contship italia group

srm

Corridors and logistical efficiency of territories

The results of a survey on Italian manufacturing companies

maritime economy

December 2018

"Corridors and logistical efficiency of territories. The results of a survey on Italian manufacturing companies" is an online report produced by the partnership between SRM and Contship Italia Group. It is part of the research activities carried out by SRM within its Permanent Observatory on Maritime Transports and Logistics (www.srm-maritimeconomy.com)

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The "first" survey carried out by SRM and Contship

The Italian economic system, strongly based on manufacturing and exports, is experiencing lower growth compared to the rates recorded in the last two years, as well as to those recorded on average in the Euro-area (see Italy's monthly economic note released by Istat – Italy's official national statistics centre – last September).

While added services sectors in our country show good stability, we are witnessing a fall in the foreign demand of Italian goods and in labour productivity. That brings us to the following important consideration: *the efficiency of the logistic corridors, used by Italian manufacturing companies to sell goods in international markets "counts"*. It counts a lot. It strongly influences the competitiveness of their products in the international context, and is a component of productivity too often not analysed with enough attention.

To the economic concerns mentioned above we must add the growing global concern with "Climate Change" and the growing risks of "disruption" along the global supply chains. In fact, logistics and transport are estimated to be responsible for 14% of all greenhouse gas emissions (IPCC estimate – Intergovernmental Panel on Climate Change – source Lteconomy.it).

Contship, as an independent operator that has always been promoting the development of port and intermodal infrastructures, is constantly engaged with building an efficient and more environmentally friendly primary logistics model through a heavy use of the *railway mode* (inter-modality).

This is the context within which Contship Italia Group, in partnership with SRM's maritime observatory conceived and launched the "first" survey on the efficiency of logistics corridors for containerized goods, based on the answers of manufacturing companies located in three of the main Italian regions in terms of exports, i.e. Lombardy, Emilia Romagna, and Veneto. The study traces a quantitative analysis with two main purposes:

- progressively extend the study to other Italian regions, making the research a permanent observatory, and a constant and up to date source of information and knowledge for Italian and foreign operators;
- translate the companies' "sentiment" on their logistics system into a new index named QLI[2] (*Quality Logistics Italian Index*).

Contship Italia Group in 2019 is to celebrate 50 years of activity and, with this initiative, it aims to contribute to the debate on the role of ports and intermodal transport in Italy. *Dialogue with all actors of the supply chain, an integrated vision and a systematic and collaborative action* represents our recipe for facing the challenge of creating greater social and economic wellness.

Daniele Testi
Marketing and
Corporate Communication
Director Contship Italia Group

Logistics corridors and competitiveness

This research product, designed and implemented by SRM and Contship, aims to present a picture of the logistics system in Italy "shot by " a panel of 400 manufacturing companies selected in three important Italian regions, which together represent just over 40% of Italian GDP and 52.7% of Italy's foreign trade: Lombardy, Emilia Romagna, and Veneto.

The Survey gives specific answers to complex and defined questions concerning the "logistics corridors," transport methods, processes, national and foreign ports mostly used by manufacturing companies that employ containers to export their goods.

With this study, we initiate a path to provide some guidelines for institutions, businesses, trade associations so that they can better define their strategy and foster growth and development of the logistics sector in Italy in the coming years.

Let's give an example: the fact that the main import and export market for our Survey is the Asian area is significant; this occurs at a time when the debate on the *Belt & Road Initiative*, and equally so the debate on what position Italy should take on this Chinese project that has become reality.

The Survey also highlights the increasingly strategic (and by now consolidated) role of the Ligurian ports that serve most of the companies interviewed.

Noteworthy is the fact that most companies do not know the foreign port that "serves" their goods; the reason can be found in the fact that the majority of companies use the *"Ex Works"* rule in their commercial relations; 85% of respondents outsource the logistic process when dealing with their exports; the percentage is 71% in the case of imports.

The analysis also seeks to identify the logistics factors to which manufacturing companies give greater importance, and for each factor the quality perceived by companies with reference to the logistics system they belong to: for example, «Rapidity and regularity of port services» and «Costs of transport service between the port and the inland destination» are the variables to which the companies attribute greater importance. Interesting are the territorial differences that emerge for both the importance and the quality perceived. The final result of this part of the analysis is the *Quality Logistics Italian Index* (QLI2) released for the three regions as a whole and individually for each of them.

Ultimately, the Survey offers an interesting interpretation of the data (a strength / priority analysis) from which emerge the drivers on which to focus and invest more and more in the future, both at the port and logistics level so as to increase the competitiveness of the overall system.

Alessandro Panaro
Head of Maritime &
Energy Dept., SRM

The following tables show the survey's main results and disclose some parts of the more detailed comments given in the specific sections:

The Survey

The analysis comprised **400 manufacturing companies** located in three regions, **Lombardy (150)**, **Veneto (150)**, and **Emilia Romagna (100)**, without limits in size and without sectoral constraints; the only filter is the selection of companies that export/import goods via maritime transport using containers. The interviews were carried out between May and June 2018.

Foreign trade (% Italy)

LOMBARDIA

28.9%

VENETO

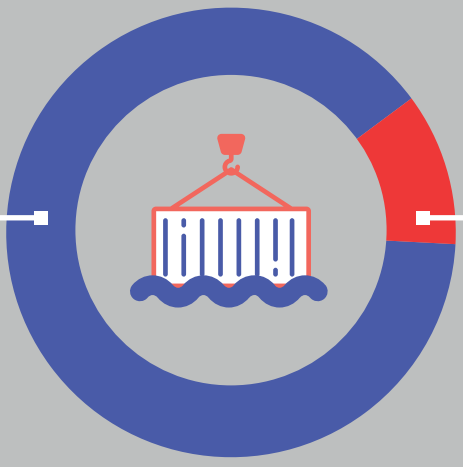
12.6%

EMILIA ROMAGNA

11.2%

Intensity of the use of containers

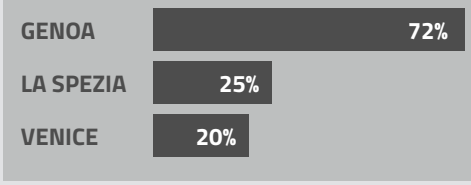
89%
1 container per week



11%
More than 1 container per week

The road is the main mode of connection between companies and ports

LOGISTICS CORRIDORS / ports of departure



% of companies declaring to use that port to export their goods. The companies indicated the first two ports utilised.

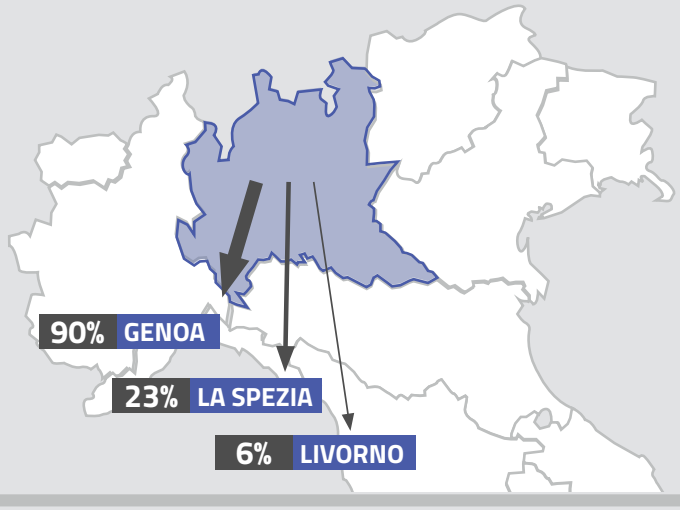
LOMBARDY

ROAD

64%

ROAD + RAIL

36%



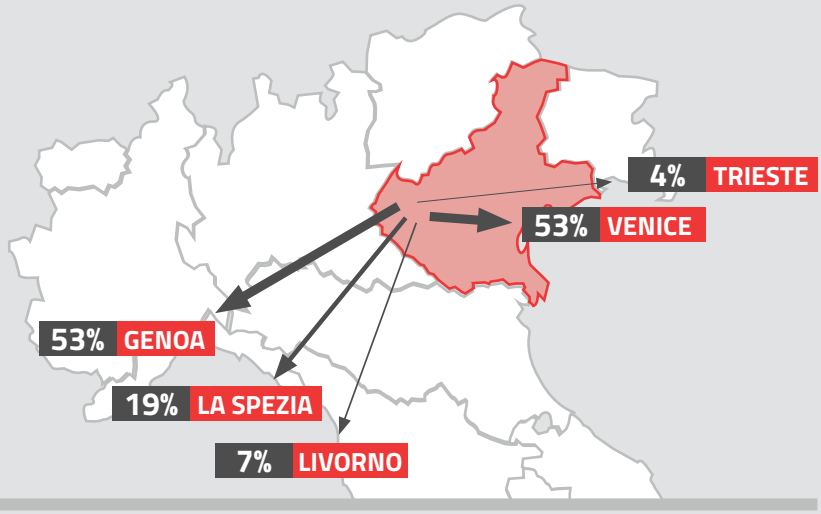
VENETO

ROAD

94%

ROAD + RAIL

6%



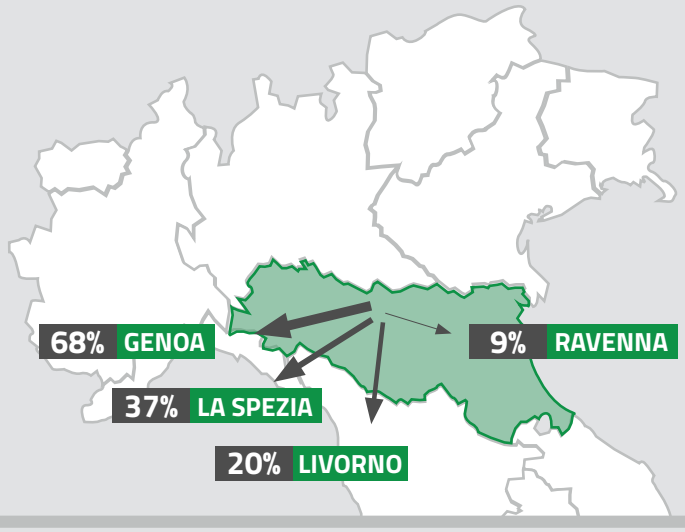
EMILIA ROMAGNA

ROAD

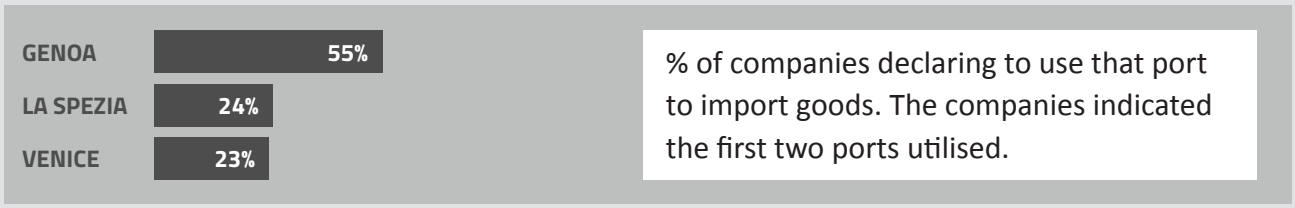
79%

ROAD + RAIL

21%



LOGISTICS CORRIDORS / ports of entry



% of companies declaring to use that port to import goods. The companies indicated the first two ports utilised.

