COUNTRY NOTE

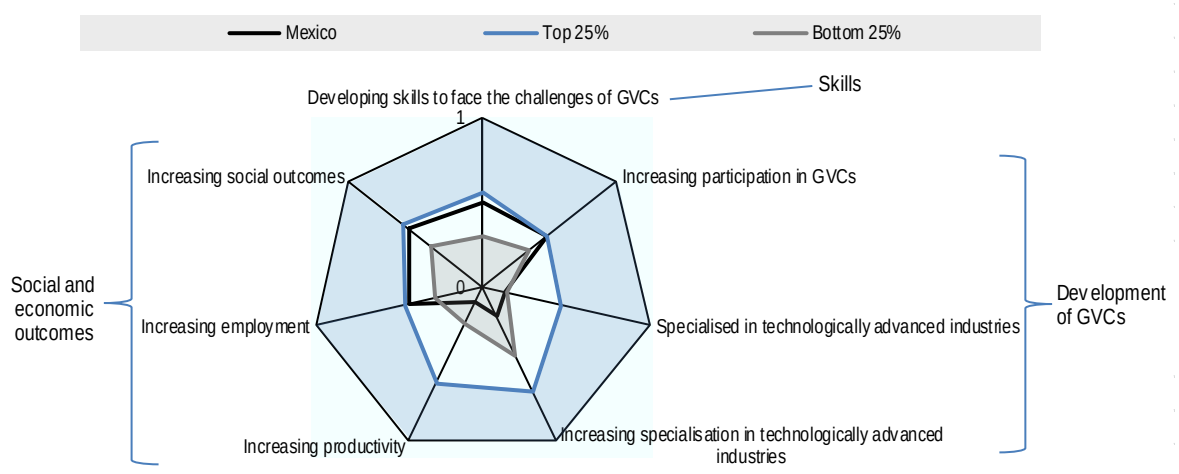
SKILLS OUTLOOK 2017
SKILLS AND GLOBAL VALUE CHAINS

How does Mexico 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 (2017a), *OECD Skills Outlook 2017, Skills and Global Value Chains*, http://dx.doi.org/10.1787/9789264273351-en.

- Since the 2000s, Mexico has increased its participation in global value chains, but participation remains relatively low (Figure 1, Table A.1; Report, pp. 41-44). One in five jobs in the business sector of Mexico 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 (OECD, 2017a, Figure 2.9).
- Mexico specialises in few medium/high-tech manufacturing industries and is slightly increasing specialisation in several other technologically advanced industries, but specialisation in technologically advanced industries, including services, remains low (Figure 1, Table 1).

- Increased participation in global value chains has been accompanied by some improvement in social and employment outcomes in Mexico over the last decade (Figure 1, Table A.1). Changes in employment have been at the OECD average and income inequality has decreased, but it remains the highest among OECD countries. Productivity growth has been below the OECD average.
- Mexico's population is low-skilled compared to other OECD countries. To increase participation in global value chains, specialise in the technologically advanced industries and ensure that the country fully benefits economically and socially from its participation in global markets, Mexico needs to equip its population with skills mixes of strong cognitive and social and emotional skills, achieve greater equity in learning outcomes, and encourage adults to continuously develop and adapt their skills.

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).

Because Mexico has not participated in the Survey of Adult Skills (PIAAC), specialisation opportunities cannot be computed.

Source: OECD (2017a), *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

- To participate in GVCs and progressively specialise in more technologically advanced industries, Mexico needs to better equip all its youth with a mix of cognitive skills, ICT skills and social emotional skills such as managing, communicating and marketing skills that are highly valued by employers, and strong readiness to learn. Mexico's 15-year-olds perform below the OECD average in science, reading and mathematics and their performance has not improved over the last decade (OECD, 2016). In addition, the share of 15-19 year-olds who complete upper secondary education and the enrolment rate in tertiary education are below the OECD average (OECD, 2017b).
- To specialise in most technologically advanced industries, countries need pools of workers with qualifications that reliably reflect what they can do. Educational outcomes in Mexico vary greatly, although the amount of educational performance that is explained by socio-economic background has decreased between 2006 and 2015 (OECD, 2017b).
- To equip all graduates with a strong skills mix and reliable qualifications, 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. Mexico also needs to increase access to tertiary education and improve its quality while better involving employers in vocational education and training programmes.

