FOCUS ON
An Export Machine(ry)

Produced by the Economic Analysis and Research

The other Made in Italy
to move into high gear

EXECUTIVE SUMMARY

- *The perception of Made in Italy, abroad as at home, is still associated with agro-food products. However, they account for only 7% of our exports: the Italian bestseller in the world is our machinery, which generates € 74 billion, almost three times as much.*
- *In the past ten years, exports of food products have grown faster than machineries', twice as fast in the last three, to the benefit of Germany, the US and newcomers. Here is where the Italian Tale (iTale) we could tell originates: being aware that organization, value chain and the financial package can fuel sustainable, long-lasting growth even for such an important sector.*
- *Italian consumer goods still represent excellence, but we must do our best to win primacy throughout the production chain, adapting our industrial model to benefit the entire value chain.*
- *According to SACE projections, Italian machinery exports will grow 5% a year through 2018, reaching € 90 billion. If we promote those companies as we do for downstream products, such as food and beverage[01], we will generate € 12 billion in additional exports.*
- *The geographies we could approach are mixed bag: they include the largest world importers like the US, China, Germany, UK and France, but also fast-growing markets like Mexico, Thailand, Turkey, Saudi Arabia and Poland.*

[01] *See "Focus On - Is € 50 billion a realistic goal for Italian agro-food exports?", SACE, March 2015.*

THE CREATION OF VALUE BEGINS WITH MACHINERY

The competitive pressure of medium-tech Chinese products had significant effects on various related markets: Far East, Latin America and Sub-Saharan Africa. Beijing has exchanged growing imports of mechanical engineering to these areas to satisfy its intense demand for commodities[02], depressing the development of their manufacturing sectors. This "back-colonization" has driven several countries to depend on the Chinese appetite for commodities, which is now declining. Decreasing Chinese demand is revealing that the industrialization of many economies is incomplete[03], as they find themselves once again assailed by the volatility of raw materials prices.

Might we experience an "advanced" version of this problem in Italy to the benefit of Germany and the US? No, **because the quality of our machinery and associated service components shields them from "Chinese model" price competition**. The shortage of new investments, the impact of the financial crisis on consumer spending, and difficulties in formulating coherent industrial plans have reduced the room for maneuver of our medium/long-term commercial policies, also for machinery. Trade has stagnated in intermediate goods, while the moment for consumer goods (foods, fashion, even in the luxury class) is extremely favorable. In the latter case, product quality has increasingly paralleled wise marketing policies in recent years.

Our tale, in fact, is one of unquestioned excellence in food products: though sales are haltered by falsification, Italian-sounding competition, and limited control of the distribution chains, they are the result of a chain of quality (now a bit stressed on the suppliers) and by excellent machinery appreciated worldwide. So **we are focusing on the downstream component, positioning ourselves as an international producer of quality food products, but we are greatly neglecting the upstream component**. If we wanted, we could tell a broader story, conveyed by our excellence in foods but starting from origins of the product along the entire value chain.

It seems easier, and probably is, to sell Italian products than the industrial culture that accompanies it. In reality, if we attempted to showcase the story we could tell with our machinery, we would realize that the Italian Tale, which we shall call the "iTale", is much more real than we think.

