catalan ship of the shipowner Galzaran Infringoli³⁹. Among the largest vessels were those used by the Medici. Just look at the situation in Barletta⁴⁰:

Departure	Ship	Cap	acity
date		(in c	carri)
		Wheat	Barley
December, 27	Ship of Giovanni Bernardi		80
January, 4	Ship of Paolo Luce from Ragusa		106 e
			1/2
February, 18	Ship of Giovan Aloisio Buscayno	101	
March, 1	Ship of Nicola from Calamotta	93	
March, 7	Ship of Dobrasan from Ragusa		84
April, 20	Ship of Giovanni de Quaranta from Bisceglie		120
April, 20	Ship of Giovanni Rusco from Raguss	90	
May, 16	Ship of Sansonetto de Giacomuccio from	102	
	Trani		
Agust, 17	Ship of Ramon de Parets		133

An interesting fact of the Apulian transport is the organization of the cabotage. It is possible to observe what happened between the ports of Barletta and Manfredonia. Between 17 and 20 January 1487, the merchants Palumbo de Gello and Giliberto de Boctunis, together with Alfonso and Baldassarre de Barisano from Trani, organised these cargos from Bari to Manfredonia:

Ships	Departure quantity
	(Wheat, in <i>carri</i>)
Ship of Nicola de Rusco	40
Ship of Luca Marino from Ragusa	70
Ship of Allegretto de Iuppano	28
Ship of Radu Allegretto from Split	15
Ship of Radu Piccolo	15

³⁹ Fonti Aragonesi VI, p. 29.

⁴⁰ *Ibid.*, pp. 28, 32, 34, 35, 37, 39.

Once arrived in Manfredonia all the cargo – of a total of 168 carri – was transported offshore on the ship of the Catalan Lorenzo Sabater and brought out of the Kingdom («et cum dicta nave ferendum extra regnum»)41.

This form of transport made up of small boats that sailed along the coast until they docked a larger ship suitable for longer routes was widely used by everyone and, naturally, also by the Medici. On 19 February, controlled by Ottaviano and Valerio Catalano & partners of Trani, the Medici embarked grain from Barletta to Manfredonia using these boats (barche):

	W	neat
	Carri	Tomoli
Boat of Radi Cernoviczi	9	
Boat of Bartolomeo from Manfredonia	6	
Boat of Luca di Raffaele Pappalettera	9	
Boat of Radi Maccichi	12	
Boat of Antonio from Manfredonia	6	
Boat of Giovanni Marino from Ragusa	15	
Boat of Radu Piccolo	14	
Boat of Nardo di Nicola Secze	6	
Boat of Nardo di Nicola Mie	8	
Boat of Pere di Casasagia	9	26
Boat of Nicola Calamaghia	6	10

For a total of 101 *carri*, which were loaded on the ship of the Catalan Giovanni Aloisio Buscavno⁴².

The last point concerns the end points. In other words: where did the Medici wheat arrive? The preferred landing place was of course Venice. This is clearly demonstrated by the activities recorded in the Account of 1474-1475 as the central role played by the Medici of Venice, when they exported 15.000 staia of wheat, more or less 12.500 hectolitres⁴³. Once unloaded in the lagoon city, this grain, the so-called *formento grosso*, what happened to it? Was it used to satisfy local needs? Probably ves. But it cannot be excluded that it was destined for a further journey, to-

⁴¹ *Ibid.*, p. 29.

⁴² *Ibid.*, pp. 32-33.

⁴³ Leone, *Il commercio estero*, p. 9.

wards the mainland. Another destination was certainly Florence, with grain arriving through the port of Livorno, with loads made on the edge of the ship (*a orlo di nave*)⁴⁴. In addition, the wheat of Puglia reached other ports, following the Mediterranean dimension described in the fourteenth century by Pegolotti. Unfortunately, however, our sources say very little about the articulation of the routes and reduce everything to the synthetic formula the wheat was "taken out of the Kingdom" («ferendum extra regnum»). One can believe that much wheat went towards Ragusa, Dalmatia, the Balkan hinterland and Hungary. More wheat, perhaps, towards the Iberian peninsula, the Hellenic peninsula and the Ottoman Empire. Certainly, it arrived in Egypt, as evidenced by the consignments transported by the Venetians towards Alexandria. Cities where Manfredonia's wheat was also transported by Catalan ships, as is told, for example, by a memento (*ricordanza*) of the Strozzi bank in 1488⁴⁵.

