THE ITALIAN PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS INDUSTRY

SECTOR REPORT 2019
(SUMMARY)

AMAPLAST
ITALIAN PLASTICS AND RUBBER PROCESSING MACHINERY AND MOULDS MANUFACTURERS' ASSOCIATION

THE ITALIAN PLASTICS AND RUBBER
PROCESSING MACHINERY, EQUIPMENT AND MOULDS INDUSTRY

SECTOR REPORT 2019
(SUMMARY)

by AMAPLAST Study Department

INDEX

SOURCES:
AMAPLAST, FEDERMACCHINE, ISTAT
and statistical institutes of the mentioned countries

COPIES:
on request and with the permission
of AMAPLAST management

FOR FURTHER INFORMATION:
Stefania Arioli
phone +39 02 82283728
s.arioli@amaplast.org

AMAPLAST

ASSOCIAZIONE NAZIONALE COSTRUTTORI DI MACCHINE
E STAMPI PER MATERIE PLASTICHE E GOMMA

*ITALIAN PLASTICS AND RUBBER PROCESSING MACHINERY
AND MOULDS MANUFACTURERS' ASSOCIATION*

AMAPLAST - Centro Direzionale Milanofiori
Palazzo F/3 - 20090 Assago (MI) Italy
tel. +39 02 8228371 - fax +39 02 57512490
info@amaplast.org - www.amaplast.org

SECTOR DEVELOPMENTS

After eight years of growth, the Italian plastics and rubber processing machinery industry closed the year 2019 with declines across the board. Production and exports fell by over six percentage points and imports suffered a loss of almost nine. As a consequence, the domestic market shrunk by roughly eight percent and the balance of trade - while still strongly positive - dropped by five.

Fractional production growth and a slight drop in exports at the end of 2018 already represented a warning sign of an imminent reversal of trend.

In 2019 the trend in foreign trade - critical for an industry which exports nearly seventy percent of its production - was almost constantly negative although the year did not end as badly as feared.

Numerous instability factors in the domestic market, weakened by low industrial production and consumption, and on the international level - such as Brexit and economic tensions between the United States and China - accumulated during the last year. This economic instability caused a contraction in investments (as Industry 4.0 incentives dried up), translating into a reduction in imports and alterations in export dynamics.

The unsatisfactory trends in the domestic market and international demand are reflected in a lower quantity of raw materials consumed by the Italian plastics processing industry: 5,69 million metric tonnes of thermoplastics were consumed in 2019, compared to 5,75 million metric tonnes in 2018. This negative trend could also be partially attributable to “plastic free” campaigns and the directive against disposables.

It is worthy to note that the performance of Italian manufacturers in 2019 was on par with that of their German competitors, who registered a loss of 6% in production, 5% in imports, and 7% in exports.

The destinations of Italian exports have seen general reductions in Europe in favour of Asia. Other areas have shown more stability, albeit with various distinctions.

The change in trends, negative in Europe and positive in Asia, was conditioned by sales performance in the major countries in each region. This will be discussed in greater detail below and highlighted in table 5.

The trends for exports of the main types of primary processing machinery in 2019 are as follows:
- excellent recovery for injection moulding machines (+28%)
- moderate decline for extruders (-4%)
- losses for blow moulding machines (-9%)
- heavy contraction for thermoforming machines (-15%).

The economy was also weighed down by heavy losses (-18%) for moulds, which represent a quarter of all exports in the sector, compounding the 5% decrease in 2018. Injection moulds make up a large portion, and the losses here erode the gains in injection machines.

Another type of exported machine gaining importance over the years is flexographic printers, which peaked in 2017 but declined by 4% in both 2018 and 2019.