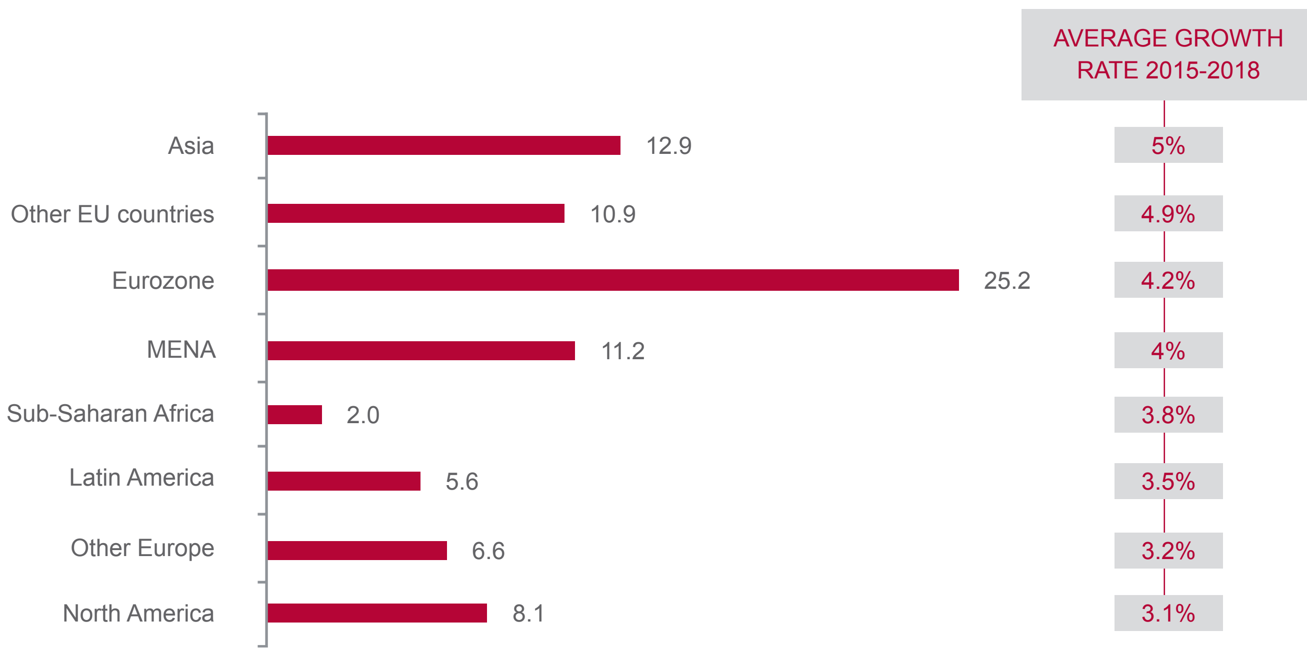
[02] *Source: "Latin America and the Rising South", World Bank, 2015. Example: the exports of manufactured products of Latin America declined by over 10% between 2001 and 2011, while exports of farm products increased by almost 8% and those of extraction industries by almost 15%.*

[03] *Source: Dani Rodrik "Premature Deindustrialization", NBER, February 2015.*

ITALIAN MACHINERY CIRCLES THE GLOBE

From 2009 to 2014, **world imports of mechanical engineering grew by an annual average of 7.6%**, exceeding € 1.5 trillion, equal to 11.8% of total imports. In the same period, Italian machinery kept pace with growth of 6.2%. For the future, considering the slowdown in international demand (projected average annual **growth of + 0.2% for the sector[04]), we have estimated the growth of our machinery exports at 4.8% a year through 2018**, with intense demand from not only our European Union partners but also from Asia, the Middle East and North Africa (Chart 1).

CHART 1. *Italian exports of mechanical engineering (2014, € billions) and projections 2015-2018**



* The SACE projections are for 63 countries.

Source: Istat, SACE

[04] *Source: IHS, August 2015.*

The principal characteristic of capital goods is that they are a strategic link in many manufacturing production chains, enabling the Italian production system to promote and incorporate innovation and technology. The specific nature of Italian companies in this sector is a strong export vocation (foreign sales represent 52% of the total[05]) and a receptive ear to customer requirements. Another distinctive feature of sector companies is the central role of human capital, a competitive factor of such importance as to justify the label "Made by Italians" in lieu of the more classic "Made in Italy"[06].

Last year Italy exported over € 74 billion in machinery, one-fifth of our country's total exports. Almost a third of that went to the euro-zone, followed by East Asia and non-EU European countries (like Russia, Turkey and Switzerland; for 10.8%). Of all the segments of the sector, we have selected five that represent 35% of all mechanical engineering exports (Chart 2), **have shown significant growth, and historically choose SACE as a partner for insurance and risk management services**. All these segments are highly internationalized. The leading world importers of these products, depending on the segment, are the United States, China, Germany, the United Kingdom, Mexico, France, Canada, South Korea, and Japan, but there are other areas[07] that have shown strong growth in imports from the world.

