



The Italian industry of glass processing machinery, systems, accessories and special products in 2016



Associazione Italiana dei fornitori
di Macchine, Impianti, Accessori
e prodotti speciali
per la lavorazione del vetro

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Introduction

Gimav

Established in 1980, Gimav is a Confindustria member Association that represents **Italian manufacturers of glass processing machinery, systems, special products and accessories.**

Gimav **protects the interests of the Industry**, provides a **wide range of services** and **advice** on daily business topics to its members, strives to foster **growth, promote business culture, and represent both in Italy and abroad the Made in Italy glass sector**, which stands for absolute excellence in terms of technology, reliability and innovation across the world.

Gimav, a key reference point for the Industry in Italy and worldwide, has long established and strengthened relationships with its primary national and foreign counterparts.

Gimav is the parent company of Vitrum Srl., the organizer of the international glass trade expo held at Fiera Milano Rho on odd years, which ranks among the top 5 trade expos worldwide.

Gimav joined Confindustria in January 2017, and is a member of Federmacchine Federation.

Gimav member companies account for nearly 80% of the overall sales by Italian manufacturers of glass processing machinery, accessories and special products.

Methodology: statistics survey and data analysis procedure

Gimav once again carried out its annual statistics survey of the sector in an effort to provide an overview of the industry and information on its structure, sales, production and export markets.

A **survey** was sent to a sample pool of 150 companies in the industry, both members of the Association and non-members, to obtain the best possible snapshot of the overall trend. The number of responses was 57.15% higher than last year.

For the **analysis of export flows**, official ISTAT data for the industry main customs codes was used.

Although the analysis was not as complete and accurate as originally intended due the extreme variability of customs codes used by the companies (there are more than 100 for Gimav members alone), it nonetheless outlines the exports and total sales percentages for the main export markets.

The customs codes used for the analysis were:

Flat Glass	84642011	Grinding or polishing machinery for optical glass processing
Flat Glass	84642019	Grinding or polishing machinery for glass processing (optical glass excluded)
Hollow Glass	847529	Machinery for the production or hot processing of glass or glassware
Hollow Glass	847590	Parts of machinery for assembling lamps, electric or electronic tubes or valves or machines for manufacturing or hot working glass or glassware
Hollow Glass	84805000	Molds for glass (except those made of graphite or other carbon material or ceramics)

Once again this year, the industry report includes a section on the **analysis of aggregate balance sheets**, following the large-scale work on statistics carried out by Federmacchine Statistics Office.

Federmacchine completed a study involving a sample of 1,037 companies belonging to its federated associations. The AIDA database with standard balance sheets reclassified according to the financial reclassification scheme was used for the study.

The report is completed by the **qualitative economic survey for 2017**, which lists the data as aggregate percentages.

The industry report also contains a section on the initial results of government incentives for machinery upgrades first introduced in January 2017 with the Industry 4.0 Plan (Piano Industria 4.0).

Industry Sales

The growth trend recorded for exports in 2015 continues in 2016, and domestic market demand – which is starting to feel the effects of government incentives for machinery upgrades – is clearly shifting from imports to made-in-Italy products.

This is the industry's seventh consecutive year of growth after the downturn of 2009.

Overall sales increased by **5.09%** over 2015, with **Flat Glass** gaining **7.25%**, and **Hollow Glass** 1.05%.

A remarkable improvement, especially for Flat Glass, which last year scored a 6.7% increase over 2014, while Hollow Glass recorded slightly slower growth compared to its 3.46% gain in 2015 vs. the previous year.

Italian manufacturers of glass processing machinery, systems, special products and accessories confirmed their **export-oriented drive**, with **78.75%** of their production being slated for foreign markets. More specifically, exports now represent 85.63% of sales invoiced by the Hollow Glass sector, and 75.30% of sales invoiced by the Flat Glass sector, up from 74.82% in 2014.

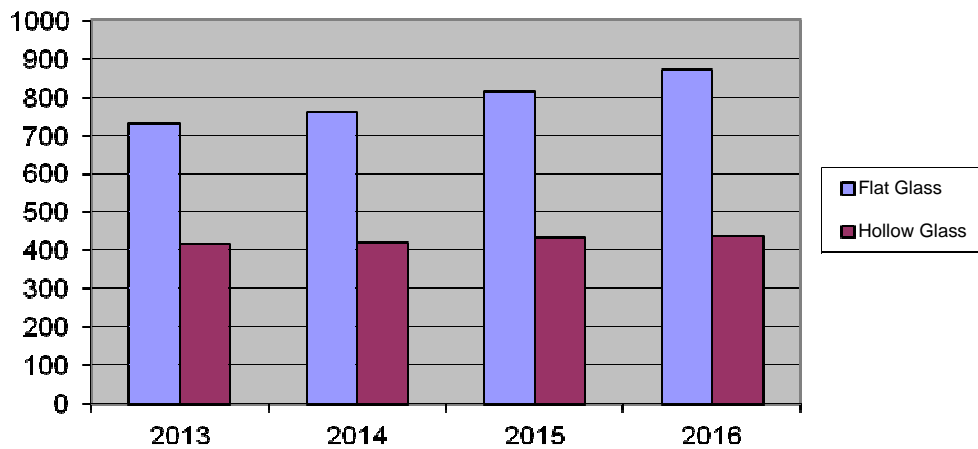
Sales of the Italian industry of glass processing machinery, special products and accessories				
Sectors	2016 [€]	2015 [€]	2014 [€]	% Change 2016/2015
Flat Glass				
Italian market sales	215.296.275	204.634.802	184.755.300	+5.21
Exports	656.375.929	608.149.661	576.992.088	+7.93
Total sales Flat Glass	871.672.204	812.784.463	761.747.388	+7.25
Hollow Glass				
Italian market sales	62.800.621	62.725.351	62.500.350	+0.12
Exports	374.329.157	369.853.925	355.594.582	+1.21
Total sales Hollow Glass	437.129.779	432.579.276	418.094.932	+1.05
Total Flat + Hollow	1.308.801.983	1.245.363.739	1.179.842.320	+5.09

Gimav data based on ISTAT figures and internal survey

% Share of sales for 2016 by destination			
Destination Market	Flat Glass	Hollow Glass	Sector Total
Italian market sales	24.70%	14.37%	21.25%
Exports	75.30%	85.63%	78.75%

Gimav data based on ISTAT figures and internal survey

Sales trend (millions of Euro) 2013-2016



Summary Italian industry of glass processing machinery, accessories and special products Year 2014-2015-2016				
Variable	Unit of measure	2016	2015	2014
Sector sales	€	1.308.801.983	1.245.363.739	1.179.842.320
Exports	€	1.030.705.087	978.003.586	932.586.670
Imports	€	83.167.560	89.427.443	96.400.678
Trade balance	€	947.537.527	888.576.143	836.185.992
Domestic orders	€	278.096.897	267.360.153	247.255.650
	% Change	+4.02%	+8.13	+0.99
Foreign orders	€	1.030.705.087	978.003.586	932.586.670
	% Change	+5.39%	+4.87	3.34
Workforce	Units	4.025	3.970	4.000

Gimav data based on ISTAT figures and internal survey

The **trade balance** continued to grow remarkably, and reached 947 million Euro, up by 6.63% from the year before.

As stated, the effects of the **Nuova Sabatini and SuperAmmortamento** (New Sabatini and Super-Amortization) economic growth incentives are starting to materialize, as shown by the increase in domestic orders. The annual import flows analysis also indicates the Italian market's clear preference for Italian-made machinery, as imports dropped sharply (the strong decline in Chinese product purchases is particularly newsworthy).

Imports

The overall picture

In 2016 imports continued to drop, and dropped by **7%** from the year before (which also posted a 7.23% decrease from 2014), indicating - as stated – the domestic market's renewed preference for Italian products.

The drop in imports was particularly substantial in the **Flat Glass** sector, down by **37.22%**.

Hollow Glass imports also dropped by **3.63%**, to roughly half of the 7.37% decrease recorded the prior year compared to 2014.

Overall Imports			
Sectors	2016 [€]	2015 [€]	% Change 2016/2015
Flat Glass	5.631.722	8.970.932	-37.22
Hollow Glass	77.535.838	80.456.511	-3.63
Total Flat + Hollow	83.167.560	89.427.443	-7.00

Gimav data based on ISTAT figures

Belgium ranked 1st for exports towards Italy again this year, although sales dropped sharply.

On the contrary, strong growth was recorded for imports from **France**, up by 44.17% from the year before, bringing its overall share up to 11.95%, and **Croatia**, up by 46.48% increase, for an overall share of 10.21%.

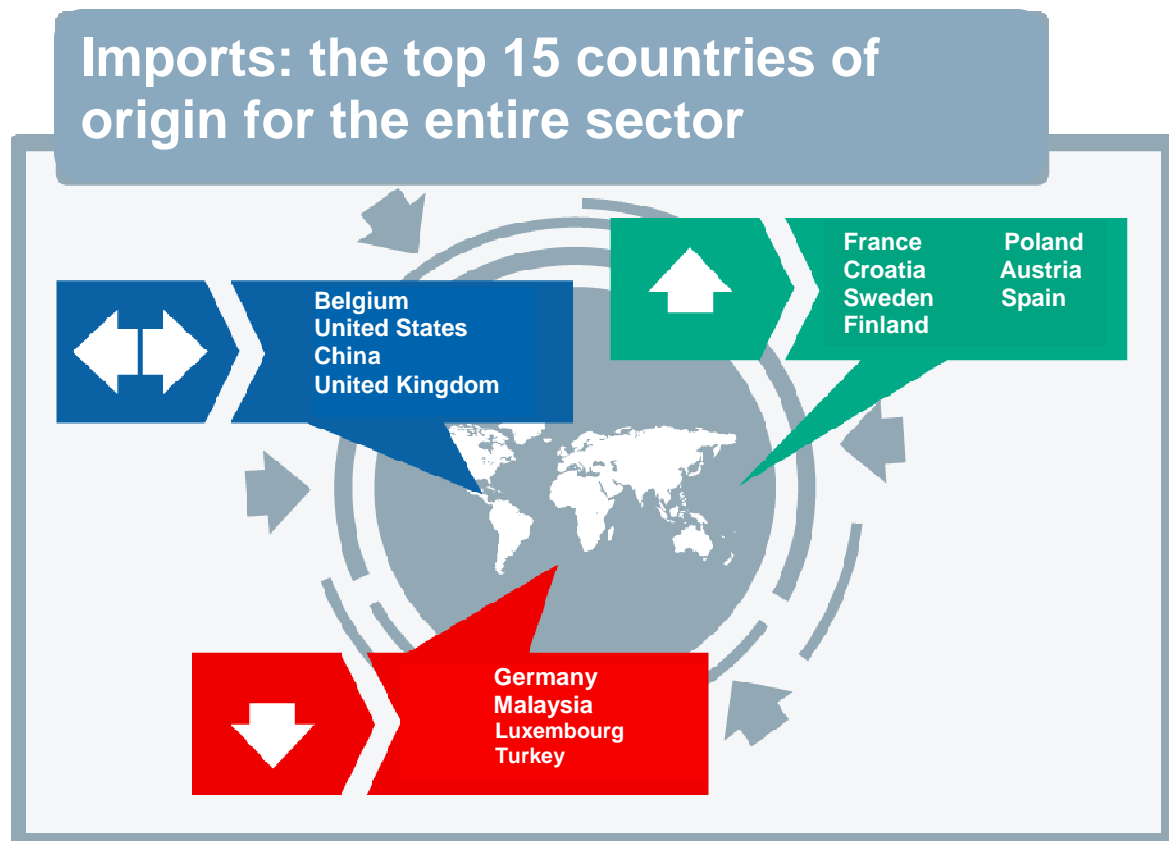
The **United States** remained in 4th place, with a 12.41% decrease in exports to Italy, and a 7.50% share.