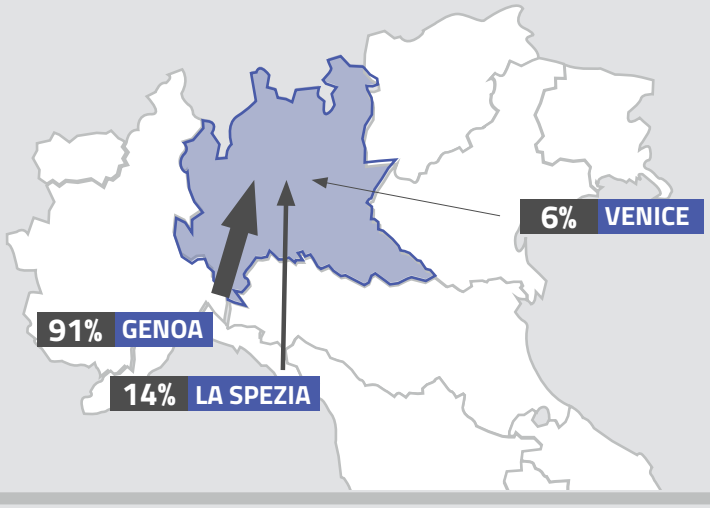
LOMBARDY

ROAD

73%

ROAD + RAIL

27%



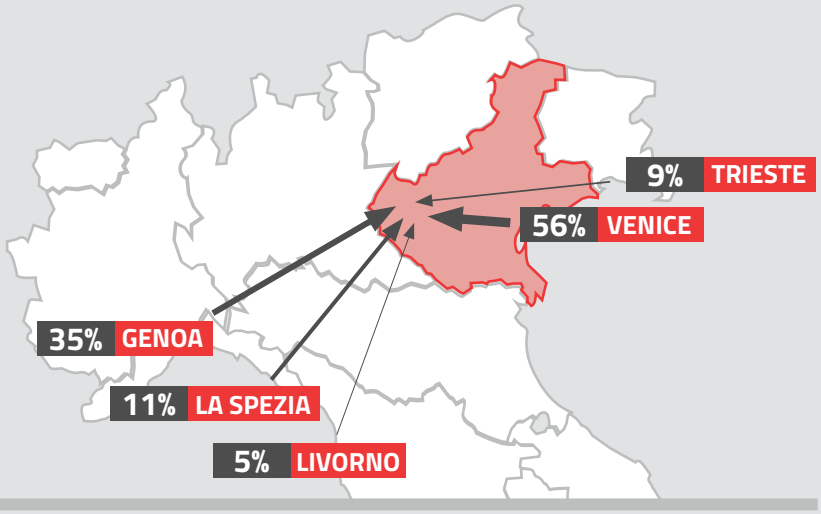
VENETO

ROAD

92%

ROAD + RAIL

8%



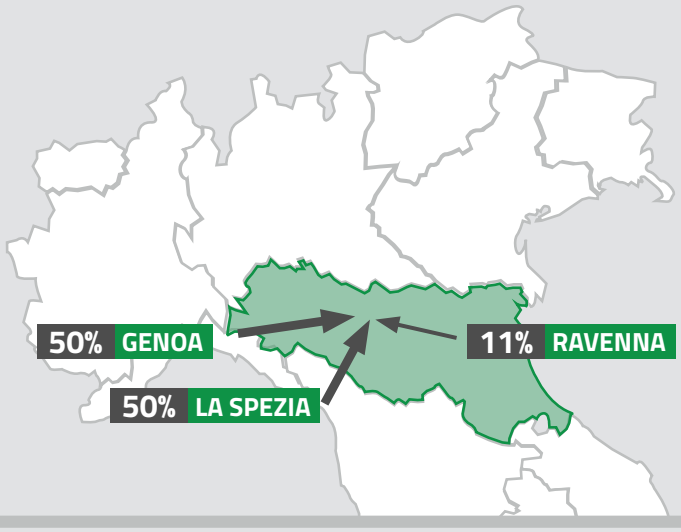
EMILIA ROMAGNA

ROAD

63%

ROAD + RAIL

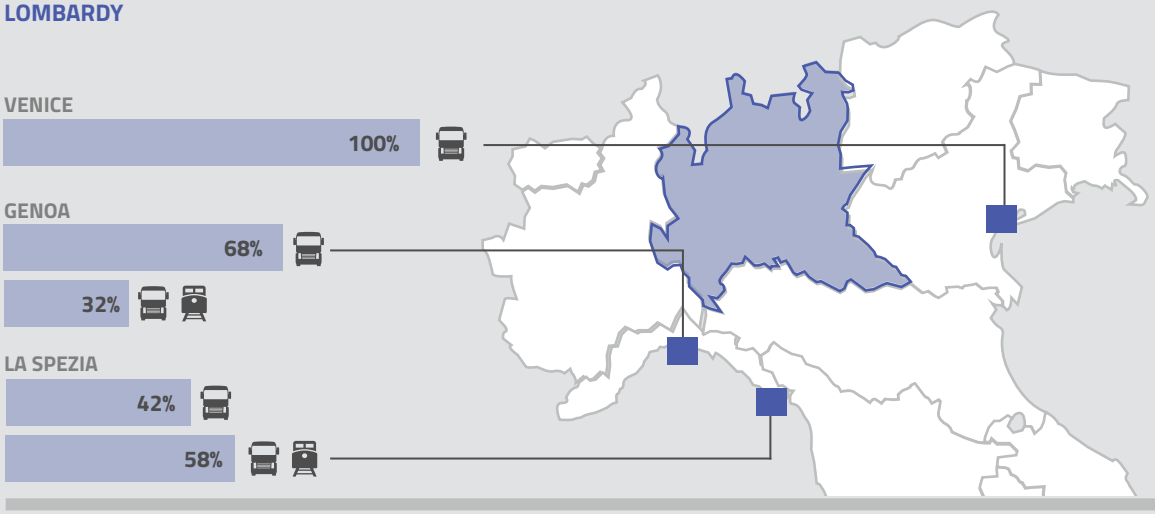
37%



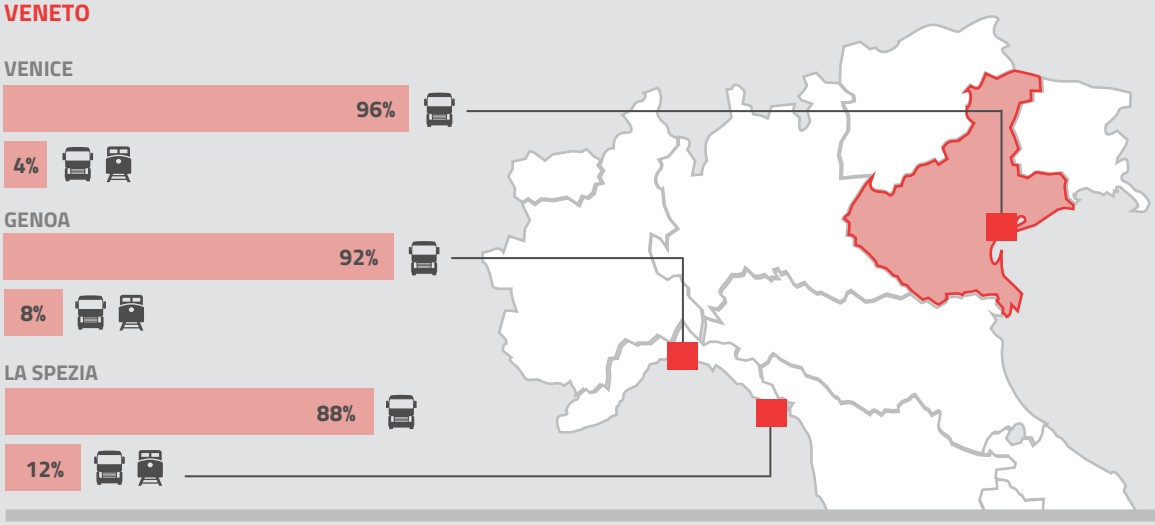
LOGISTICS CORRIDORS / connections with ports

% of companies declaring to use that mode of transport to and from the port.

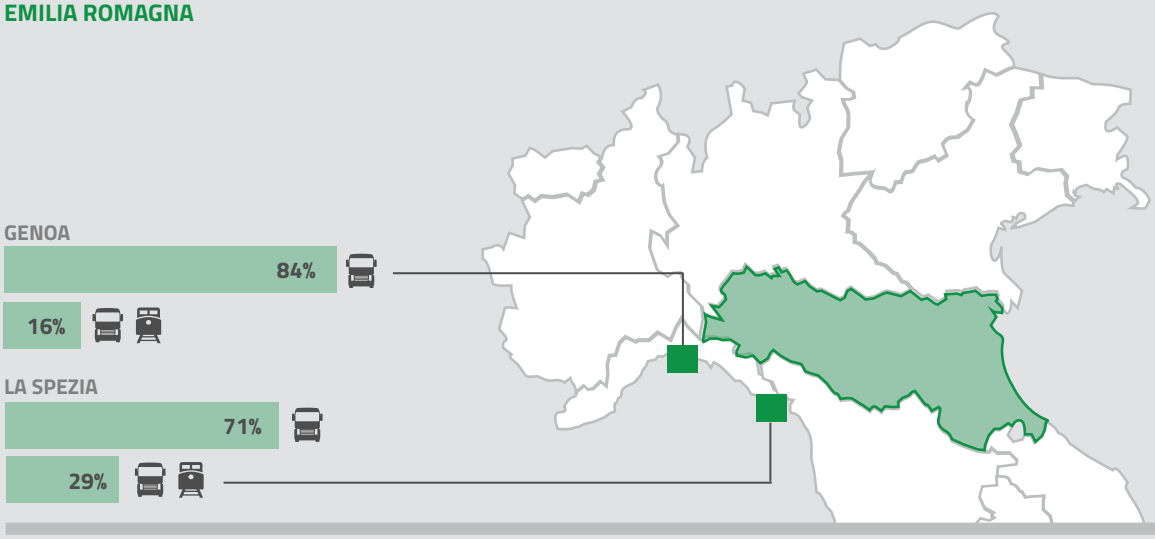
LOMBARDY



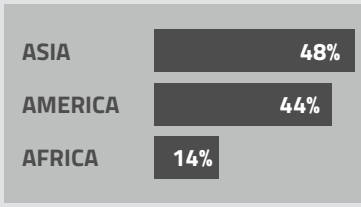
VENETO



EMILIA ROMAGNA

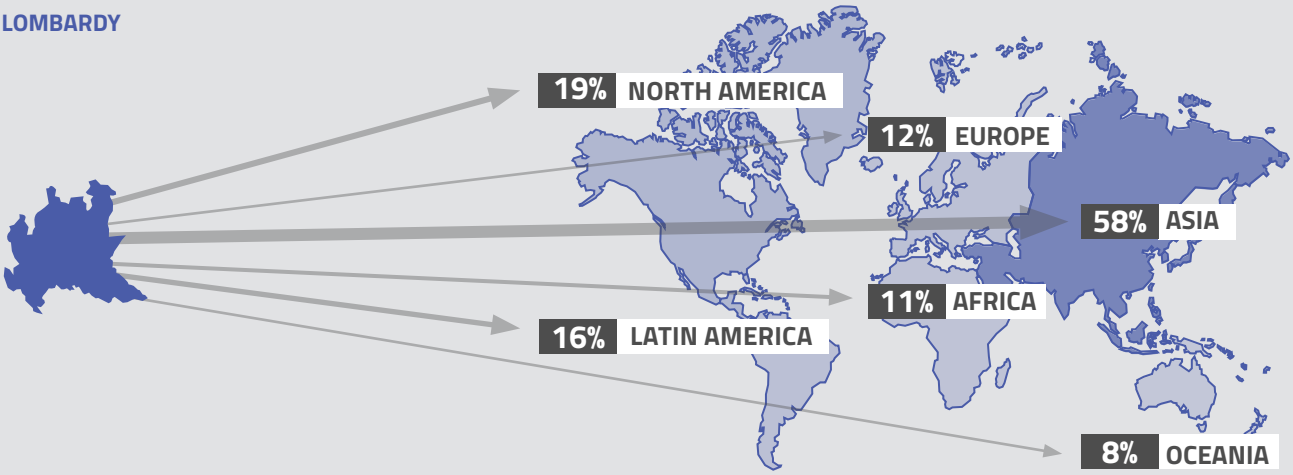


LOGISTICS CORRIDORS / destination countries

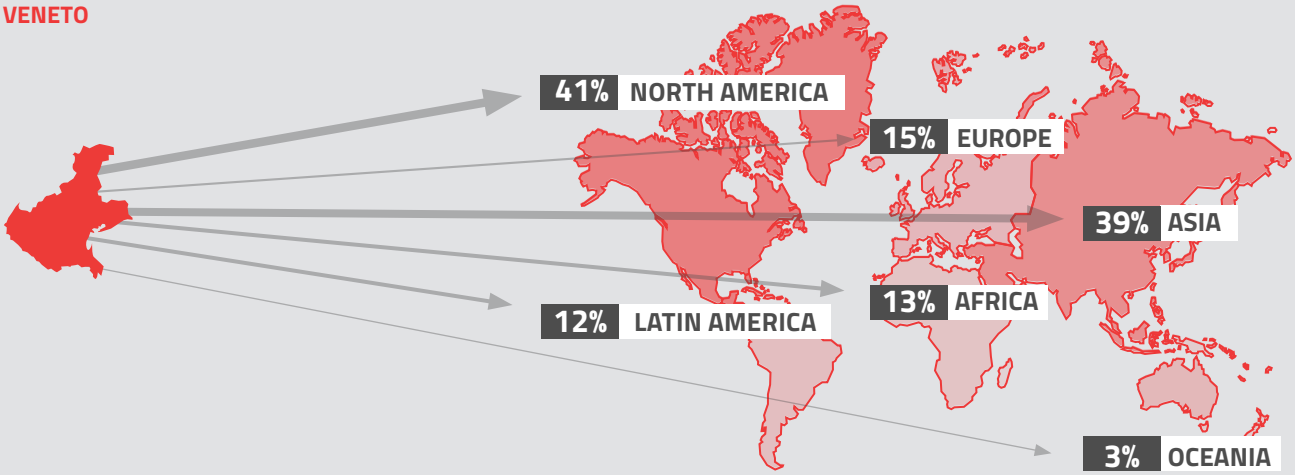


% of companies declaring to export to a that specific geographical area. The companies indicated the first two areas of destination.