[05] *Source: "Struttura e competitività delle imprese", Istat, November 2014*

[06] *Source: Boldizzoni D., and Serio, L. "La gestione delle risorse umane nelle PMI. Persone e organizzazioni nell'economia senza confini", Editori Laterza, 2010.*

[07] *Some of these, such as Brazil, South Africa and Turkey, require special caution, considering the turbulences that have involved the emerging countries (see "Focus On - How Deep Is the Rabbit Hole?", SACE, September 2015).*

CHART 2. *The five leading segments: performance and export destinations*

Segment (export in € billions)	Share of the machinery sector (2014)	Average annual growth of Italian exports 2009-2014	Opportunities to seize[08]
Pumps and compressors **6.3**	8.5%	4.8%	United Kingdom Saudi Arabia India Turkey Peru
Engines and turbines[09] **6.1**	8.2%	5.9%	Germany Thailand Poland Algeria South Africa
Machine tools **6.0**	8.1%	5.9%	United States South Korea Thailand Canada Czech Rep.
Packaging **4.7**	6.4%	8.6%	China Malaysia Brazil Turkey Chile
Food processing machinery **3.1**	4.2%	8.6%	Mexico Indonesia Saudi Arabia Ireland Ethiopia

Source: Istat, UN Comtrade

[08] *Of the countries where Italy already exports (where companies can therefore benefit from some knowledge of the market), we have selected a few that have demonstrated strong growth in recent years. For our analysis of world import data we have made a few simplifications, using Harmonized System codes of four digits rather than six. Please see the annex for a table with the values for each country.*

[09] *Excluding engines for aircraft, vehicles and motorcycles.*

Pumps and compressors

Over 70% of pump production is exported, with strong specialization by product and market[10]. The markets with strongest demand include the United Kingdom and India, each with imports exceeding a billion euros, but especially Saudi Arabia, which has increased its world imports of these products tenfold[11].

Engines and turbines

Six billion in exports. The most appealing destinations include Thailand, where we currently export only € 20 million but which last year imported over € 3.5 billion in these goods (+ 12.6% annual average since 2009). Algeria registered even greater growth (almost + 17% a year): despite its geographical proximity, it only accounted for 3.3% of our exports of these products.

Machine tools

Italy is the world's fourth largest producer and no. 3 exporter of these goods[12]; these are high-tech products that require large investments in R&D. This segment, in fact, shows a propensity for innovation, despite the small average company size. The most popular method for achieving the critical mass necessary for investments is networking with other companies and/or research institutes and centers[13]. This segment has an export percentage similar to that of pumps and compressors. United States, South Korea, Thailand, Canada and Czech Republic are markets that in the past five years have invested and improved the production capacity of their manufacturing industry, importing this type of products with growth rates exceeding 10% each year.

[10] *Source: ANIMA.*

[11] *Latest available figure: 2013; reference is to the period 2009-2013.*

[12] *Source: UCIMU Further government initiatives for these products are expected, in addition to those of recent years, to suport internal demand to promote the replacement of obsolete equipment and favor investments.*

[13] *Source: Campanini, Costa, Rizzi, "Innovazione e performance aziendali del settore delle macchine utensili in Italia", Quaderni del Dipartimento di scienze economiche e sociali, Serie Rossa: Economia – Quaderno N. 72, luglio 2011.*

Automatic machinery for packaging and packing

The export propensity of Italian manufacturers of packaging machinery is one of the highest in the segment: over 80%. Italy vies for international leadership in this segment with German companies exploiting the excellence of our technology and quality and the personalization and production flexibility of the machinery[14]. This machinery is used in numerous sectors: foods certainly lead the way, followed by pharmaceuticals, cosmetics and tissues. Chile and Malaysia are two economies where demand from foreign sources is still limited, but imports are growing rapidly (rates of over 14% in the period 2009-2014). These two countries together represent only 2% of our exports.