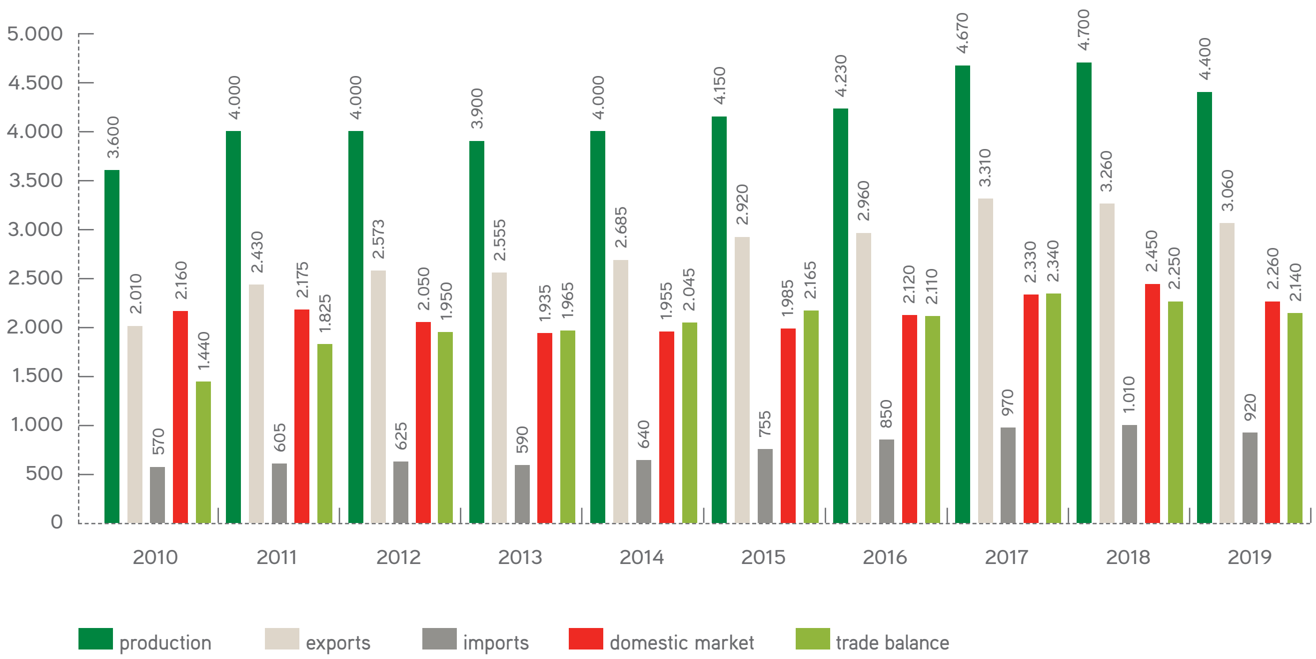
TABLE 1

ITALY - MARKET OF PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS (MILLION EUROS)

	2017	2018	2019	Δ % 19/18	average Δ % three years	average Δ % ten years
production	4.670	4.700	4.400	-6,4	1,3	2,9
exports	3.310	3.260	3.060	-6,1	1,1	5,2
imports	970	1.010	920	-8,9	2,7	6,6
domestic market	2.330	2.450	2.260	-7,8	2,2	1,5
trade balance (positive)	2.340	2.250	2.140	-4,9	0,4	4,7

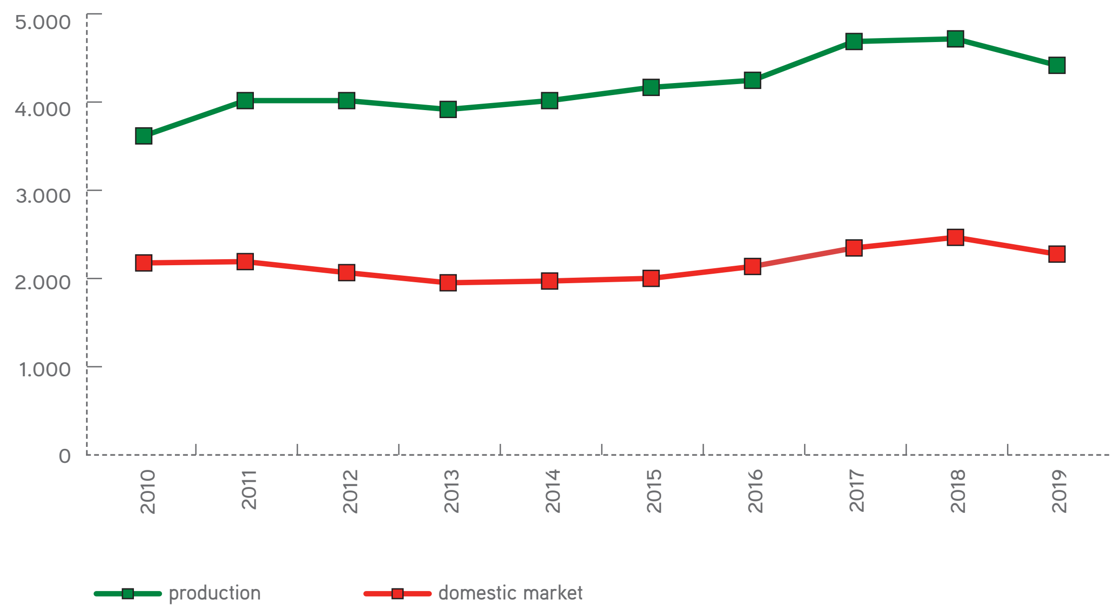
GRAPH 1

ITALY - TREND FOR PRODUCTION, EXPORTS, IMPORTS, DOMESTIC MARKET AND TRADE BALANCE (MILLION EUROS)