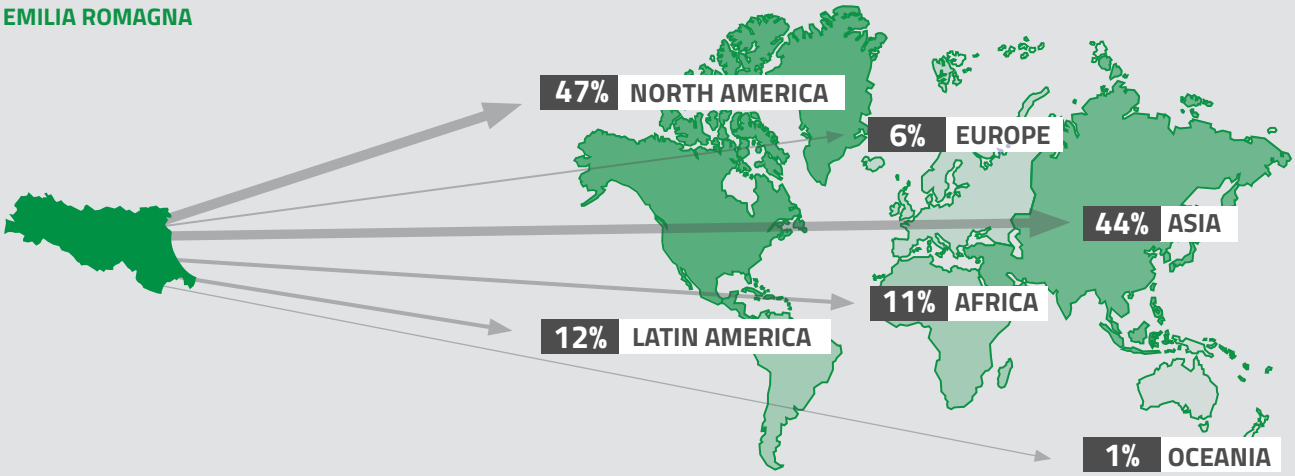
LOMBARDY



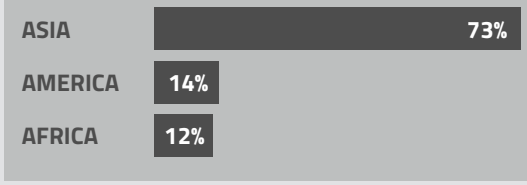
VENETO



EMILIA ROMAGNA

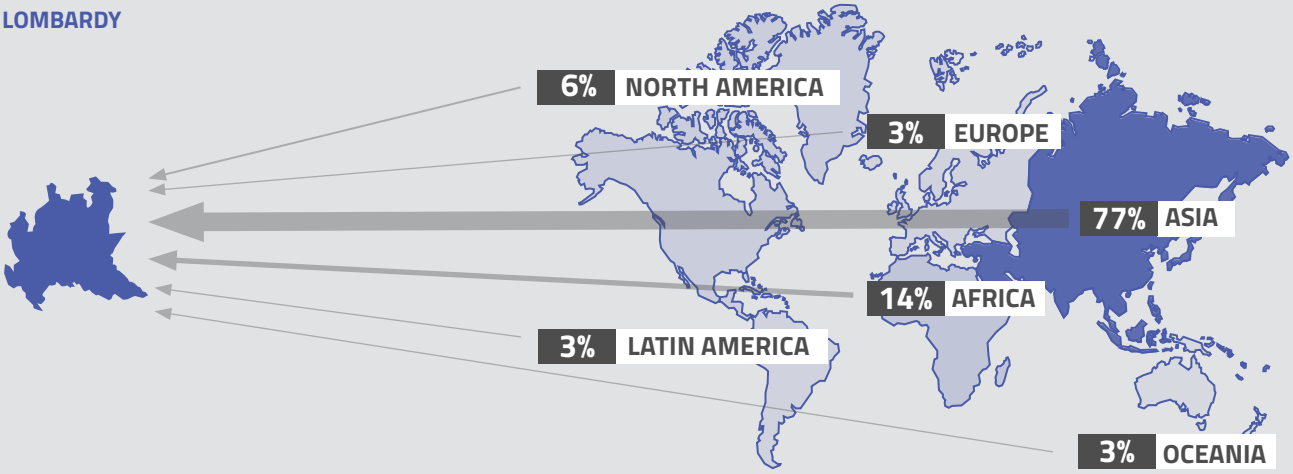


LOGISTICS CORRIDORS / countries of origin

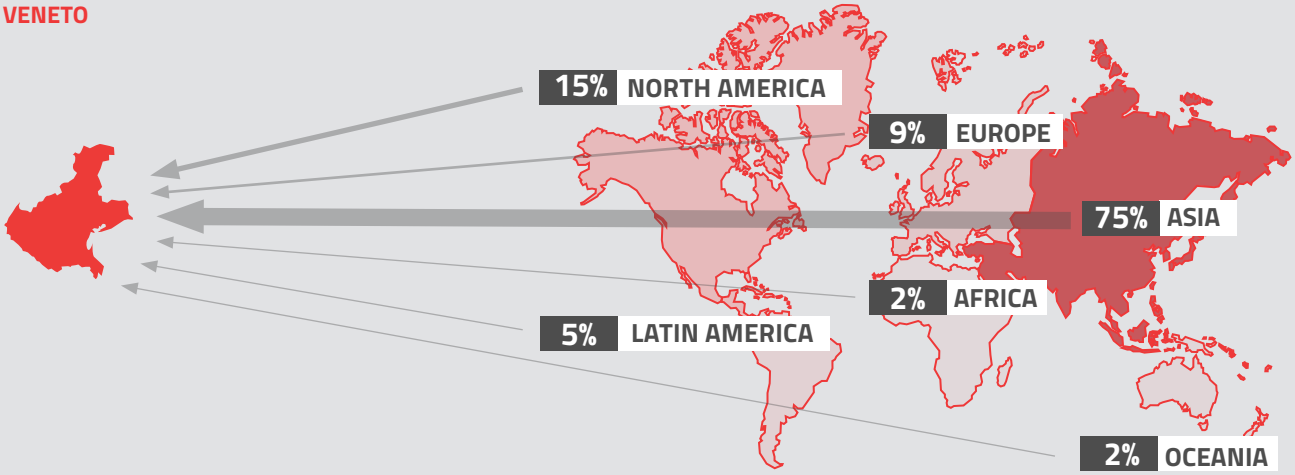


% of companies declaring to import from a specific geographic area. The companies indicated the first two areas of origin.

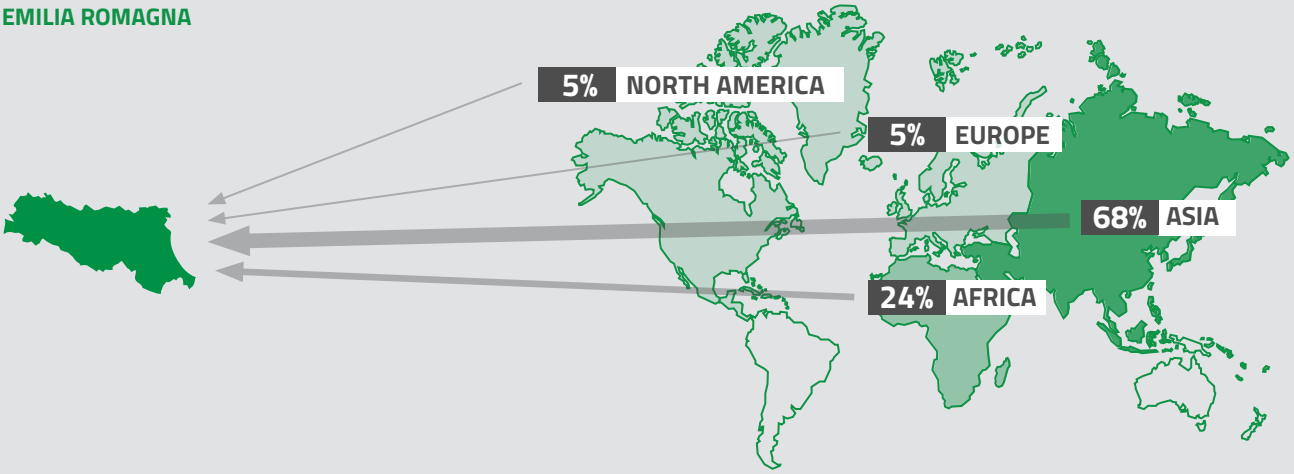
LOMBARDY



VENETO

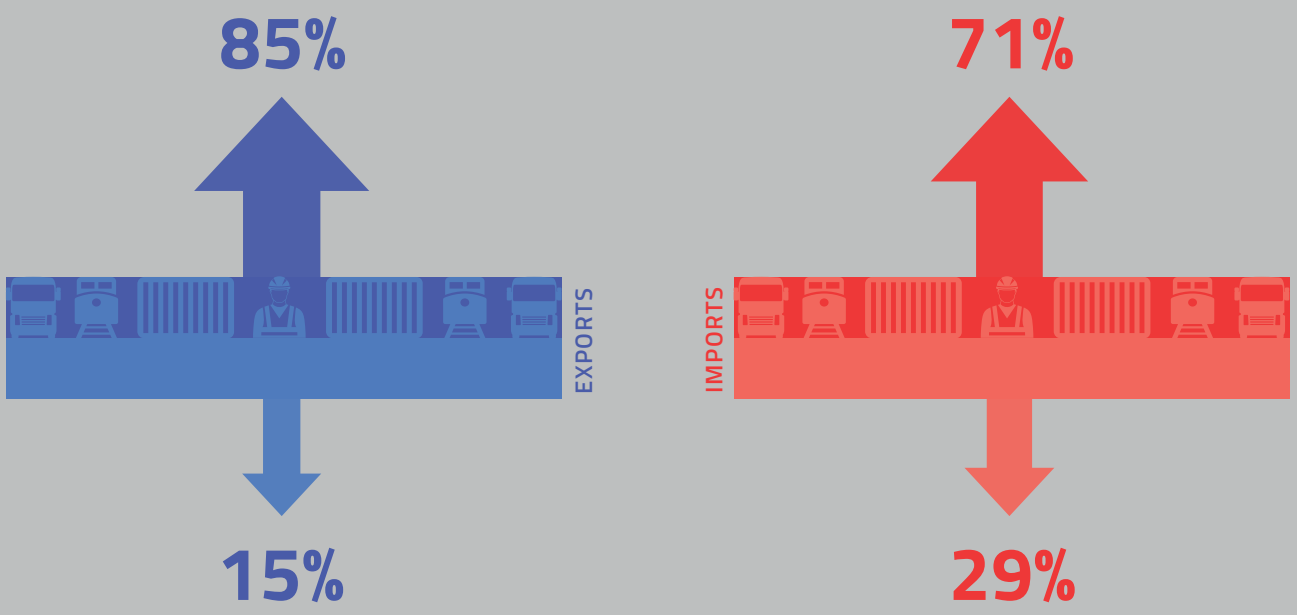


EMILIA ROMAGNA



How is the logistics process managed?

The majority of companies declare to **outsource** logistics when dealing with exports and imports of goods



The **Ex-Works** rule prevails in both incoming and outgoing goods

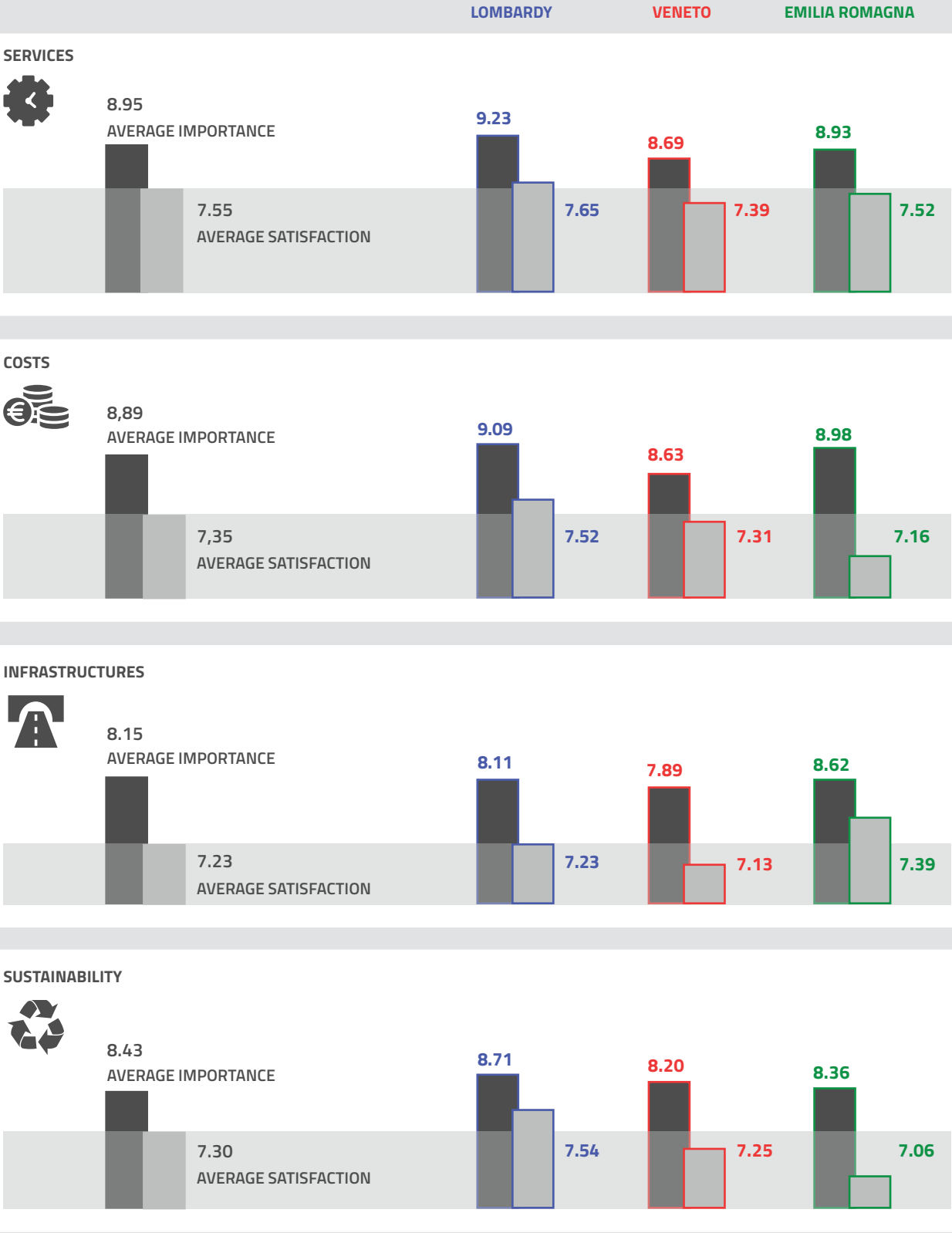
LOW RISK

LOW COSTS

EXW / Contractual provision which foresees costs completely borne by the buyer

QUALITY LOGISTICS ITALIAN INDEX

The **QLI²** shows the level of satisfaction (**7.38**) compared to the degree of importance (**8.65**) that the manufacturing companies interviewed give to their reference logistics system.
It is determined from a 1 to 10 score given to **ten variables/factors** belonging to the following categories: «Services», «Costs», «Infrastructures», and «Sustainability».



1/ Characteristics of container traffic

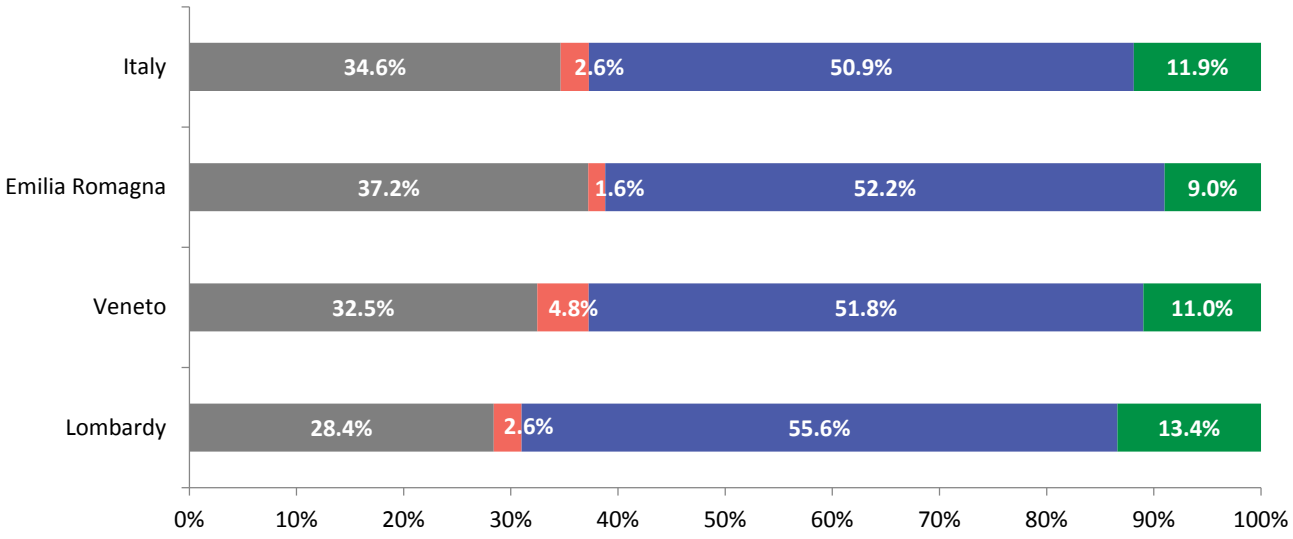
Lombardy, Emilia Romagna, and Veneto: together they make up 52.7% of the Italian trade with foreign countries

Lombardy, Emilia Romagna, and Veneto are the three main Italian regions in terms of foreign trade. In total, in 2017 they achieved € 447 billions of imports/exports (52.7% of Italian trade with foreign countries) and the value could reach € 476 billion in 2018 (SRM estimates, based on half-year data). In detail, Lombardy covers 28.9% (245 billion in 2017) of Italian foreign trade, Veneto 12.6% (107 billion), and Emilia Romagna 11.2% (95 billion). The business in the three regions is very active and accounts for a large part of Italian GDP (40.4%): Lombardy (21.9%); Veneto (9.3%); Emilia Romagna (9.2%).

