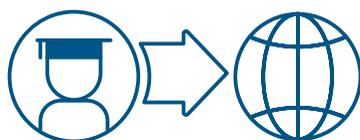

SOCIAL NEEDS IN SPAIN

Education

Report

05

July 2020



Credits

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of "la Caixa"**

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INTRODUCTION



A basic dimension of social needs is quality education. As people attain higher educational levels, income and employment levels increase, their state of health improves as a consequence of leading healthier lifestyles, and they manage to attain competencies and skills that are ever more necessary for developed and digital societies in a globalised world.

The evolution of the Spanish education system has been characterised by a high rate of access to early childhood education and by a marked improvement in accessibility at all educational levels, including higher education. Nevertheless, the system does display a number of important dysfunctions, such as high rates of school leaving, insufficient language competencies and the considerable bearing of socioeconomic background on academic results. In addition, the so-called ‘social elevator’ is still not working properly because children born into families whose educational levels are low have increasingly greater difficulties in managing to go beyond that level. Contributing to that is the high degree of segregation by social background in educational establishments, which could hamper the possibilities that the generalisation of education offers in terms of improving the opportunities of children born into the most vulnerable environments.

In this fifth report on social needs in Spain, the degree of satisfaction of educational needs in recent years is measured. By means of a broad set of indicators, the main sources of information enabling the coverage of those needs to be assessed are analysed on three different planes: accessing a sufficient educational level, gaining adequate knowledge that contributes to economic and social development, and forming part of an inclusive education system. The sources of information are, es-

entially, the Active Population Survey (EPA, as abbreviated in Spanish), the Household Budget Survey (EPF, as abbreviated in Spanish), the Survey of the Adult Population’s Participation in Learning Activities (EADA, as abbreviated in Spanish) and the surveys from which the OECD’s education-related reports draw their data, such as the Programme for International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS).

For each of the three described challenges (access to education, educational quality and equality), the indicators used include some that are habitually used to assess educational reality, as well as other new ones that enable a tighter view of the evolution of education to be obtained from the perspective of social needs. The latter indicators allow for a more in-depth examination of certain key aspects such as the intergenerational persistence of low educational levels, the burden of families’ private spending on education by their income, and the level of school segregation by socioeconomic background.

In addition, the use of information corresponding to different moments in time enables the evolution of education-related social needs to be assessed. The different indicators point to the fact that the Spanish education system is characterised by high levels of access. However, it has serious difficulties in reducing school leaving and the repetition of a school year. These problems tend to be structural in nature, and they have changed very little in the last decade.

The report also compares the situation in Spain to that in Europe by means of a selection of representative indicators for each of the three challenges. The information

analysed reveals that school leaving after compulsory education is much higher than the European mean in both the expansive and recessive stages. Added to this problem are the greater intergenerational persistence of low educational levels and the higher level of segregation by socioeconomic background in educational establishments in Spain than within the European context.

Another section of the report pays attention to the response by public policies to education-related social needs. Different indicators are proposed, which summarise the coverage of those needs by public intervention through different instruments. The information collected shows that Spain is one of the European Union (EU) countries that spend the least on education in relation to both its economic level and per-student spending. It is important to highlight that per-student public spending on education from ages 0 to 3 is below the European mean. So, despite the fact that access to early childhood education is becoming more generalised, families have to make a major financial effort to fund it. This may be hampering its potential positive impact on the development of cognitive and non-cognitive skills in young children from vulnerable environments.

Summarising the information by means of a basic system of indicators – allowing the data to almost speak for themselves while qualifying the narrative with short specific comments that help to interpret them – represents a new approach in the landscape of social reality studies. It is now up to the reader to browse through the pages of the report, build their own narrative, and compare what are normally opinions and hypotheses to a new broad set of objective data.

EDUCATION

This reports measures education-related social needs. On this aspect, anyone or any household faces three fundamental challenges:



1. Having access to quality education: only if they have access to a sufficient educational level to live and prosper in society will this need be met.



2. Having the possibility to gain adequate knowledge that contributes to economic and social development: only if education enables them to attain an adequate level of knowledge to live a full life and to satisfy labour market demands for decent quality jobs will this need be met.



3. Forming part of an inclusive education system: only if the education system promotes equal life opportunities for people from different social backgrounds will social investment in human capital foster economic growth and fair social development in the long term.

On the matter of education, society faces three fundamental challenges:

(people as a percentage of total population)

First challenge:



Having access to quality education

Not accessing schooling before the age of 3

87.1% ↓ 66.0%

2004 2016

Not accessing schooling from the age of 3 to 6

3.8% ↓ 2.0%

2004 2016

Not attaining a sufficient educational level

28.1% ↓ 9.9%

2004 2018

Not attaining a medium educational level

54.6% ↓ 40.2%

2004 2018

Not attaining a high educational level

73.3% ↓ 63.0%

2004 2018

Early school leaving

32.2% ↓ 18.3%

2004 2017

Second challenge:



Having the possibility to gain adequate knowledge that contributes to society's development

Insufficient mathematics knowledge in primary education

12.7% ↓ 7.0%

2011 2015

Insufficient reading comprehension knowledge in primary education

6.5% ↓ 3.4%

2006 2016

Insufficient mathematics competencies in secondary education

23.0% ↓ 22.2%

2003 2015

Insufficient reading comprehension competencies in secondary education

21.1% ↓ 16.2%

2003 2015

Insufficient foreign language competencies

46.6% ↓ 45.8%

2007 2016

* referring to students from a low socioeconomic background.

Third challenge:



Forming part of an inclusive education system

Repetition of a school year in secondary education

29.0% ↑ 31.1%

2003 2015

Level of segregation in classrooms

23.1% ↑ 23.8%

2003 2015

Intergenerational persistence of a low educational level

58.8% ↓ 45.7%

2005 2016

Insufficient reading comprehension competencies in secondary education*

31.7% ↓ 25.5%

2003 2015

Insufficient mathematics competencies in secondary education*

35.8% ↓ 34.6%

2003 2015

Private spending on education higher than 10% of total household spending

2.4% ↑ 5.9%

2006 2017

The Spanish education system displays a high rate of access to early childhood education and a marked improvement in accessibility at all levels. Competencies in primary and secondary education are close to the European mean. The most important dysfunctions are high rates of school leaving, insufficient language competencies, the considerable bearing of socioeconomic background on academic results and the high level of segregation by social background.

The most important

1. Access to the Spanish education system occurs in a generalised manner from the age of 3. At the beginning of the century, only 4 in 100 children aged 3 to 6 were not schooled and, in 2016, that figure dropped to fewer than 2 in 100. However, early school leaving rates in Spain are very high. Thus, 1 in 5 young people aged 18 to 24 does not continue their studies beyond compulsory secondary education.

2. The rate of repetition of a school year among students from low social backgrounds is much higher than among those from other social backgrounds, and a gap in the level of competencies attained in mathematics and reading comprehension is detected between students who have repeated a school year and other students, to the detriment of the former. The level of segregation in classrooms by socioeconomic background is also higher than the European mean: 1 in 4 students should change school so that there is no segregation.

3. Although the trend over time is clearly one of improvement, between 5 and 10% of the Spanish population has difficulties in attaining sufficient competencies in primary education, and between 16 and 26% has difficulties in doing so in secondary education. In addition, the adult population's access to a sufficient educational level has improved in the last two decades. The major unresolved issue of our system is an improvement in foreign language competencies.

4. In 2011, 1 in 2 people aged 25 to 64 whose parents had a low educational level did not manage to attain a higher educational level than their parents. The problem got smaller between 2005 and 2011 among people aged 25 to 64, but it got bigger among younger cohorts (aged 25 to 34), which is worrying because the educational level is a good indicator of financial level.