Germany suffered a sharp decrease in sales to Italy, equal to 62.53%, dropping into 5th place after ranking 2nd last year.

China remained in 8th place, but incurred a 19.29% loss in sales to Italy.

Imports: top 15 countries of origin for the entire sector					
Country	2016 [€]	2015 [€]	Change in ranking 2016/2015	% Change 2016/2015	% Share total Imports
Belgium	19.650.326	21.864.081 (1)	↔	-10.12	23.63
France	9.938.133	6.893.461 (5)	↑	44.17	11.95
Croatia	8.490.566	5.796.185 (6)	↑	46.48	10.21
United States	6.239.404	7.123.303 (4)	↔	-12.41	7.50
Germany	4.892.101	13.055.802 (2)	↓	-62.53	5.88
Sweden	4.612.467	3.330.098 (9)	↑	38.50	5.55
Malaysia	4.000.840	8.164.752 (3)	↓	-50.99	4.81
China	3.713.436	4.600.808 (8)	↔	-19.29	4.47
Luxembourg	3.706.916	4.898.906 (7)	↓	-24.33	4.46
Finland	2.863.422	2.337.802 (12)	↑	22.48	3.44
United Kingdom	2.753.267	2.494.600 (11)	↔	10.37	3.31
Poland	1.745.123	649.312 (14)	↑	168.76	2.10
Turkey	1.644.733	2.626.979 (10)	↓	-37.39	1.98
Austria	1.390.353	442.044 (17)	↑	214.53	1.67
Spain	1.375.337	503.968 (16)	↑	172.90	1.65

Gimav data based on ISTAT figures



Imports by the Flat Glass sector

With specific regard to the Flat Glass sector, imports for 2016 were **37.22%** lower than in 2015, a sharp drop that confirms the trend already underway in the two previous years.

European producers continue to be preferred over competitors based in other continents, with 79.71% of sales being invoiced by **EU countries**, or over 82% if we consider **extra-EU** countries (in Europe, but outside the Euro zone).

The data for **Asia** is extremely interesting, as it shows invoiced sales dropped by **61.10%**.

The percentage value of imports of North **American** and **South American** products increased, although not significantly in terms of absolute value.

The detailed analysis of European Union data ranks **France** in first place with a 37.01% rise from the year before, and it now accounts for over half of all imports (52.01% overall share).

Germany witnessed a 72.24% drop in volume of exports to Italy, becoming the second ranking supplier country, with a 13.2% share of the overall total.

China also suffered a sharp decrease in sales, equal to almost 3/4 of the value reported in 2015 (-73.23%).

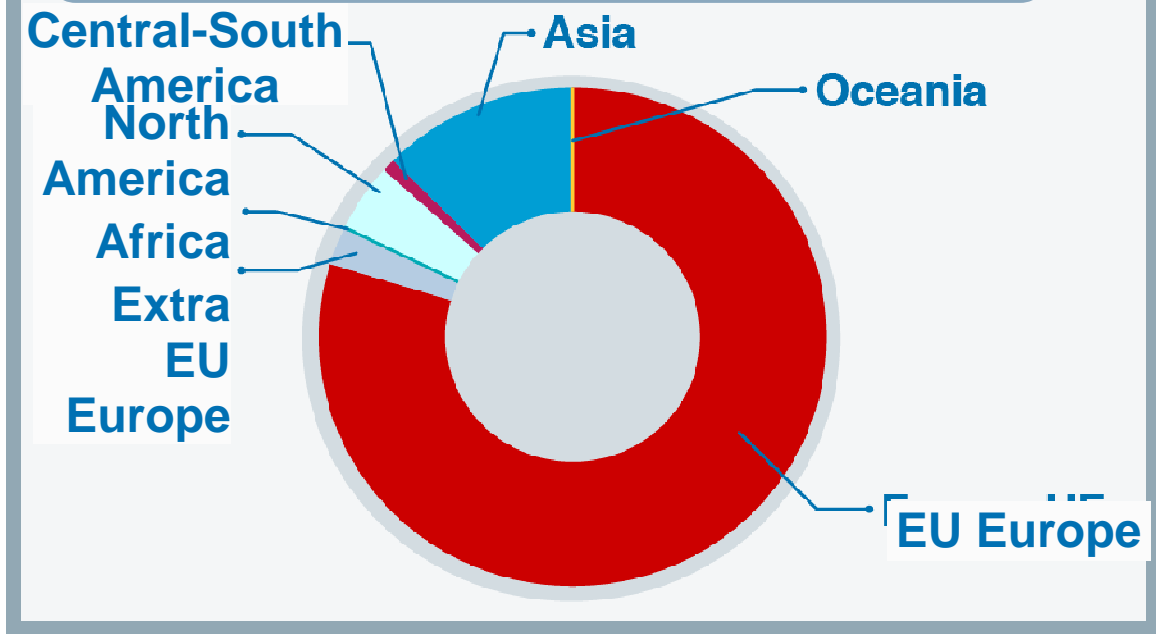
Imports of Flat Glass processing machinery, accessories and special products				
Area of origin	2016 [€]	2015 [€]	% Change 2016/2015	% Share 2016 total
EU Europe	4.488.816	6.916.100	-35.10	79.71
Extra-EU Europe	135.303	98.595	37.23	2.40
Africa	0	7.363	-	0
North America (NAFTA)	256.305	99.789	156.85	4.55
Central and South America	43.709	17.705	146.87	0.35
Asia	707.589	1.818.843	-61.10	11.52
Oceania	0	12.537	-	0
TOTAL	5.631.722	8.970.932	-37.22	100

Gimav data based on ISTAT figures

Imports of Flat Glass processing machinery, accessories and special products					
Geographical area	Country	2016 [€]	2015 [€]	% Change % 2016/2015	% Share 2016 total
EU Europe	France	2.929.193	2.137.894	37.01	52.01
	Germany	743.521	2.679.080	-72.24	13.20
	Austria	502.738	74.716	572.86	8.93
	Spain	101.560	34.580	193.70	1.80
Extra-EU Europe	Russia	70.000	0	-	1.24
America	United States	256.305	99.789	156.85	4.55
Asia	China	353.898	1.322.021	-73.23	6.29

Gimav data based on ISTAT figures

Imports of Flat Glass processing machinery, accessories and special products



Imports by the hollow glass sector

A relatively small drop compared to Flat Glass was also noted for imports pertaining to Hollow Glass **(-3.63%)**, which confirms the downward trend already reported last year.

The **European Union** strengthened its position as a preferred supplier for Italian buyers, scoring a 4.35% increase in imports from countries in the Euro zone. Moreover, considering the 30.93% reduction in imports from **extra-EU countries**, imports for the entire continent exceed 80%.

Belgium reasserted itself in first place in spite of sales dropping by 10.12% compared to 2015 (reportedly lower than 2014 already).

Germany also witnessed a severe contraction, down by 60%, and now claims 5.35% of all imports.

Strong growth was reported for imports from **Croatia, France** and **Sweden**.

Imports from **Asian countries** plummeted by 29.49%, and now account for 11.52% of the overall total. The leading exporter in the area, Malaysia, witnessed a 51% contraction in sales to Italy.

Also in decline were the figures for **North America** (-13.87%), but in spite of a 14.81% decrease the **United States** still ranks first among all exporters.

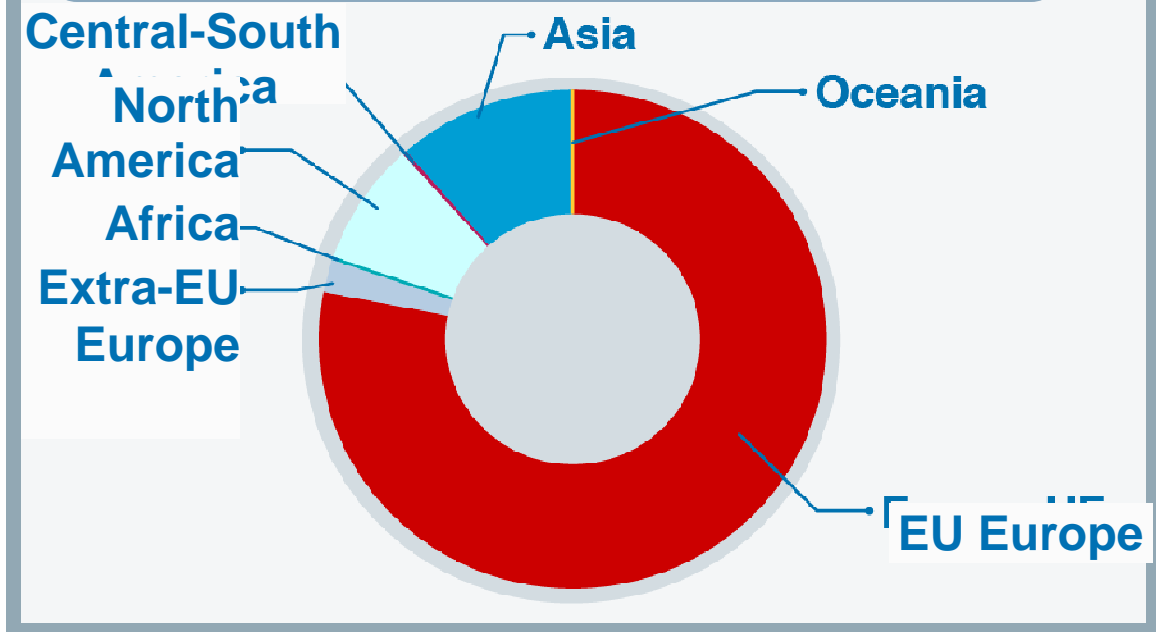
Imports of Hollow Glass processing machinery, accessories and special products				
Area of origin	2016 [€]	2015 [€]	% Change 2016/2015	% Share 2016 total
EU Europe	60.509.711	57.987.880	4.35	78.15
Extra-EU Europe	1.805.065	2.613.490	-30.93	2.33
Africa	35.422	19.007	86.36	0.04
North America (NAFTA)	6.063.294	7.040.059	-13.87	7.60
Central and South America	245.695	199.587	23.10	0.35
Asia	8.874.748	12.586.819	-29.49	11.52
Oceania	1.903	9.669	-80.31	0
TOTAL	77.535.838	80.456.511	-3.63	

