

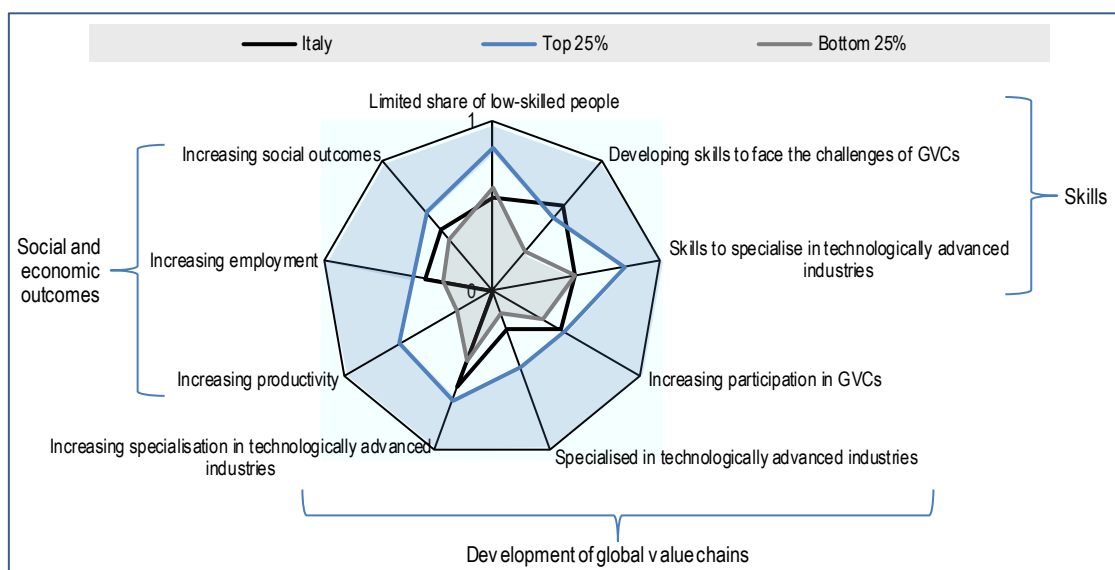
SKILLS OUTLOOK 2017 SKILLS AND GLOBAL VALUE CHAINS

How does Italy compare?

OECD Skills Outlook 2017

The *OECD Skills Outlook 2017* shows that skills matter for global value chains. The report presents new analyses based on the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), and the Trade in Value Added Database. It develops a Scoreboard on Skills and Global Value Chains with the objective to measure the extent to which countries have been able to make the most of GVCs through the skills of their populations in terms of skills, global value chains, and social and economic outcomes. It also explains what countries would need to do to specialise in technologically advanced industries.

Figure 1. Scoreboard on skills and global value chains



Source: OECD (2017), *OECD Skills Outlook 2017, Skills and Global Value Chains*, <http://dx.doi.org/10.1787/9789264273351-en>.

- Since the 2000s, Italy has increased its participation in global value chains more than many other OECD countries, but participation remains below the OECD average. One in three jobs in the business sector of Italy is sustained by foreign final demand, because of direct links with trade partners or indirect ones when products reach final consumers through exports of third countries.
- Italy specialises in technologically advanced industries – some complex business services and medium/high-tech manufacturing industries, but this specialisation pattern is not well supported by the country's skills characteristics. In particular, Italy's top performers in

literacy and numeracy have lower skills than the OECD average, which makes it difficult for the country to develop a comparative advantage in the most technologically advanced industries, as these industries require workers with strong cognitive skills.

- Increased participation in global value chains has been accompanied by economic and social progress at or below the OECD average over the last decade. The employment rate of older workers has increased, but labour market uncertainty has increased too, along with the share of youth neither in employment nor in education and training. Productivity growth has been slow.
- To ensure that Italy benefits economically and socially from its participation in global markets, the country needs to equip its population with skills mixes of both cognitive and social and emotional skills, achieve more equity in learning outcomes, and encourage adults to continuously develop and adapt their skills. The Survey of Adult Skills (PIAAC) shows that 38% of adults are low performers in either literacy or numeracy skills, significantly above the OECD average. In addition, the share of the population with tertiary education remains below the OECD average.

Table 1. Specialisation opportunities in technologically advanced industries

From the alignment of countries’ skills characteristics with industries’ skills requirements

		Medium/high-tech manufacturing			High-tech manufacturing			Business services (more complex)				
		Machinery and equipment n.e.c	Electrical machinery, apparatus n.e.c	Motor vehicles, trailers, semi-trailers	Chemicals and chemical products	Computer, electronic, and optical	Other transport equipment	Finance and insurance	Real estate activities	Renting of machinery, equipment	Computer and related activities	R&D, and other business services
specialisation in 2011	observed	○	○						○		○	○
specialisation trend 2000-11	increased		●			●		●	●	●	●	●
	decreased	●		●	●		●					

Note: The dots in the table show whether countries have increased (black circle) or decreased (grey circle) their revealed comparative advantages over the period 2000-11. Revealed comparative advantages (white circle) show the extent to which a country is specialised in a certain industry within GVCs (or receives more income from its exports in this industry than other countries).

Source: OECD (2017), *OECD Skills Outlook 2017, Skills and Global Value Chains*, <http://dx.doi.org/10.1787/9789264273351-en>.