SPAIN vs EUROPE

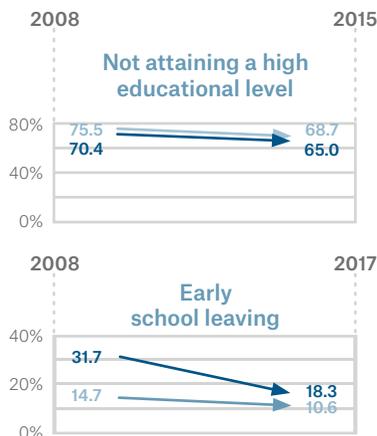
Spain → Europe →

(people as a percentage of total population)

First challenge:



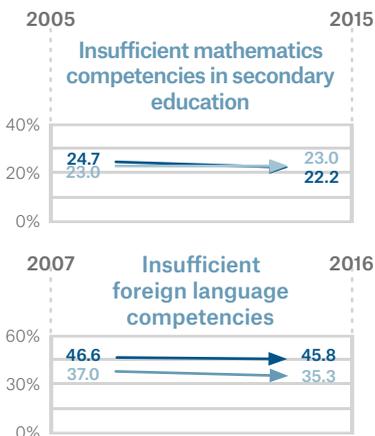
Having access to quality education



Second challenge:



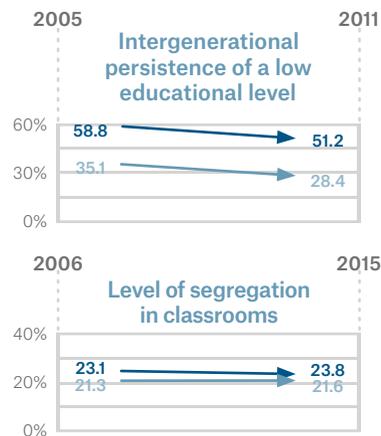
Having the possibility to gain adequate knowledge that contributes to society's development



Third challenge:



Forming part of an inclusive education system



The most important

1. Early school leaving is much higher than the European mean in both the expansive and recessive stages. Repetition of a school year in secondary education is much higher than the European mean.

2. Spain is far from the European mean in sufficient foreign language competencies. This deficit is structural in nature, and it has changed very little in the last decade. Moreover, Spain is situated at the European mean with regard to the percentage of people who do not manage to attain sufficient mathematics competencies.

3. Regarding the persistence of a low educational level, the results are considerably worse than the European mean. In Spain, 1 in 2 people aged 25 to 64 whose parents have a low educational level does not manage to attain a higher educational level than their parents, whereas the ratio within the European context is 1 in 3.

PUBLIC POLICIES

1

Compared to the European mean, Spain is one of the countries that spend the least on education in relation to its GDP. In terms of per-student spending as a percentage of GDP, Spain is also situated below the mean, with 10% less spending.

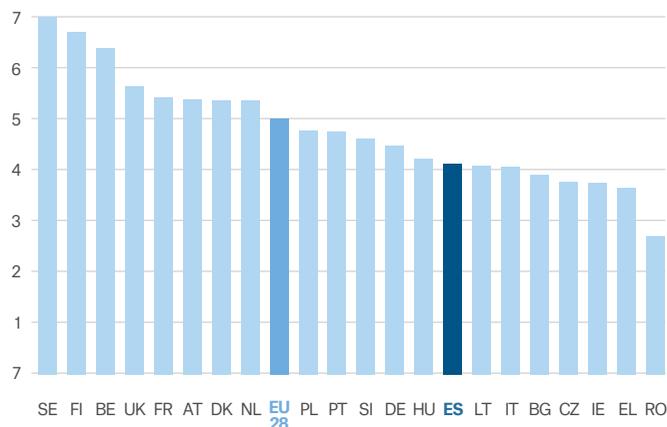
2

As the financial crisis progressed, the volume of spending on education in Spain moved even further away from European mean. The biggest gap in per-student investment in resources is at university level, whereas per-student investment in primary and secondary education in Spain is at the mean.

3

Although access to early childhood education (ages 0 to 3) is more generalised in Spain than in other European countries, per-student public spending is below the mean. As families are the ones who make the main financial effort to fund access to it, this is something that may be hampering its potential positive impact on the development of skills among young children from the most vulnerable environments.

Spending on education as a percentage of GDP, 2015



Source: Education and Training Statistics (Eurostat).

THE SITUATION IN SPAIN



The analysis of education-related social needs by means of a system of basic indicators poses three different challenges: firstly, access to the education system; secondly, whether those who access education do so with the possibility of attaining adequate competencies to contribute to a developed society; and thirdly, whether the education system they access promotes equal life opportunities for people from different social backgrounds and, by investing in human capital, therefore effectively promotes social and economic development in the long term.

The information collected by means of the proposed indicators sheds light on the strengths and weaknesses of the Spanish education system. All the access indicators have significantly improved in the last two decades apart from the one measuring early school leaving, whereas the knowledge and competency indicators have slowly improved apart from the one measuring foreign language knowledge. Lastly, the indicators for the third challenge relating to equal educational opportunities for people from different social backgrounds show a clear difference to the detriment of people from lower social backgrounds in terms of attaining competencies, the probability of repeating a school year, and the persistence of low educational levels generation after generation.

First challenge: Having access to quality education

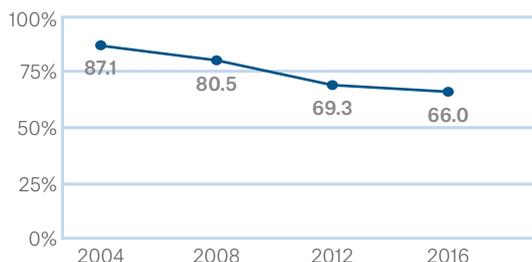


This challenge is measured by means of the indicators shown on this page. The meaning of the data is explained in the rest of the section.

Key indicators for situations of lack of access to quality education among the Spanish population (percentages).

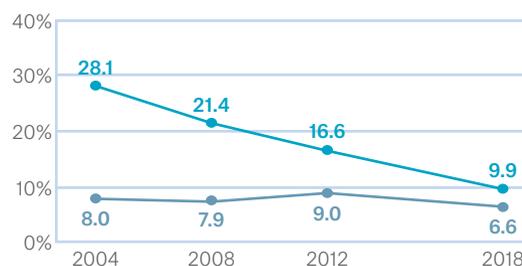
Not accessing schooling before the age of 3:

Children aged 0 to 3 who are not schooled as a percentage of the total for that age range.



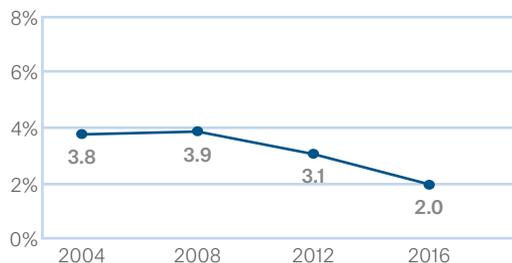
Not attaining a sufficient educational level:

Percentage of people who have not attained a lower secondary education.



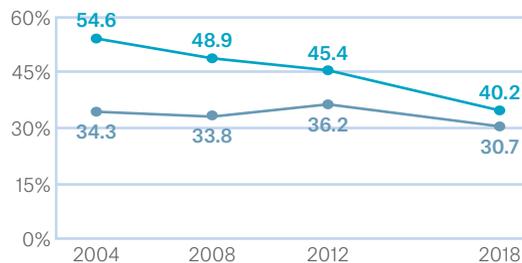
Not accessing schooling from the age of 3 to 6:

Children aged 3 to 6 who are not schooled as a percentage of the total for that age range.



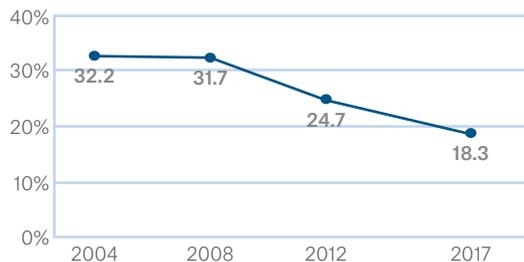
Not attaining a medium educational level:

Percentage of people who have not attained an upper secondary education.



