

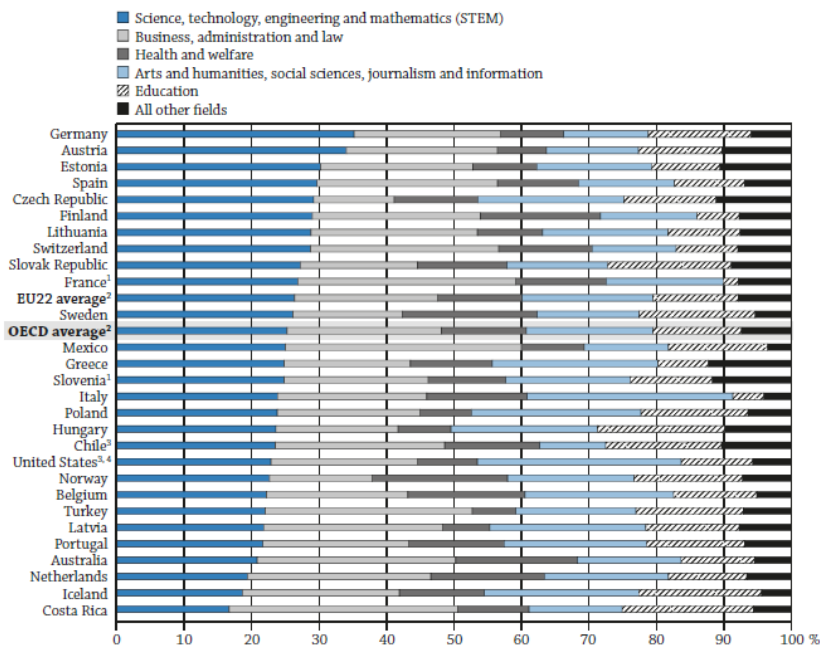
## EDUCATION AT A GLANCE 2017

*Education at a Glance: OECD Indicators* is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in the 35 OECD countries and a number of partner countries.

### Spain

- The fields of science, technology, engineering and mathematics (**STEM**) are considered nowadays a key to economic growth and innovation. **In Spain, 26% of tertiary-educated individuals studied these fields**, one of the largest shares across OECD countries.
- Higher educational attainment increases employment prospects and reduces the risk of being unemployed, but **35% of young adults (25-34 year-olds) in Spain have not achieved an upper secondary education**, one of the highest rates among OECD countries, although there have been a large improvement of 23 percentage points compared to the share among older adults (55-64 year-olds).
- **Spain has a low share of young adults enrolled in vocational education and training programmes** compared to other OECD countries (12% versus 25%) despite the fact that those with a vocational qualification have an employment rate of 74%, compared with 63% for those with a general qualification.
- **Spain has nearly full enrolment in early childhood education and care**, at 95% for 3-year-olds and 97% for 4-year-olds, **well above the OECD averages** of 78% and 87% respectively.

**Figure 1. Fields of study among tertiary-educated 25-64 year-olds (2016)**



**Note:** Science, technology, engineering and mathematics (STEM) comprise the ISCED-F 2013 fields of natural sciences, mathematics and statistics, information and communication technologies, and engineering, manufacturing and construction.

1. The age group refers to 25-34 year-olds.


2. The OECD and EU22 averages exclude France and Slovenia.

3. Year of reference differs from 2016. Refer to the source table for more details.

4. Data refer to bachelor's degree fields, even for those with additional tertiary degrees.

Countries are ranked in descending order of the field of STEM.

**Source:** OECD (2017), Table A1.3. See *Source* section for more information and Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

**StatLink**  <http://dx.doi.org/10.1787/888933556938>

## **A science-related tertiary education pays off in the labour market, but fields of study are largely gender biased in Spain and across OECD countries**