Gimav data based on ISTAT figures

Imports of Hollow Glass processing machinery, accessories and special products					
Geographical area	Country	2016 [€]	2015 [€]	% Change 2016/2015	% Share 2016 total
EU Europe	Belgium	19.623.075	21.832.641	-10.12	25.31
	Croatia	8.451.566	5.796.185	45.81	10.90
	France	7.008.940	4.755.567	47.38	9.04
	Sweden	4.612.467	3.330.198	38.50	5.95
	Germany	4.148.580	10.376.722	-60.02	5.35
Extra-EU Europe	Turkey	1.610.522	2.538.529	-36.56	2.08
America	United States	5.983.099	7.023.514	-14.81	7.72
Asia	Malaysia	4.000.840	8.164.752	-51.00	5.16

Gimav data based on ISTAT figures

Imports of Hollow Glass processing machinery, accessories and special products



Italian Market

A more in-depth assessment of the Italian market is in order, considering the few machinery upgrade incentives made available to Italian manufacturers in 2015.

The data indicates that Italian **Flat Glass** manufacturers continue to dominate the domestic market, where sales increased by 5.21%, while imports shrank by 37.22%.

In the **Hollow Glass** sector sales were sluggish, but imports decreased, although not to the same extent as Flat Glass.

Overall, Italian market sales increased by **1.25%**, confirming the positive trend as in the year before.

Italian market shares					
	2016 [€]	2015 [€]	2014 [€]	2013 [€]	% Change 2016/2015
Flat Glass					
Imports	5.631.722	8.970.932	9.541.683	10.528.026	-37.22
National Product	215.296.275	204.634.802	184.755.300	184.525.200	5.21
Total Flat Glass	220.927.997	213.605.734	194.296.983	195.053.226	3.43
Hollow Glass					
Imports	77.535.838	80.456.511	86.858.995	43.563.433	-3.63
National Product	62.800.621	62.725.351	62.500.350	60.300.051	0.12
Total Hollow Glass	140.336.459	143.181.862	149.359.345	103.863.484	-1.99
Total Flat + Hollow	361.264.457	356.787.596	343.656.328	298.916.710	1.25

Gimav data based on ISTAT figures and internal survey

Focus: Italian government incentives for machine upgrades

As stated, during 2016 Italian companies were able to benefit from a few machinery upgrade incentives. Particularly worthy of mention are the **Nuova Sabatini** and the **SuperAmmortamento**; the latter went into effect in the second half of 2015, and started yielding significant results over the course of 2016.

These incentives intend to **boost the competitiveness of Italian companies** by promoting **production machinery upgrades**.

A survey conducted by UCIMU in 2016 revealed the extreme obsolescence of machinery in service at Italian manufacturing plants, characterized by their being 12 years old on average.

An in-depth analysis of the Italian industry standing reveals that Italian manufacturers of glass processing machinery, systems, special products and accessories – global icons of excellence in technology, quality and innovation – in the last few years witnessed a surge in foreign market sales, while domestic sales came to represent only 20% of their overall sales. This has significant consequences in terms of eroding the global market competitiveness of Italian finished products.

The two main incentives in force as of 2016 are described in the boxes below.

The Nuova Sabatini:

This incentive is designed to make the Italian manufacturing system more competitive and make it easier for micro- small- and medium-sized companies to obtain loans for the **purchase of new machinery, systems and equipment**.

At the end of 2014, the ceiling of the Cassa Depositi e Prestiti (Deposits and Loans) fund, which initially stood at €2.5 billion, was increased to €5 billion. The 2014-2015 budget, which initially allocated €191.5 million to partially cover bank loan interest charges, has since been increased to €383.6 million.

On 2 September 2016 the Italian industry incentives reserve fund was depleted, and subsequently replenished in the first few days of 2017.

The incentive measure provides 3 key subsidies for investment loans:

- ✓ **bank loans** ranging from 20 thousand to 2 million Euro, to finance investments in new machinery, systems, capital goods and equipment
- ✓ a **subsidy** to cover interest up to the total amount calculated using the conventional accrual method based on 2.75% A.P.R. and a semi-annual payment schedule for five years.
- ✓ **loan default coverage for up to 80%** of the amount financed, through the Fondo di Garanzia per le PMI (SME Guarantee Fund)

The incentive can be used by SMEs headquartered in Italy.

SuperAmmortamento

This incentive is meant to promote machinery upgrades through a **40% off-balance sheet deduction** for investments in new capital goods, systems and machinery made by business owners, which brings the **value of the deduction up to 140%** by reducing the base of taxable income.

Eligible investments are for **new capital goods** purchased directly from the producer or dealer (or goods on display in show rooms for demonstration purposes only).

The Industry 4.0 Plan

The **Industry 4.0 Plan** presented by the Ministry of Economic Development Carlo Calenda on 7 December 2016, and thereafter incorporated into the 2017 Stability Law has:

- extended the validity of the **SuperAmmortamento** (Super-Amortization)
- refinanced the **Nuova Sabatini** incentives plan
- introduced the 250% **IperAmmortamento** (Hyper-Amortization) for Industry 4.0 related capital goods
- extended the benefits provided by the **Credito d'Imposta per la Ricerca e Sviluppo** (R&D tax credit)

The applicability of SuperAmmortamento and IperAmmortamento for Industry 4.0 related capital investments is limited to capital goods purchased by 31/12/2017, subject to a down-payment of at least 20%, and scheduled to be delivered by 30/06/2018.

The IperAmmortamento however proved difficult to interpret, and in the first few months of 2017 generated a great deal of questions and subsequent official clarification notices, the last of which, issued by the Revenue Agency on 30/03/2017, finally rendered it useable.

This problem also emerges in a short survey carried out among Gimav members on 3 May 2017, which shows the incentives had negligible effects on the first quarter of the year, while in April their effect was clear and beyond expectations, with a sharp increase in market transactions.

Given their effectively delayed implementation, hopefully these incentives will remain in force at least until the end of 2018, to ensure that the positive effects of this important government effort to boost the Italian industry's competitiveness have an even greater beneficial impact.

Early in 2017 Gimav launched an extensive communication and information campaign, meant to promote these incentives and encourage Italian companies that use glass processing machinery to take advantage of them.

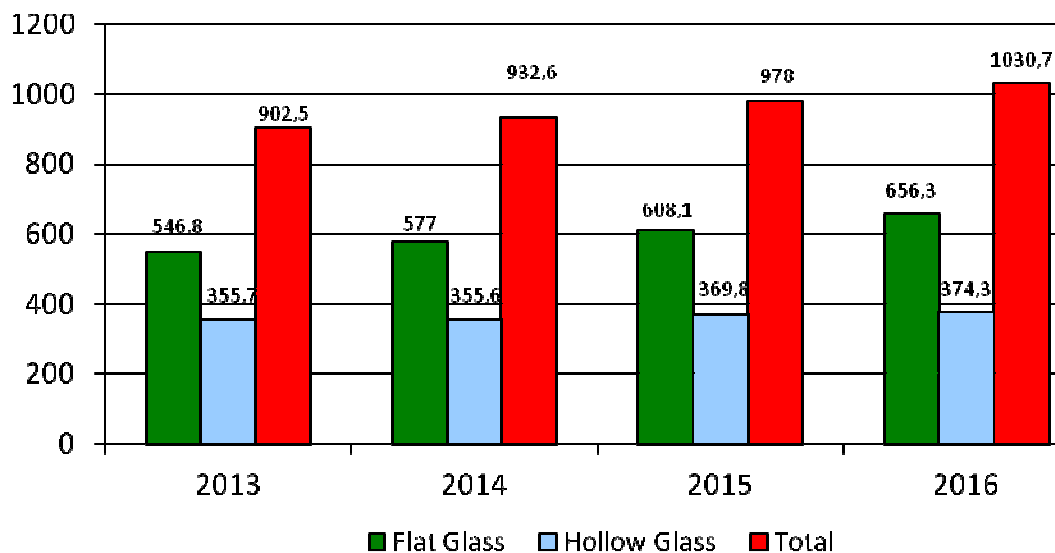
Exports

The exports growth trend continued this year, with a **5.39%** increase for the entire sector (compared to last year's 4.87%), **Flat Glass** rose by **7.93%** (as opposed to 5.4% in 2015), and **Hollow Glass** by **1.21%** (compared to 4.1% the year before).

Exports for the entire sector					
Sectors	2016 [€]	2015 [€]	2014 [€]	2013 [€]	% Change 2016/2015
Flat Glass	656.375.929	608.149.661	576.992.088	546.792.500	7.93%
Hollow Glass	374.329.157	369.853.925	355.594.582	355.656.300	1.21%
Total	1.030.705.087	978.003.586	932.586.670	902.448.800	5.39%

Gimav data based on ISTAT figures and internal survey

Exports for the entire sector: 2013 – 2016 trend analysis



More specifically, the **European Union** remained the primary outlet for exports, although sales to **extra-EU countries** decreased sharply. Our continent in fact accounts for 43.43% of the overall sales to foreign markets.

The **North American** sales trend recorded truly remarkable growth, in excess of 45%, with 10.75% attributable to the **United States**, making it the #1 customer of Italian manufacturers.

Also recovering are **South America**, with a 22.15% increase in sales and a 7.50% share, and **Asia**.

The four highest ranking customers of Made in Italy, besides the **United States**, are **Mexico**, **China**, and **France**, which ranks 1st among European countries. They are followed by **Germany**, which attained an increase in Italian imports, and the **United Kingdom**.

Turkey dropped from #1 to #8 on the customers' ranking, with its share decreasing from 12.12% in 2015 to 3.45% in 2016.