Food processing machinery

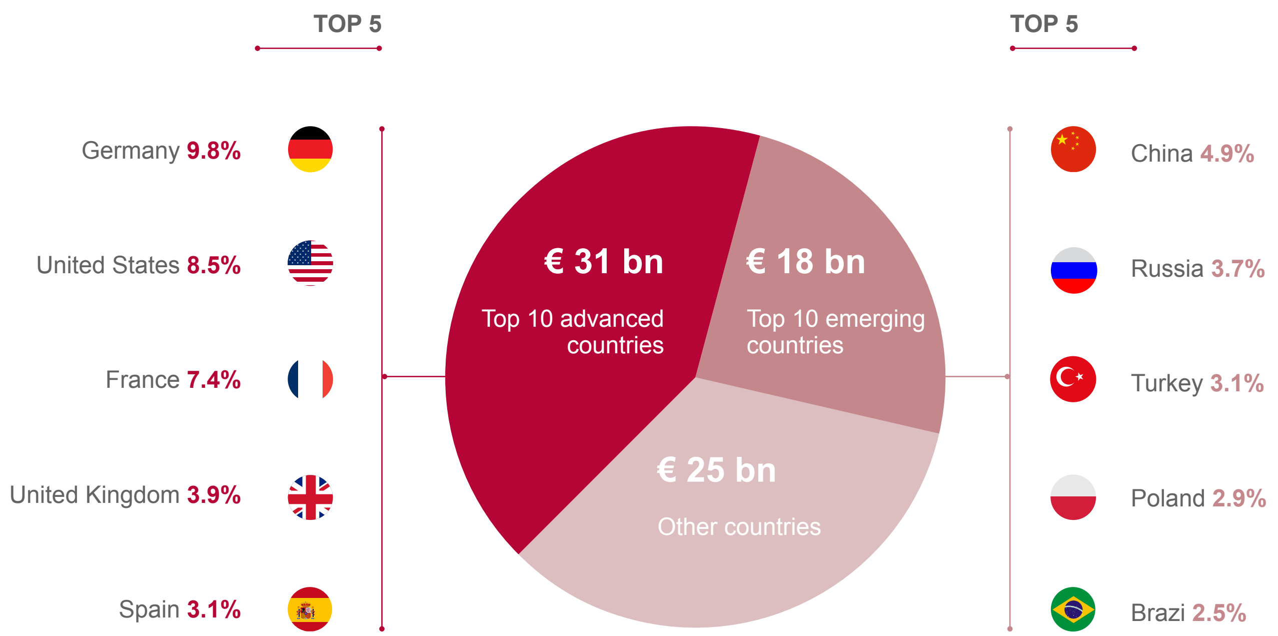
World exports of this machinery in 2013 totaled € 178 billion, and the share of the two principal exporters, Italy and Germany, exceeded 30% of the total[15]. The volume in this segment is highly concentrated: the chief exporting countries account for over 80%, with a limited share in the emerging countries. This machinery has greatly redefined the standards of food production but especially its quality, flexibility, safety, and hygiene and its energy, environmental and social sustainability. The demand from several countries offers opportunities, some with established levels like Mexico, Indonesia and Saudi Arabia, others like Ethiopia, which has grown 22% a year but in 2014 imported "only" € 300 million (but absorbs 0.7% of exported products, one of the largest shares in Sub-Saharan Africa).

[14] *Source: UCIMA. Italy and Germany account for more than 50% of worldwide sales in this segment.*
[15] *Source: "RE-start - Rapporto Export 2015-2018", SACE, May 2015.*

GERMANY IS OUR NO. 1 CUSTOMER, BUT THE U.S. IS THREATENING OVERTAKE THEM

Italy is the no. 2 European exporter of mechanical engineering (after Germany) **and no. 5 worldwide** (after China, Germany, United States and Japan). Germany and the United States are therefore not only competitors[16] but also major importers of our machinery, together assimilating over 18% of our production (Chart 3). After a sharp decline in 2009 (- 25% in both countries), our exports have rebounded and, according to our projections, will continue to grow at an average rate of 5.2% in the two countries through 2018.