- In 2015, 26% of Spain's tertiary-level graduates completed qualifications in the fields of science, technology, engineering and mathematics (STEM). This is higher than the average share across OECD countries (23%) and the difference is even greater among graduates from doctoral programmes: 50%, compared with 43% for OECD countries.
- On average across OECD countries, 26% of new entrants to tertiary education chose one of the STEM fields of study in 2015, with the largest share selecting engineering, manufacturing and construction (15%). The percentages in Spain were close to the OECD average, at 27% and 16% respectively.
- The choice of field of study is strongly gender biased in Spain as it is the case across the OECD. In 2015, 24% of new entrants to engineering, manufacturing and construction tertiary programmes were women in Spain, the same as the average across OECD countries. The share of women in information and communication technologies (ICT) was only 12%, below the OECD average of 19%. However, as in most OECD countries, women are largely over-represented in the fields of education (Spain, 79%; OECD average, 78%) and health and welfare (Spain, 72%; OECD average, 76%). Public authorities in Spain aim to reduce the gender bias by offering students information and guidance to ensure the equality of opportunities between women and men when choosing a field of study.
- The STEM fields have been seen as especially important for fostering innovation and economic growth, and they were among the most popular fields of study among Spanish tertiary-educated adults, accounting for 30% of 25-64 year-olds in 2016 (Figure 1), followed by business, administration and law (27%). This is slightly higher than the OECD averages of 25% and 23% respectively.
- Employment prospects in Spain for 25-64 year-olds with a STEM tertiary education are better than for tertiary-educated adults overall, who have an 80% employment rate compared with 84% on average for OECD countries. In 2016, the average employment rate was 84% for ICT graduates (OECD average, 88%) and 82% for engineering, manufacturing and construction graduates (OECD average, 87%). Similarly, the employment rate for health and welfare graduates was 86%, almost the same as the average across OECD countries (87%). Employment prospects for graduates in business, administration and law are the same as the overall average employment prospects in both Spain and the OECD (80% and 85%), but employment rates are slightly lower for graduates in education (Spain, 77%; OECD average, 83%) and in arts and humanities, social sciences, journalism and information (Spain, 77%; OECD average 81%).