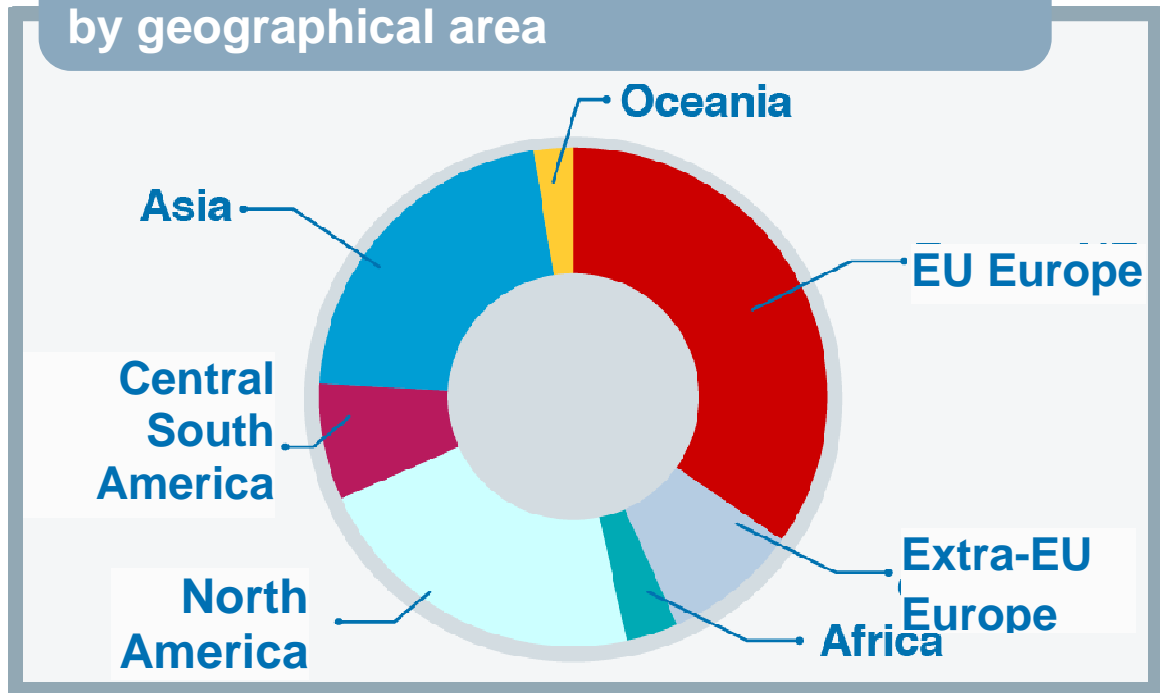
Russia is recovering and climbed from #20 to #10, doubling its share (from 1.22% to 2.52%). **Brazil** also started to purchase Italian products again, and its import values increased slightly.

Australia moved up one rank – as predicted by the 2016 qualitative survey - with overall exports increasing from 0.90% to 2.25%, which make it the 13th largest importer of Italian machinery.

Exports for the entire sector - % share by geographical area			
Export markets	2016	2015	% Change 2016/2015
EU Europe	34.64	33.84	2.36
Extra-EU Europe	8.79	19.84	-55.69
Africa	3.19	4.50	-29.11
Nord America (NAFTA)	21.63	14.83	45.85
Central and South America	7.50	6.14	22.15
Asia	21.78	19.43	12.09
Oceania	2.48	1.42	1.74

Gimav data based on ISTAT figures

Exports for the entire sector - % share by geographical area



Exports for the entire sector: top export market rankings					
2016 Exports			2015 Exports		Change 2016/2015
Ranking	Country	% Share	Ranking	% Share	
1	United States	10.75	2	7.23	↑
2	Mexico	9.84	3	6.93	↑
3	China	8.41	5	6.23	↑
4	France	8.34	4	6.67	↔
5	Germany	4.87	7	4.43	↑
6	United Kingdom	3.91	9	2.43	↑
7	Poland	3.73	6	5.98	↓
8	Turkey	3.45	1	12.12	↓
9	Spain	3.29	10	2.42	↑
10	Russia	2.52	20	1.22	↑
11	Thailand	2.51	16	1.45	↑
12	Brazil	2.42	12	1.89	↔
13	Australia	2.25	27	0.90	↑
14	Croatia	1.49	14	1.71	↔
15	India	1.38	13	1.72	↓

Gimav data based on ISTAT figures

Exports for the entire sector: top export market rankings



Exports by the Flat Glass sector

The growth trend recorded in 2015 for Flat Glass exports gained momentum, resulting in a **7.93%** gain from the year before, up by a 5.40% increase in 2014.

The **European Union**, in spite of a sharp drop in imports by **extra-EU countries**, remained the main customer of the Made-in-Italy hollow glass sector, accounting for nearly 43% of production destined for export.

North America recorded a sensational 44% increase in imports compared to last year, and **Oceania** now accounts for 5.20% of Italian exports.

A more detailed analysis reveals that the **United States** maintained its #1 position as a customer, further increasing its share of overall exports, now at 17.82%.

A sharp increase was also recorded for purchases from **France** – the leading European importer – and **Mexico**.

China jumped straight into 4th place after ranking 46th in 2015, and now accounts for 5.70% of the Italian export sales total. Sales also increased for **Spain**, and sales to **Australia** rose sharply, to nearly triple its overall share.

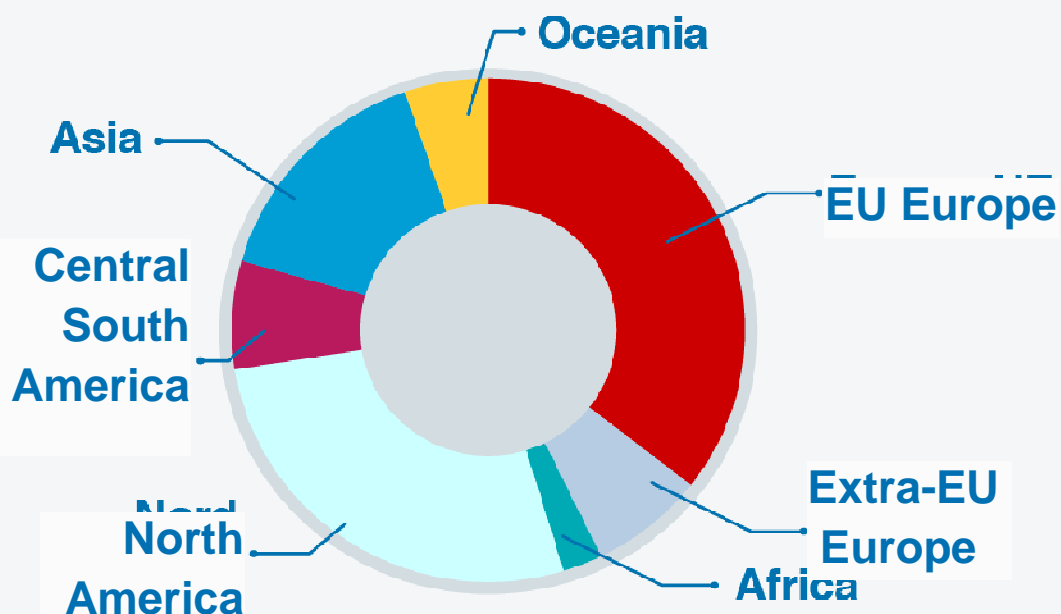
Sales to **Germany** dipped slightly, and sales to **Brazil** dropped significantly for the second year in a row. This market - which in 2014 was the Italian hollow glass sector leading importer - dropped to #9 in two years, and now holds a 2.89% share.

We should also note the slight - yet significant - increase in sales to **Russia**, which climbed from 38th place in 2015 to 27th, although its share growth remained under one percentage point.

Exports of Flat Glass machinery, products and accessories % share by geographical area			
Export markets	2016	2015	% Change 2016/2015
EU Europe	35.54	37.18	-4.41
Extra-EU Europe	7.29	9.57	-23.82
Africa	2.34	4.41	-46.94
Nord America (NAFTA)	27.22	18.79	44.86
Central and South America	6.98	9.71	-28.11
Asia	15.43	16.90	-8.70
Oceania	5.20	3.44	51.16

Gimav data based on ISTAT figures

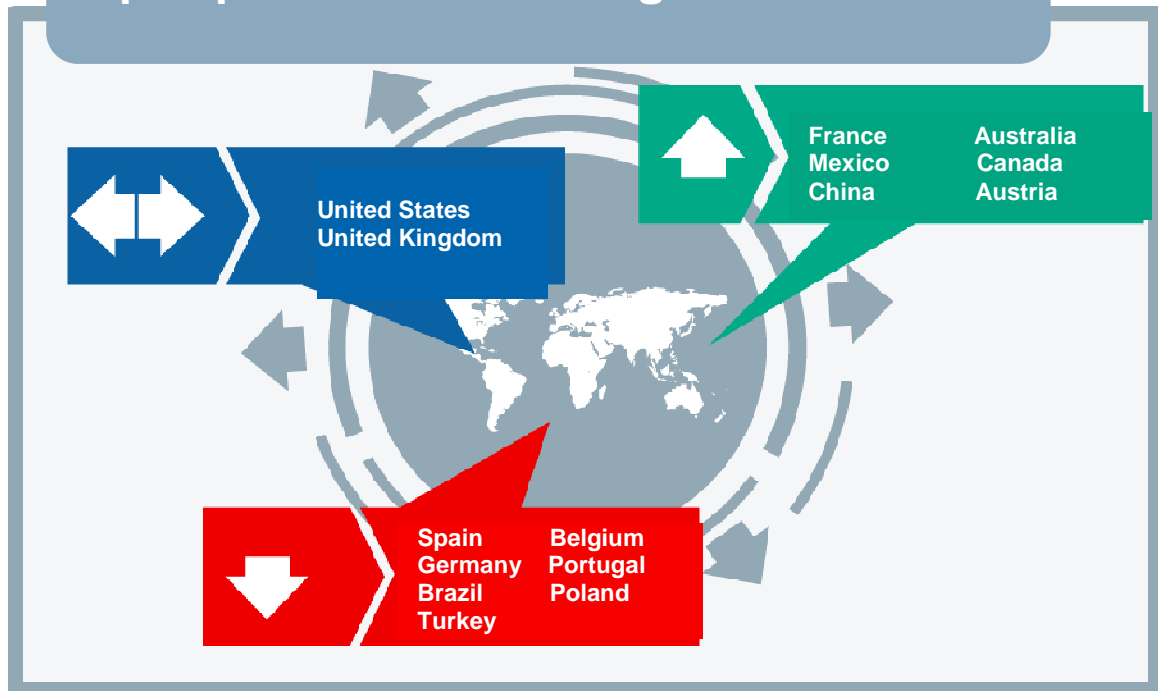
Exports of Flat Glass processing machinery, accessories and special products % share by geographical area



Exports by the Flat Glass sector: top export market rankings					
2016 Exports			2015 Exports		% Change 2016/2015
Ranking	Country	% Share	Ranking	% Share	
1	United States	17.82	1	14.86	↔
2	France	7.63	13	2.39	↑
3	Mexico	6.69	14	2.23	↑
4	China	5.70	46	0.42	↑
5	United Kingdom	4.98	5	4.50	↔
6	Spain	4.83	9	3.12	↑
7	Australia	4.81	17	1.82	↑
8	Germany	4.25	4	4.68	↓
9	Brazil	2.89	6	4.36	↓
10	Turkey	2.73	7	4.28	↓
11	Canada	2.71	18	1.70	↑
12	Belgium	2.65	2	5.65	↓
13	Portugal	1.84	12	2.43	↓
14	Austria	1.67	43	0.45	↑
15	Poland	1.42	3	5.04	↓

Gimav data based on ISTAT figures

Exports by the Flat Glass sector: top export market rankings



Exports by the Hollow Glass sector

In 2016 exports by the Italian hollow glass processing machinery, systems, special products and accessories sector increased by **1.21%**, a slight gain compared to 2015 (when they rose by 4.01%).