CHART 3. *Countries importing Italian mechanical engineering (2014)*



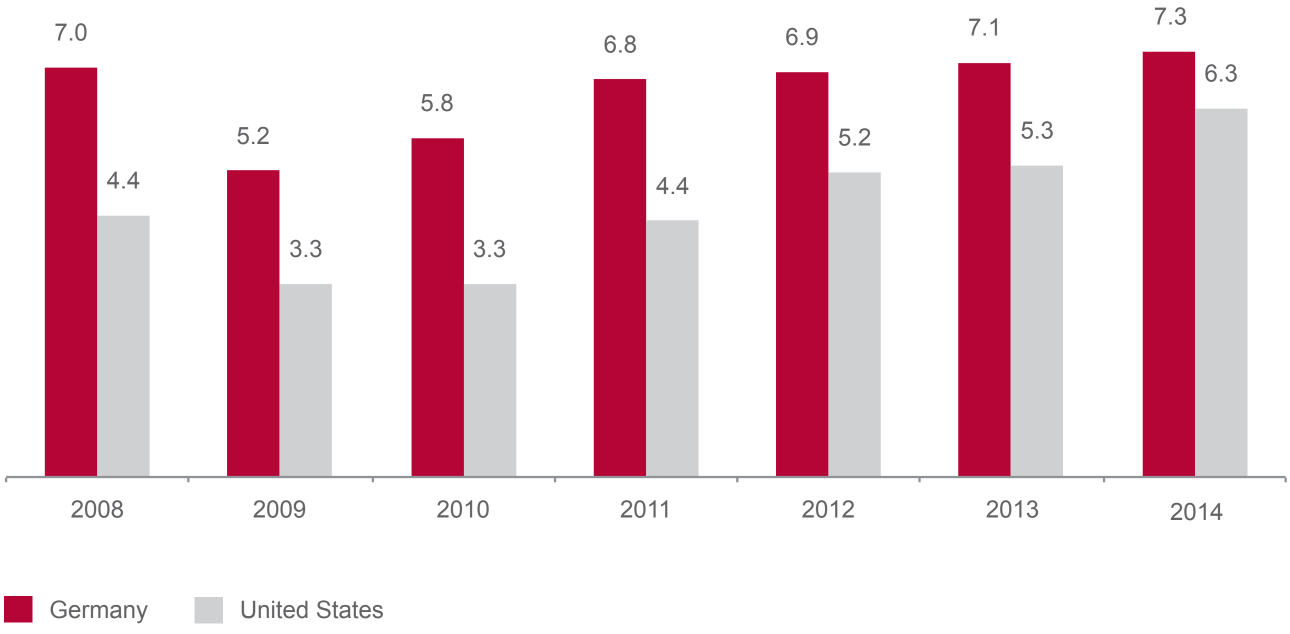
Source: Istat

[16] *For the various mechanical engineering (179) Italy boasts a larger balance of trade than Germany, taken as the benchmark. This performance is better than that of other world exporters like China, Japan and the U.S. (Fortis-Corradini Index computed on UN Comtrade data).*

Germany is our principal trade partner[17]: in 2014 we exported over € 7 billion to that country, 3% more than the previous year (Chart 4). Machinery trade between the two countries is significant, and the five segments in consideration are no exception: a total of over € 4.5 billion. First-half results this year confirmed this positive trend.

Exports of machinery to the U.S.—with € 6.3 billion, the U.S. presents the second largest market for our mechanical engineering, followed by France with 5.4 billion—have almost doubled since 2009, returning to pre-crisis levels after more than two years thanks to strong growth in 2011 (+33%). Perhaps the United States now represents a market with even greater growth potential than Germany.

CHART 4. *Exports of Italian machinery to Germany and the U.S. (€ billions)*



Source: Istat

[17] *We are their seventh largest trade customer.*

iTALE, THE STORY WE COULD TELL (AND HOW TO TELL IT): ORGANIZATION, PRODUCTION CHAIN AND FINANCIAL PROPOSAL

Value added and organization are more important than price

A recent study[18] compared 14,000 European companies in the manufacturing sector[19] in terms of company organization and offshoring, i.e. the tendency to procure raw materials and intermediates from abroad. Analyzing the big seven European exporters of manufacturing (Austria, France, Germany, Italy, United Kingdom, Spain, and Hungary), we find that 29% of them on average have outsourced some decisions strategic for companies: only 17% in Italy versus over 40% in Austria, the United Kingdom and Spain, 38% in Germany and 35% in France. Among competitors, therefore, **it seems a reasonable conclusion that qualified, expert personnel can replace industrial might in relations with certain countries, in relations with the financial world, and in formulating commercial strategy**.

Procuring raw materials and intermediates from third parties lets them concentrate on the higher value-added aspects: organization and product marketing (as with agro-foods). What's more, for mechanical engineering a focus on price is not always beneficial, given the importance of non-price competitiveness through quality, personalization and after-sale service. All this should be the basis for a new iTale, with targeted marketing policies and promotional support, as has been the case for other well-known sectors of Made in Italy.