Maritime trade represents an important part (second only to road transport) of these regions' foreign trade: considering only the four modes of transport (thus excluding not specified modes in Istat database), sea trade represents 28.4% for Lombardy, 32.5% for Veneto, 37.2% for Emilia Romagna (compared with 34.6% for Italy).

Importance of maritime trade

% of total foreign trade*, year 2017



*The total trade considered for the calculation of percentages excludes the "not specified" option in Istat statistics.

Figure 1 - Source: SRM/Contship on Istat data

1 container per week for most companies for both exports and imports

As many Italian companies are manufacturing ones, the container is an important means for exporting Italian goods abroad and for importing goods to employ in the industrial process. The Italian economic system (especially the regions analysed in the Survey), made up of small and medium-sized entities, shows a low intensity in the use of containers: most companies "use on average no more than 1 container per week" both in export and import. More precisely, 89% of respondents said they export no more than 50 containers per year (the percentage is 85% for imports); 10% of companies export using 51 to 500 units (14% for imports) and only 1% use more than 500 containers (both for imports and exports).

Number of containers used for export by manufacturing companies in a year

% of companies per container band

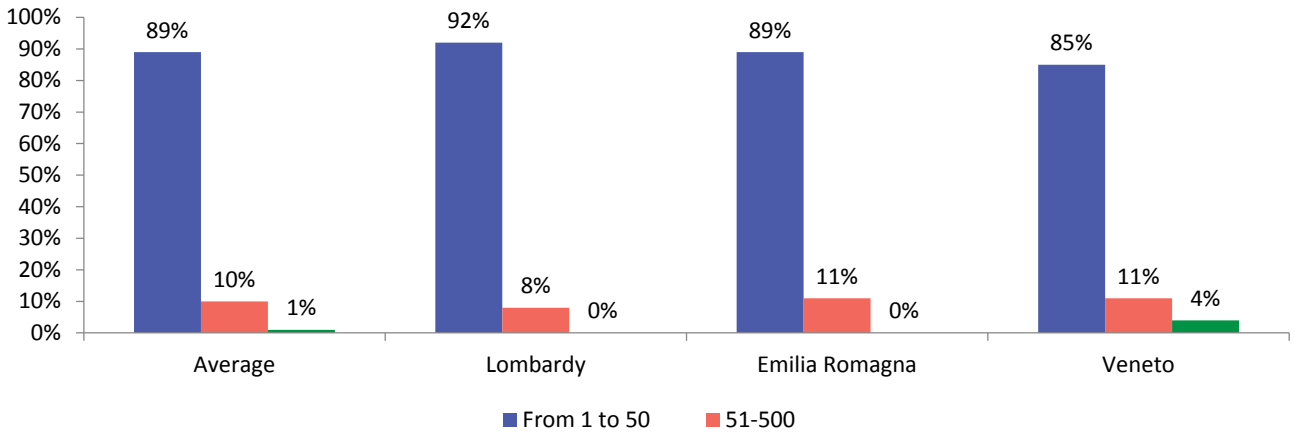


Figure 2 - Source: SRM/Contship

Number of containers used for import by manufacturing companies in a year

% of companies per container band

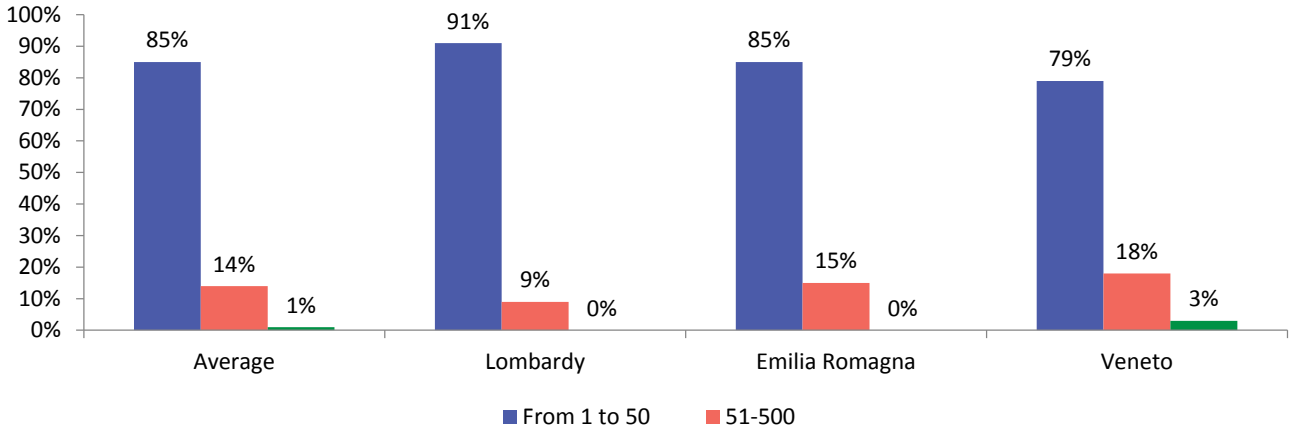
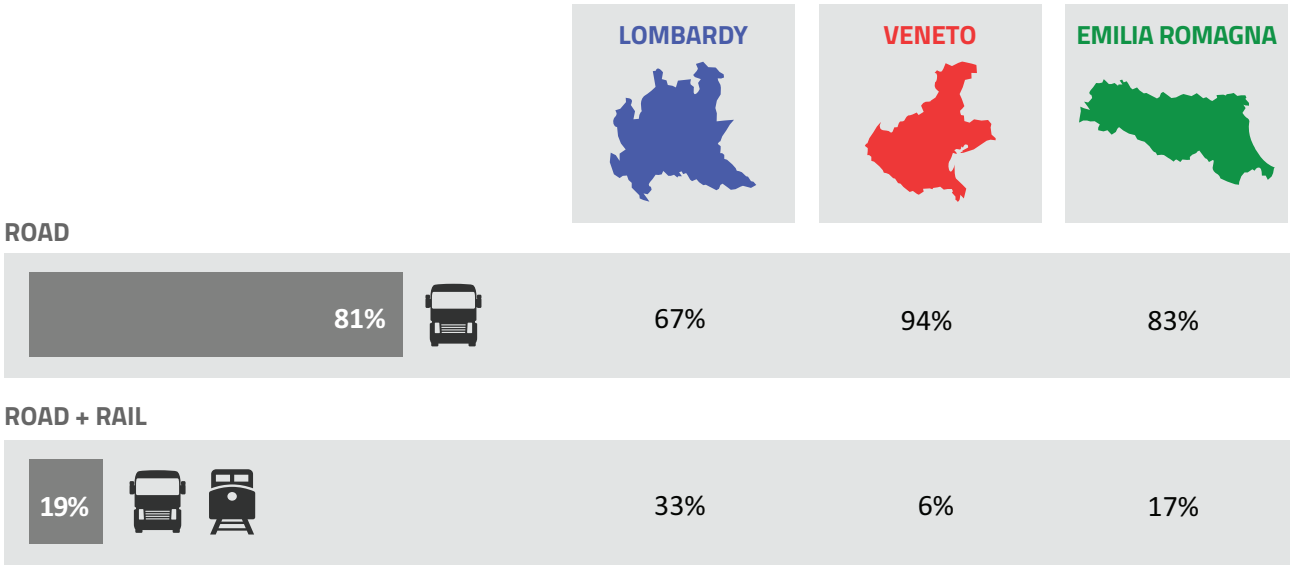


Figure 3 - Source: SRM/Contship

The road: the main connection between the company and the port

One important element for the improvement of the "logistics corridor" is understanding how companies are connected to the port and vice-versa.
With the exception of Lombardy, inter-modality (Road + Rail) is used by less than 17% of the companies interviewed.

Main mode of connection with the port*



* The percentages of companies refer to both incoming and outgoing goods.

Figure 4 - Source: SRM/Contship

The two most-used ports: Genoa for 72% of companies, La Spezia for 25%

Genoa, La Spezia and Venice, are the most-used ports by companies for both imports and exports; manufacturing companies were asked "which are the two ports mainly used to export and import their goods." For goods for export 72% of respondents indicated Genoa (the percentage drops to 55% for imports). Again with reference to exports, 25% of respondents include La Spezia, 20% Venice, and 10% Livorno among the first two ports used. With regard to imports: La Spezia (23%), Venice (24%), Livorno (5%), Trieste (5%).

Differences emerge when we look at the single regions separately. In fact the percentage of companies that primarily opt for Genoa reaches the climax for those located in Lombardy: 90% for both incoming and outgoing goods. In Veneto, 53% choose Genoa to export (the number drops to 35% for imports), 19% indicate the port of La Spezia, and 53% that of Venice. In Emilia Romagna, for 68% of the companies Genoa is one of the most used ports for goods in export (50% for imported goods); La Spezia is used by 37% (50% in the case of imported goods), Livorno by 20% for outgoing goods, while Ravenna by 11% for imports.

Main gateway ports rankings (2 ports per response)

% of companies that use the port

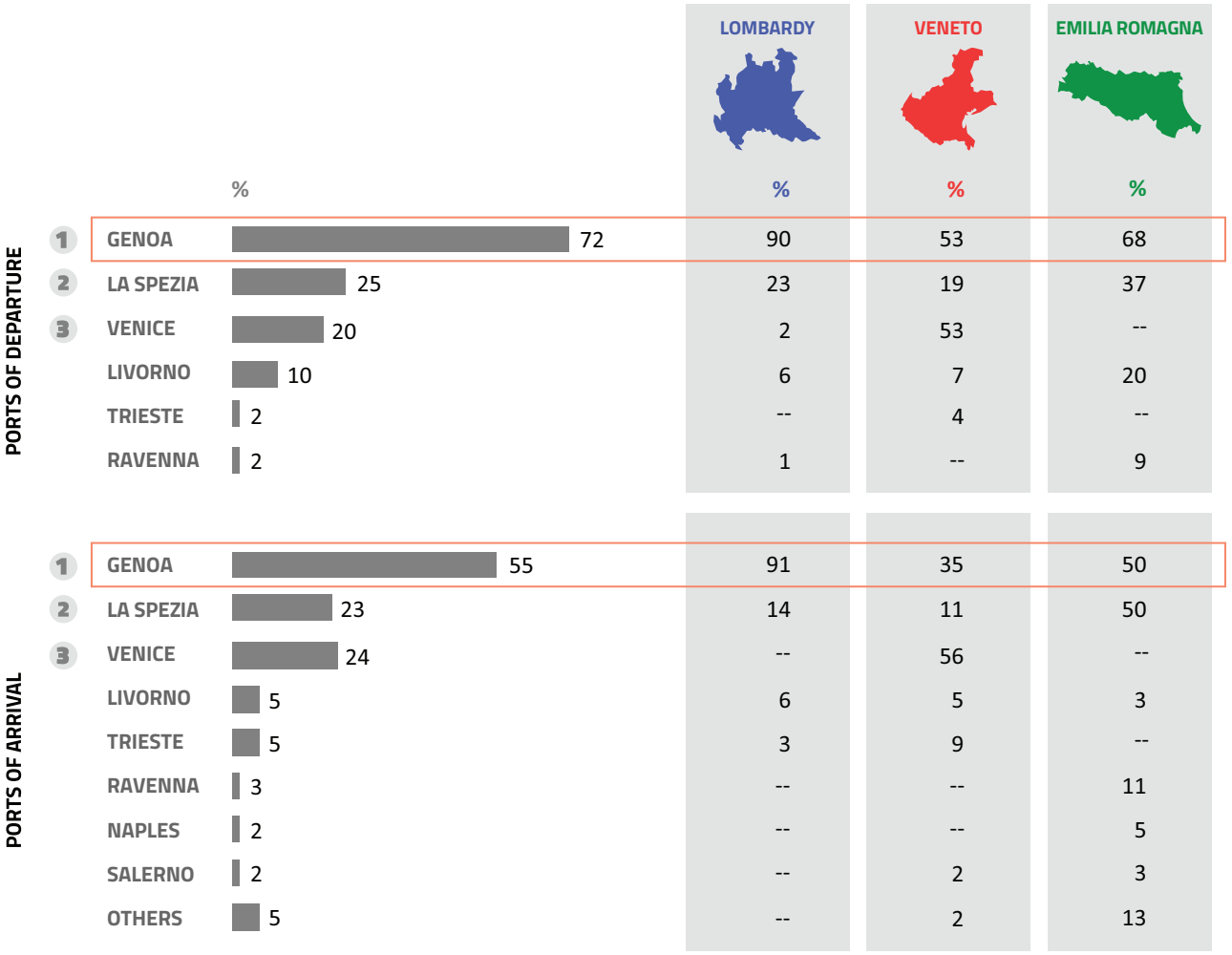


Figure 5 - Source: SRM/Contship

Container traffic in the 5 most-used ports

The 5 ports indicated by the companies surveyed are among the first 6 Italian ports for annual container traffic. For 2017, Genoa is confirmed as the top Italian port with a traffic of approximately 2.6 million containers (14.1% more than in 2016). La Spezia follows with 1.5 million TEU (+15.8%), Livorno with 734 thousand TEU (-8.3%), Trieste (616 thousand TEU, +26.7%), Venice (611 thousand TEU; +0.9%).