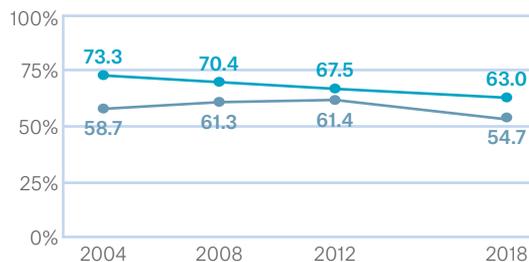
Early school leaving:

Percentage of people aged 18 to 24 who have left school early.



Not attaining a high educational level:

Percentage of people who have not graduated in tertiary studies.



Source:

Compiled in-house using data from the Spanish Ministry of Education, EPA and Eurostat.

- People aged 25 to 64
- People aged 25 to 29

The population's well-being is closely related to possibilities of accessing education. The ease or difficulty in accessing schooling is usually assessed by means of net schooling rates, i.e., people of that age who are enrolled in any of the school years within the education system. Presented in the indicators for the first challenge are the schooling rates for different age ranges prior to compulsory education: children younger than 3 years old and those aged 3 to 6. As can be seen, Spain has high early childhood education rates: 98% of children aged 3 or over are schooled, whereas the mean rate for OECD countries is situated at 76% (OECD, 2018a). In general, Spain also displays a high level of interregional equality in relation to this aspect, as practically no variation between the regions was recorded for the enrolment rates of 3-year-olds (OECD, 2018a). In addition, more and more parents have schooled their under 3-year-old children in the last decade. Currently, 1 in 3 children of that age are schooled.

However, simply having access to schooling does not guarantee that people will attain a certain educational level. That is why it is necessary to use other indicators that can provide information about the educational level attained: sufficient (compulsory education), medium (baccalaureate [a post-16 educational qualification in Spain], vocational education and training or similar studies) and high (university or equivalent studies). The indicators show that, in the last two decades, there has been a marked improvement in the Spanish population's medium educational level. More specifically, in 2004, 1 in 3 people aged 25 to 64 had not attained a sufficient educational level to enable them to develop a minimum of skills and to acquire basic competencies. In other words, they had managed, at the very most, to complete primary education but had not completed lower secondary education. Fortunately, that percentage has fallen drastically, and now only 1 in 10 people do not attain a sufficient educational level.

Regarding the educational levels beyond compulsory education, the trend is also positive, albeit to a lesser extent, in both intermediate and higher studies. Whereas, in 2004, more than half of the population aged 25 to 64 had not managed to attain intermediate studies (baccalaureate, vocational education and training or similar studies), that level is now attained by 60% of the population within that age range and by 70% of the population if we focus solely on younger people aged 25 to 29. In 2000, 4 in 10 people aged 25 to

64 had not completed compulsory education (primary and lower secondary education), whereas, in 2018, only 1 in 10 people did not manage to do so. The number of people who do not attain a medium educational level (baccalaureate or any branch of vocational education and training) has also fallen. It went from 6 in 10 people in 2000 to 4 in 10 in 2018. Among those who do not attain a high educational level, 21% finished the baccalaureate and 15% finished the intermediate level of vocational education and training, whereas, at the beginning of the century, only 13% and 7% managed to do so, respectively.

The results are similar in the high educational level. Whereas, in 2004, nearly 3 in 4 people aged 25 to 64 had not attained a high educational level, now the figures for this group are slightly lower (10 percentage points lower, falling from 73% to 63% of people in this age range). If we focus on younger people, almost 1 in 2 people aged 25 to 29 managed to attain a high educational level.

As a negative indicator, and despite the improvements in schooling rates and the educational levels that the population attains, the percentage of people who leave school early in Spain is very high. They are people aged 18 to 24 who, regardless of whether they have finished lower compulsory secondary education, do not continue their studies by taking a baccalaureate, vocational education and training or any unregulated training course. Currently, 1 in 5 young people aged 18 to 24 are in that situation. As underscored by Gortázar (2018), the economic boom of the 1990s, the bubble in the construction sector and other low-productivity sectors changed the qualification needs for the workforce and altered a whole generation's financial motivations and decisions, which led to early school leaving from 1998 to 2008 of up to 32%. While today's figures are better than they were in 2008, when the problem affected almost 1 in 3 people, it is important to underscore that only the deep economic recession managed to bring such leaving down due to a lack of employment opportunities for people with a low educational level.

EARLY EDUCATION AND WORK-LIFE BALANCE: SCHOOLING OF CHILDREN YOUNGER THAN 3 YEARS OLD AND PARENTAL LEAVE

As underscored in the study by Cebolla-Boado et al. (2014), the initial educational stages, and especially the pre-school stage (ages 0 to 6), can be decisive when it comes to getting good academic results in adult years. It is precisely in these early stages that the compensatory nature of schooling as an instrument that equalises opportunities and reduces social disadvantages is most decisive. Thus, there is broad consensus on the benefits of children attending early childhood education schools, particularly in relation to the improvement in cognitive abilities, language acquisition and academic performance. Those who benefit the most

are children from humble families and those whose parents do not invest quite as much in active teaching. The authors underscore that standardising the curriculum of such schools would enhance its equalising potential. In Spain, the level of schooling of children younger than 3 years old is relatively high within the European context. Both the gradual increase in the rate of women's participation in the labour market and the generalisation of free public-sector education at the next pre-school stage (ages 3 to 6) have contributed to families taking the decision to enrol children aged 1 to 2 in an educational establishment.

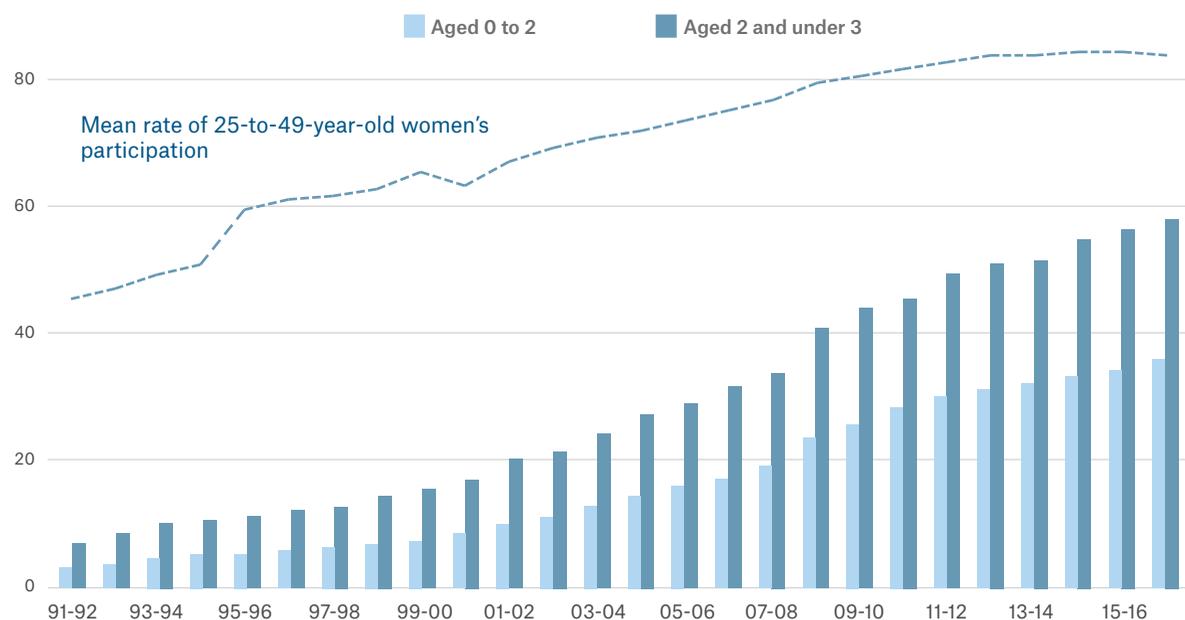
EARLY EDUCATION AND WORK-LIFE BALANCE: SCHOOLING OF CHILDREN YOUNGER THAN 3 YEARS OLD AND PARENTAL LEAVE

Figure 2 shows that the net schooling rates for children younger than 3 years old and the mean rate of 25-to-49-year-old women's participation in the labour market have grown simultaneously. That rate is now nearly 85%, and 6 in 10 2-year-old children and almost 4 in 10 children younger than that age are schooled. The enrolment of children at both private- and public-sector early childhood edu-

cation schools has increased significantly in Spain in the last two decades and, as shown in Figure 3, it is currently higher than the EU mean. The net schooling rates for this age range in Spain are higher than those in every other Mediterranean country and many central and northern European countries, such as Belgium, the Netherlands and the United Kingdom.