The story of the Medici grain ended in the 1490s. But for ten years this family had a predominant role, almost as a monopolist, in a general market situation of the kingdom of Naples that favoured, throughout its history, the foreign commercial elites, especially Tuscan ones. However, they left ample room for maneuvering, alliances, and collaboration with a wide range of local operators—ranging from prominent entrepreneurs like the Coppola family to smaller producers scattered across a vast territory. Through their collaboration with major firms, these actors created a dense and organized network of grain production and distribution, which became one of the most distinctive features of this Mediterranean capitalism. This supply chain enabled the connection of economies operating at different speeds, from the very slow pace of rural production to the faster rhythms of international maritime and overland trade routes.

⁴⁴ Il Giornale del Banco Strozzi (1473), pp. 719 s.

⁴⁵ *Ibid.*, p. 540, n. 19.

Bibliography

Primary sources

Balducci Pegolotti, La pratica della mercatura = F. Balducci Pegolotti, La pratica della mercatura, ed. A. Evans, Cambridge 1936.

Carte Strozziane = Florence, State Archives, Carte Strozziane, V serie, reg. 29.

Fonti Aragonesi VI = Fonti Aragonesi VI. Copia quaterni Bernardi de Anghono Magister actorum penes magistrum portulanum Apulie de tractis extractis a portibus civitatibus Manfredonie, Baroli, Trani, Vigliliarum, Melficte, Iuvinaczi, Bari, Mole, Sancti Viti de Polignano et de portu Polignani tam per extra Regnum quam infra, V indictionis (1486-1487). Conto della Fabbrica e Fosso di Manfredonia, ed. C. Salvati, Naples 1968.

Il Giornale del Banco Strozzi (1473) = Il Giornale del Banco Strozzi (1473), a cura di A. Leone, Naples 1981.

Protocolli del carteggio = Protocolli del carteggio di Lorenzo il Magnifico per gli anni 1473-1474, 1477-1492, a cura di M. Del Piazzo, Florence 1956 (Documenti di storia italiana. Serie II, 2).

Secondary sources

Abulafia, Grain Traffic = D. Abulafia, Grain Traffic out of the Apulian Ports on behalf of Lorenzo de' Medici, 1486-7, in Mediterranean encounters, economic, religious, political, 1100-1550, Aldershot 2000 (Variorum collected studies series, 694), IX, pp. 25-35.

Aymard, Venise, Raguse et le commerce = M. Aymard, Venise, Raguse et le commerce du blé pendant la seconde moitié du XVIe siècle, Paris 1966.

Barile, Uomini e commerci nella Capitanata medievale = N. Barile, Uomini e commerci nella Capitanata medievale: la testimonianza del giornale del Banco Strozzi (1473), in 31° Convegno nazionale sulla Preistoria – Protostoria – Storia della Daunia (San Severo, 13-14 novembre 2010), a cura di A. Gravina, San Severo 2011, pp. 151-164.

Bernato, Francesco Nasi = S. Bernato, Francesco Nasi, in Dizionario biografico degli Italiani, 77 (2012), disponibile online http://www.treccani.it/enciclopedia/francesco-nasi res-b35fc210-a2ba-11e2-9d1b00271042e8d9 %28Dizionario Biografico%29/r.

Carabellese, Bilancio di un'accomandita = F. Carabellese, Bilancio di un'accomandita di casa Medici in Puglia del 1477 e relazioni commerciali fra la Puglia e Firenze, in «Archivio storico pugliese», II (1896), pp. 77-104.

Carabellese, La Puglia nel secolo XV = F. Carabellese, La Puglia nel secolo XV da fonti inedite, Trani 1901.