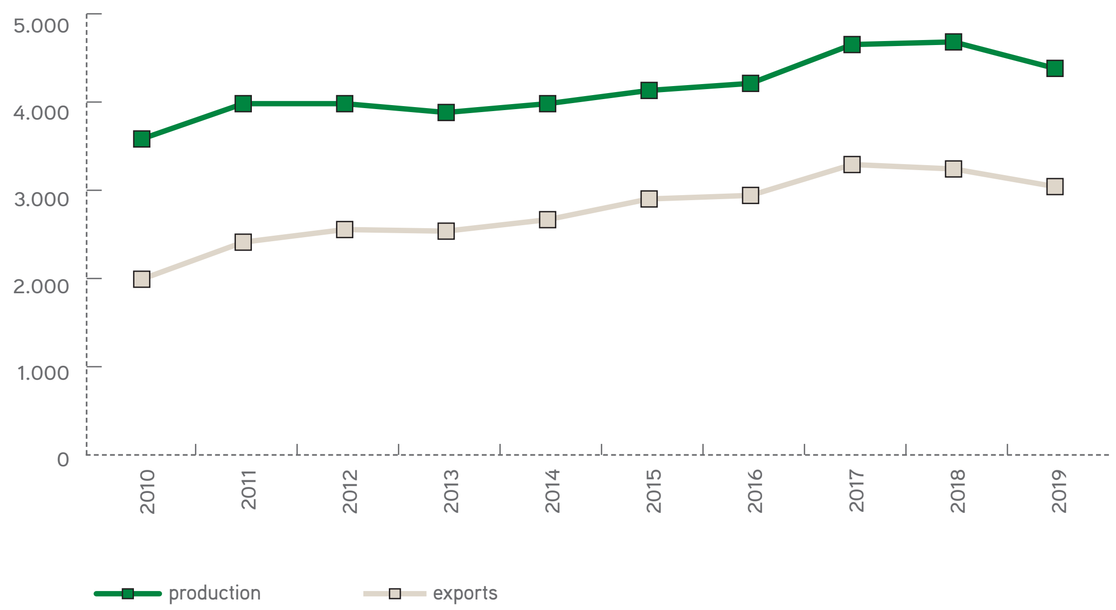
GRAPH 2

ITALY - TREND FOR PRODUCTION AND DOMESTIC MARKET (MILLION EUROS)

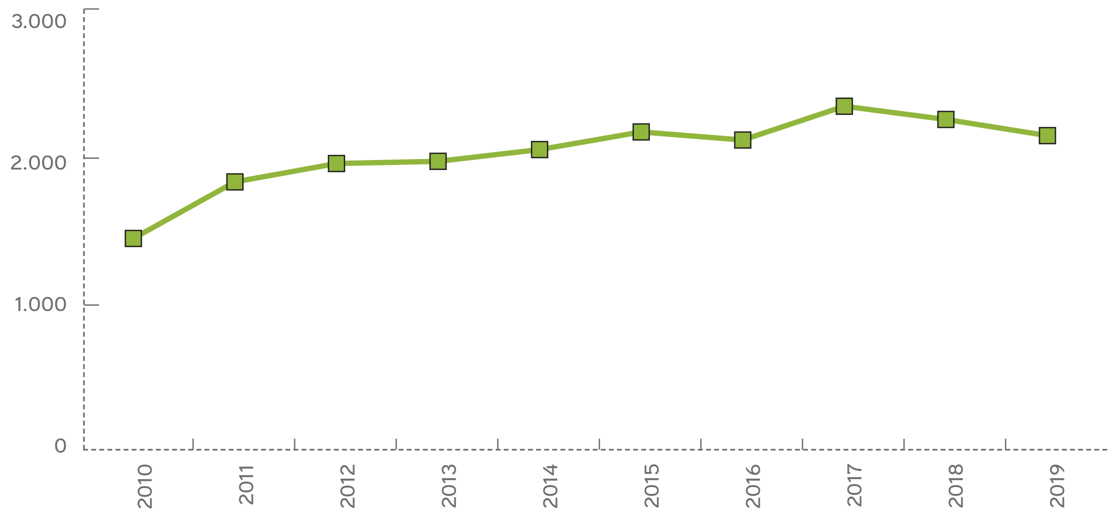


GRAPH 3

ITALY - TREND FOR PRODUCTION AND EXPORTS (MILLION EUROS)



GRAPH 4
ITALY - TREND FOR TRADE BALANCE (MILLION EUROS)



The analysis presented so far explains the trend in the sector up until the end of 2019, just before the beginning of the Covid-19 epidemic in China in January 2020, followed by the global spread which prompted the World Health Organization to declare it a pandemic.