Figure 2. There is a correlation between women's participation in the labour market and schooling rates for children aged 0 to 3.

The mean rate of 25-to-49-year-old women's participation in the labour market and the net schooling rate for children aged 0 to 3, Spain.



Source:

Spain's National Statistics Institute (INE) and Non-University Education Statistics. Spanish Ministry of Education and Vocational Training's Subdirectorate-General for Statistics and Studies.

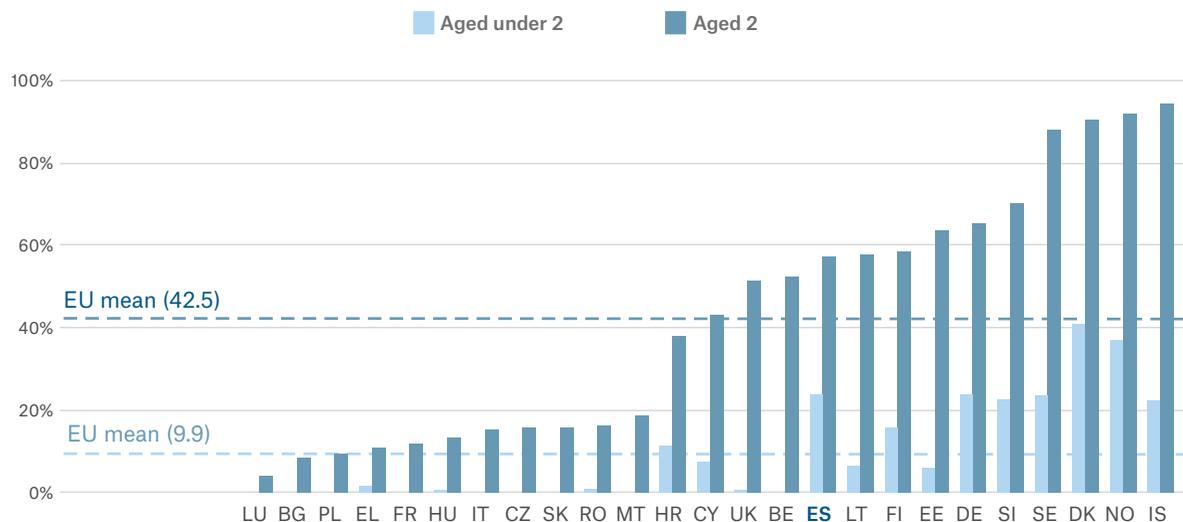
EARLY EDUCATION AND WORK-LIFE BALANCE: SCHOOLING OF CHILDREN YOUNGER THAN 3 YEARS OLD AND PARENTAL LEAVE

Another tool for early stimulation and cognitive development is parental leave, which not only facilitates greater interaction between the newborn and its parents, but also has clear implications for work-life balance. Broadly speaking, according to the comparison presented by the European Parliamentary Research Service (EPRS), in 2016, maternity and paternity leave in European countries was paid at somewhere between 65 and 100% of full pay. Maternity leave varied in duration from 10 weeks in Portugal to 58 weeks in Bulgaria, whereas paternity leave is usually much shorter. It varied between 2 days

in the Netherlands and 10 weeks in Slovenia (or 9 in Finland). Within this context, Spain is situated at the European mean for maternity leave, which is 16 weeks long. However, Spain's paternity leave was relatively short (2 days) until 2007, when it was extended to 15 days. A decade later, in 2017, it was extended to 4 weeks. Recently, paternity leave has been further extended to 8 weeks, which situates Spain well above the most usual length for such leave (2 weeks) in EU countries.

Figure 3. Schooling rates for children aged 0 to 3 are above the EU mean.

Schooling rates for children aged 0 to 3 in Spain and in the EU (children in education by age, as a percentage of the population of that age).



Source: Eurostat Database.

Second challenge:

Having the possibility to gain adequate knowledge that contributes to society's development



This challenge is measured by means of the indicators shown on this page. The meaning of the data is explained in the rest of the section.

Key indicators for gaining adequate competencies to live in a developed society (percentage of primary education students aged 9 and secondary education students aged 15 whose knowledge is insufficient).

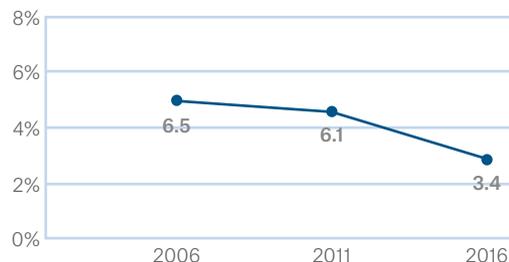
Insufficient mathematics knowledge in primary education:

Percentage of primary education students aged 9 who do not attain a level of mathematics knowledge that is deemed sufficient.



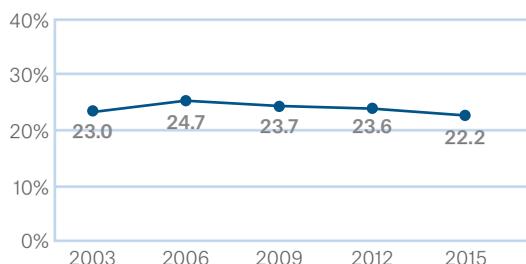
Insufficient reading comprehension knowledge in primary education:

Percentage of primary education students aged 9 who do not attain a level of reading comprehension knowledge that is deemed sufficient.



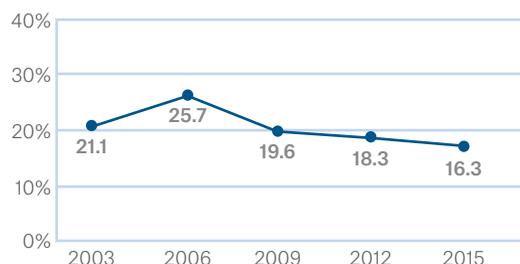
Insufficient mathematics competencies in secondary education:

Percentage of secondary education students aged 15 who do not attain mathematics competencies that are deemed sufficient.



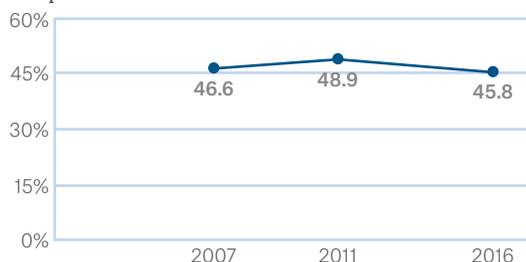
Insufficient reading comprehension competencies in secondary education:

Percentage of secondary education students aged 15 who do not attain reading comprehension competencies that are deemed sufficient.



Insufficient foreign language competencies:

Percentage of people who do not attain foreign language competencies that are deemed sufficient.



Source:

Compiled in-house using data from PISA, TIMSS, PIRLS and EADA.

A second key aspect of the population's education-related needs is the quality of the knowledge and competencies that education provides. It is about measuring whether the knowledge that people acquire in the different educational stages is adequate for contributing to society's economic and cultural development.

The indicators for the second challenge centre on knowledge and competencies in mathematics, reading comprehension and foreign languages, and they measure the percentage of primary education students aged 9, secondary education students aged 15, and adults who do not attain competencies that are deemed sufficient in those subjects. Information on knowledge is limited in some instances because not all the surveys are carried out for all years. In fact, for primary education, we only have three surveys available: PIRLS for 2006, 2011 and 2016, and TIMSS for 2011 and 2015.

The results point to an improvement in mathematics and reading comprehension knowledge in primary education between 2001 and 2015 or 2016. In mathematics, the number of primary education children who did not attain sufficient knowledge fell by almost half (from 12.7% to 7%) in a short period of time (between 2011 and 2015). Something similar happened in reading comprehension. Only 3% of primary education children did not attain sufficient knowledge in 2016, a percentage that was significantly lower than in 2011 (6%).