Cassandro, L'irradiazione economica fiorentina = M. Cassandro, L'irradiazione economica fiorentina nell'Italia meridionale tra medioevo e rinascimento, in Fra spazio e tempo. Studi in onore di Luigi De Rosa, a cura di I. Zilli, Naples 1995, I, pp. 191-221.

Cassandro, La Puglia e i mercanti = M. Cassandro, La Puglia e i mercanti fiorentini nel basso medioevo, in «Atti e relazioni dell'Accademia pugliese delle scienze. Classe di scienze morali», II (1968-1974), pp. 5-42.

De Roover, The Rise and Decline = R. De Roover, The Rise and Decline of the Medici Bank: 1397-1494, Harvard 1963.

Leone, Il commercio estero = A. Leone, Il commercio estero in Italia meridionale dal Quattro al Cinquecento, in Il commercio a Napoli e nell'Italia meridionale nel XV secolo: fonti e problemi, a cura di B. Casale – A. Feniello – A. Leone, Naples 2003.

Feniello, Aspetti dell'economia tarantina = A. Feniello, Aspetti dell'economia tarantina da due frammenti di registri della dogana (1463-1466), in Un principato territoriale nel Regno di Napoli? Gli Orsini del Balzo principi di Taranto (1399-1463), Atti del convegno di Studi (Lecce, 20-22 ottobre 2009), a cura di L. Petracca – B. Vetere, Rome 2013, pp. 423-438.

Heers, Le clan des Medicis = J. Heers, Le clan des Medicis, Paris 2012.

Jacoviello, Strozzi e Medici = M. Jacoviello, Strozzi e Medici nel regno di Napoli durante la seconda metà del secolo XV, in ID., Venezia e Napoli nel Quattrocento. Rapporti tra i due Stati e altri saggi, Napoli 1992, pp. 185-210.

Lane, Venetian Shipping = F.C. Lane, Venetian Shipping during the Commercial Revolution, in «American Historical Review», XXXVIII/2 (1933), pp. 229-239.

Petracca, Banco Strozzi = L. Petracca, Il banco Strozzi di Napoli. Credito, economia e società nel Quattrocento, Roma, 2024 (I libri di Viella, 507).

Rivera Magos, La Chiave de tutta la Puglia = V. Rivera Magos, La Chiave de tutta la Puglia. Presenze straniere, attività commerciali e interessi mediterranei a Manfredonia "agriporto" di Capitanata (secoli XIII-XVI), in Storia di Manfredonia, vol. 1. Il Medioevo, a cura di R. Licinio, Manfredonia 2008, pp. 63-99.

Romano, A propos du commerce = R. Romano, A propos du commerce du blé dans la Méditerranée des XIV^e et XV^e siècle, in Éventail de l'histoire vivante. Hommage à Lucien Febvre, voll. 1-2, Paris 1953, pp. 149-161.

Sakellariou, Southern Italy = H. Sakellariou, Southern Italy in the Late Middle Ages. Demographic, Institutional and Economic Change in the Kingdom of Naples, c. 1440 – c. 1530, Leiden-Boston 2012.

Sansoni, Francesco Coppola = A. Sansoni, Francesco Coppola imprenditore nella Napoli aragonese, Doctoral Thesis in Historical, Archaeological, and Art Historical Sciences, University of Naples, 2017.

Tanzini, Cosimo de' Medici = L. Tanzini, Cosimo de' Medici. Il banchiere statista, padre del Rinascimento fiorentino, Roma 2022.

Vantaggiato, I mercanti nel Principato = L. Vantaggiato, I mercanti nel Principato, in I domini del principe di Taranto in età orsiniana (1399-1463), Geografie e linguaggi politici alla fine del Medioevo, a cura di F. Somaini – B. Vetere, Lecce 2009, pp. 199-212.

Visceglia, Territorio, feudo = M.A. Visceglia, Territorio, feudo e potere locale. Terra d'Otranto tra Medioevo e età Moderna, Naples 1988.

Vitale, Trani dagli Angioini = V. Vitale, Trani dagli Angioini agli Spagnuoli. Contributo alla storia civile e commerciale di Puglia nei secoli XV e XVI, Trani 1912.

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