Continuously develop and adapt adults' skills

- Mexico still has a comparatively low-skilled labour force and its firms invest little in workers' training (OECD, 2017b).
- Workers who withdraw from the labour market and those who are in the informal market risk a vicious cycle in which they do not 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 in Mexico (OECD, 2017a, Figure 4.9). However, job quality is far below the OECD average (OECD, 2017a, Figure 2.23). Good management practices are a powerful tool for using effectively the skills assets, adjusting them to new needs, and thereby giving a country a comparative advantage in GVCs.
- The prevalence of temporary contracts and informal work hinder the effective use of skills at work, as employers will be less likely to invest in workers with whom they have a weak employment relationship. A better recognition of skills acquired informally can help firms identify the skills that workers actually possess, which can improve skills matches within the firm and across occupations and sectors.

Participate in the global network of education, training and innovation

- Mexico does not appear to be much involved in the global network of education, training and innovation, producing research and innovation outputs relevant for the international market (OECD, 2017a, pp. 144-45). The country does not attract many international students nor does it provide funding incentives for international co-operation. But the country's patenting activities run in collaboration with international partners and scientific publications co-authored with researchers from abroad were above or at the OECD average in 2012.

Reference

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

OECD (2017b), *OECD Skills Strategy Diagnostic Report: Mexico*, OECD, Paris, http://www.oecd.org/mexico/OECD-Skills-Strategy-Diagnostic-Report-Mexico.pdf.

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264266490-en.

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

Top 25% | Around average | Bottom 25% | Missing data

	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%			
Austria								Top 25%	
Belgium		Bottom 25%	Top 25%	Bottom 25%	Top 25%		Bottom 25%		Top 25%
Canada									
Chile	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%	Top 25%	Top 25%	Missing data
Czech Republic				Bottom 25%		Top 25%	Top 25%		
Denmark							Bottom 25%	Bottom 25%	Bottom 25%
Estonia		Top 25%		Bottom 25%		Top 25%	Top 25%		
Finland	Top 25%	Bottom 25%	Top 25%			Bottom 25%			
France						Bottom 25%			
Germany				Top 25%				Top 25%	Top 25%
Greece	Bottom 25%		Bottom 25%		Bottom 25%		Bottom 25%	Bottom 25%	
Hungary	Missing data		Missing data				Top 25%	Top 25%	
Iceland	Missing data	Bottom 25%	Missing data	Top 25%	Bottom 25%			Bottom 25%	Top 25%
Ireland					Top 25%		Top 25%	Bottom 25%	Bottom 25%
Israel	Bottom 25%	Top 25%	Bottom 25%		Top 25%			Top 25%	Top 25%
Italy	Bottom 25%	Top 25%	Bottom 25%				Bottom 25%		
Japan	Top 25%		Top 25%	Top 25%		Bottom 25%		Bottom 25%	
Korea			Top 25%	Top 25%	Top 25%		Top 25%		Top 25%
Luxembourg	Missing data		Missing data	Bottom 25%	Top 25%		Bottom 25%	Top 25%	Bottom 25%
Mexico	Missing data		Missing data		Bottom 25%	Bottom 25%	Bottom 25%		
Netherlands	Top 25%	Bottom 25%	Top 25%	Bottom 25%		Top 25%	Bottom 25%		Bottom 25%
New Zealand	Top 25%	Bottom 25%		Bottom 25%	Bottom 25%	Top 25%			
Norway	Top 25%		Top 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	Bottom 25%	
Poland		Top 25%		Top 25%		Top 25%	Top 25%		Top 25%
Portugal	Missing data	Top 25%	Missing data					Bottom 25%	Top 25%
Slovak Rep.		Bottom 25%		Bottom 25%		Top 25%	Top 25%	Top 25%	
Slovenia	Bottom 25%	Top 25%	Bottom 25%						Bottom 25%
Spain	Bottom 25%		Bottom 25%			Top 25%			Bottom 25%
Sweden	Top 25%	Bottom 25%	Top 25%						Bottom 25%
Switzerland	Missing data		Missing data		Top 25%	Top 25%			
Turkey	Bottom 25%	Top 25%	Bottom 25%	Top 25%	Bottom 25%	Bottom 25%		Top 25%	Top 25%
United Kingdom					Top 25%				
United States				Top 25%	Top 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 (2017a), *OECD Skills Outlook 2017, Skills and Global Value Chains,* http://dx.doi.org/10.1787/9789264273351-en.