

Chapter 3. The role of supply chains

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DOI: 10.54103/milanoup.180.c268

3.1 Introduction

In recent years, due initially to the pandemic and subsequently to the war in Ukraine, we have witnessed a global economic crisis with a considerable impact on businesses and, in particular, on the SMEs that form the backbone of our economic system.

In these circumstances, supply chains have constituted the Italian route to competitiveness and to the digital and environmental transition of our production system; and it is through supply chains that many small businesses have found the way to grow and create medium-sized manufacturing groups.

Several recent studies have shown that companies that operate as part of a chain enjoy higher-quality governance. In some SMEs this quality may even make up for a lack of spillover from large companies. More structured governance allows SMEs to grow faster, has a considerable influence on capacity for international expansion and also has a positive impact on the adoption of sustainable practices.

Supply chains are accelerators of innovation, and this is our way of working: small or large companies are connected by ties that are very often informal (but no less solid for that), grouped around a product or a service. The system is complex but has the ability to act extremely rapidly, displaying the famous resilience that has allowed our manufacturing sector to recover faster than those of other countries.

Supply chains can also explain the excellent performance of Italian exports, which increased by 19.9% in 2022 (and very probably more in 2023), despite numerous shocks to the system; indeed, the dynamics of Italian exports have proved to be resistant to the global crises of the past few years, both in absolute terms and relative to other leading European exporters.

Italian industry is firmly integrated within international supply chains, with a huge diversity of product type and position within global value chains. In particular, it is well-placed upstream in production chains as a supplier of high-quality semi-finished goods. Diversification and flexibility have allowed Italian companies to suffer relatively fewer of the bottlenecks and asymmetric shocks that have affected international supply chains.

The events of recent years have accelerated the shift in supply chain relations in Italy - already underway for several years - in two directions: reshoring and re-verticalisation.

Indeed, to adapt to market changes and improve their sustainability and resilience, many companies have decided to re-locate their facilities and logistics to their home country in order to gain greater flexibility and control over the quality of their products, and be better prepared for interruptions in their own supply chains.

For example, a recent survey by the Osservatorio Export showed that over a third of manufacturing companies in eastern Veneto have changed at least one strategic supplier in the past two years, with 58.1% of these choosing new suppliers close to home in Italy. The main reason for this change is the availability of suitable suppliers locally, followed by convenience in price terms and reduced risks to supply.

The need to embrace the dual transition - digital and environmental - could also push companies towards a greater degree of formal coordination of their strategic decisions within the chain, in other words towards further re-verticalisation. This is because, in general terms, both require greater information sharing among the various actors upstream and downstream in the chain than in the past, in order to maximise return on investment by strategic use of data relating to production and consumption and - in the case of environmental sustainability - also for reasons of market accountability. Furthermore, growing vulnerability to cyberattacks, which are becoming increasingly common, may lead some parties in the chain to a desire to share data transmission standards and methods in order to enhance digital security and resilience to shock. From this perspective, cybersecurity is no longer an option. Small businesses cannot even think of going international, becoming part of a chain and handling employee and customer data without appropriate protection from cyber threats.

The goal that has guided Confindustria's actions in recent years is to embark on a course within the Italian economy that will see supply chains as increasingly integrated and dynamic ecosystems made up of connected, interdependent companies: we firmly believe that considering growth and transformation processes (but also corrections and incentives) as interventions that involve small and large companies connected and integrated by the sharing and dividing of stages in the production process, services and know-how, is undoubtedly ambitious, but essential today for the future of our economy.

More generally there is a need to increase coordination throughout supply chains by giving the most strategic (and structured) suppliers the implicit task of becoming managers of sub-systems, and also encouraging aggregations of smaller companies in order to protect artisan capacity while at the same time supporting it with organisational and financial development. Such a process is already happening, for example, in the luxury clothing sector, where many

SMEs are seeking to establish a few larger groups. Another step towards the future and the survival of supply chains is the need to strengthen those companies that are fragile but strategic. The stronger the weakest link, the stronger the chain. The route to greater strength includes measures implemented for years by Piccola Industria Confindustria geared to cultural development in entrepreneurs; indeed, it is essential to abandon the idea that ‘small is beautiful’: the goal of small business owners should be growth.

From the supply chain angle, we have seen that as a company increases in size, it also increases its ability to influence the price, quantity and/or quality of the product or service it buys or sells and, consequently, its position in the chain.

Supply chains are drivers of technology and digitalisation, and for this reason it is necessary to act on all the factors that boost their role: ESG transition, density and size of company, capitalisation, research infrastructure and training.

3.2 The importance of digitalisation

According to the latest DESI report, Italy is only in 18th place among EU member states; in 2020 it was in 25th place. 60% of SMEs have achieved at least a basic level of digital intensity and, in particular, the use of cloud-based services has seen considerable growth. These data indicate that, although the situation has improved in recent years, partly due to the pandemic, which accelerated the process, there is still much to be done, especially in the area of digital skills, in which Italy - where 46% of the population have basic knowledge - lies in fourth to last place in the EU. The EU itself is committed to digitalisation and has allocated 127 billion euros to reform and investment in the digital sector.

To be competitive, an SME needs to set itself pragmatic targets for efficiency and profitability geared to improving production and the balance sheet; and to do this it needs to draw on a series of digital technologies, not only to coordinate its various production processes, but also to interconnect with the main functions of the supply chain. With digital technologies, companies become more flexible and more able to adjust their facilities to produce smaller batches in response to their customers’ specific needs. Thanks to digitalisation, words that until recently appeared oxymorons have become inseparable: quality and speed, economies of scale and bespoke production.

The numerous digital technologies poised to enter the scene are based on the Internet of Things (IoT), which collects data from appliances and processes which can then be analysed in real time using predictive Machine Learning tools, ultimately leading to the use of Artificial Intelligence (AI) to automate various processes that can be carried out autonomously.

In these new operational circumstances, the supply system does not happen independently from all the other operations, but in line with them, drawing on

end-to-end visibility and with the ability to make use of all data, analyses and forecasts; and on a continuous self-learning process over the whole system.

However, it is essential that all companies in the chain are involved in this process, and therefore a supply-chain based digital strategy must be developed. For this reason, Confindustria is carrying out a major awareness-raising and training programme to engage the many SMEs that make up the Italian industrial fabric and that need further support to embark on their digitalisation journey and make plans to use digital technologies in their production processes.

A key source of support is the Confindustria Digital Innovation Hub network (DIH), set up to assist companies with digital transformation, helping them to assess their digital maturity and directing them to bodies offering innovation, technology centres and competency centres where they can see the concrete application of technology.

To raise SMEs' awareness of AI as a tool to increase productivity and reduce the dimensional gap, Piccola Industria Confindustria organised a series of talks, "Artificial Intelligence and SMEs: experiences of a present future", in partnership with Anitec-Assinform and in collaboration with Confindustria local associations and DIHs. The talks focused on the experiences of companies and the operational applications of AI, as well as analysis of risks and critical issues, in order to encourage its informed and progressive use. The seven events were attended by over 1000 entrepreneurs, demonstrating that the issue of AI is now a priority for our businesses.

For SMEs, this is a challenging transformation, but company size is certainly not a limit in terms of digitalisation. There are many examples of pioneering SMEs whose ability to innovate has made them essential links in supply chains that are strategic to the manufacturing industry.