With relatively little warning compared to other European countries, Italy found itself in a wholly novel situation, with the suspension of all non-essential production and commercial activities ordered on 12 March 2020, not eased until 4 May.

Although the ATECO code for the production of plastics and rubber machinery classified it among the activities authorized to operate during lockdown, the protective measures against the spread of Covid-19 - including limiting commercial traffic between countries - rapidly compromised the capabilities of companies in the sector. Shorter shifts, quarantine, temporary shutdown of various component suppliers, and logistics challenges led to a slowdown in production. Furthermore, restrictions on many different categories of customer, Italian or foreigner, caused a sharp drop in orders.

The issue has not so much regarded pre-crisis orders, which were substantially fulfilled or postponed, but a drop in future orders. The impact on revenues will manifest at different times depending on the type of production: auxiliary machinery manufacturers took an almost immediate hit, whilst the providers of more complex and costly machinery and plants, with longer delivery times, will feel the main impact in 2021.

However, as of the date of this report, it is difficult to predict how the crisis will progress, let alone the intensity and duration of its effects on the Italian plastics and rubber processing machinery industry.

Forecasts have been issued over the weeks by agencies and official organizations as to the aftermath of the lockdown measures on the Italian, European, and global economies. Most analysts expect the economy to rebound in 2021, albeit not to its pre-crisis values. The forecasts are differentiated by two possible scenarios: “soft”, where further lockdowns won't be necessary and thus 2021 will present a stronger upsurge; or “hard”, in which additional lockdowns will exacerbate the recession and delay recovery.

Other variables that could condition - indirectly and further down the road - the dynamics of the Italian plastics and rubber machinery industry are the gradual implementation of the circular economy model and the possible reshoring of certain production lines (particularly production of anti-Covid PPE) to limit dependence on imports.

The constant increase in consumption of cleaning and personal hygiene products, almost always sold in plastic packaging, is driving an increase in demand for plastics processing machinery. On the other hand, recovery will probably be slower for suppliers of production technology for building and automotive goods.

Another important element will be the enactment of the plastic tax, introduced by the stimulus decree law (Decreto Legge n. 34 of 19 May 2020 “Rilancio”), which will enter into force on 1 January 2021.

It will also be interesting to observe developments in the “plastic free” movement, which seemed to be catching on a few months ago prior to the Covid-19 epidemic. Instead, the emergency has put plastic in a positive new light: until recently the demand to replace plastic with other materials was strong, with the objective (although not very realistic) of minimizing environmental pollution, but the tragic advent of the virus has made it clear how important and irreplaceable this material is. As a matter of fact, not only is plastic important in medical applications - as highlighted by the media and PPE requirements - but also for packaging, especially in the food industry, where plastic can improve hygiene and shelf life.

ITALIAN FOREIGN TRADE 2017–2019

Tables 2-5 provide a more in-depth geographical and commercial analysis of Italian imports and exports of plastics and rubber processing machinery.

Regarding imports, looking at the top producer countries, we note a drop in purchases from European suppliers in favour of Asian countries (in particular China and Japan).

Going more into detail (referring to core machinery and their generally significant trade values), Italian processors have turned less to German manufacturers for procurement of injection moulding machines (from 54 million euros in 2018 to 39 million in 2019), blow moulding machines (from 24 million euros to slightly more than 4), and moulds (from over 112 to less than 86). Fewer injection moulding machines and moulds have been purchased from Austria, and mould orders have fallen off from Switzerland and France.

On the other hand, orders from China rose during the period, consisting mainly of moulds (roughly 60%, with over 97 million euros spent in 2019 as compared to the 85 million in 2018). As for Japan, Italian processors have imported more injection moulding machines, for a value of over 28 million euros (versus the 22 million of the year before).

All in all, Italian processors investing in foreign-produced machinery continue to turn primarily and broadly to the major European suppliers of primary processing technology, whilst trade with extra-EU manufacturers tends to be limited to moulds and auxiliary equipment.