## **High levels of education and skills are key to better socio-economic outcomes**

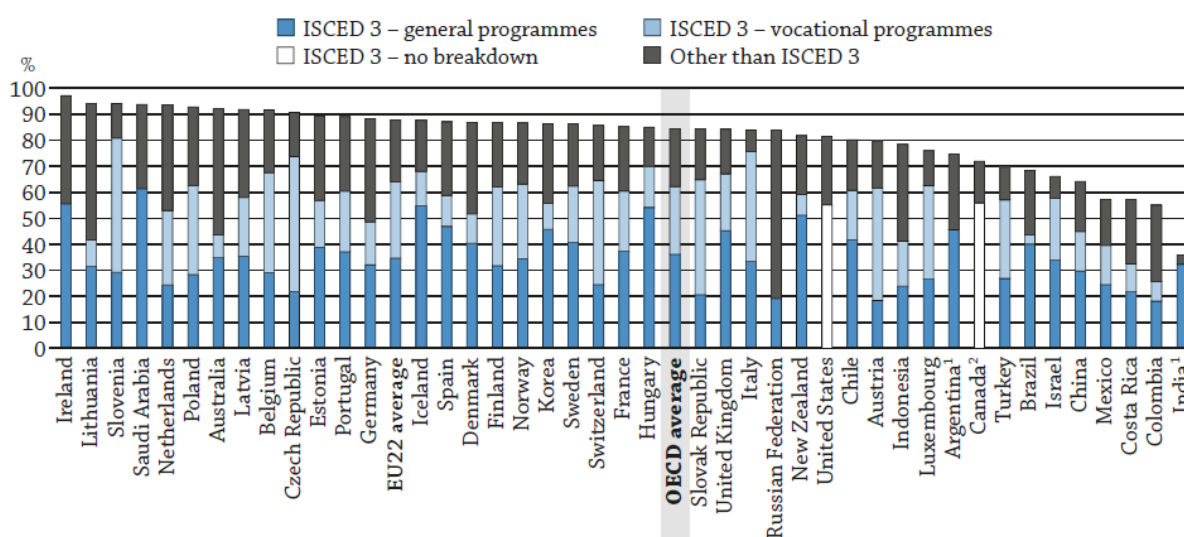
- In Spain, 35% of 25-34 year-olds have not attained an upper secondary qualification, more than twice the OECD average of 16%, 24% hold an upper secondary or post-secondary non-tertiary qualification (OECD average, 42%), and 41% a tertiary qualification (OECD average, 43%). In Spain, these numbers have not changed substantially from the 2005 figures; nevertheless there is a clear improvement of 23 percentage points between the older (55-64 year-olds) and younger adults (25-34 year-olds) without an upper secondary qualification.
- Higher educational attainment increases employment prospects. In Spain, the employment rate for tertiary-educated young adults is 76%, compared with 68% for those with an upper secondary or post-secondary non-tertiary education qualification, and only 60% for those who have not completed upper secondary education. On average across OECD countries the equivalent employment rates are 83%, 76% and 59%, respectively.
- People with the lowest educational qualifications are also at greater risk of being unemployed. In Spain, the unemployment rates for young adults who have not completed upper secondary education is about 30%, compared with 21% for those with upper secondary education and 16% for tertiary-educated individuals. On average across OECD countries, 17% of younger adults who have not completed upper secondary education are unemployed. This is almost twice the rate for individuals with higher educational qualifications, which averages 9% for those with an upper-secondary or post-secondary non-tertiary education and 7% among the tertiary-educated.
- Higher levels of education pay off in higher earnings too. In Spain, 25-64 year-olds with a tertiary degree have an earnings advantage of 53% over those with upper secondary education, while those with below upper secondary education level have an earnings disadvantage of 29%. The average earnings advantage for tertiary-educated individuals across OECD countries is 56%, while those with an educational attainment below upper secondary suffer an earnings disadvantage of 22%.
- Out of the 30 OECD countries and economies with data on tuition fees, Spain is among the two thirds charging tuition fees at bachelor or equivalent level but among the 10 that charge fees below USD 4 000. In Australia, Canada, Chile, Japan, Korea, New Zealand and the United States they are much higher – they can exceed USD 4 000 and reach over USD 8 000 per year. In Spain, although the Spanish basic legislation establish the same

