In 1513 Leonardo da Vinci left Milan permanently. During his sojourn in the Lombard capital he worked on more than his artistic masterpieces and magnificent scenography for theatre props for the performances that entertained the court. He was put in charge of the design of a stretch of the ‘Navigli’, artificial canals that even today connect Milan with the Ticino river that flows from Lake Maggiore, and the Adda river that flows from Lake Como. The process of canalization began towards the end of the twelfth century and further strengthened the rich network of natural waterways within the Duchy of Milan; to the South, the Po river which carves its way across all of Northern Italy from the mountains in Piedmont to the Adriatic sea where it flows out between Venice and Ravenna; its tributaries Ticino and Adda, as well as shorter rivers and streams such as Bormida, Tanaro, Agogna, Scrivia, Lambro, Olona, and Seveso. Da Vinci did work on the project, and, although his work remained for the most part on paper, the intention of improving water transport, going as far as to engage the services of this Tuscan genius, serves to highlight the importance the Dukes placed on the transport network even to those who have never seen the impressive work of hydraulic engineering that is the Navigli.\footnote{Cinquecento anni di Naviglio Martesana (1497–1997), Chiara Tangari ed. (Novate Milanese, 1998).} Even the road network, the main routes of which dated back to Roman times, enjoyed special attention the likes of which was not to be recorded again until the eighteenth century, leading historians to judge the Lombard transport system to be the best in the Italian peninsula throughout the Modern Age.\footnote{Bruno Caizzi, Strade lombarde. Itinerari e uomini in epoca austriaca (Milan, 1985), p. 9.}

Similar care equipped sixteenth century Milan and the territories under its control with a well-structured network of communication routes, a factor of primary importance for the good running of an economy such as the Lombard one reaching out to foreign markets.
Supplies for the 100,000 plus inhabitants of Milan and the communities under its control were thus facilitated; provision of foodstuffs, building materials, and the import of primary materials for manufacturing was deployed throughout the ducal territories.

Export was also facilitated. The highly sought-after luxury goods manufactured in the Duchy, including woollen products, silks, jewellery and precious metal working, and decorative parade armours, were transported far and wide: be it to the neighbouring states or out towards the most distant markets beyond the Alps or of the Mediterranean. Agricultural products, which exceeded the needs of the internal population, were marked for export. Cereals were destined for Switzerland, but these were not the only agricultural goods from Lombardy to be sought after by foreign markets. The excavation of a series of secondary canals, known as the ‘rogge’, which branch off from theNavigli, allowed for increased grassland cultivation, particularly in the already fertile area south of Milan, and with the increased production of fodder, came the permanent installation of livestock. A flourishing cheese production resulted, which, by the fifteenth century already boasted the crowning glory of local cheese production, that is ‘grana’ a well-known cheese that is a local variety of the cheese known as ‘parmesan’. The high protein value and its long storage life made this cheese highly sought after, particularly in maritime cities where it was part of the food supplies for naval crews, not only in Italian ports but further afield: export to cities as distant as Antwerp is documented from the fifteen century.

The presence of a transport network comprising both roads and waterways, together with the geographic position of the Duchy at the foot of the Alps and thus a necessary junction along the routes that from the heart of Europe ran to the centre and south of Italy, and also routes from France to Venice, facilitated

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4 Gino Barbieri, Economia e politica nel ducato di Milano (1386–1535), (Milan, 1938).