The **European Union** confirmed its role as the main importer of Italian products, with **France** ranking above all others in the area. Imports by **extra-EU** European countries dropped sharply (by more than 60%). Our continent nonetheless still accounts for 43.78% of the sector overall exports, as opposed to 57% in 2015.

Exports to **North America** and **Central-South America**, as well as **Asia**, picked up significantly, with the latter now claiming a 26.61% share of the global exports total.

A detailed analysis of each country reveals that **Mexico** strengthened its position, becoming the leading importer of Italian-made hollow glass processing products, followed by **China**, which now holds a double digits share.

Also sharply increasing are imports by the **United States**, which doubled its share percentage, and **Russia**, which climbed back to #9 after tumbling from 2nd place in 2014 to 15th place in 2015.

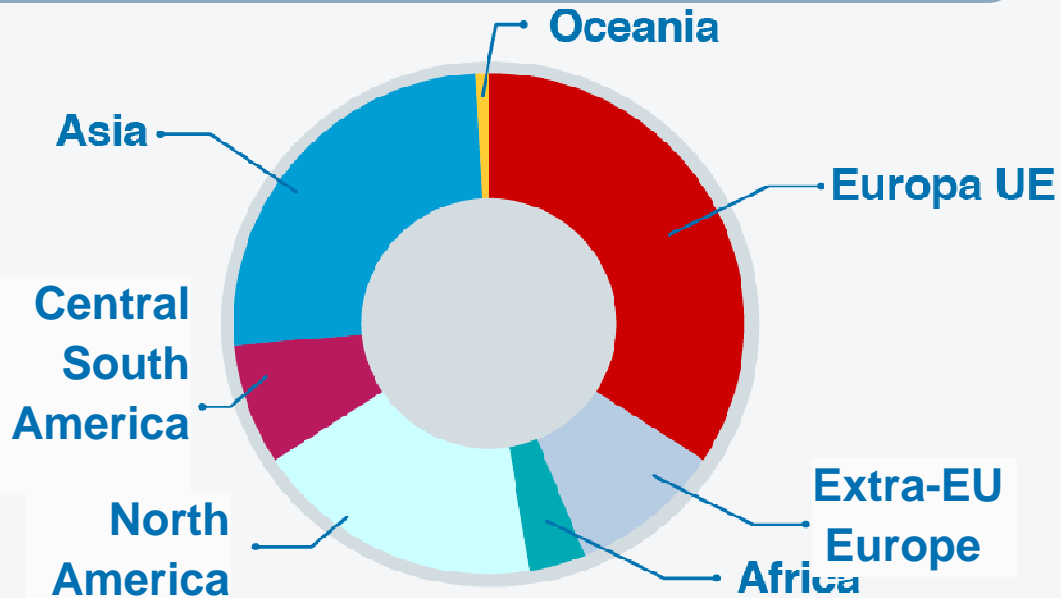
Brazil also recovered, rejoining the top 15 after being in 20th place in 2015, and **Sri Lanka**, which climbed into 15th place after ranking 62nd in 2015.

Turkey, the #1 importer of Italian machinery in 2015, plummeted to 7th place, with an overall share of 3.88% compared to 15.85% in 2015.

Exports of Hollow Glass machinery, products and accessories % share by geographical area			
Export markets	2016	2015	% Change 2016/2015
EU Europe	34.09	32.25	5.70
Extra-EU Europe	9.69	24.73	-60.82
Africa	3.70	4.54	-18.50
Nord America (NAFTA)	18.26	12.93	41.22
Central and South America	7.82	4.45	75.73
Asia	25.61	20.64	24.08
Oceania	0.84	0.46	82.60

Gimav data based on ISTAT figures

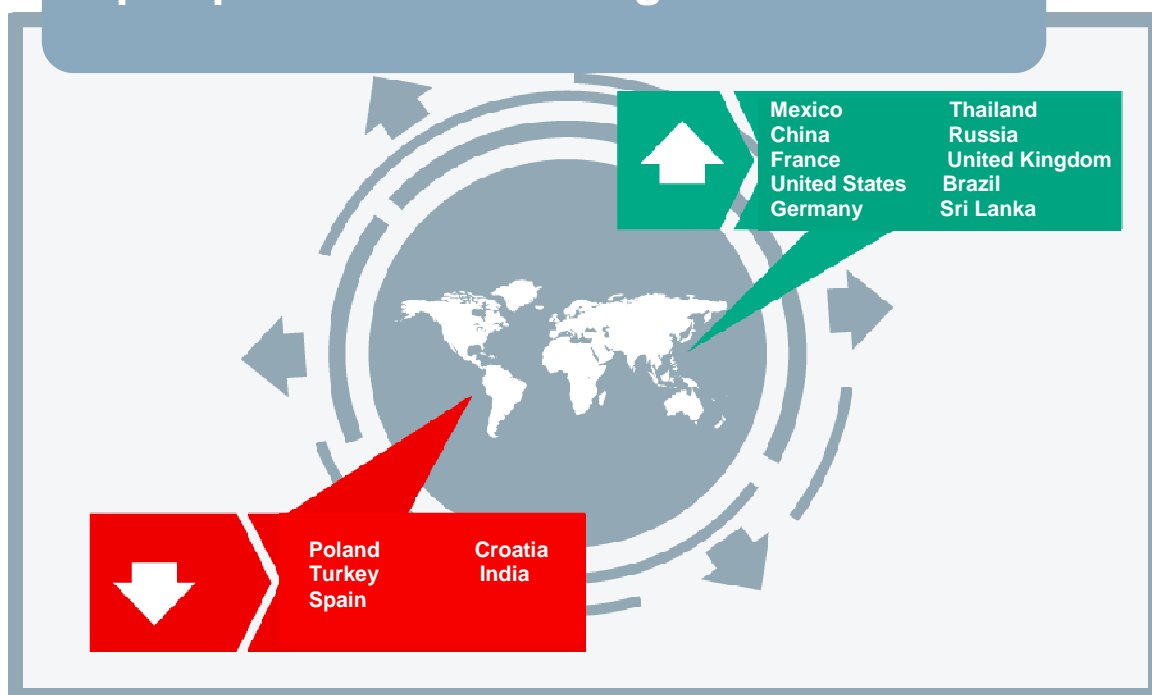
Exports of Hollow Glass processing machinery, accessories and special products % share by geographical area



Exports by the Hollow Glass sector: top export market rankings					
2016 Exports			2015 Exports		% Change 2016/2015
Ranking	Country	% Share	Ranking	% Share	
1	Mexico	11.75	2	9.16	↑
2	China	10.04	3	8.99	↑
3	France	8.77	4	8.70	↑
4	United States	6.49	8	3.59	↑
5	Germany	5.25	7	4.31	↑
6	Poland	5.12	5	6.43	↓
7	Turkey	3.88	1	15.85	↓
8	Thailand	3.77	13	1.92	↑
9	Russia	3.59	15	1.52	↑
10	United Kingdom	3.26	17	1.45	↑
11	Spain	2.37	10	2.09	↓
12	Croatia	2.30	9	2.38	↓
13	Brazil	2.13	29	0.71	↑
14	India	2.00	11	2.03	↓
15	Sri Lanka	1.87	62	0.09	↑

Gimav data based on ISTAT figures

Exports by the Hollow Glass sector: top export market rankings



2013 – 2015 Balance sheets analysis

As a result of the detailed statistics work carried out by Federmacchine, this year's Gimav industry report once again includes an aggregate balance sheets analysis section.

Federmacchine in fact conducts a yearly survey of its 1,037 associated companies, including Gimav.

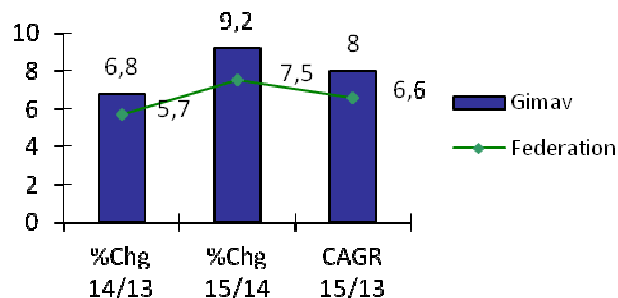
The survey pool includes companies in the regions of Lombardy (46%), Triveneto (19%), Emilia Romagna (12%), Piedmont (9%), and companies in other regions (14% of the overall total).

The AIDA database of standard balance sheets reclassified according to the financial reclassification scheme was used for the study.

Ordinary operations: analysis of costs and revenues

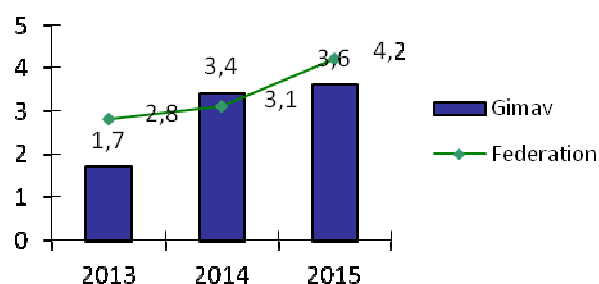
For the period considered (2013-2015), the revenue of surveyed companies increased by 6.6% on average, a vast improvement from the 4.1% of the year before.

With regard to our sector, in 2014 revenue increased by 6.8% over 2013 and in 2015 by 9.2% over 2014, placing it clearly above the Federation average.