lower and higher limits for both bachelor and masters tuition fees: master’s degrees cost over 50% more than bachelor’s degrees on average across all fields of education; nevertheless, the fees are among the lowest across countries that charge tuition fees at this level of education.

## Vocational programmes provide a valuable route towards accessing the labour market or continuing in education

- Younger adults (25-34 year-olds) in Spain who have completed upper secondary vocational programmes as their highest educational attainment have higher employment rates (74%) than those with a general qualification (63%). This is also the case across OECD countries, with average rates of 80% and 70% respectively.
- Despite this, Spain has one of the lowest enrolment rates in vocational education and training (VET) across OECD countries (Figure 2). Almost half (47%) of 15-19 year-olds are enrolled in upper secondary general programmes (OECD average, 37%) and only 12% in upper secondary vocational programmes (OECD average, 25%). Additionally, 28% of 15-19 year-olds are enrolled in education programmes at a level other than ISCED 3 (OECD average, 24%). These include those making the transition to tertiary education: In Spain, a 36% of 18 year-olds and a 46% of 19 year-olds are enrolled in tertiary education programmes (OECD averages are 17% and 33% respectively). Overall, 87% of 15-19 year-olds in Spain are enrolled in education (OECD average, 85%).
- In Spain, the percentage of 18-24 year-olds still in education was 58% in 2016. An 18% of these young adults were not in education but employed, and those neither employed nor in education or training (NEETs) made up the 23% of the 18-24 year-olds. On average across OECD countries, 52% of 18-24 year-olds are in education, 32% are not in education but are employed, and 15% are NEETs.
- Countries with well-established VET and apprenticeship programmes have been more effective in holding the line on youth unemployment. In Spain, only 0.4% of upper secondary students are enrolled in education programmes combining school and work, a significantly lower percentage than the OECD average of 17%. Nevertheless, in the case of Spain the share will be higher if we consider 20% as the threshold of time at work, instead of the 25% threshold that it used in this analysis.

Figure 2. Enrolment rates of 15-19 year-olds, by programme level and orientation (2015)



1. Year of reference 2014.

2. Excludes post-secondary non-tertiary education.

Countries are ranked in descending order of total enrolment.