Container traffic in the 5 most-used

	2005	2016	2017	Var.% 2016-2017
Genoa	1,624,964	2,297,917	2,622,187	14.1
La Spezia	1,024,455	1,272,425	1,473,571	15.8
Venice	289,860	605,875	611,383	0.9
Livorno	658,506	800,475	734,085	-8.3
Trieste	198,319	486,462	616,156	26.7

Table 1 - Source: SRM/Contship

Most companies that export by sea have indicated Asia and America as their final destination, and Asia as the main continent from which they import

While in the previous paragraph we focused on the Italian ports of departure and arrival for goods exported and imported by sea, in this paragraph we change the point of view and move on to the analysis of landing sites (for exported goods) and departure sites (for imported goods) abroad: where the goods

Main 2 countries for exported goods

% of companies that export mainly in the area / country; first or second country for export

FIRST + SECOND COUNTRY FOR EXPORT	TOTAL %	LOMBARDY %	VENETO %	EMILIA ROMAGNA %
ASIA	**48**	**58**	**39**	**44**
China/Hong Kong	16	17	11	23
Saudi Arabia/United Arab Emirates/Middle East	8	8	9	5
Japan	4	7	2	1
Turkey	4	7	3	1
India	4	3	4	4
Israel	3	5	2	4
Singapore	2	2	2	1
Thailand	2	2	1	2
Other Asia	11	17	12	4
AMERICA	**44**	**34**	**48**	**52**
North America	34	19	41	47
United States	30	17	36	41
Canada	6	2	7	12
Latin America	13	16	12	10
Brazil	5	4	6	5
Mexico	4	5	3	2
Argentina	1	3	--	--
Other Latin America	4	7	3	2
AFRICA	**14**	**11**	**13**	**20**
Tunisia	4	5	2	5
Africa gen.	2	1	3	4
Algeria	2	2	3	1
Morocco	2	2	--	4
Egypt	1	1	--	4
Other Africa	3	3	7	3
EUROPE	**12**	**12**	**15**	**6**
United Kingdom	3	4	3	2
Greece	3	4	3	--
Germany	1	1	3	--
Other Europe	6	6	12	3
OCEANIA: AUSTRALIA	**5**	**8**	**3**	**1**

Figure 6A - Source: SRM/Contship

we export go and where the goods we import come from. 48% of the companies interviewed export their products to Asia, 44% to America, 14% to Africa, 12% to Europe, and 5% to Australia.
While companies in Lombardy are more inclined towards the Asian markets (58% export in this area), those of Veneto and Emilia Romagna show a greater inclination towards North America (41% and 47%), and towards African markets (13% and 20%). Imports come mainly from Asia (for 73% of companies); 14% of companies import from America and 12% from Africa.

Main 2 countries for imported goods

% of companies that import mainly in from the area / country; first or second country for imports

FIRST + SECOND COUNTRY FOR IMPORTS	TOTAL %	LOMBARDY %	VENETO %	EMILIA ROMAGNA %
ASIA	**73**	**77**	**75**	**68**
China/Hong Kong	55	49	55	61
India	13	17	11	13
Japan	4	9	4	--
Turkey	3	3	4	3
Saudi Arabia/United Arab Emirates/Middle East	2	3	2	--
Jordan	2	3	2	--
Malaysia	2	3	2	--
Israel	2	--	2	5
Thailand	2	--	2	3
Other Asia	6	15	2	--
AMERICA	**14**	**11**	**22**	**5**
America Gen.	2	3	2	--
North America: United States	9	6	15	5
Latin America	3	3	5	--
Mexico	2	--	4	--
Argentina	1	3	--	--
Brazil	1	--	2	--
AFRICA	**12**	**14**	**2**	**24**
Egypt	3	3	--	8
Morocco	2	9	--	--
Tunisia	2	3	--	5
Libya	2	--	--	5
South Africa	2	--	--	5
Algeria	1	3	--	--
Other Africa	3	--	2	6
EUROPE	**6**	**3**	**9**	**5**
Germany	2	--	5	--
United Kingdom	2	--	--	5
Greece	1	3	--	--
Other Europe	2	--	4	--
OCEANIA: AUSTRALIA	**2**	**3**	**2**	**--**

Figure 6B - Source: SRM/Contship

The main trading Partner Countries

Istat data on foreign trade* help us to better interpret the results of our Survey. Among the first 5 commercial partners of Lombardy, we find Germany, France, China, the Netherlands, and the United States; it is reasonable to assume that while China and United States are mainly reached through maritime transport, for the European countries it is road trade that prevails. Accordingly, China and the United States were among the leading export and importing countries in our Survey which included only companies whose foreign trade is handled by sea with the use of containers). With the exception of the United States, for the other countries mentioned, Lombardy's imports exceed its exports. For Veneto, we find Germany, France, China, and the United States. Spain is added to these. Unlike Lombardy, it is exports that exceed imports in all cases with the exception of China and Germany. A similar situation occurs for Emilia Romagna.

Main trading partners of Lombardy (billions of euros)

	Imports	Exports	Trade	World %o
Germany	25.2	15.8	41.0	17.5
France	12.0	11.5	23.4	10.0
China	11.8	3.8	15.6	6.7
The Netherlands	10.5	2.8	13.3	5.7
United States	3.0	9.0	12.0	5.1
Spain	5.1	6.5	11.6	4.9
Switzerland	4.2	6.1	10.3	4.4
United Kingdom	3.7	5.3	9.1	3.9
Belgium	5.6	2.4	8.1	3.4
Poland	2.7	3.5	6.2	2.7
World	*116.6*	*117.9*	*234.6*	*100.0*

Table 2 - Source: SRM/Contship on Istat data

Main trading partners of Veneto (billions of euros)

	Imports	Exports	Trade	World %
Germany	9.9	7.7	17.6	17.7
France	2.1	5.9	8.1	8.1
United States	0.6	4.9	5.5	5.5
China	3.8	1.6	5.4	5.4
Spain	2.2	2.8	5.0	5.0
United Kingdom	0.7	3.5	4.2	4.2
Romania	1.6	1.6	3.2	3.2
Austria	1.6	1.6	3.2	3.2
The Netherlands	1.6	1.4	3.0	3.0
Poland	1.1	1.8	2.9	3.0
World	*40.3*	*59.6*	*99.9*	*100.0*

Table 3 - Source: SRM/Contship on Istat data

*Data refer to the import and export of manufacturing products net of the energy component.

Main trading partners of Emilia Romagna (billions of euros)

	Imports	Exports	Trade	World %
Germany	5.5	7.2	12.7	13.9
France	3.7	6.5	10.2	11.1
United States	0.7	5.8	6.5	7.1
China	3.3	1.8	5.1	5.6
Spain	2.0	2.9	5.0	5.4
United Kingdom	1.1	3.7	4.8	5.3
The Netherlands	1.6	1.5	3.1	3.4
Belgium	1.6	1.4	3.0	3.3
Poland	0.9	1.8	2.7	3.0
Austria	0.8	1.2	2.0	2.2
World	*33.0*	*58.6*	*91.6*	*100.0*

Table 4 - Source: SRM/Contship on Istat data

52% of companies do not know the port of destination

Our analysis didn't stop at the area of destination (for exported goods) and the area of origin (for imported goods). It went further to examine which are the main ports of destination and those of origin. The results are quite surprising. The data show that most companies know little about that kind of information. In fact 52% of them do not know in which foreign port their exported goods arrive. In Asia, Shanghai is the most-used port (7%); in America, it is the port of New York (5%). For imported goods, 44% of companies do not know the port of origin. Also in this case, Shanghai is the most used port (as stated by 20% of respondents).

Percentage of companies which do not know the port of destination or the port of origin

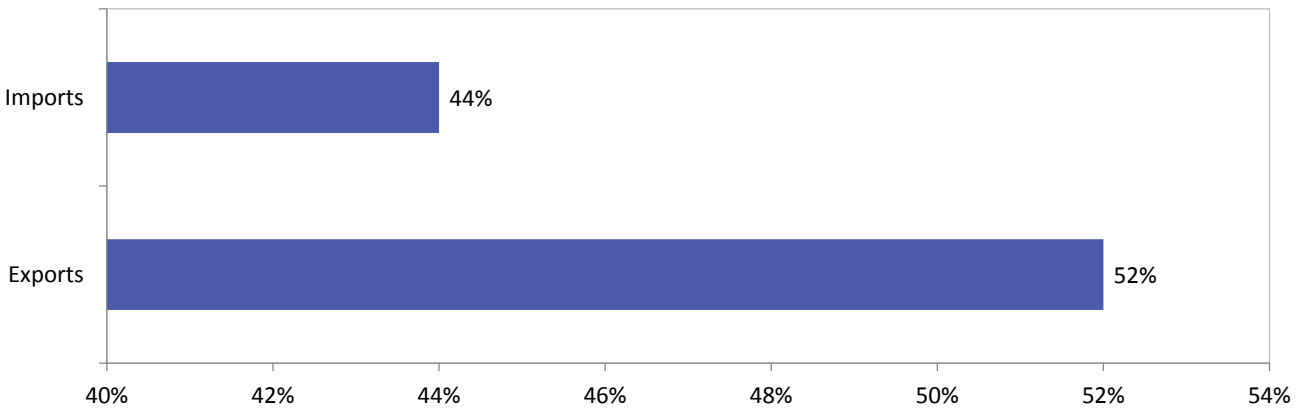


Figure 7 - Source: SRM/Contship

Main ports of destination for exported goods

% of companies

PORTS (FIRST + SECOND COUNTRY FOR EXPORT)	TOTAL  %	LOMBARDY  %	VENETO  %	EMILIA ROMAGNA  %
ASIA	**23**	**30**	**15**	**21**
Shanghai	7	7	6	9
Hong Kong	3	5	--	5
Tokyo	2	3	1	--
Dubai	2	1	2	2
Shenzhen	1	2	--	--
Busan	1	2	--	--
Nagoya	1	2	--	--
Eilat	1	2	--	1
Doha	1	2	--	--
Singapore	1	2	2	--
Bangkok	1	2	--	2
Gedda	1	1	2	--
Nhava Sheva	1	1	2	--
Other Asia	3	2	4	1
AMERICA	**17**	**17**	**10**	**26**
North America	11	8	8	22
New York	5	3	2	14
Miami	3	5	3	1
Toronto	2	--	--	5
Other North America	4	1	4	3
Latin America	6	9	3	4
San Paolo	2	2	2	1
Veracruz	1	2	--	1
Buenos Aires	1	2	--	--
Guayaquil	1	2	--	--
Other America Latina	2	4	1	2
EUROPE	**6**	**8**	**6**	**--**
Pireaeus	1	2	2	--
Istanbul	1	2	--	--
Hamburg	1	1	3	--
Barcelona	1	1	1	--
Other Europe	2	2	--	--
AFRICA	**5**	**3**	**2**	**11**
Casablanca	2	2	--	4
Tunis	2	1	--	5
Durban	1	--	2	--
Alexandria	1	--	--	2
OCEANIA: AUSTRALIA	**4**	**8**	**3**	**1**
Melbourne	3	5	3	1
Sidney	1	2	--	--
Auckland	1	2	--	--
NO PORT SPECIFIED	**52**	**49**	**63**	**41**

Figure 8A - Source: SRM/Contship

Main ports of origin for imported goods

% of companies

PORTS (FIRST + SECOND COUNTRY FOR IMPORTS)	TOTAL %	LOMBARDY %	VENETO %	EMILIA ROMAGNA %
ASIA	**41**	**46**	**38**	**42**
Shanghai	20	23	18	21
Bombay	4	6	2	5
Hong Kong	3	3	--	8
Shenzhen	3	--	4	5
Ningbo	2	3	2	--
Aqaba	2	3	2	--
Xiamen	2	--	2	3
Dalian	2	--	4	--
Mumbai	2	--	2	3
Bangkok	2	--	--	8
Dubai	1	3	--	--
Tokyo	1	3	--	--
Visakhapatam	1	3	--	--
Karachi	1	3	--	--
Damascus	1	3	--	--
Vientiane	1	3	--	--
Other Asia	10	--	12	12
AFRICA	**5**	**6**	**2**	**11**
Casablanca	2	6	--	--
Tripoli	2	--	--	5
Other Africa	5	--	2	9
AMERICA	**4**	**6**	**5**	**--**
North America	3	6	4	--
Savanna	2	3	2	--
Portorico	1	3	--	--
Other North America	3	--	4	--
Latin America : San Paolo	1	--	2	--
EUROPE	**4**	**3**	**7**	**--**
Hamburg	2	--	4	--
Piraeus	1	3	--	--
Venice	1	--	2	--
Barcelona	1	--	2	--
NO PORT SPECIFIED	**44**	**43**	**45**	**42**

Figure 8B - Source: SRM/Contship

Italy's inter-regional maritime transport

Istat provides for each Italian region data for loading and unloading of goods from and to other Italian regions. Only the northern regions were considered in this box (Liguria, Veneto, Emilia Romagna, and Friuli Venezia Giulia).
Although these regions have not been considered in the Survey, they can help us to understand interregional logistical movements by sea.

Liguria loads in total 12.6 million tons of goods. It shows good relations with Sicily, Tuscany, Campania, and Sardinia. The Italian region unloads in total 15.8 million tons of goods mainly in Tuscany, Puglia, Sicily, and Sardinia.
Veneto loads 3 million tons of goods, of which over 70% originates from Friuli Venezia Giulia, Calabria, and Emilia Romagna. It unloads 6.4 million tons of goods mainly in Sicily, Puglia, and Sardinia.
Emilia Romagna loads 2.6 million tons of goods, over 70% from Sicily, Veneto, and Puglia. It unloads 2.5 million tons, almost 70% in Veneto, Sicily, and Marche.
Friuli Venezia Giulia loads 1.6 million tons, over 80% from Veneto, Emilia Romagna, and Marche. The region unloads 6.3 million tons. Over 60% in Puglia, Sicily, and Sardinia.