Profit as a percentage of sales

The 2012 and 2013 data recorded far lower values for our sector than the Federation as a whole, but in 2014 the trend turned around, and in 2015 profits as a percentage of sales, although slightly lower than average at 3.6%, nonetheless confirmed the upswing of 2014. The chart below shows profit trends as a percentage share of sales.



Operating costs

For the three years considered, the costs for purchases, services and labor increased. Procurement costs were the highest, followed by labor and services. The procurement and labor costs of GIMAV member companies matched the average trend over the 3-year period.

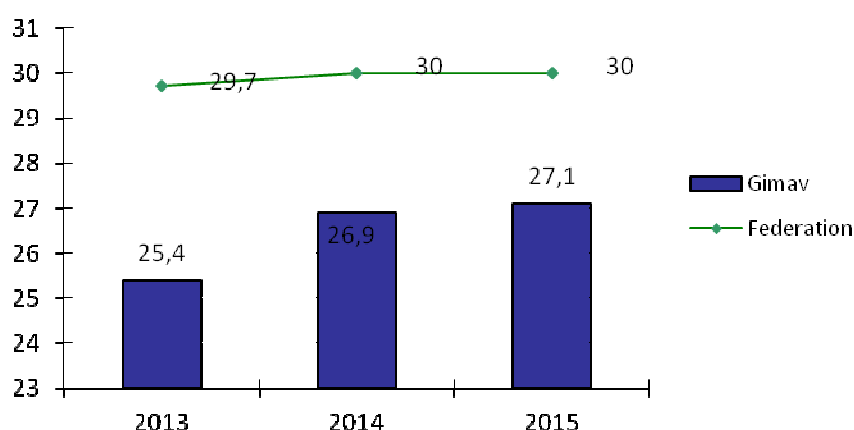
The chart below shows the percentage change over the 3 years.



Vertical integration ratio

The Federation value added to sales ratio slightly increased over the 3-year period. The organization's propensity toward greater vertical integration justifies the increase in level of incidence. The data for Gimav confirms the average trend, by increasing over the three years in question, while remaining under the Federmacchine value.

The chart below shows the percentage share

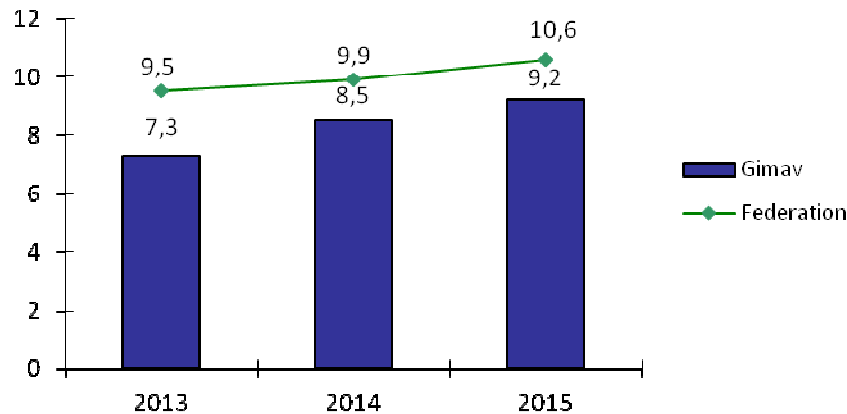


Gross Operating Margin

During the 3-year period being examined this indicator – which represents the company's ability to generate gross profit from ordinary operations – improved strongly for GIMAV companies, although it is yet to reach the reported sample average.

This indicator is obtained by subtracting labor costs from the operational value added.

The chart below shows the GOM as a percentage of sales.

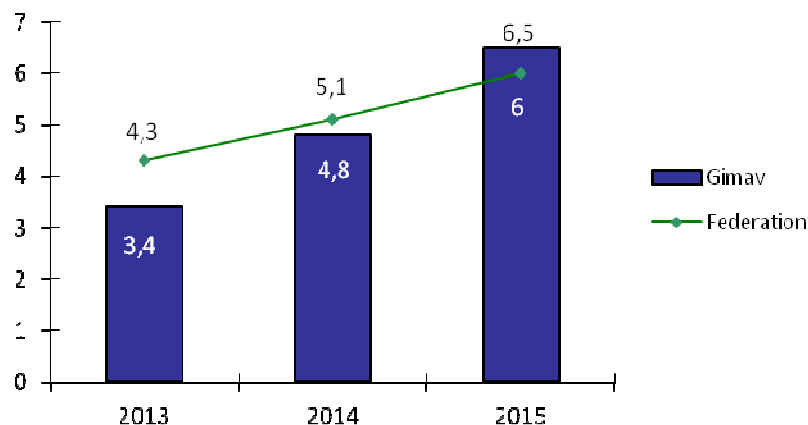


ROI

This figure also improved during the 3-year period, both for the machinery sector as a whole, and for companies associated with Gimav.

More specifically, the positive trend of Gimav member companies last year improved to the point that it exceeded the Federation average.

Their rate of return on investments therefore also increased significantly.

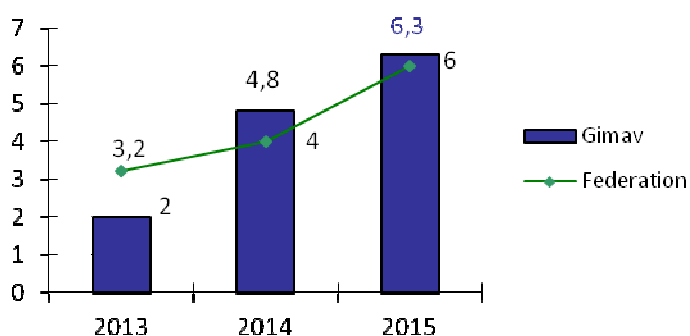


ROE

The ROE is a synthetic indicator of the company's overall profitability for the year, and measures returns on equity (the residual shareholder's equity after external financing entities, suppliers and taxes are paid).

Our member companies' return on equity (ROE) increased significantly.

The substantial improvement resulted in an above average value for the second consecutive year in this case as well.

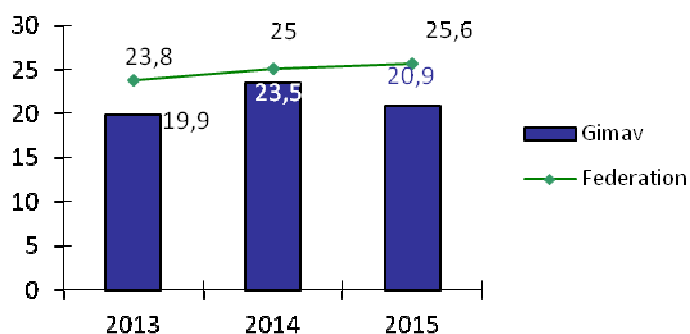


Net Working Capital

Working capital is the balance between current assets and current liabilities pertaining to the operating cycle. It represents the amount of funds required to carry out ordinary operations for the next financial reporting year.

This ratio represents the funds used by the company to support its ordinary operations. The more efficient the company is, the more money it saves, and the lesser is the value of this indicator.

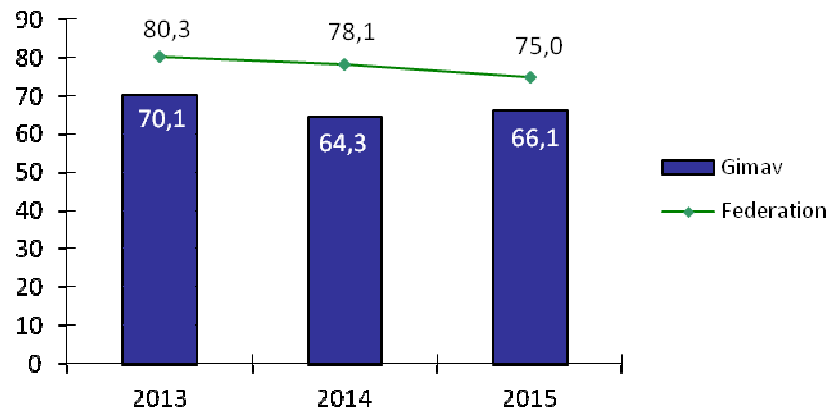
Last year the ratio of Gimav member companies improved substantially, and continues to remain below the Federation average.



Average days of inventory

During the 3-year period the sector and industry overall average days of inventory decreased.

The ratio for our sector is no longer decreasing, but Gimav's remained under the overall average.

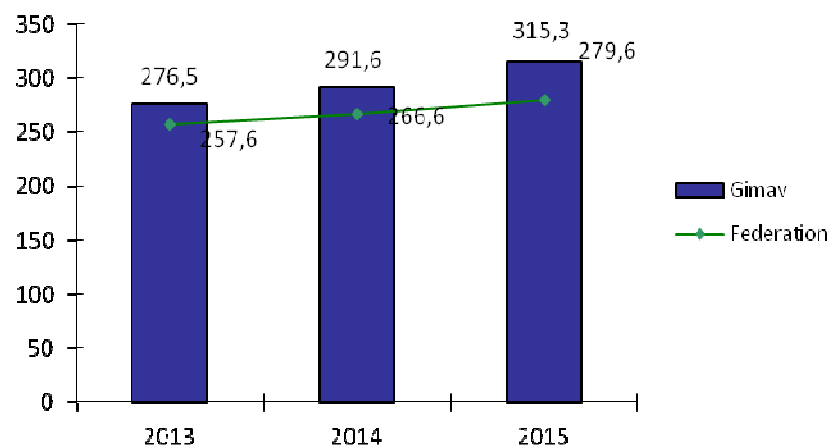


Per-capita revenues

This indicator shows a net improvement in productivity for the second year in a row.

More specifically, Gimav companies far outpaced the value recorded for the entire sector, represented by Federmacchine.

The chart below shows the results in thousands of Euros.

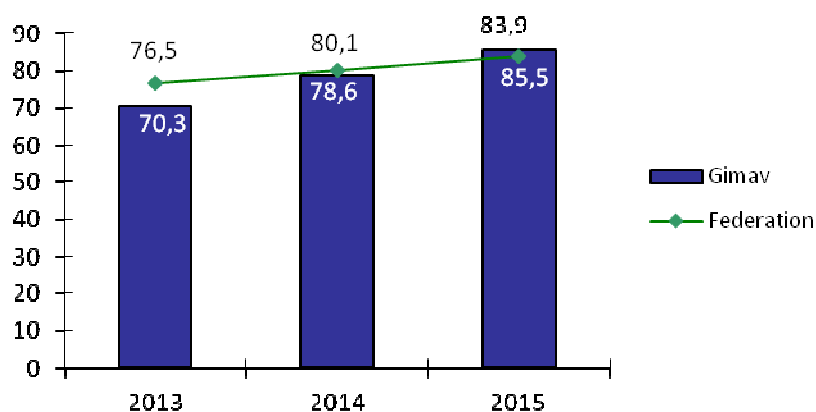


Value added per-capita

The 3-year trend for this indicator is also positive, and registered a substantial increase for Gimav companies, which in 2015 exceeded the Federmacchine average.