Source: OECD (2017), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

StatLink <http://dx.doi.org/10.1787/888933558192>

## Access to early childhood education gives Spanish children a strong start

- In Spain, early childhood education shows nearly full enrolment: 95% of 3-year-olds and 97% of 4-year-olds are enrolled in early childhood education. On average across OECD countries, the rates are 78% for 3-year-olds and 87% for 4-year-olds.
- In Spain, 51% of children in early childhood educational development programmes are attending public institutions, rising to 68% for pre-primary programmes. Across OECD countries, the average rates are 45% and 67% respectively.
- Expenditure on early childhood education in Spain accounts for an average of 0.8% of GDP, the same as the average for OECD countries. Public expenditure accounts for 75% of all resources allocated to early childhood education (OECD average, 82%).

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### Note regarding data from Israel


The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

### References

OECD (2017), *Education at a Glance 2017: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2017-en>.

For more information on **Education at a Glance 2017** and to access the full set of Indicators, visit [www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm).

**Subnational data** are available at <http://nces.ed.gov/surveys/annualreports/oecd/index.asp>.

**Updated data can be found on line at** [OECD.Stat](http://dx.doi.org/10.1787/eag-data-en) as well as by following the **StatLinks**  under the tables and charts in the publication <http://dx.doi.org/10.1787/eag-data-en>.

**Explore, compare and visualise more data and analysis using:**  **EducationGPS**  
<http://gpseducation.oecd.org/CountryProfile?primaryCountry=ESP&treshold=10&topic=EO>.

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## Key Facts for Spain in Education at a Glance 2017

Source	Main topics in <i>Education at a Glance</i>	Spain		OECD average		EU22 average	
<b>Fields of study</b>							
<b>Graduates in upper secondary vocational programmes</b>		<b>2015</b>					
		%	% Women	%	% Women	%	% Women
Table A2.1	Business, administration and law	12%	65%	20%	66%	19%	66%
	Engineering, manufacturing and construction	16%	7%	34%	12%	33%	11%
	Health and welfare	21%	74%	12%	82%	12%	82%
	Services	11%	52%	17%	60%	19%	59%
<b>New entrants to tertiary education</b>		<b>2015</b>					
		%	% Women	%	% Women	%	% Women
Table C3.1	Education	11%	79%	9%	78%	9%	79%
	Business, administration and law	20%	55%	23%	54%	23%	57%
	Engineering, manufacturing and construction	15%	24%	16%	24%	15%	25%
<b>Tertiary students enrolled, by mobility status</b>		<b>2015</b>					
		International students <sup>1</sup>	National students	International students <sup>1</sup>	National students	International students <sup>1</sup>	National students
Table C4.2.	Education	1%	12%	3%	8%	3%	8%
	Business, administration and law	3%	21%	27%	23%	26%	22%
	Engineering, manufacturing and construction	3%	16%	17%	12%	17%	15%
<b>Tertiary-educated 25-64 year-olds</b>		<b>2016</b>					
Table A1.3	Education	10%		13%		13%	
	Business, administration and law	27%		23%		21%	
	Engineering, manufacturing and construction	17%		17%		18%	
<b>Employment rate of tertiary-educated 25-64 year-olds</b>		<b>2016</b>					
Table A5.3	Education	77%		83%		83%	
	Business, administration and law	80%		85%		85%	
	Engineering, manufacturing and construction	82%		87%		86%	
<b>Early childhood education</b>							
<b>Enrolment rates in early childhood education at age 3</b>		<b>2015</b>					
Table C2.1	ISCED 01 and 02	95%		78%		80%	
<b>Expenditure on all early childhood educational institutions</b>		<b>2014</b>					
Table C2.3	As a percentage of GDP	0.8%		0.8%		0.8%	
	Proportions of total expenditure from public sources	75%		82%		85%	
<b>Vocational education and training (VET)</b>							
<b>Enrolment in upper secondary education, by programme orientation</b>		<b>2015</b>					
		General	Vocational	General	Vocational	General	Vocational
Table C1.3	Enrolment rate among 15-19 year-olds	47%	12%	37%	25%	35%	29%
<b>Graduation rates, by programme orientation</b>		<b>2015</b>					
		General	Vocational	General	Vocational	General	Vocational
Table A2.2	Upper secondary education - all ages	53%	30%	54%	44%	50%	49%
<b>Employment rate, by programme orientation</b>		<b>2016</b>					
		General	Vocational	General	Vocational	General	Vocational
Figure A5.3.	25-34 year-olds with upper secondary or post-secondary non-tertiary education as their highest educational attainment level	63%	74%	70%	80%	69%	79%
<b>Tertiary education</b>							
<b>Share of international or foreign students, by level of tertiary education</b>		<b>2015</b>					
Table C4.1.	Bachelor's or equivalent	1%		4%		6%	
	Master's or equivalent	7%		12%		12%	
	Doctoral or equivalent	**		26%		22%	
	All tertiary levels of education	3%		6%		8%	
<b>Educational attainment of 25-64 year-olds</b>		<b>2016</b>					
Table A1.1	Short-cycle tertiary	11%		8%		6%	
	Bachelor's or equivalent	10%		16%		13%	
	Master's or equivalent	14%		12%		14%	
	Doctoral or equivalent	1%		1%		1%	
<b>Employment rate of 25-64 year-olds, by educational attainment</b>		<b>2016</b>					
Table A5.1	Short-cycle tertiary	76%		81%		81%	
	Bachelor's or equivalent	79%		83%		82%	
	Master's or equivalent	82%		87%		87%	
	Doctoral or equivalent	89%		91%		91%	
	All tertiary levels of education	80%		84%		84%	
<b>Relative earnings of full-time full-year 25-64 year-old workers, by educational attainment (upper secondary education = 100)</b>		<b>2015</b>					
Table A6.1	Short-cycle tertiary	**		122		124	
	Bachelor's or equivalent	**		146		138	
	Master's, doctoral or equivalent	**		198		177	
	All tertiary levels of education	153		156		153	