The most comprehensive data series come from PISA and centre on 15-year-old students in compulsory secondary education, which enables information to be had for this age range in six different years since 2000. The results vary from year to year, but broadly speaking, the values have remained the same in the last two decades. Approximately 1 in 4 students do not have sufficient mathematics knowledge and, depending on the year, 1 in 5 or 6 do not have sufficient reading comprehension knowledge.

The last indicator taken into consideration is the one that measures competencies in foreign language use as an adult, the results for which were worse than those for the previous ones. Almost half of the Spanish population claims not to have sufficient competencies in foreign language speaking. This percentage fell slightly between 2011 and 2016 from 49% to 46% of the population. An improvement in foreign language competencies remains an unresolved issue in the Spanish education system.

FUNCTIONING OF INTERMEDIATE STUDIES AND VOCATIONAL EDUCATION AND TRAINING: SPAIN vs EUROPE

For several decades, intermediate vocational education and training studies in Spain have been considered the worst educational path for young people. The OECD (2018a) has compared the education systems of 35 countries and has concluded that the qualification rate on vocational education and training programmes in Spain (25%) is significantly lower than in other countries, and is below the OECD mean (36%) and well below the EU-22 mean (41%). However, the qualification rates on general programmes that lead to university education (basically the baccalaureate), which are situated at around 50%, are similar to those in other countries. Balancing out these percentages would seem desirable, as would trying to reduce the number of adults who do not manage to finish their upper secondary education. One of the tools to attain that objective could be the reinforcement of intermediate and upper levels of vocational education and training to make them more attractive.

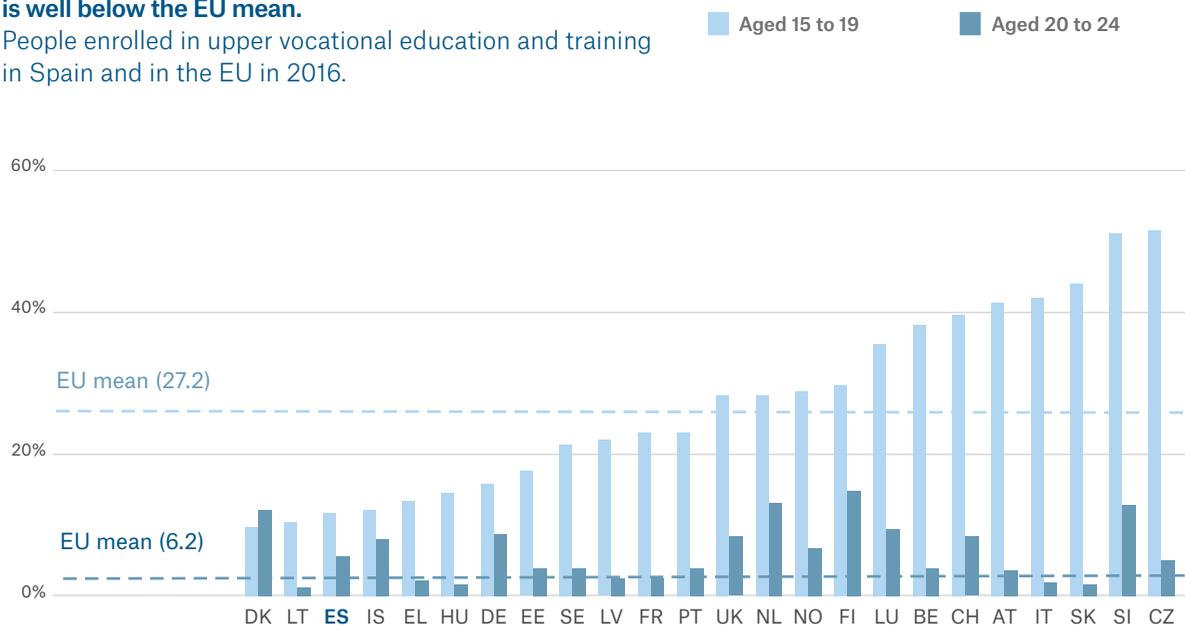
FUNCTIONING OF INTERMEDIATE STUDIES AND VOCATIONAL EDUCATION AND TRAINING: SPAIN vs EUROPE

Figure 5 shows that the percentage of young people aged 15 to 19 in Spain who are enrolled in upper vocational education and training is very low. Only 12% of people in this age range are enrolled in this type of training, whereas in other

European countries such as Italy, the percentage is higher than 40%, and the European mean is situated at around 25%, which is twice the rate of those enrolled in Spain in 2016.

Figure 5. Enrolment in vocational education and training is well below the EU mean.

People enrolled in upper vocational education and training in Spain and in the EU in 2016.



Source:

OECD.Stat. Enrolment rate by age in upper secondary vocational education. ISCED 2011 level 3 programme 5.

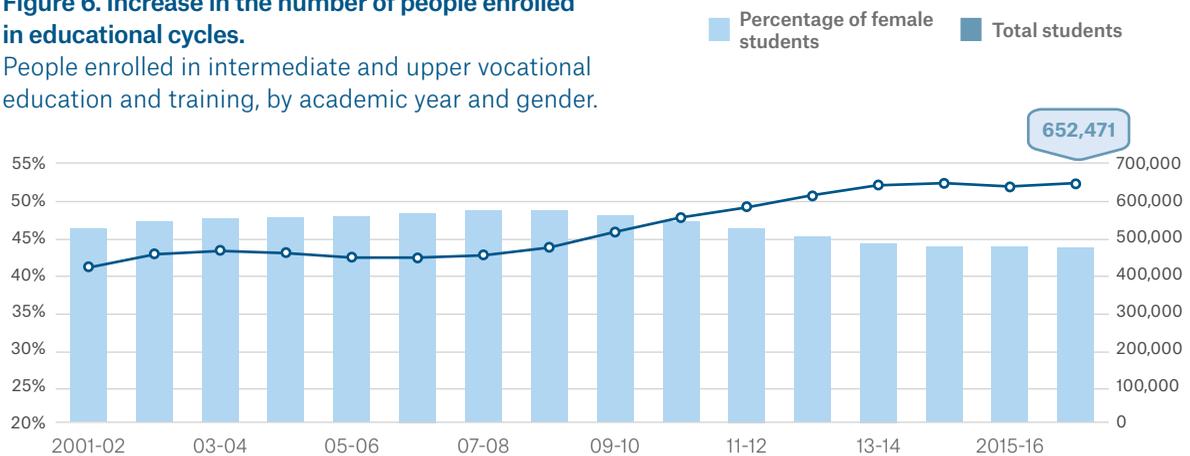
FUNCTIONING OF INTERMEDIATE STUDIES AND VOCATIONAL EDUCATION AND TRAINING: SPAIN vs EUROPE

Nevertheless, as shown in Figure 6, the trend in the last decade is clearly positive because the number of students enrolled in different educational levels of vocational education and training increased considerably, and particularly so from the start of the crisis in 2008. Between the 2007/2008 and 2016/2017 academic years, the number of students enrolled in intermediate and upper vocational ed-

ucation and training increased by 44%, from 450,000 to 650,000 students, approximately. When taking gender into consideration, that increase was found to be asymmetrical. In the enrolment rate, there was a shift towards higher numbers of male students, while the percentage of female students fell from almost half (49%) in 2008 to 44% in 2017.

Figure 6. Increase in the number of people enrolled in educational cycles.

People enrolled in intermediate and upper vocational education and training, by academic year and gender.



Source: Spain's National Statistics Institute (INE), series for students enrolled in non-university education.

HOW TO IMPROVE LEARNING: TEACHING STAFF'S TRAINING, ACTIVITIES AND SATISFACTION

In the educational process, there are important elements that determine how learning functions, and they play a major role in knowledge acquisition. Such elements relate to the teaching staff's characteristics, training and satisfaction, as well as the number of teaching hours and their organisation, educational establishments' degree of autonomy, the subjects that are allocated more time in the timetable, and the different educational options that the system offers.