As for exports of core machinery, as seen above, the year 2019 witnessed a prevalent contraction in values with respect to 2018. Sales of the following types of machinery diminished:

- extruders, by over 3%. Europe has remained generally stable whilst NAFTA lost ground (most significantly, sales dropped off by 10 million euros in the USA). Sales increased to the Far East, with India recording a boom of +12 million euros
- blow moulding machines lost roughly 9%. Sales to Russia, Algeria, the United States, Mexico, and Iran decreased significantly
- thermoforming machines by nearly 15%, with the most significant impact from a halving of sales to China (from more than 14 million euros to just over 7 million) coupled with normal variations in other geographical areas.

As previously mentioned, injection moulding machines bucked the trend with clear growth (+28%) with respect to 2018 thanks to increased European orders from Spain and the UK, with peaks also in the United States, South Africa, Iran, the UAE, and Indonesia.

The slowdown in moulds (-18%, compounding the -5% in 2018) is attributable to the negative trend in many of the main export markets. Limiting our analysis to those where sales exceeded 50 million euros in 2018, of note are Germany (from 261 million in 2018 to 198 million in 2019), the Czech Republic (62 to 47 million), Poland (54 to 43 million), France (52 to 40 million), and the United States (52 to 38 million).

Providing additional detail as to flexographic printing machines - losing nearly 4%, as stated above—we note, among the main European partners, an abrupt drop for France (from over 16 to roughly 10 million euros), the UK (from more than 14 to 4 million), and Germany (from nearly 13 to 9). Furthermore, exports to India fell from over 14 to little more than 10 million euros. The important American market is one of the few exceptions, importing flexographic printers to the tune of more than 22 million euros after 19 million in 2018.

TABLE 2

ITALY - IMPORTS-EXPORTS OF PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS (THOUSAND EUROS)

	imports					exports				
	2017	2018	Δ % 18/17	2019	Δ % 19/18	2017	2018	Δ % 18/17	2019	Δ % 19/18
flexographic printing machines	21.520	19.703	-8,4	16.585	-15,8	198.744	190.431	-4,2	183.231	-3,8
plants for mono- and multifilaments	12.489	3.021	-75,8	4.384	45,1	45.809	55.022	20,1	43.745	-20,5
injection moulding machines	133.470	146.745	9,9	129.031	-12,1	119.525	127.626	6,8	163.302	28,0
extruders	27.282	42.459	55,6	43.056	1,4	368.533	386.487	4,9	372.424	-3,6
blow moulding machines	23.767	35.203	48,1	15.384	-56,3	141.709	160.890	13,5	145.994	-9,3
thermoforming machines	13.255	14.861	12,1	9.350	-37,1	94.747	92.270	-2,6	78.641	-14,8
presses for tyres and inner tubes	1.799	623	-65,4	9.122	1.365,0	35.939	33.707	-6,2	31.372	-6,9
presses	14.357	12.076	-15,9	8.170	-32,3	86.768	87.894	1,3	53.754	-38,8
machines for moulding or forming	17.180	16.337	-4,9	21.154	29,5	125.448	115.437	-8,0	133.698	15,8
machines for reactive resins	1.788	3.368	88,4	6.195	83,9	42.199	35.265	-16,4	45.479	29,0
machines for foamed products	8.129	12.077	48,6	8.077	-33,1	40.770	28.942	-29,0	33.593	16,1
equipment for size reduction	4.124	3.620	-12,2	2.717	-25,0	34.483	30.148	-12,6	29.559	-2,0
mixers	14.836	3.034	-79,5	6.397	110,8	50.546	32.069	-36,6	32.998	2,9
cutting, splitting and peeling machines	7.011	10.816	54,3	10.271	-5,0	18.623	13.605	-26,9	18.403	35,3
other machines	72.129	80.555	11,7	72.780	-9,7	451.658	463.569	2,6	472.321	1,9
parts and components	210.050	227.757	8,4	207.316	-9,0	493.010	493.071	0,0	470.926	-4,5
moulds	389.135	374.106	-3,9	348.856	-6,7	960.812	913.824	-4,9	747.384	-18,2
total	972.320	1.006.361	3,5	918.845	-8,7	3.309.323	3.260.258	-1,5	3.056.823	-6,2