## Spain - Country Note - Education at a Glance 2017: OECD Indicators

Source	Main topics in <i>Education at a Glance</i>	Spain		OECD average		EU22 average	
<b>Adult education and learning</b>							
<b>Participation of 25-64 year-olds in adult education<sup>2</sup></b>							
		<b>2012</b>		<b>2012<sup>3</sup></b>		<b>2012</b>	
Table C6.1a	Participation in formal education only	4%		4%		n.a.	
	Participation in non-formal education only	34%		39%		n.a.	
	Participation in both formal and non-formal education	8%		7%		n.a.	
	No participation in adult education	53%		50%		n.a.	
<b>Financial investment in education</b>							
<b>Annual expenditure per student, by level of education (in equivalent USD, using PPPs)</b>							
		<b>2014</b>					
Table B1.1	Primary education	USD 6 970		USD 8 733		USD 8 803	
	Secondary education	USD 8 528		USD 10 106		USD 10 360	
	Tertiary (including R&D activities)	USD 12 489		USD 16 143		USD 16 164	
<b>Total expenditure on primary to tertiary educational institutions</b>							
		<b>2014</b>					
Table B2.1	As a percentage of GDP	4.3%		5.2%		4.9%	
<b>Total public expenditure on primary to tertiary education</b>							
		<b>2014</b>					
Table B4.1	As a percentage of total public expenditure	8.2%		11.3%		9.9%	
<b>Teachers</b>							
<b>Actual salaries of teachers in public institutions relative to wages of full-time, full-year workers with tertiary education</b>							
		<b>2015</b>					
Table D3.2a	Pre-primary school teachers	**		0.78		0.79	
	Primary school teachers	**		0.85		0.86	
	Lower secondary school teachers (general programmes)	**		0.88		0.90	
	Upper secondary school teachers (general programmes)	**		0.94		0.96	
<b>Annual statutory salaries of teachers in public institutions, based on typical qualifications, at different points in teachers' careers (in equivalent USD, using PPPs)</b>							
		<b>2015</b>					
		<b>Starting salary</b>	<b>Salary after 15 years of experience</b>	<b>Starting salary</b>	<b>Salary after 15 years of experience</b>	<b>Starting salary</b>	<b>Salary after 15 years of experience</b>
Table D3.1a	Pre-primary school teachers	USD 37 609	USD 43 304	USD 29 636	USD 39 227	USD 28 726	USD 38 487
	Primary school teachers	USD 37 609	USD 43 304	USD 30 838	USD 42 864	USD 30 080	USD 42 049
	Lower secondary school teachers (general programmes)	USD 42 002	USD 48 336	USD 32 202	USD 44 623	USD 31 498	USD 43 989
	Upper secondary school teachers (general programmes)	USD 42 002	USD 48 336	USD 33 824	USD 46 631	USD 32 503	USD 46 151
<b>Organisation of teachers' working time in public institutions over the school year</b>							
		<b>2015</b>					
		<b>Net teaching time</b>	<b>Total statutory working time</b>	<b>Net teaching time</b>	<b>Total statutory working time</b>	<b>Net teaching time</b>	<b>Total statutory working time</b>
Table D4.1	Pre-primary school teachers	880 hours	1425 hours	1001 hours	1608 hours	1034 hours	1564 hours
	Primary school teachers	880 hours	1425 hours	794 hours	1611 hours	767 hours	1557 hours
	Lower secondary school teachers (general programmes)	713 hours	1425 hours	712 hours	1634 hours	663 hours	1593 hours
	Upper secondary school teachers (general programmes)	693 hours	1425 hours	662 hours	1620 hours	629 hours	1580 hours
<b>Percentage of teachers who are 50 years old or over</b>							
		<b>2015</b>					
Table D5.1	Primary education	34%		32%		33%	
	Upper secondary education	37%		40%		42%	
<b>Share of female teachers in public and private institutions</b>							
		<b>2015</b>					
Table D5.2	Primary education	76%		83%		86%	
	Upper secondary education	55%		59%		61%	
	Tertiary education	42%		43%		44%	
<b>Ratio of students to teaching staff</b>							
		<b>2015</b>					
Table D2.2	Primary education	14		15		14	
	Secondary education	11		13		12	
	Tertiary education	13		16		16	
<b>Equity</b>							
<b>Intergenerational mobility in education<sup>2</sup></b>							
		<b>2012</b>		<b>2012<sup>3</sup></b>		<b>2012</b>	
		<b>Both parents have less than tertiary</b>	<b>At least one parent attained tertiary</b>	<b>Both parents have less than tertiary</b>	<b>At least one parent attained tertiary</b>	<b>Both parents have less than tertiary</b>	<b>At least one parent attained tertiary</b>
Tables A4.1 and A4.2	Less than tertiary education (30-44 year-olds' own educational attainment)	68%	27%	69%	31%		n.a.
	Tertiary-type B (30-44 year-olds' own educational attainment)	12%	9%	12%	16%		n.a.
	Tertiary-type A and advanced research programmes (30-44 year-olds' own educational attainment)	20%	63%	20%	55%		n.a.
<b>Transition from school to work</b>							
<b>Percentage of people not in employment, nor in education or training (NEET)</b>							
		<b>2016</b>					
Table C5.1	18-24 year-olds	23%		15%		15%	
<b>Education and social outcomes</b>							
<b>Percentage of adults who report having depression</b>							
		<b>2014</b>					
		<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>	<b>Women</b>
Table A8.1	Below upper secondary	6%	14%	10%	15%	10%	14%
	Upper secondary or post-secondary non-tertiary	5%	9%	6%	10%	6%	10%
	Tertiary	2%	4%	5%	6%	4%	6%

The reference year is the year cited or the latest year for which data are available.

Refer to Annex 3 for country-specific notes and for more information on data presented in this key facts table ([www.oecd.org/education/education-at-a-glance-19991487.htm](http://www.oecd.org/education/education-at-a-glance-19991487.htm)).

1. For some countries foreign students are provided instead of international students.

2. Data refer to ISCED-97 instead of ISCED-A 2011.

3. OECD average includes some countries with 2015 data.

\*\* Please refer to the source table for details on this data.

Cut-off date for the data: 19 July 2017. Any updates on data can be found on line at <http://dx.doi.org/10.1787/eag-data-en>