Regarding teaching staff, OECD data (2018a) show that, in primary education, 33% of teachers are over 50 years old and 9% are under 30 years old. Although there is a higher percentage of older teachers in Spain when compared to the OECD mean, the differences are not great. In secondary education, the situation is similar to that in other OECD countries with regard to middle-aged and over 50-year-old teachers, but the number of young teachers (under 30 years old) is very low at just 3.3% of teaching staff. In comparison, the OECD mean (10.4%) is more than triple that percentage.

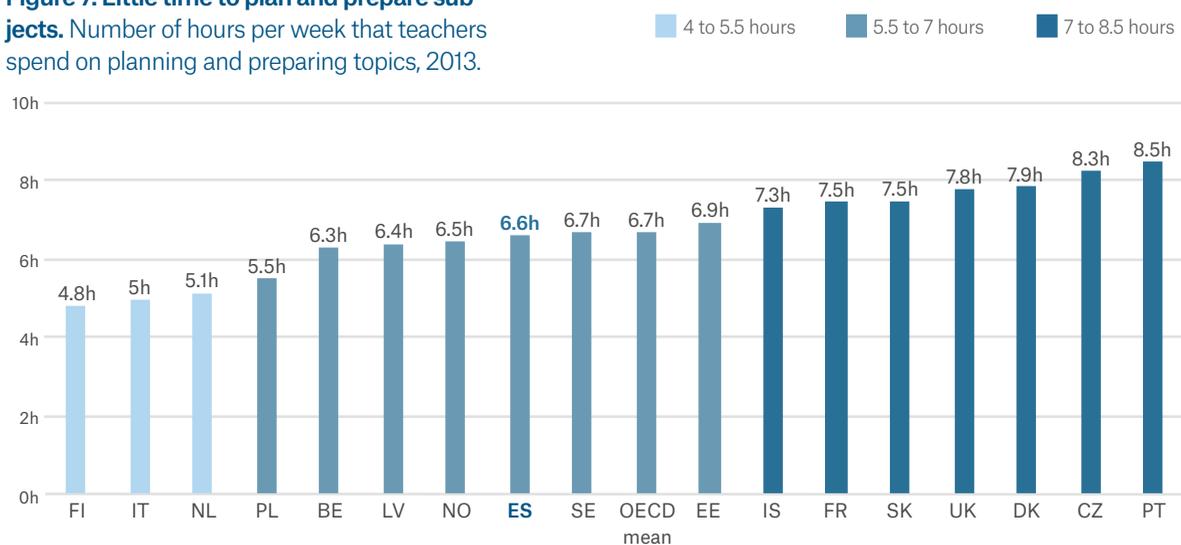
Comparing the teaching staff's activities in terms of distribution of tasks by hour, Spanish teaching staff spend more time on in-class teaching (direct teaching) than the OECD mean and the mean of 22 countries of the EU. Half of their working time is spent on such teaching, whereas teachers in other countries spend less time on that task (44% of the total). As shown in Figure 7, Spanish teachers may spend relatively little of their working time on planning and preparing the subjects they teach. This contrasts with what happens in Portugal, the Czech Republic and Denmark, which stand out in regard to this aspect by being above the OECD mean. Portuguese teachers spend almost 30% more time than their Spanish counterparts (8.5 hours compared to 6.6 hours) on the task of planning and preparing.

HOW TO IMPROVE LEARNING: TEACHING STAFF'S TRAINING, ACTIVITIES AND SATISFACTION

Spanish teaching staff's pay at all educational stages is higher than the OECD mean. Pay progression after gaining employment may be somewhat demotivating though, since pay is relatively high at the start but increases less throughout teachers' careers than it does in other countries. In addition, Spanish teaching staff need more years than the mean to reach the top of their pay scale. The teaching staff's pay gap by the educational level taught is small in comparison to the one in Finland or Belgium, and headteachers' pay is not that different from the one that the rest

of the teaching staff receive (23% higher). That percentage is half the mean for OECD countries (46%), which may be a disincentive for teachers when it comes to considering whether to take on the management of educational establishments. Regarding teaching staff's job satisfaction (Figure 8), Spain is among the countries in which teachers are most satisfied with their jobs (95% fall into this category), although most of them consider their work to be socially undervalued. Fewer than 1 in 10 teachers consider themselves socially valued, whereas 6 in 10 do so in Finland.

Figure 7. Little time to plan and prepare subjects. Number of hours per week that teachers spend on planning and preparing topics, 2013.



Source: OECD (2019), "TALIS Teaching and Learning International Survey - Indicators", OECD Education Statistics (database), <https://doi.org/10.1787/data-00698-en>.

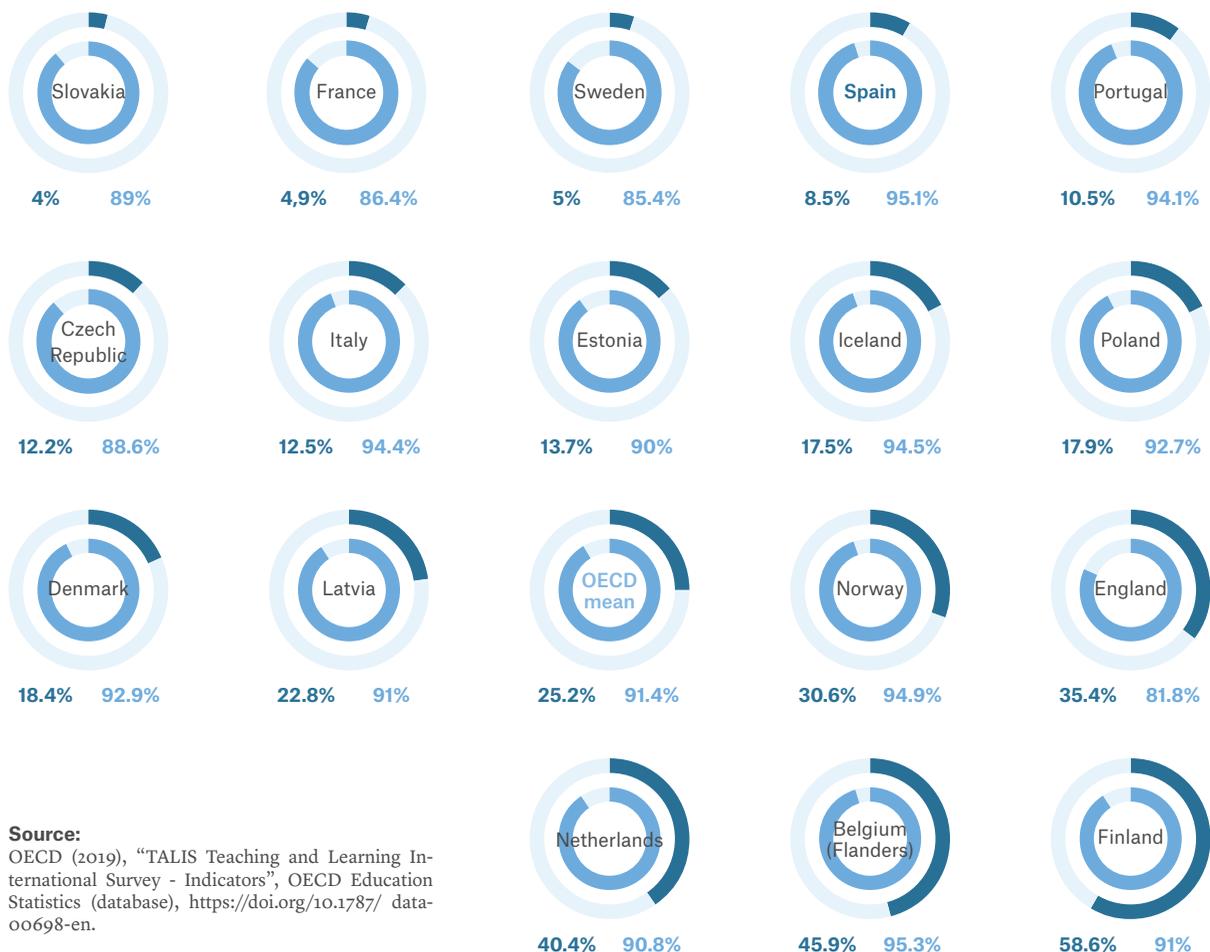
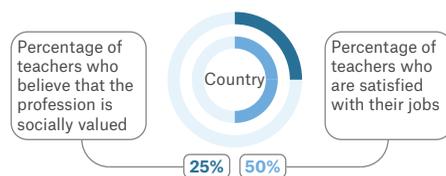
HOW TO IMPROVE LEARNING: TEACHING STAFF'S TRAINING, ACTIVITIES AND SATISFACTION

Lastly, regarding educational establishments' degree of autonomy, the OECD (2018a) underscores that, in Spain, a high percentage of decisions in secondary education are taken by the authorities, and the percentage of those taken at the educational establishment level is very low

when compared to what happens in other countries. This piece of information is important because the report points out that, in countries where there is a good mix of autonomy and accountability, the students' competency outcomes are better.