Coastal navigation: loading of goods (2016)

Liguria				Veneto	
	Tons (000)	%		Tons (000)	%
Liguria	3,118	24.8	Friuli Venezia Giulia	927	30.3
Sicily	2,237	17.8	Calabria	815	26.7
Tuscany	2,105	16.8	Emilia Romagna	693	22.7
Campania	1,118	8.9	Marche	217	7.1
Sardinia	920	7.3	Puglia	189	6.2
Other regions	3,055	24.3	Other regions	217	7.1
	12,553	*100.0*		*3,058*	*100.0*
Emilia Romagna				**Friuli Venezia Giulia**	
	Tons (000)	%		Tons (000)	%
Sicily	956	36.8	Veneto	811	49.7
Veneto	554	21.3	Emilia Romagna	375	23.0
Puglia	429	16.5	Marche	185	11.3
Friuli Venezia Giulia	247	9.5	Sicily	95	5.8
Marche	200	7.7	Calabria	70	4.3
Other regions	214	8.2	Other regions	95	5.8
	2,600	*100.0*		*1.631*	*100.0*

Table 5 - Source: SRM/Contship on Istat data

Coastal navigation: unloading of goods (2016)

Liguria				Veneto	
	Tons (000)	%		Tons (000)	%
Tuscany	3,188	20.1	Sicily	2,348	36.8
Liguria	3,118	19.7	Puglia	1,014	15.9
Puglia	3,001	18.9	Sardinia	970	15.2
Sicily	2,805	17.7	Friuli Venezia Giulia	811	12.7
Sardinia	1,818	11.5	Emilia Romagna	554	8.7
Other regions	1,916	12.1	Other regions	680	10.7
	15,846	*100.0*		*6,377*	*100.0*

Emilia Romagna				Friuli Venezia Giulia	
	Tons (000)	%		Tons (000)	%
Veneto	927	36.8	Puglia	2,413	38.1
Sicily	516	20.5	Sicily	1,358	21.4
Marche	274	10.9	Sardinia	796	12.6
Emilia Romagna	247	9.8	Veneto	693	10.9
Puglia	230	9.1	Friuli Venezia Giulia	375	5.9
Other regions	323	12.8	Other regions	698	11.0
	2,517	*100.0*		*6,333*	*100.0*

Table 6 - Source: SRM/Contship on Istat data

2/ Logistics process management

85% of companies outsource the logistics related to the export of their products

Now that "time" and "precision" in deliveries have acquired a greater importance in the relationships within the supply chain and in those with final consumers, deciding a) whether to outsource or not logistics and b) to whom to outsource the logistic process is a strategic choice for manufacturing companies. In fact, outsourcing the logistics services can have the following advantages: cost reduction, a better use of stocks, and, in general, better competitiveness in the market. But the greatest advantage is no need for investing in property, plants, facilities and personnel, thus making a fixed cost a variable one, albeit to a certain extent.

We asked manufacturing companies whether they outsource the logistics process or both in the case of exports, and in the case of imports. Companies seem to strongly prefer outsourcing logistics especially for their exports (85% of our sample do that). As for imports the percentage is also high, but 14 points less, most likely due to the fact that in the B2B transactions some Italian companies are more sensitive towards the time and quality precision goods arrive to them. No differences emerge among the three Italian regions examined, and in the case of exports companies that outsource the logistics process exceeds 80% in all of them. As regards imports, in Emilia Romagna the percentage of outsourcing companies is lower than the others, while still remaining high and above 60%.

Outsourcing of logistics: export of goods

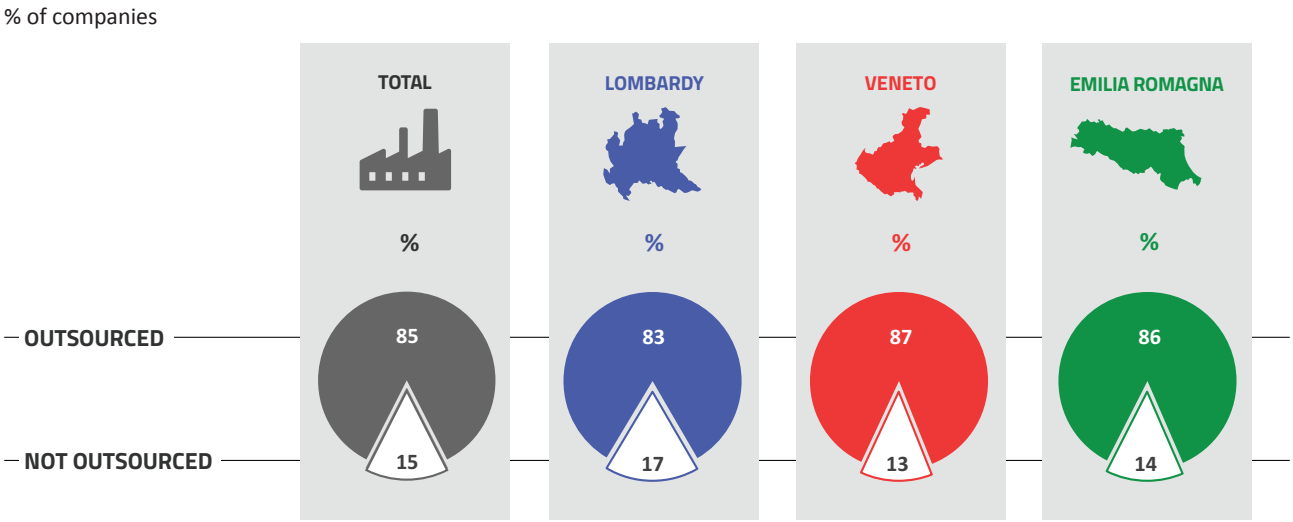


Figure 9A - Source: SRM/Contship

Outsourcing of logistics: import of goods

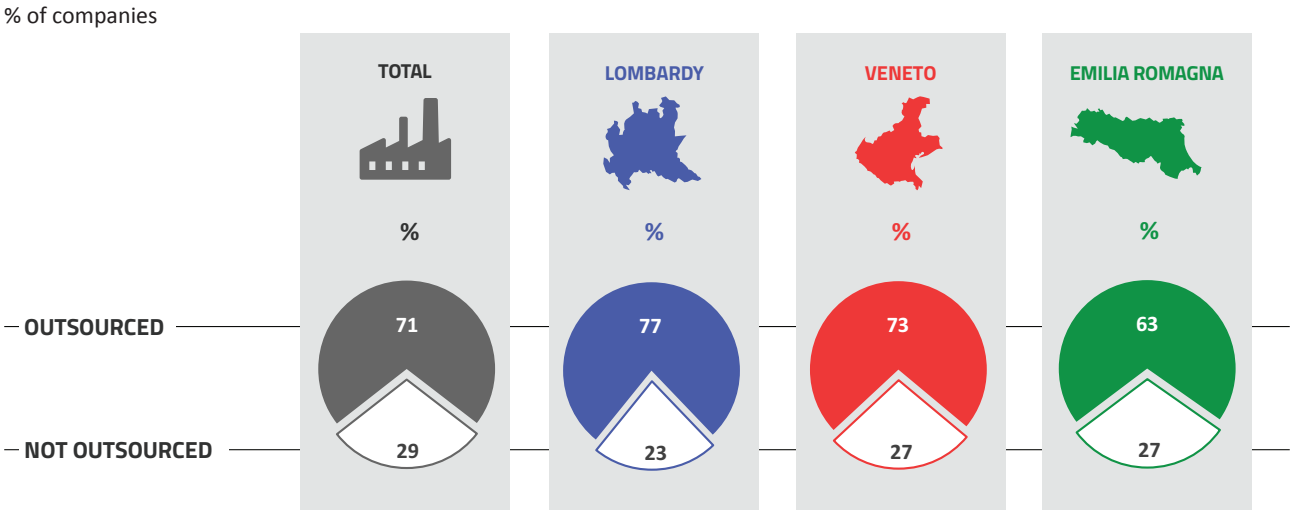


Figure 9B - Source: SRM/Contship

64% of companies use the Ex-Works rule for exporting their goods

The choice of trading terms (Incoterms) is another important factor in a company decision about how to manage the logistical process of its imports and exports. Each Incoterm rule specifies: a) the obligations of each party (e.g. who is responsible for services such as transport; import and export clearance etc); b) the point in the journey where risk transfers from the seller to the buyer.

In general, the set of terms beginning with the letter "E" or "F" indicates costs and risks borne by the buyer, those beginning with the letter "C" indicate transport costs borne by the seller and risk borne by the buyer, while those beginning with "D" indicate costs and risks of transport borne by the seller.

In our Survey we asked companies which Incoterm rule they favour when dealings with foreign counterparties.

The "Ex Works" rule is the preferred one by the majority of companies in the case of exports: 64% of them use it. Italian companies mostly prefer to transfer the cost and risk of transport to the buyers.

"Ex Works" is the least demanding and least expensive rule for sellers. The seller has no need to oversee the loading of goods, and is not charged for costs for export customs clearance. Transport risks lies entirely in the hands of the buyer. The seller fulfils its obligations simply by placing the goods, at the disposal of the buyer in the chosen place (generally its own factory and/or warehouse).

Besides the 64% of companies which use the Ex-Works rule, there are another 13% which use the FOB (Free on Board) rule, according to which the seller is free of costs and risks once goods reach the ship at the port of departure. As a result, 77% of companies take charge of logistics not beyond the port of departure. No significant differences have been noted between the three Italian regions analysed.

For imports, 46% of companies choose the Ex Works rule. The percentage is lower compared to exports, but still significant: in general it is the buyer the one who assume the risks and costs of transport. 26% of companies use the FOB rule.

Some differences emerge among the three regions analysed, but, overall, Ex Works and FOB are preferred by the majority of companies.

Incoterms rules mainly used by companies for exports and imports

% of companies

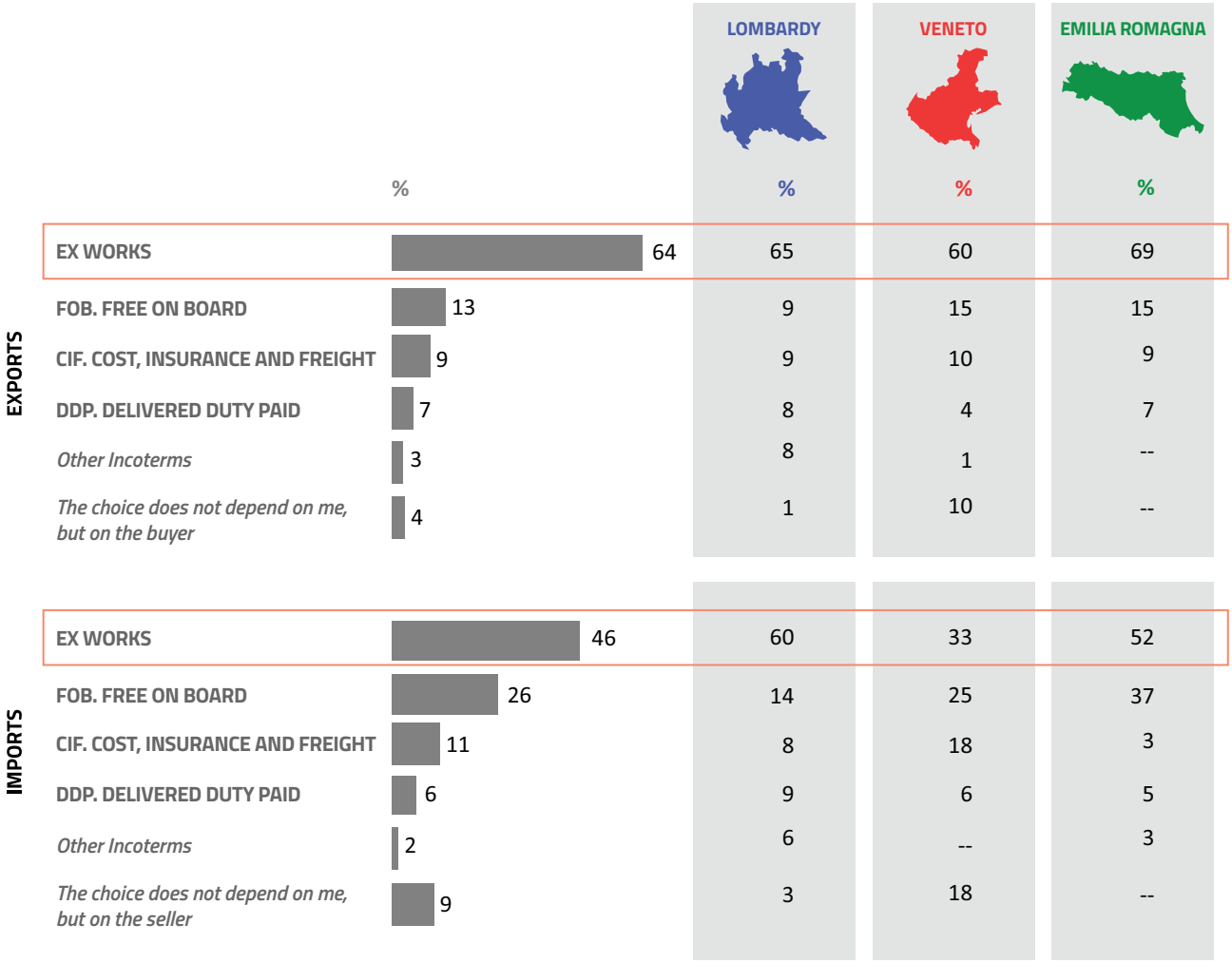


Figure 10 - Source: SRM/Contship

Some Incoterms

Ex Works:
Risks and costs fully borne by the buyer

FOB (Free On Board):
Risks and costs borne by the seller up to loading the goods onto the ship at the port of departure

CIF. Cost, Insurance and Freight:
Risks and costs borne by the seller until arrival at the port of destination

DDP. Delivered Duty Paid:
Risks and costs borne by the seller until the goods arrive at destination + Customs fees + Import duties

3/ Logistical challenges and Quality Logistics Italian Index

"Rapid and regular port services" and "costs of the transport service between the port and the inland destination" are the factors to which companies attribute more importance

Services, Costs, Infrastructures, and Sustainability. Companies were first asked to score each factor on a 1 to 10 scale, based on their importance for the efficiency of the overall logistics system. On average the factors were given an importance-score of 8 (more precisely, 8.65). Very important are the rapidity and the regularity of port and maritime services. Some differences emerge for the three Italian regions analysed. In Lombardy the gap between the bottom scored factor and the top one (from 7.79 to 9.25, with an average of 8.81) Is wider than the ones found for Veneto and Emilia Romagna. The average importance are 8.79 for Emilia Romagna and 8.38 for Veneto.