This performance index is used to evaluate whether the company operates efficiently or if labor costs are excessive compared to the final contribution margins.

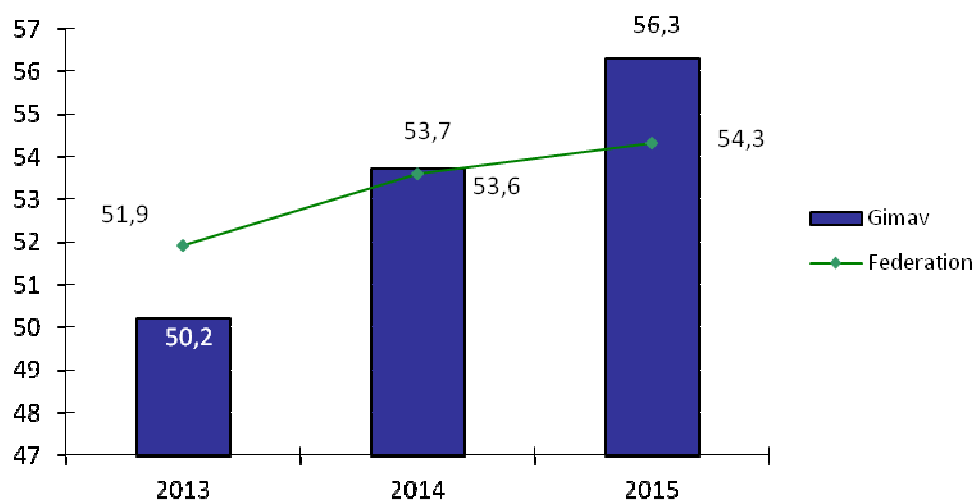
This chart also lists the results in thousands of Euros.



Average labor costs

In 2015 labor costs continued to increase, thereby worsening this parameter, which in 2014 was already above the Federmacchine average.

The chart shows the results in thousands of Euros.

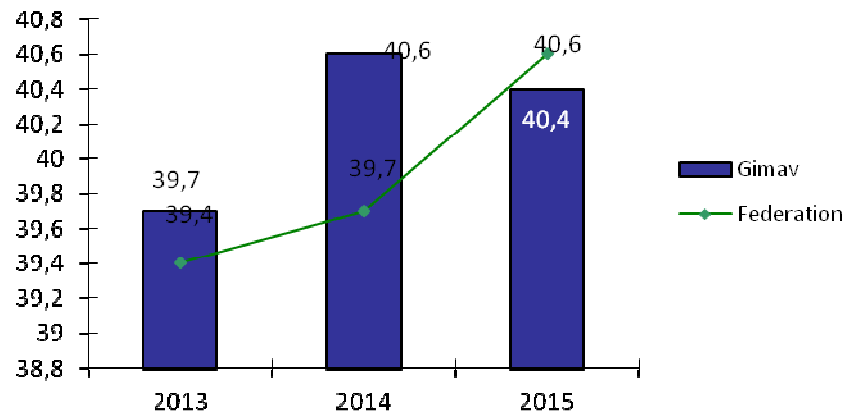


Debt to equity ratio

This ratio measures the relationship between the company's equity and third-party liabilities at the end of the financial year, and reflects the company's ability to operate in conditions of relative independence from creditors.

The figures indicated that more company capital than third-party capital was used by glass companies and the sector as a whole, with a slight decrease for Gimav member companies

The chart shows the % share

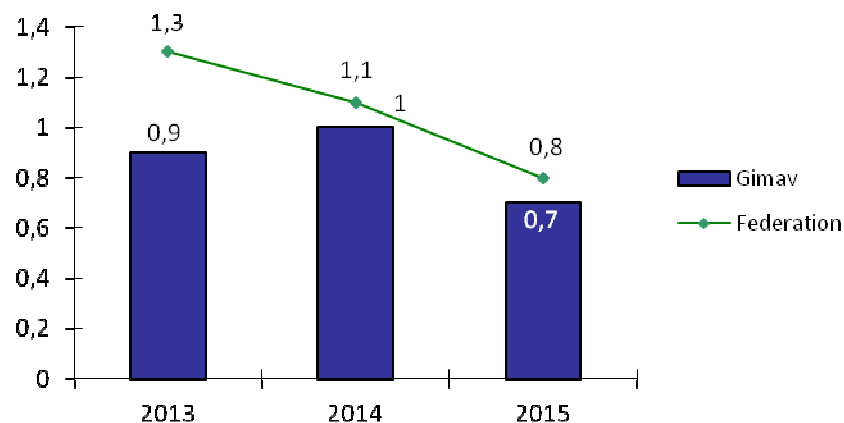


Interest coverage ratio

This indicator measures the company's cost of debt.

It declined slightly for both the Federation and Gimav member companies.

The chart shows the % share



2017 Forecast

This year's survey included two sections that assessed how companies in the sector perceived the economic trend for 2017.

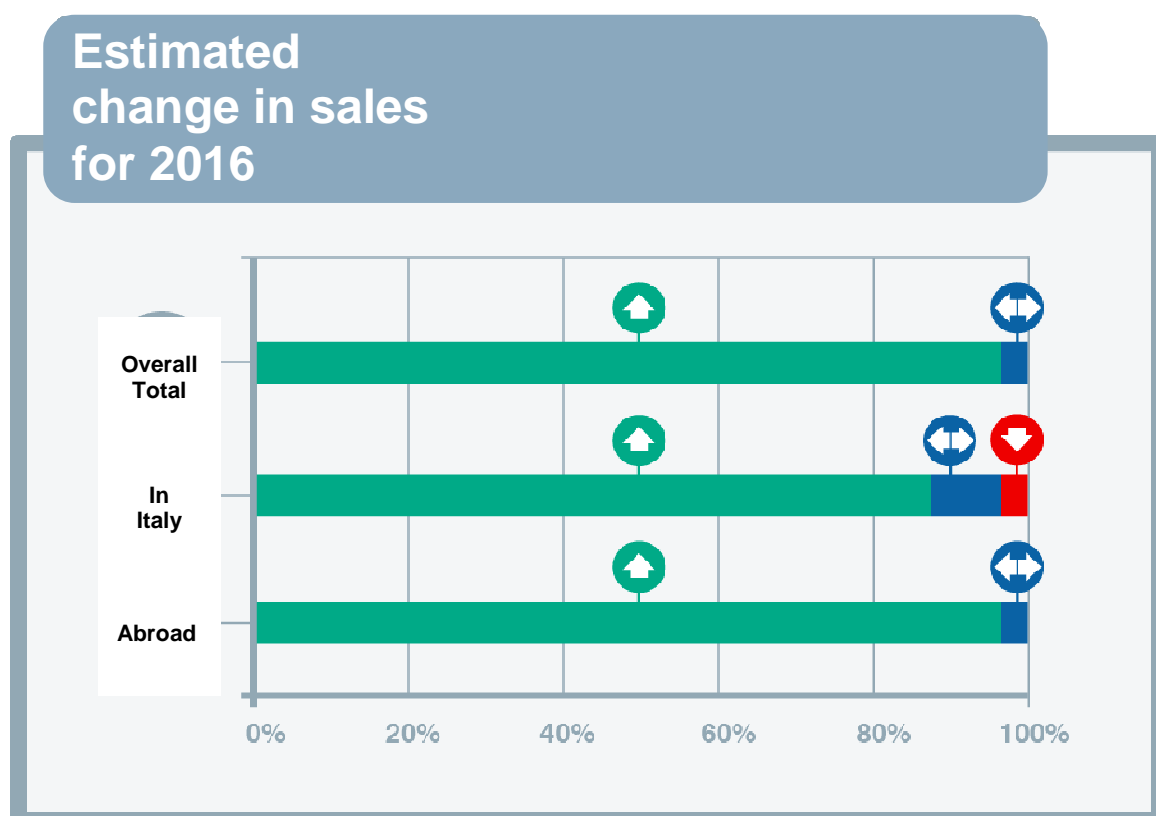
Their responses provided an interesting outlook on some figures which – when fully interpreted – are suggestive of widespread confidence.

2017 Sales forecast

The sample indicates that the situation has improved significantly, and 96.6% of respondents expected sales to increase for this year.

Sales to foreign markets are expected to record the highest growth; none of the companies foresaw a decrease, and 97% forecast an increase in exports.

Just like last year, only 3% of the sample forecast a - very slight - decrease in domestic sales, 9% expected them to stay the same, and 88% expected them to increase.



Global export markets anticipated sales trend

The companies were asked to indicate their sales outlook for different export markets.

The possible responses were: sales will increase; sales will remain the same; sales will decrease.

The sales forecasts for **Europe**, both **EU** and **extra-EU**, were very good, with figures for both expected to increase or remain unchanged.

As expected, **Russia** continued to be viewed as a very difficult export market, and the majority (54.2%) forecast a further reduction in sales.