Figure 8. Teachers are satisfied but consider themselves socially undervalued.

Percentage of teachers satisfied with their jobs, and beliefs about how the profession is socially valued, 2013.



Source: OECD (2019), "TALIS Teaching and Learning International Survey - Indicators", OECD Education Statistics (database), <https://doi.org/10.1787/data-0698-en>.

Third challenge: Forming part of an inclusive education system



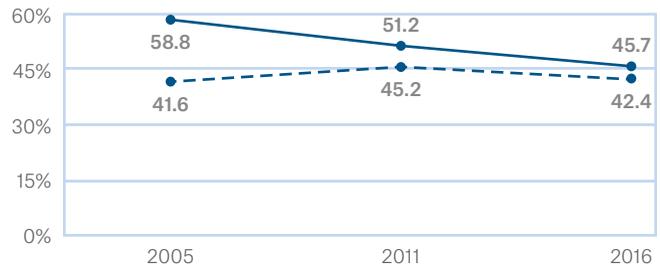
This challenge is measured by means of the indicators shown on this page. The meaning of the data is explained in the rest of the section.

Key indicators for educational level, repetition of a school year, competencies, private spending on education, and segregation by social background (percentages)

Intergenerational persistence of a low educational level:

Percentage of people whose parents have a low level of studies that did not attain a higher level than their parents.

— Aged 25 to 64
- - - Aged 25 to 34



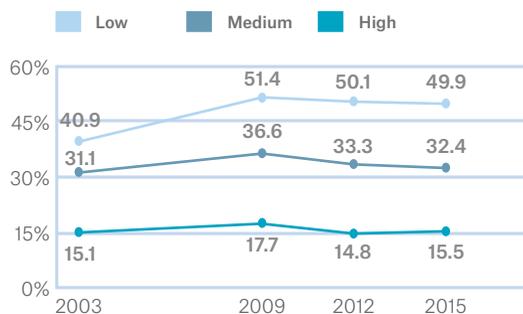
High private spending on education:

Percentage of people living in families with members aged 0 to 25 in which private spending on education is higher than 10% of family spending, by income quintile.



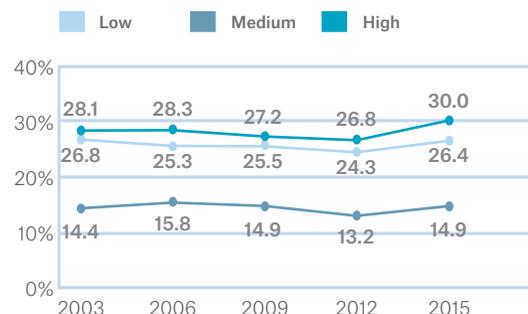
Repetition of a school year in secondary education:

Percentage of people who have repeated a school year, by socioeconomic background.



Level of segregation in classrooms:

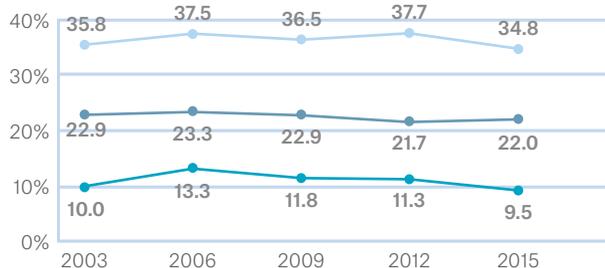
Percentage of people who should change school so that there is no segregation, by socioeconomic background.



Insufficient mathematics competencies in secondary education:

Percentage of people who do not attain mathematics competencies in secondary education that are deemed sufficient, by socioeconomic background.

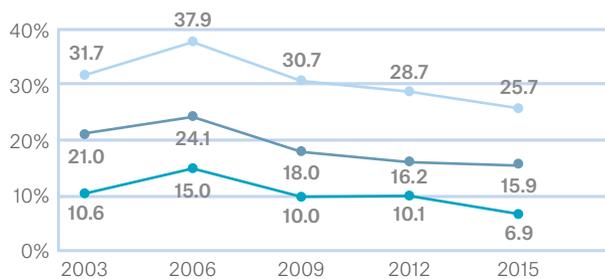
■ Low ■ Medium ■ High



Insufficient reading comprehension competencies in secondary education:

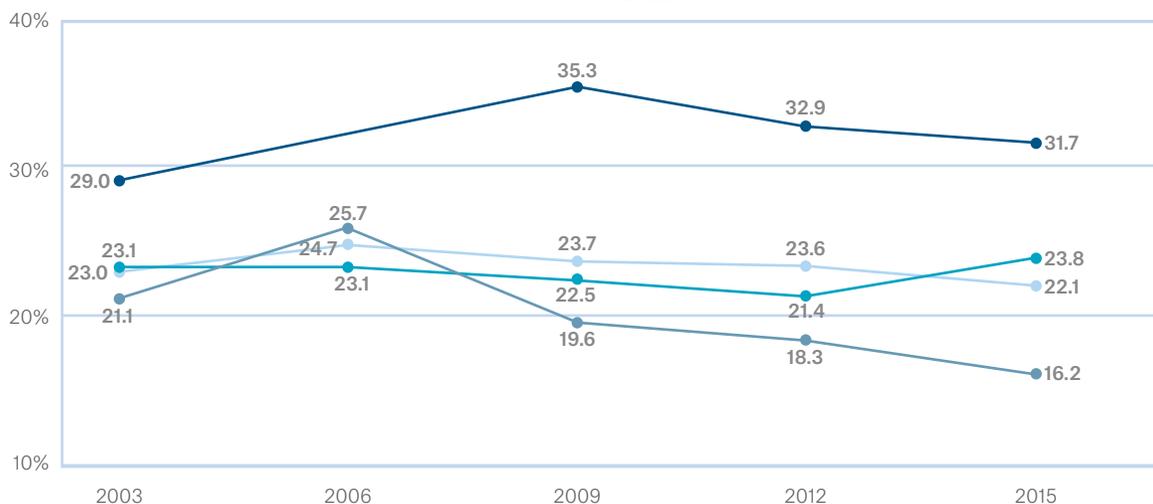
Percentage of people who do not attain reading comprehension competencies in secondary education that are deemed sufficient, by socioeconomic background.

■ Low ■ Medium ■ High



Totals

— Repetition of a school year in secondary education
— Level of segregation in classrooms
— Insufficient mathematics competencies in secondary education
— Insufficient reading comprehension competencies in secondary education



Source:
Compiled in-house using data from PISA, the Living Conditions Survey (ECV), EADA and EPF.

The third challenge relating to the population's education-related needs is that the education system should be inclusive and that the population should be able to access to a system that promotes equal life opportunities for people from different social backgrounds. The main idea underlying this need is that, by investing in human capital, economic growth can be promoted at the same time as progress is made towards balanced social development in the long term.

This challenge includes different aspects relating to accessibility to stimulating educational environments for people from lower social backgrounds, as well as to the asymmetric effect of phenomena such as the repetition of a school year by social background or the evolution of spending by families whose younger members are in educational stages.