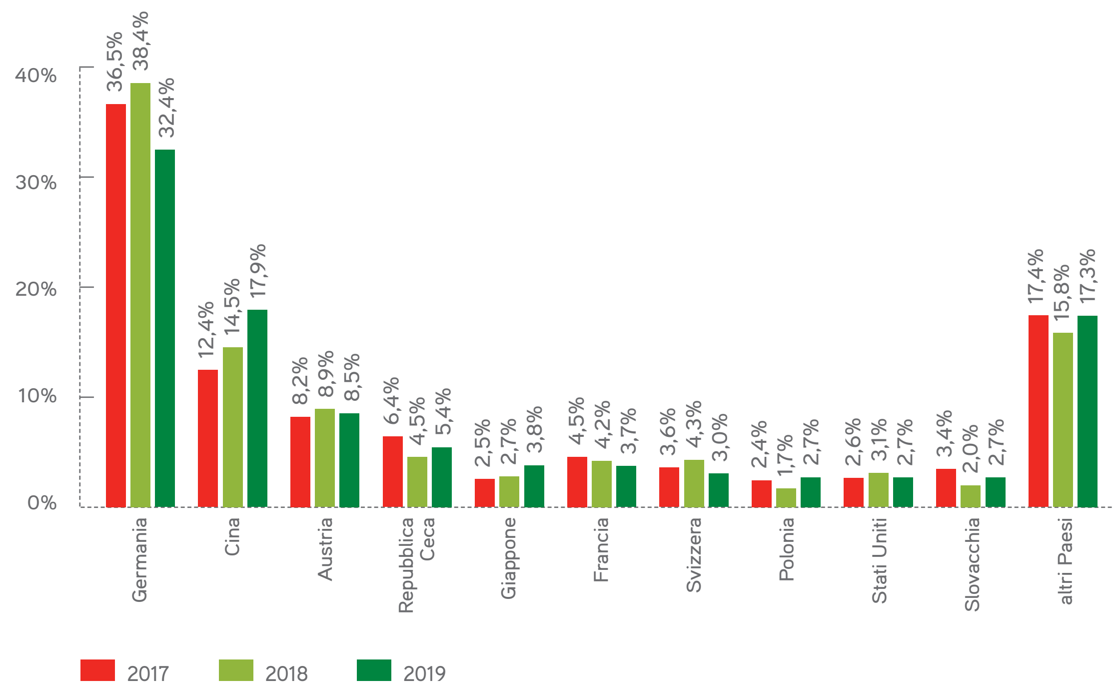
TABLE 3

ITALY – TOP TEN ORIGIN COUNTRIES FOR PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS (THOUSAND EUROS)

	2017	% out of total 2017	Δ % 17/16	2018	% out of total 2018	Δ % 18/17	2019	% out of total 2019	Δ % 19/18
Germany	355.179	36,5	20,7	386.897	38,4	8,9	297.548	32,4	-23,1
China	120.741	12,4	11,3	145.861	14,5	20,8	164.237	17,9	12,6
Austria	79.496	8,2	-4,3	89.316	8,9	12,4	78.100	8,5	-12,6
Czech Republic	62.150	6,4	29,6	45.563	4,5	-26,7	49.606	5,4	8,9
Switzerland	24.618	2,5	-8,1	27.550	2,7	11,9	34.628	3,8	25,7
France	44.221	4,5	4,8	42.077	4,2	-4,8	34.088	3,7	-19,0
United States	34.586	3,6	-7,7	42.932	4,3	24,1	27.735	3,0	-35,4
Japan	23.543	2,4	-0,5	16.899	1,7	-28,2	24.722	2,7	46,3
Slovakia	25.503	2,6	2,3	30.794	3,1	20,7	24.427	2,7	-20,7
Luxembourg	33.467	3,4	136,0	19.735	2,0	-41,0	24.410	2,7	23,7
other countries	168.817	17,4	15,7	158.738	15,8	-6,0	159.346	17,3	0,4
total	972.320	100,0	14,6	1.006.361	100,0	3,5	918.845	100,0	-8,7

GRAPH 5

ITALY - TOP TEN ORIGIN COUNTRIES FOR PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS (% OUT OF TOTAL)



GRAPH 6

ITALY – EXPORTS OF PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS (Δ% YEAR OVER YEAR)