1. Size and accessibility of infrastructures
2. Rapidity and regularity of port services (loading/unloading of goods/controls)
3. Rapidity and regularity of maritime transport services
4. Rapidity and regularity of land transport services
5. Availability of high-speed rail services
6. Rapidity and efficiency of customs services
7. IT system
8. Port service charges (stops, THC-Terminal Handling Charge, etc.)
9. Costs of the transport service between the port and the inland destination
10. Attention to sustainability issues (environmental, economic-social, etc.)

Importance of factors related to the logistics system

Average score (from 1 to 10) given to each factor.

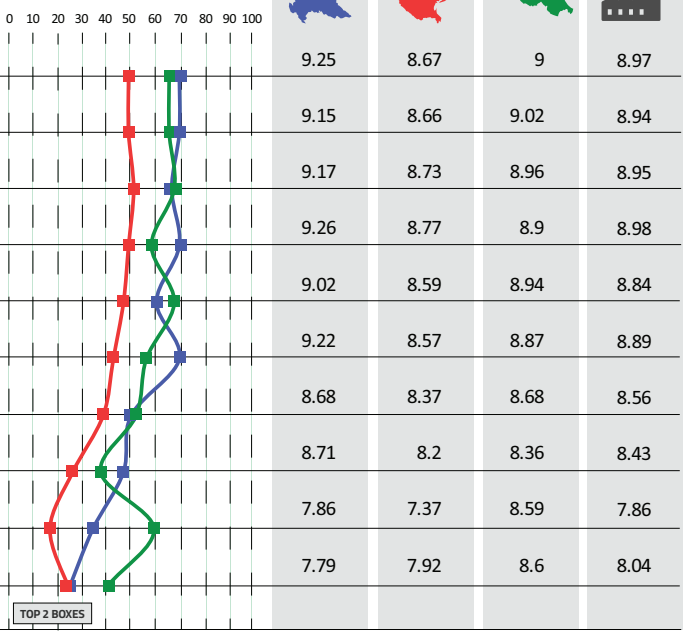
Rapidity and efficiency of customs services	8.98	< 9
Rapidity and regularity of port services (loading/unloading of goods/controls)	8.97	< 9
Rapidity and regularity of maritime transport services	8.95	< 9
Costs of the transport service between the port and the inland destination	8.94	< 9
Rapidity and regularity of land transport services	8.89	< 9
Port service charges (stops, THC-Terminal Handling Charge etc.)	8.84	< 9
Size and accessibility of infrastructures	8.56	< 9
Attention to sustainability issues (Environmental, Economic-Social, etc.)	8.43	> 8
IT system	8.04	= 8
Availability of high-speed rail services	7.86	< 8
Medium importance	**8.65**	> 8

Table 7 - Source: SRM/Contship

Interesting is the "Top 2 boxes" analysis which expresses the percentage of companies that assigned a 9 to 10 score to each factor. While for Veneto this percentage does not exceed 60% for any of the variables considered, it exceeds 60% for several of them in Lombardy and Emilia Romagna.

Importance of factors related to each regional logistics system

Average score (from 1 to 10) given to each factor and *Top 2 boxes.**



	LOMBARDY	VENETO	EMILIA ROMAGNA	TOTAL
Rapidity and regularity of port services (loading/unloading of goods/controls)	9.25	8.67	9	8.97
Costs of the transport service between the port and the inland destination	9.15	8.66	9.02	8.94
Rapidity and regularity of maritime transport services	9.17	8.73	8.96	8.95
Rapidity and efficiency of customs services	9.26	8.77	8.9	8.98
Port service charges (stops, THC-Terminal Handling Charge etc.)	9.02	8.59	8.94	8.84
Rapidity and regularity of land transport services	9.22	8.57	8.87	8.89
Size and accessibility of infrastructures	8.68	8.37	8.68	8.56
Attention to sustainability issues (Environmental, Economic-Social, etc.)	8.71	8.2	8.36	8.43
Availability of high-speed rail services	7.86	7.37	8.59	7.86
IT system	7.79	7.92	8.6	8.04

* *Top 2 boxes*: percentage of companies that gave a score of 9 or 10 to the factor.

Figure 11 - Source: SRM/Contship

Quality Logistics Italian Index: positive results, but we still need to improve

Besides the level of importance, companies were asked to give a "quality score" (reflecting their level of satisfaction) for each factor with reference to their 2 most used ports. As a result, the overall quality score (that of the three regions considered as a whole) ranges from 7.12 (Availability of high-speed rail services) to 7.56 (Rapidity and regularity of maritime transport services).

The average quality score (*Quality Logistics Italian Index*) is 7.38 for the three regions (satisfaction level: more than sufficient).

If we compare it with the average importance (8.79; see the previous paragraph), it is clear that there is a gap between the satisfaction assessment and the importance assessment given to the logistic system and that gap needs to be fulfilled.

Satisfaction levels are similar for the three Italian regions examined: the Quality Logistics Italian Index is of 7.49 for Lombardy, 7.28 for Veneto, and 7.36 for Emilia Romagna.

As regards Lombardy, quality scores cover a range from 6.99 (information system) to 7.62 (rapidity and regularity of port services – loading/unloading goods/controls). For Veneto, they go from 7.02 (availability of rail services) to 7.45 (rapidity and regularity of maritime services). Finally, for the Emilia Romagna, they range from 7.06 (attention to sustainability) to 7.56 (rapidity and regularity of land services).

The perceived quality of the logistics system

Level of satisfaction on a 1 to 10 scale for each factor.

Rapidity and regularity of maritime transport services	7.56	< 8
Rapidity and regularity of land transport services	7.54	< 8
Rapidity and regularity of port services (loading/unloading of goods/controls)	7.51	< 8
Rapidity and efficiency of customs services	7.46	> 7
Size and accessibility of infrastructures	7.44	> 7
Costs of the transport service between the port and the inland destination	7.38	> 7
Port service charges (stops, THC-Terminal Handling Charge, etc.)	7.31	> 7
Attention to sustainability issues (environmental, economic-social, etc.)	7.3	> 7
IT system	7.14	> 7
Availability of high-speed rail services	7.12	> 7
Quality-Logistics Index	**7.38**	> 7

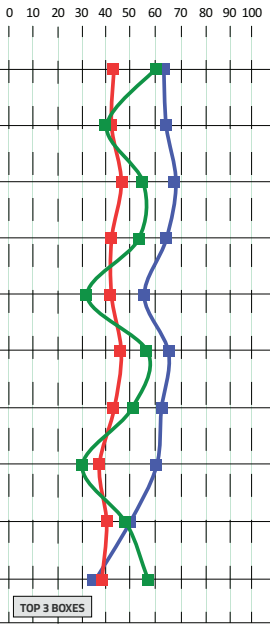
Table 8 - Source: SRM/Contship

In this case, an analysis was made with reference to the percentages of companies which gave a score between 8 and 10 (Top 3 boxes), rather than between 9 and 10 (Top 2 boxes). For Lombardy, a good percentage of companies (between 60% and 70%) gave a score higher than 7 to almost all the factors considered. For Veneto, the distribution is quite homogeneous and a lower percentage of companies (between 40% and 50%) gave scores higher than 7.

For the Emilia Romagna the scores are much more variable: from 60% (rapidity and regularity of the port services) to 30% (attention to sustainability).

The perceived quality of the logistics system

Average satisfaction of the factor on a scale of 1 to 10 and *Top 3 boxes.**



	LOMBARDY	VENETO	EMILIA ROMAGNA	TOTAL
Rapidity and regularity of port services (loading/unloading of goods/controls)	7.62	7.37	7.55	7.51
Costs of the transport service between the port and the inland destination	7.60	7.28	7.21	7.38
Rapidity and regularity of maritime transport services	7.69	7.45	7.54	7.56
Rapidity and efficiency of customs services	7.63	7.34	7.42	7.46
Port service charges (stops, THC-Terminal Handling Charge etc.)	7.44	7.34	7.11	7.31
Rapidity and regularity of land transport services	7.67	7.41	7.56	7.54
Size and accessibility of infrastructures	7.57	7.29	7.49	7.44
Attention to sustainability issues (Environmental, Economic-Social, etc.)	7.54	7.25	7.06	7.3
Availability of high-speed rail services	7.13	7.02	7.23	7.12
IT system	6.99	7.08	7.45	7.14

* *Top 3 boxes*: percentage of companies that assigned 8, 9 or 10 to the factor.

Figure 12 - Source: SRM/Contship

The two dimensions previously analysed (importance and quality) brought us to lay out a strength/priority analysis. For each region's logistics system we highlighted the strengths and the priority of interventions according to the scores given by the companies interviewed. Based on this analysis we can cluster each factor in four different groups:

I) Strength: in the top-right group we have the factors to which operators gave a score above the average for both importance and quality.

II) Priority of interventions: in the upper-left corner there are the factors for which the importance is above average, but the perceived quality is below average. Interventions/ investments are needed to improve the level of satisfaction by manufacturing companies.

III) Secondary interventions: in the lower-left corner there are the variables for which both importance and quality are lower than the average. Interventions are needed in order to increase the level of satisfaction, but they are not as important as those for the factors included in the upper left group.

IV) Potential: in the lower-right cluster there are the factors for which the quality perceived by manufacturing companies is above average, but these companies attribute to them less importance than average. These factors are "potentialities" to be better exploited.

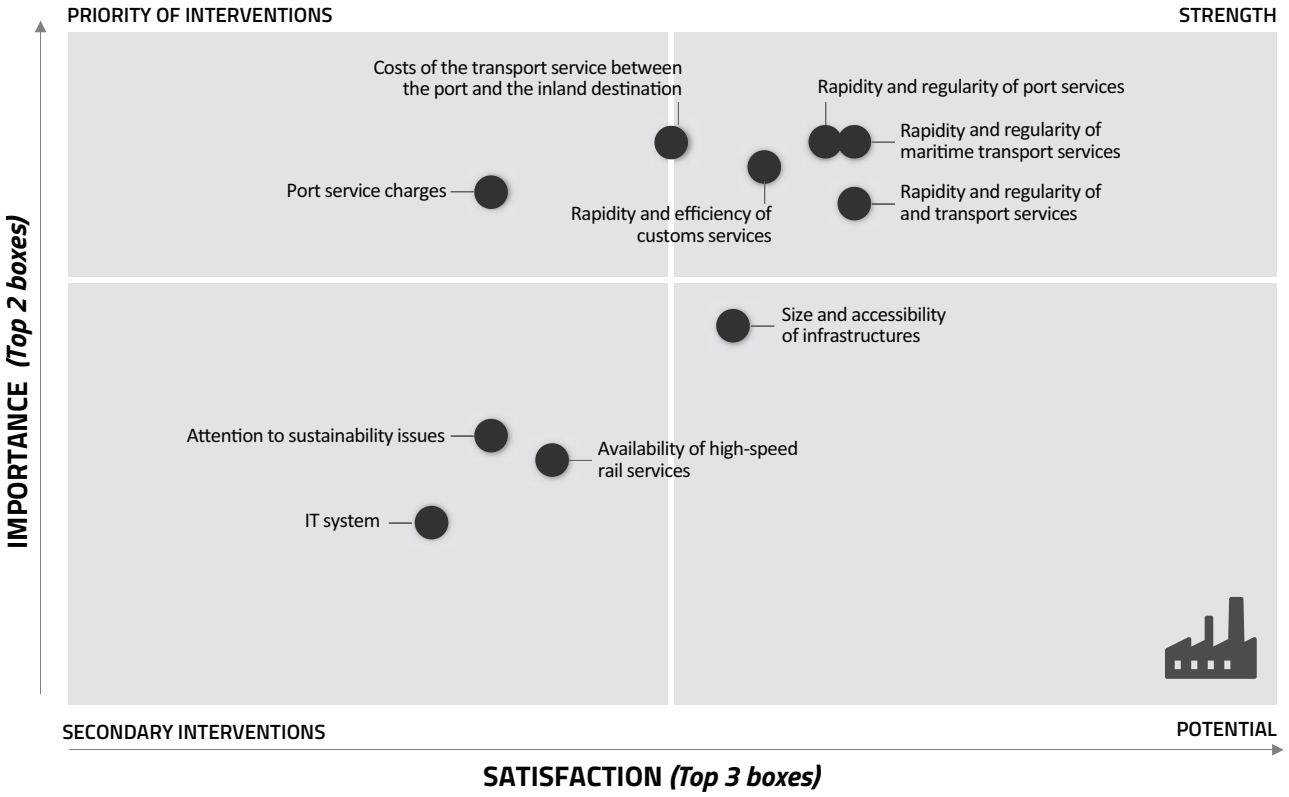
The logistics system of the three manufacturing Italian regions analysed (Lombardy, Veneto, and Emilia Romagna), include logistical corridors that connect companies with the ports of Genoa, Venice, Trieste, La Spezia, and Livorno. It is well positioned (there is a strength point) with reference to the rapidity and regularity of port and maritime services, while interventions are needed to reduce the port charges and the cost of transport from the port to the company and vice versa.

The following factors – the information system, the availability of railway services, and the attention to sustainability – shows a lower than average quality, but these factors are also scored as less important by operators: they are clustered as secondary interventions.

It's important to notice that, even though we talk about strengths, still a gap remains between the quality perceived (7.38 the average value) and the importance attributed to the factors (8.79 the average value). Therefore, even in the case of strengths, further investments should be made in order to improve the overall logistics system.

Strength/Priority analysis (overall companies)

Total sample; *Top 2 boxes** and *Top 3 boxes***.



* *Top 2 boxes*: percentage of companies that assigned 9 or 10 to the factor.
** *Top 3 boxes*: percentage of companies that assigned 8, 9 or 10 to the factor.