Key policy messages

Equip graduates with strong mixes of relevant skills and reliable qualifications

- Italy’s workers have relatively strong readiness to learn but some of the lowest scores in literacy and numeracy among countries covered by the Survey of Adult Skills. They also perform ICT, STEM, managing, communication and marketing and accounting tasks on the job much less frequently than workers in other OECD countries, suggesting they could be better equipped with these skills – skills that are highly valued by employers. To specialise in the most technologically advanced industries, Italy needs to better equip its workers with a mix of cognitive skills and social and emotional skills.
- To specialise in most technologically advanced industries, countries need pools of workers with qualifications that reliably reflect what they can do. Italy’s share of higher education graduates is below the OECD average and their degrees do not always translate into skills proficiency: about 36% of Italy’s recent graduates have numeracy skills below level 2. Learning outcomes of 15-year-old students in Italy also vary, although the amount of educational performance that is explained by socio-economic background is smaller than on average across OECD countries and has decreased between 2006 and 2015. In addition,

gender differences in favour of boys in science and mathematics are particularly marked in Italy. All these skills discrepancies translate into the uneven learning outcomes for Italy's adults.

- To equip all graduates with a strong skills mix, the Skills Outlook emphasises the importance of high-quality pre-primary education for all to give every child a strong start to their education and careers. In addition, innovative teaching methods in schools and a stronger teacher support for all students can help them attain the relevant skills, both cognitive and social and emotional ones. Italy also needs to increase access to university and vocational education and training programmes and improve their quality.

Continuously develop and adapt adults' skills

- Participation in adult learning in Italy is significantly below the OECD average, according to the Survey of Adult Skills. Indeed, Italy's low-skilled adults have some of the lowest participation rates among the OECD countries, participating in the Survey of Adult Skills.
- Italy's low-skilled adults and workers that withdraw from the labour market face a vicious cycle in which they are less likely to benefit from training and therefore their skills remain weak. Policies need to better support all workers at risk of displacement and ensure quality of adult learning.

Make the best use of the skills pool

- Data suggest that best management practices are used unevenly across firms in Italy. These practices can be a powerful tool for using effectively the skills assets, adjusting them to new needs, and thereby giving a country a comparative advantage in GVCs.

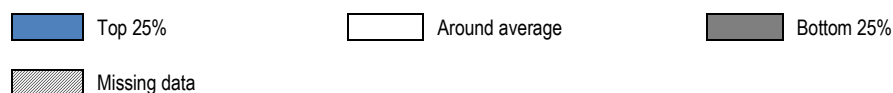
Participate in the global network of education, training and innovation

- Italy seems to participate less than many other countries in the global network of education, training and innovation. Patenting activities run in collaboration with international partners along with the scientific publications co-authored with researchers from abroad were below the OECD average in 2012. The international mobility of scientific authors in Italy is also relatively low. In addition, Italy has not attracted many foreign students and researchers, which can be linked to the limited provision of tertiary education programmes taught in English.
- Many policies affect countries' capacities to be part of global education, innovation and research networks, underlining the need to adopt a comprehensive approach.

Reference

OECD (2017), *OECD Skills Outlook 2017, Skills and Global Value Chains*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264273351-en>.

Table A.1. Scoreboard on skills and global value chains



	Skills			Development of GVCs			Economic and Social Outcomes		
	A limited share of low-skilled people	Developing skills to face the challenges of GVCs	Skills to specialise in tech. advanced industries	Increasing participation in GVCs	Specialised in tech. advanced industries	Increasing specialisation in tech. advanced industries	Increasing productivity	Increasing employment	Improving social outcomes
Australia	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Austria	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%
Belgium	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%
Canada	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Chile	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Missing data
Czech Republic	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Bottom 25%	Bottom 25%
Denmark	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Estonia	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Bottom 25%	Bottom 25%
Finland	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
France	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Germany	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%
Greece	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Hungary	Missing data	Bottom 25%	Missing data	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Bottom 25%
Iceland	Missing data	Bottom 25%	Missing data	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%
Ireland	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%
Israel	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%
Italy	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Japan	Top 25%	Bottom 25%	Top 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Korea	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Top 25%
Luxembourg	Missing data	Bottom 25%	Missing data	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%
Mexico	Missing data	Bottom 25%	Missing data	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Netherlands	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%
New Zealand	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%
Norway	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Poland	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Top 25%	Bottom 25%	Top 25%
Portugal	Missing data	Top 25%	Missing data	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%
Slovak Rep.	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Top 25%	Bottom 25%
Slovenia	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Spain	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%
Sweden	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
Switzerland	Missing data	Bottom 25%	Missing data	Bottom 25%	Top 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%
Turkey	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%
United Kingdom	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%
United States	Bottom 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%

Note: indicators are described in Box 1.1 of the report. The scoreboard shows for each sub-category, countries that perform in the top 25%, bottom 25%, and those around the OECD average. For instance, Finland is among the OECD countries that have the lowest share of low-skilled people, have not developed skills much to face the challenges of GVCs but have the skills to specialise in technologically advanced industries, and have not increased much their specialisation in technologically advanced industries. It performs around the average for the other sub-categories.

Source: OECD (2017), *OECD Skills Outlook 2017, Skills and Global Value Chains*, <http://dx.doi.org/10.1787/9789264273351-en>.