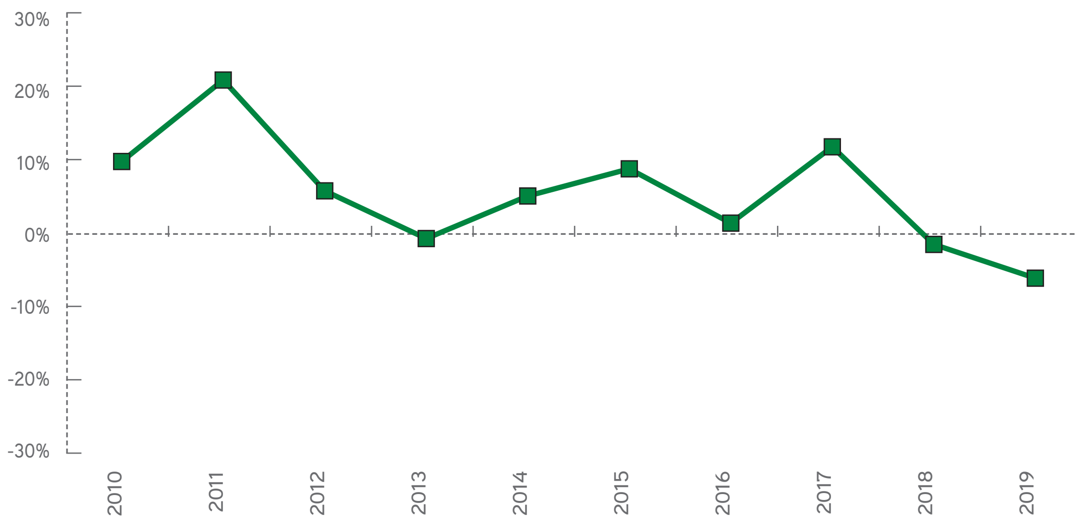


TABLE 4

ITALY - EXPORTS OF PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS BY REGION (THOUSAND EUROS)

	2017	% out of total 2017	Δ % 17/16	2018	% out of total 2018	Δ % 18/17	2019	% out of total 2019	Δ % 19/18	average Δ % 17-19
UE	1.717.952	51,9	17,2	1.653.771	50,7	-3,7	1.490.020	48,7	-9,9	0,6
NAFTA	453.473	13,7	6,2	489.663	15,0	8,0	469.200	15,3	-4,2	3,2
Far East	376.822	11,4	4,0	383.296	11,8	1,7	431.676	14,1	12,6	6,0
other Europe	294.584	8,9	8,5	313.767	9,6	6,5	238.935	7,8	-23,8	-4,2
South America	155.950	4,7	12,4	140.060	4,3	-10,2	141.244	4,6	0,8	0,6
Middle East	98.288	3,0	-13,7	71.988	2,2	-26,8	91.868	3,0	27,6	-6,9
North Africa	89.770	2,7	19,6	107.788	3,3	20,1	78.619	2,6	-27,1	1,6
other Africa	70.300	2,1	7,2	65.280	2,0	-7,1	78.458	2,6	20,2	6,1
Central America	30.146	0,9	21,0	20.473	0,6	-32,1	20.669	0,7	1,0	-6,0
Oceania	22.038	0,7	28,9	14.172	0,4	-35,7	16.134	0,5	13,8	-1,9
world	3.309.323	100,0	11,7	3.260.258	100,0	-1,5	3.056.823	100,0	-6,2	1,1

GRAPH 7

ITALY – EXPORTS OF PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS BY REGION (% OUT OF TOTAL)