Figure 13 - Source: SRM/Contship

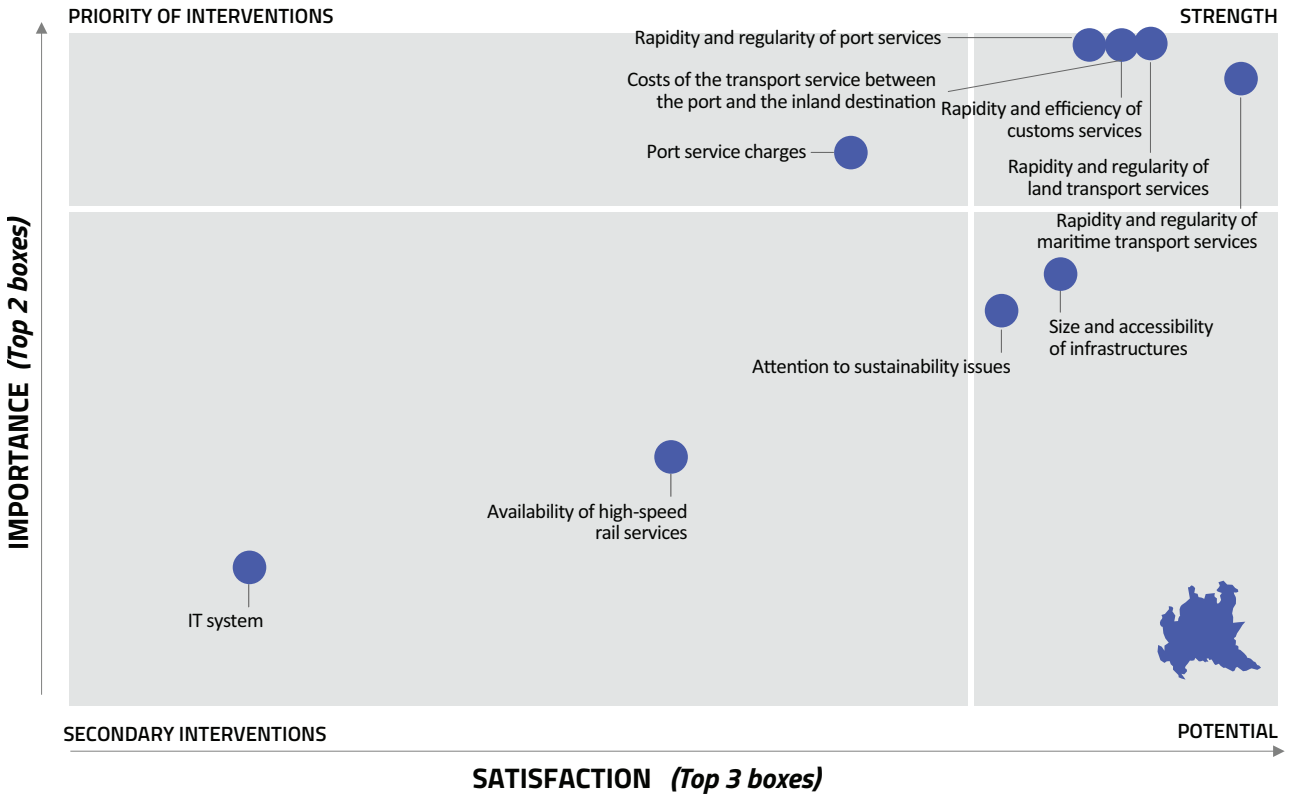
The same kind of analysis has been carried out for the three regions taken individually.

Lombardy: companies primarily use the corridors connecting them with the ports of Genoa and La Spezia. This logistics system has strengths with reference to the rapidity and regularity of port services, rapidity and regularity of maritime transport services, customs and land transport services, costs of the transport service between the port and the inland destination. Interventions are needed to reduce the costs of the port services. The information system and rail transport are less relevant, but they need improvement in quality as well.

Conclusion: average level of importance (8.81); Quality Logistics Italian Index (7.49). General improvements are desirable. Interventions are needed to reduce transport costs from the port to the company, and vice versa.

Strength/Priority analysis (Lombardy)

Lombardy; *Top 2 boxes** and *Top 3 boxes***.



* *Top 2 boxes*: percentage of companies that assigned 9 or 10 to the factor.
** *Top 3 boxes*: percentage of companies that assigned 8, 9 or 10 to the factor

Figure 14 - Source: SRM/Contship

Veneto: the logistics system connects the Venetian companies mainly to the port of Venice and to that of Genoa. It shows strengths with reference to the following factors: rapidity and regularity of the maritime transport services, and rapidity and regularity of the port and land transport. The system needs some improvements on the side of costs which show a wider gap between the quality perceived and the importance attributed. The information system, attention to sustainability and rail transport are the other factors which require improvement interventions.

Conclusion: average level of importance (8.38); Quality Logistics Italian Index (7.28). General improvements are desirable. Interventions are needed to reduce port charges and the costs of transport from the port to the company, and vice versa.

Strength/Priority analysis (Veneto)

Veneto; *Top 2 boxes** and *Top 3 boxes***.

* *Top 2 boxes*: ppercentage of companies that assigned 9 or 10 to the factor.
** *Top 3 boxes*: percentage of companies that assigned 8, 9 or 10 to the factor.

Figure 15 - Source: SRM/Contship

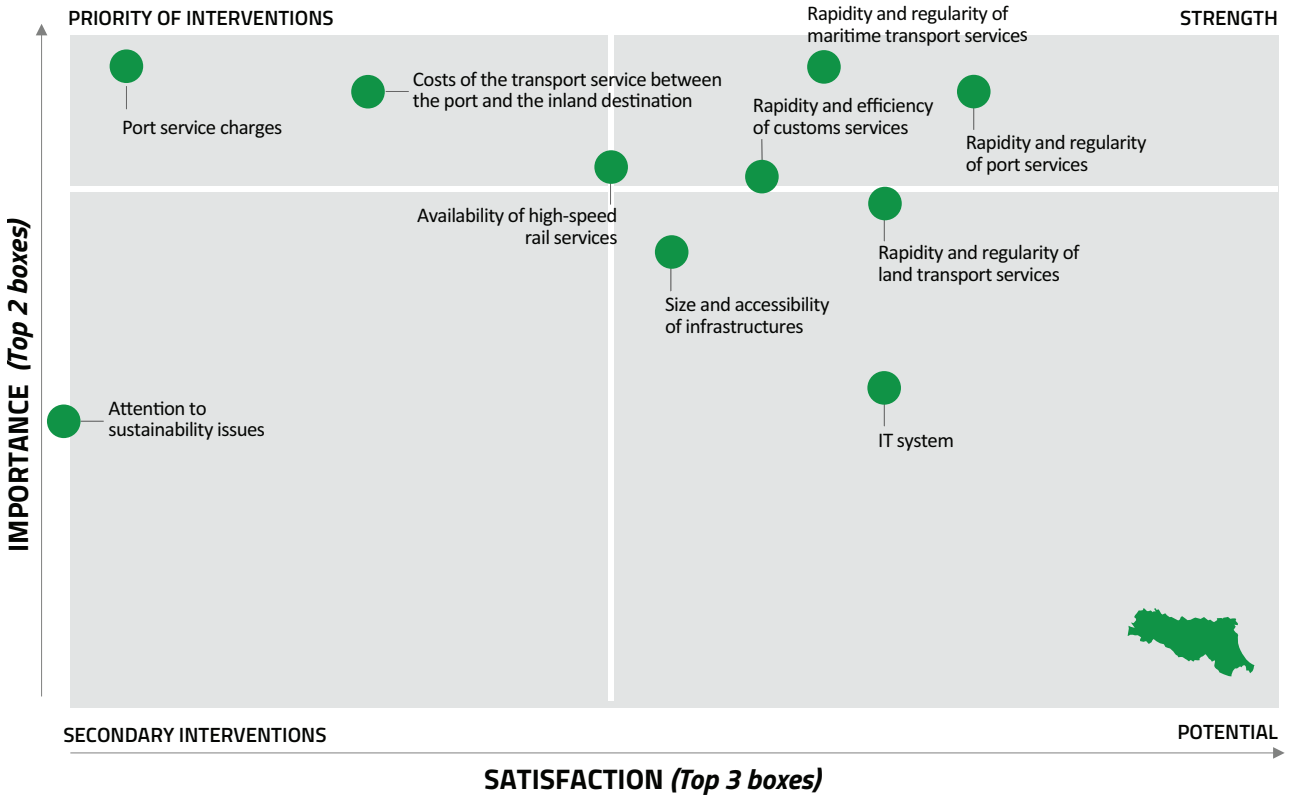
Emilia Romagna: Ithe logistics system connects the companies of Emilia-Romagna mainly to the port of Genoa and to that of La Spezia. This system shows the following strengths: rapidity and regularity of maritime transport services, of port services, of land transport and efficiency of customs services. Port charges and costs of the transport service between the port and the inland destination are clustered as priority interventions.

Attention to sustainability is another factor to work on, although less importance is still attributed to it.

Conclusion: average level of importance (8.79); Quality Logistics Italian Index (7.36). General improvements are desirable. Interventions are needed to reduce port charges and the other costs related to the transport of goods from the port to the company.

Strength/Priority analysis (Emilia Romagna)

Emilia Romagna; *Top 2 boxes** and *Top 3 boxes***.



* *Top 2 boxes*: percentage of companies that assigned 9 or 10 to the factor.
** *Top 3 boxes*: percentage of companies that assigned 8, 9 or 10 to the factor.

Figure 16 - Source: SRM/Contship

International and Domestic LPI

The World Bank releases the Logistics Performance Index (LPI) every two years.
The LPI classifies countries according to six dimensions which include: 1) customs efficiency; 2) quality of infrastructure; 3) ease of arranging shipments; 4) quality of logistics services; 5) ability to track and trace deliveries; 6) on-time deliveries (timeliness).
It includes:
1) the *International LPI*;
2) the *Domestic LPI*.

International LPI

According to the *2018 LPI*, Italy ranks 19th out of 160 countries, two positions up compared to the 2016 ranking. Among the European countries, the following countries rank in the top 10 positions: Germany, Sweden, Belgium, Austria, Holland, Denmark, United Kingdom, Finland.

Domestic LPI

The *Domestic LPI* surveyed logistics professionals to assess the logistics environments in their own countries. This domestic evaluation contains more detailed information on countries' logistics environments, core logistics processes and institutions, and time and distance data.
The *Domestic LPI* includes two types of indicators:

1) *Domestic LPI - Performances*;
2) *Domestic LPI - Environment and Institutions*.

The first set of indicators provides information on distance and waiting times for imported and exported goods both with reference to the port or airport supply chain and to the land supply chain.
With reference to exports, waiting times in Italy are higher than those noted for Germany (2018 Top Performer) both for to the port or airport supply chain and to the land supply chain.
The World Bank survey provides information on the perception of local logistics operators about: fees, quality of infrastructure, quality of services provided, sources of major delays, changes and developments in the logistics system.
As regards port charges, only 38% of respondents consider them "high or very high" (compared to 47% for Germany), while for airports the percentage is 58% (in line with Germany). On the other hand, 50% of respondents consider road transport costs too high (compared to 27% for Germany); the percentage is 45% for rail transport (compared 25% for Germany).
31% of Italian operators consider the quality of ports infrastructures "low or very low" (0% in Germany). The percentage is 17% for airports and roads (0% and 14% in Germany). For rail transport, the percentage of dissatisfied respondents is 67% (compared to 23% in Germany).
The percentage of respondents who consider the quality of services in the maritime sector "high or very high" is 54% (95% for Germany); this figure is 50% for airport services (95% for Germany), 9% for rail transport services (62% for Germany) and 42% for road transport (95% for Germany).
For 25% of Italian logistics operators transhipment transactions are among the major causes of logistical delay, a number which is, however, not very high.
A large percentage of respondents have noted improvements in the logistics system in recent years: almost 70% in the clarity of customs procedures (compared with 56% in Germany), 50% in transport infrastructure and 67% in logistics services.

Domestic LPI - Perfomances

	Italy	Top Performer 2018 (Germany)
Export time and distance / Port or airport supply chain		
Distance (kilometers)	269 km	212 km
Lead time (days)	3 days	2 days
Export time and distance / Land supply chain		
Distance (kilometers)	541 km	569 km
Lead time (days)	5 days	2 days
Import time and distance / Port or airport supply chain		
Distance (kilometers)	210 km	350 km
Lead time (days)	4 days	2 days
Import time and distance / Land supply chain		
Distance (kilometers)	519 km	559 km
Lead time (days)	5 days	3 days

Table 9 - Source: SRM/Contship on World Bank data

Domestic LPI - Environment and Institutions

	Italy (%)	Top Performer 2018 (Germany) (%)
Fees and Charges - Percent of respondents answering high/very high		
Port charges	38	47
Airport charges	58	58
Road transport rates	50	27
Rail transport rates	45	25
Quality of trade and transport related infrastructure - Percent of respondents answering low/very low		
Ports	31	0
Airports	17	0
Roads	17	14
Rail	67	23
Quality of service delivered - Percent of respondents answering high/very high		
Road	42	95
Rail	9	62
Air transport	50	95
Maritime transport	54	95
Sources of Major Delays - Percent of respondents answering improved or much improved		
Compulsory warehousing/transloading	0	0
Pre-shipment inspection	8	5
Maritime transhipment	25	5
Changes - Percent of respondents answering improved or much improved		
Customs clearance procedures	69	56
Trade and transport infrastructure	50	45
Private logistics services	67	70

Table 10 - Source: SRM/Contship on World Bank data

SRM

SRM is a Center for Studies, connected with the Intesa Sanpaolo Group, specialized in the analysis of regional economic dynamics in a European and Mediterranean perspective, and it is today an international reference point for the research carried out within the Permanent Observatory on the Economy of Maritime Transport and Logistics.

www.sr-m.it
www.srm-maritimeconomy.com

Contship Italia Group

Contship Italia is the market leader group in the maritime container terminal business and in intermodal transport. Contship Italia belongs to the Eurokai Group and operates in the ports of La Spezia, Gioia Tauro, Cagliari, Ravenna, Salerno, Tangiers, and in the transport interchange centre of Melzo (MI).

www.contshipitalia.com

maritime economy