*The value chain is not a ban*k

The organization does not concern only that happens within companies but also what occurs throughout their production chain: more specifically, what actions can be taken to facilitate suppliers? Financial supports to the chain like factoring are still limited: they should be used more, and the chain leader should in turn promote these instruments with the distribution chain. This could help **sidestep the stringent conditions of credit access**, which in recent years have restricted not only the ability of companies to innovate but also their day-to-day relation with the network of companies strategic for producing a piece or supplying a material, especially if they are smaller.

Financial proposal: better "everything ASAP" with one customer or deferred with many?

The peculiar nature of our industrial system has generated successful experiences over the years linked to niche markets, with trade partners of similar size with whom we can grow (or attempt to grow) together. Market globalization has expanded the sources of demand, with Italian companies receiving requests from all corners of the globe. With these new, larger customers, with greater bargaining power, more demanding than traditional customers and less receptive to payment-on-delivery conditions, it is difficult to establish stable, long-lasting

[18] *Source: "Europe's Export Superstars – It's the Organisation!", Bruegel Working Paper, July 2015.*
[19] *Although these data refer to the manufacturing sector as a whole, we feel they are still representative. considering the importance of mechanical engineering.*

relationships. **Along with the sales contract, sellers must be prepared to make a valid financial proposal that will enable customers to begin using the machinery immediately without waiting for complete payment**. It is therefore important to have a financial package, not only technical and commercial, that offers payment terms beyond 24 months with a minimum down payment of 15%. This is where SACE can offer extensive expertise and a network of local and international offices to support companies from the start of negotiations with instruments that permit payment terms of 2, 3, even 5 years in both advanced and riskier countries.

THE OTHER MADE IN ITALY: 12 BILLION REASONS, AN ITALIAN TALE

Between 2009 and 2014 Italian exports of food products and beverages grew at three times the rate of machinery. Machinery contributes € 74 billion each year to our balance of trade: investing in organization, in the production chain, and in the financial proposal means promoting Made in Italy from the roots, acting upstream of value creation. According to SACE projections, machinery exports will grow almost 5% a year through 2018, reaching € 90 billion. And if we promote these industries as we do[20] for downstream products such as foods and beverages-if we strive to tell our iTale-we could obtain an additional € 12 billion in exports in those four years. The target markets? As we have seen, **there are many countries deserving of attention**: there are the principal world importers like the United States, China, Germany, the United Kingdom and France, but also fast-growing markets like Mexico, Thailand, Turkey, Saudi Arabia and Poland; **the important thing is to arrive prepared**. Promoting greater awareness of the other Made in Italy also means making foreign investors more aware of these sectors, as the government has begun to do actively[21]. A new iTale exists: let's try to believe in it more.

PREPARED BY

Luca Moneta and Stefano Gorissen

CONTACTS

Customer service: +39 06 6736000 - info@sace.it

Press Office: +39 06 6736888 - mediarelations@sace.it

[20] *Source: "RE-start - Rapporto Export 2015-2018", SACE, May 2015.*
[21] *Presentation of Deputy Minister Calenda at the 7th Annual Meeting of the'International Forum of Sovereign Wealth Funds.*

ANNEX

TABLE 1. *Values of world imports for the five leading segments**

Segment	Country	Total imports (2014, € millions)	Average growth rate of imports 2009-2014
Pumps and compressors	United Kingdom	3,504	9.1%
	Saudi Arabia	2,033	79.4%
	India	1,739	11.6%
	Turkey	1,540	10.4%
	Peru	320	8.7%
Engines and turbines	Germany	22,164	8.4%
	Thailand	3,676	12.6%
	Poland	3,470	8.5%
	Algeria	1,633	16.8%
	South Africa	1,545	9.3%
Machine tools	United States	22,886	16.0%
	South Korea	11,692	10.0%
	Thailand	3,554	14.9%
	Canada	3,366	11.4%
	Czech Republic	1,636	15.1%
Packaging machinery	China	767	6.3%
	Malaysia	229	19.3%
	Brazil	141	15.7%
	Turkey	115	10.6%
	Chile	55	14.0%
Food processing machinery	Mexico	5,132	15.9%
	Indonesia	2,541	15.7%
	Saudi Arabia	1,988	68.1%
	Ireland	710	13.5%
	Ethiopia	317	22.0%

* Data for Saudi Arabia are 2009-2013 and for Indonesia 2010-2014.

Source: SACE processing of UN Comtrade data