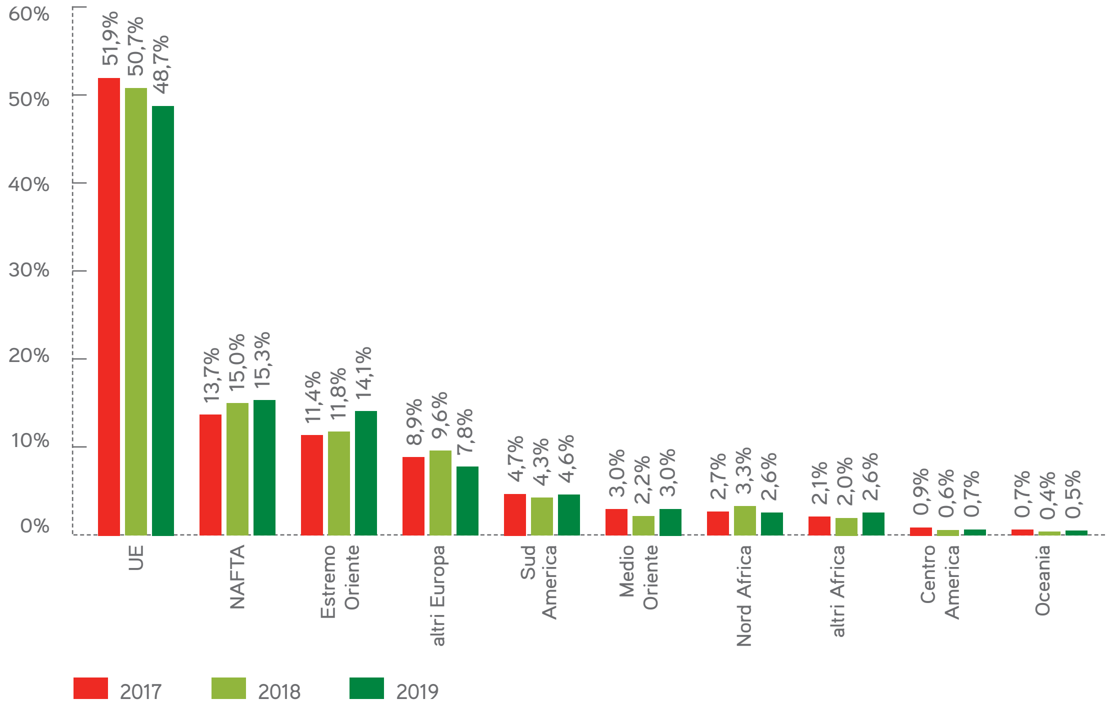


TABLE 5

ITALY – TOP 20 DESTINATION COUNTRIES FOR EXPORTS OF PLASTICS AND RUBBER PROCESSING MACHINERY, EQUIPMENT AND MOULDS (THOUSAND EUROS)

	2017	% out of total 2017	Δ % 17/16		2018	% out of total 2018	Δ % 18/17		2019	% out of total 2019	Δ % 19/18
Germany	482.826	14,6	20,0	Germany	462.163	14,2	-4,3	Germany	362.348	11,9	-21,6
United States	275.590	8,3	20,2	United States	291.866	9,0	5,9	United States	315.028	10,3	7,9
Spain	148.676	4,8	8,5	Spain	156.708	4,8	5,4	Spain	167.265	5,5	6,7
China	133.170	4,3	-3,2	China	114.841	3,5	-13,8	China	150.922	4,9	31,4
Poland	159.486	4,5	-3,3	Poland	159.355	4,9	-0,1	Poland	147.756	4,8	-7,3
France	159.868	4,8	21,7	France	165.368	5,1	3,4	France	142.693	4,7	-13,7
Mexico	142.294	3,6	-16,9	Mexico	159.028	4,9	11,8	Mexico	123.109	4,0	-22,6
United Kingdom	119.769	4,0	1,4	United Kingdom	121.596	3,7	1,5	United Kingdom	95.807	3,1	-21,2
India	65.821	3,9	-6,0	India	82.113	2,5	24,8	India	93.408	3,1	13,8
Rumania	97.106	2,7	71,3	Rumania	74.135	2,3	-23,7	Rumania	78.079	2,6	5,3
Czech Republic	127.409	2,9	26,6	Czech Republic	107.514	3,3	-15,6	Czech Republic	72.923	2,4	-32,2
Slovakia	66.672	2,0	41,8	Slovakia	56.112	1,7	-15,8	Slovakia	69.467	2,3	23,8
Russia	94.448	2,9	65,9	Russia	84.507	2,6	-10,5	Russia	68.723	2,2	-18,7
Turkey	89.612	1,8	-9,2	Turkey	92.964	2,9	3,7	Turkey	68.219	2,2	-26,6
Brazil	51.934	1,6	37,3	Brazil	50.818	1,6	-2,1	Brazil	55.987	1,8	10,2
Austria	58.021	2,0	15,1	Austria	66.541	2,0	14,7	Austria	52.607	1,7	-20,9
Portugal	51.437	1,6	-25,6	Portugal	51.432	1,6	0,0	Portugal	49.751	1,6	-3,3
Hungary	51.344	1,6	61,9	Hungary	51.820	1,6	0,9	Hungary	45.308	1,5	-12,6
Switzerland	52.207	1,6	-6,9	Switzerland	64.910	2,0	24,3	Switzerland	44.679	1,5	-31,2
Thailand	23.831	1,1	28,9	Thailand	25.198	0,8	5,7	Thailand	33.044	1,1	31,1
total top 20	2.463.279	74,4	12,7	total top 20	2.438.989	74,8	-1,0	total top 20	2.237.124	73,2	-8,3
other countries	846.044	25,6	9,0	other countries	821.269	25,2	-2,9	other countries	819.699	26,8	-0,2
world	3.309.323	100,0	11,7	world	3.260.258	100,0	-1,5	world	3.056.823	100,0	-6,2