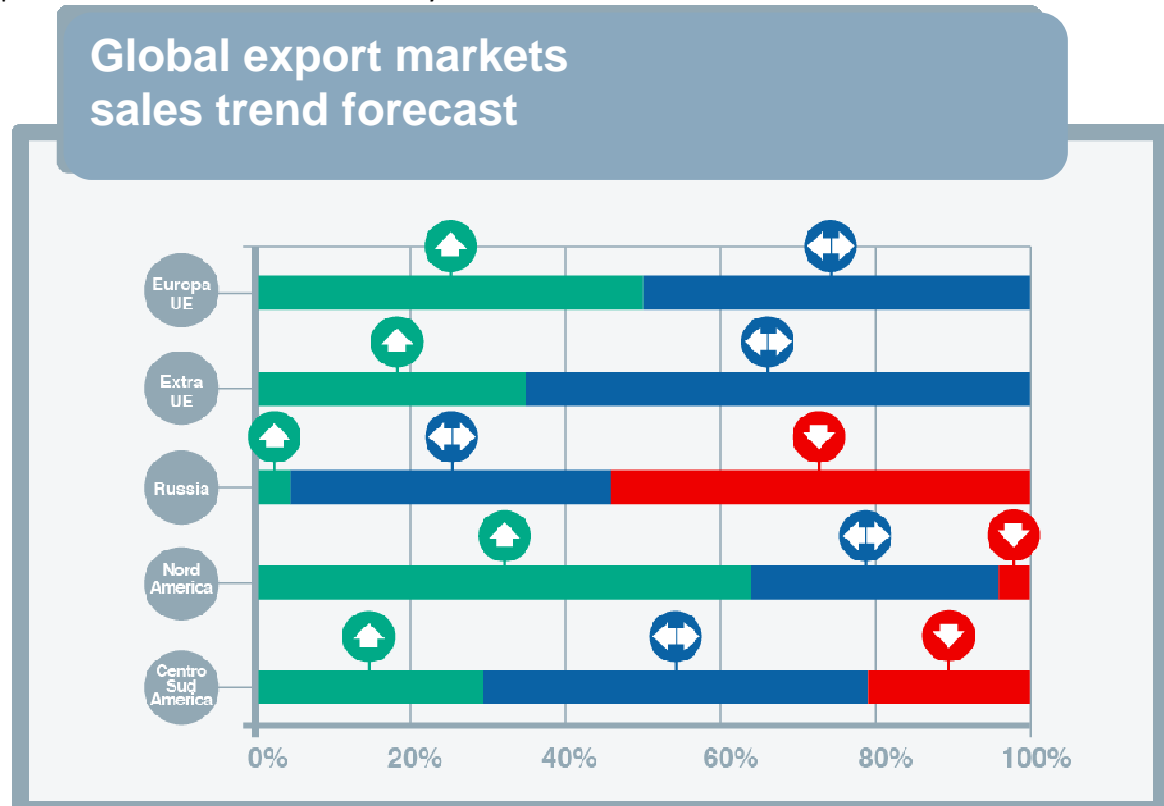
For **North America**, 64% forecast an increase and 32% expected sales to remain stable, confirming the positive trend reported last year, and subsequently confirmed by export data.

For **Central** and **South America**, where the situation continues to be difficult, nearly 21% of the sample anticipated another decrease, while almost 30% expected sales to rebound over the course of the year.

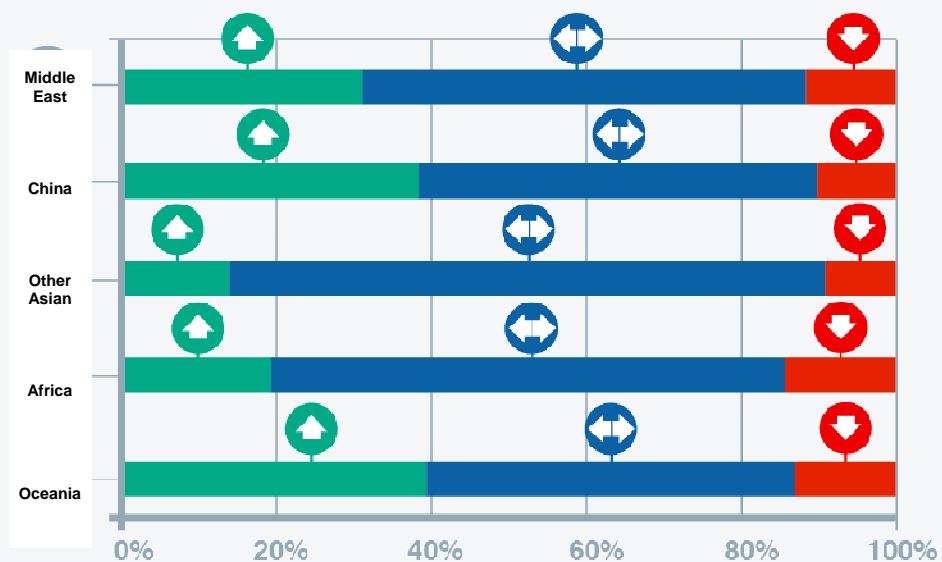
With regard to the **Middle East**, everyone forecast a further increase in exports.

China was deemed to be another growing export market by 38% of the sample, whereas 10% predicted sales would decline, as estimated for 2016.

The sales forecast for other countries in **Asia** and **Africa** basically remained unchanged, while exports to **Oceania** were deemed likely to increase.



Global export markets sales trend forecast



The Industrial Machinery Sector

The Federmacchine 2016 industry survey revealed an overall positive growth trend for the industrial machinery sector again this year.

Production increased by **3.5%**, with domestic sales rising sharply in response to government incentives for machinery upgrades (Nuova Sabatini, SuperAmmortamento).

Industry growth for 2015-2016 (data in millions of Euro)

Years	2015	2016*	% Change 2016/15
Production	40.895	42.313	+3.5%
Export	29.155	29.367	+0.7%
Domestic sales	11.740	12.946	+10.3%
Imports	8.107	8.482	+4.6%
Consumption	19.847	21.428	+8.0%
Trade balance	21.048	20.885	-0.8%
Workforce (number of employees)	180.000	180.500	+0.3%

* preliminary results

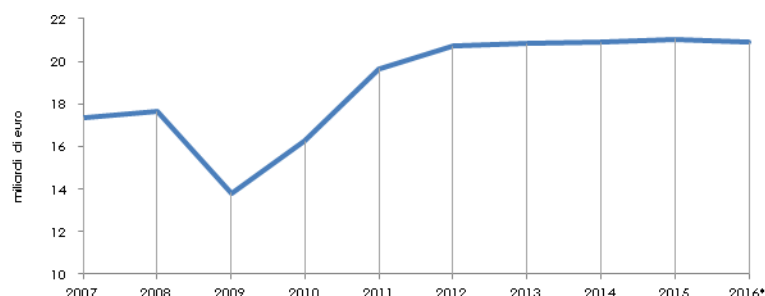
Exports propensity and trade balance

A distinctive characteristic of the Italian capital goods manufacturing industry, which became even more prominent during the crisis, is its exports propensity. In 2016, the figure was 69%.

Exports accounted for more than 50% of sales by all sectors.

The 2016 overall trade balance for all Federmacchine sectors resulted in a €20.8 billion trade surplus.

Italian trade balance for capital goods (in billions of Euro)



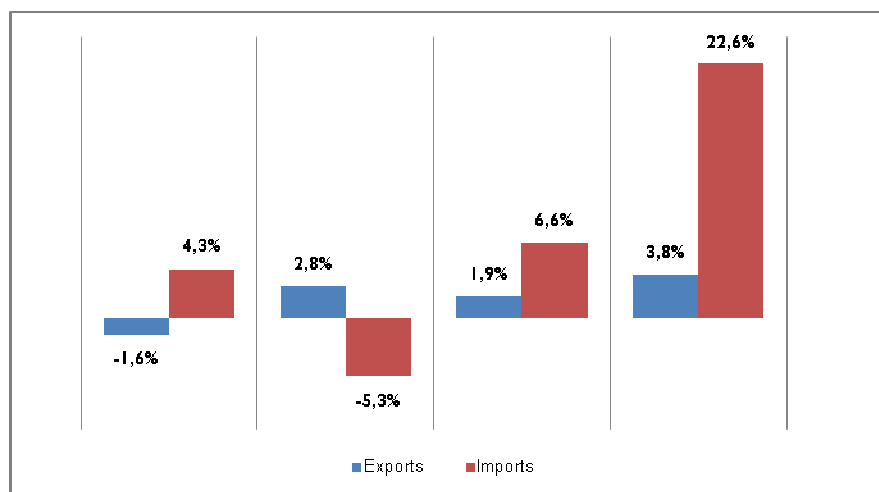
* 2016 preliminary results

Federmacchine Group Statistics

Capital goods trade trend for 2016

The quarterly trend for 2016 was estimated based on ISTAT data for 8 of the 13 Federmacchine associations. The representativeness of the data (approx. 75% of total exports) ensures the estimates are reliable and are applicable to the Italian industrial machinery sector as a whole.

Imports-Exports: quarterly trend in 2016
(changes over the same period in the previous year)



Source: Federmacchine Statistics Group based on ISTAT figures

During 2016 the industrial machinery sector suffered a sharp decrease in exports to **South America**, and an increase in exports to **North America**.

The **European Union** was the main market for Italian capital goods, accounting for 45.4% of overall exports. Including exports to extra-EU countries, our continent holds 55% of the market share.

Other growing markets are **Africa**, the **Middle East**, and **Asia**; the latter is the second largest export market for the Italian machinery sector, with a 17.1% share.

North America follows, with a share of 13.8% and a 7.5% increase over the year being examined. As predicted, exports to **South America** decreased, by 11.5%.

Trade by geographical area in 2016						
	Exports			Imports		
	Value	% Change	% Share	Value	% Change	% Share
European Union 28	9.309	2.2	45.4	4.184	9.1	66.0
Other European countries	1.959	-4.2	9.6	439	10.8	6.9
Africa	945	4.1	4.6	11	1.9	0.2
Middle East	771	2.8	3.8	15	76.6	0.2
Asia	3.506	3.1	17.1	1.404	1.5	22.2
North America	2.832	7.5	13.8	230	-4.2	3.6
South America	927	-11.5	4.5	31	-9.3	0.5
Oceania	236	10.9	1.2	21	11.6	0.3
Total	20.485	1.9	100.0	6.334	6.9	100.0

Source: Source: Federmacchine Statistics Group based on ISTAT figures

Exports in 2016: top 20 markets					
	Value	% Change		Value	% Change
Germany	2.114	-4.6	Belgium	450	-1.7
United States	1.985	-0.9	Russia	396	-17.2
France	1.395	9.3	Switzerland	371	-5.9
China	1.293	-3.9	Sweden	338	-9.4
Spain	831	11.4	Austria	334	3.5
United Kingdom	793	1.4	Czech Republic	333	-11.7
Poland	764	9.5	The Netherlands	332	14.0
Turkey	757	-9.1	Brazil	288	-31.5
Mexico	616	39.1	Portugal	268	29.1
India	543	8.5	Romania	245	-14.6

Source: Source: Federmacchine Statistics Group based on ISTAT figures

Imports in 2016: top 20 markets					
	Value	% Change		Value	% Change
Germany	2.025	9.2	Spain	140	9.5
China	748	3.3	United Kingdom	129	-4.4
France	473	5.6	India	128	13.0
Belgium	322	7.0	South Korea	128	-14.9
Switzerland	287	3.4	Taiwan	123	-5.6
Japan	245	4.2	Turkey	108	26.8
The Netherlands	202	9.8	Czech Republic	100	35.8
United States	201	-4.3	Sweden	97	15.0
Austria	191	16.9	Slovakia	71	2.8
Poland	159	7.4	Bulgaria	62	4.1

Source: Source: Federmacchine Statistics Group based on ISTAT figures