The indicators of this third challenge show us that, in Spain, 1 in 2 people whose parents had a low educational level did not manage to attain a higher educational level than their parents. This persistence of low educational levels in two consecutive generations is higher than the European mean, where this happens on average to only 1 in 3 people from this group. The greatest concern is that, among young people aged 25 to 34, the trend is not very encouraging because the persistence of low educational levels from one generation to the next has increased in the last decade.

It should be pointed out that Spain starts from a disadvantaged position in terms of the population's educational levels. In 2011, 3 in 4 people aged 25 to 64 had parents who had only been able to attain a low educational level (i.e., at the very most, they had completed compulsory education, which was up to the age of 14 at that time), whereas in Germany in that same year, that only happened to approximately 1 in 10 people of that age. It seems clear that the rapid social improvements that took place in Spain after the country's transition to democracy allowed many people from humble backgrounds to access a higher level of income than their parents had. This unprecedented social change has been key with regard to the recent OECD report (2018b) situating Spain among the countries with a relatively high level of intergenerational income mobility within the European context, in a good position after the Nordic countries.

Unfortunately, this so-called 'social elevator', which has been quite effective in terms of improving income, does not seem to have had so much success in terms of educational or occupational mobility and, in line with other Mediterranean countries, the OECD (2018b) found a poorer behaviour of educational and occupational mobility in Spain. The data are revealing: whereas, in the OECD mean, the ratio of senior managers whose parents were manual workers is 1 in 4, in Spain it is less than 1 in 5. Likewise, half of manual workers' children retain that status in Spain, whereas in the OECD mean, that only happens in a third of the cases.

Based on information from two modules of the European Union Statistics on Income and Living Conditions (EU-SILC) for 2005 and 2011 and from EADA for 2016, in our results we also observed that hindrance to the social elevator in the education of younger people (aged 25 to 34). We therefore confirmed, as underscored by Avram and Cantó (2017), that social background is a determinant of employment quality for people with the same educational level, which condemns broad strata of the population to jobs that are not only more insecure and poorly paid, but also have worse associated benefits. In addition, the aforementioned authors concluded that, during the crisis period, social advantage enabled people from families with greater resources to cope better with the financial setbacks of it. Recently, the findings of Salazar et al. (2019) have also pointed to the fact that the crisis lowered the expectations of adolescent students (14-year-olds), especially among those whose competencies were at the mean, which resulted in an increase in the role that social background plays in educational inequalities.

Another indicator in which big differences by students' socioeconomic background were recorded is the repetition of a school year in secondary education. If parents have a low socioeconomic level, 1 in 2 students repeat a school year, whereas this only happens to 1 in 9 students if their parents have a high socioeconomic level. García-Pérez et al. (2014) and Choi et al. (2016) concluded that the repetition of a school year does not improve students' learning or competencies and, in many cases, it has a negative impact on academic performance. Consequently, these differences by social origin further increase the probability of school leaving among students from families with a low socioeconomic level.

Social background also has repercussions on the competencies that students acquire in mathematics and especially in reading comprehension. In 2015, the percentage of people who did not attain sufficient competencies in both areas was three times higher among students from low social backgrounds than among those from high social backgrounds.

Lastly, an inclusive education system should not require overly burdensome private spending on books, school materials, fees or any other learning-related need at school. If it did, the achievement of learning objectives could differ depending on the purchasing power of the families in which students live. To analyse whether there have been any changes in the cost of education for Spanish families in the last decade, we constructed an indicator that measures the percentage of people living in families with members under the age of 25 in which private spending on education is higher than 10% of total family spending. Such spending includes the cost of textbooks and regular payments to educational establishments offering primary, secondary, baccalaureate, vocational education and training, and higher education (fees, registration, etc.), including master's degree, language and information technology courses, as well as payments to academies or private tutors.

The results reveal that, in 2006, 2.4% of the population fell within this group and that the figure has doubled since then. Currently, 6% of people exceed that level of spending. The burden of private spending on education as a proportion of total spending differs significantly between families with different income levels. Thus, the percentage of the population whose spending on education-related goods and services is higher than 10% of total spending increases as family income increases. Only 2.5% of the population that falls within the poorest 20% (first quintile) allocates more than 10% of total spending to educational goods and services, whereas nearly 14% of the population that falls within the wealthiest 20% does so. At all income levels, the percentage of the population that incurred such spending increased from 2006 to 2017. It doubled for the poorest and tripled for the wealthiest.

SPENDING ON EDUCATION BY INCOME LEVELS AND BY PRIVATE-SECTOR, PUBLIC-SECTOR AND PUBLICLY FUNDED PRIVATE-SECTOR EDUCATION

The evolution of private spending on education by families whose younger members are in educational stages is relevant for the purpose of measuring the extent to which quality education requires households to have a medium or high income level and whether the low income level of the humblest families hampers educational possibilities.

To perform a detailed analysis of educational spending by income level, we present an additional exploitation of the Survey of Household Spending on Education (EGHE, as abbreviated in Spanish), which was carried out in the 2011/2012 academic year to assess the costs of education-related goods and services bought by Spanish families. It enables an estimate to be made of the mean per-student investment that studying at different educational levels entails for households. That survey was carried out by Spain's National Statistics Institute (INE) within the framework of EPF, and it is based on a pilot module carried out in 2007.

SPENDING ON EDUCATION BY INCOME LEVELS AND BY PRIVATE-SECTOR, PUBLIC-SECTOR AND PUBLICLY FUNDED PRIVATE-SECTOR EDUCATION

Regarding the proportion of students by educational establishment ownership, it was found that most of the 10 million students at all educational levels (from early childhood to university education) are enrolled in public-sector educational establishments: 7 in 10 are enrolled in public-sector ones, 2 in 10 in publicly funded private-sector ones, and 1 in 10 in private-sector ones. As shown in Figure 10, it is quite usual for students in public-sector education to only attend regular classes and not to access extracurricular activities or services at the educational establishment (only 2 in 10 do so) or complementary activities (6 in 10 do so). In contrast, students in publicly funded private-sector education have much more access to extracurricular activities and services at the educational establishment (nearly 4 in 10 do so) and complementary activities (nearly 9 in 10 do so).

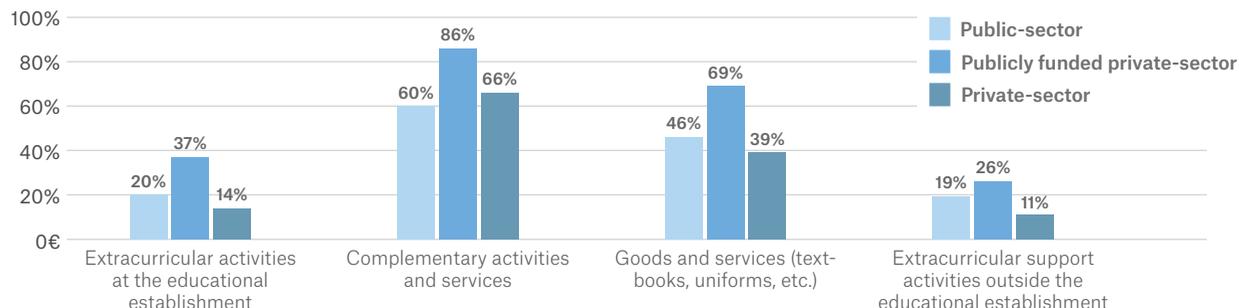
Analysing mean per-student spending by educational establishment ownership (Figure 10), it is possible to see that the annual cost to a family of enrolling a student at a public-sector educational establishment is half the cost of doing so at a publicly fund-

ed private-sector educational establishment and quarter of the cost of doing so at a private-sector educational establishment. The biggest cost to families whose children attend public-sector educational establishments is textbooks and uniforms, as well as complementary activities and services at the establishment.

To perform a more in-depth analysis of the different levels of financial effort that families need to make in terms of buying educational goods and services by their income level, we calculated mean spending on education by families' disposable income. Figure 12 shows that spending on education does not grow proportionally to disposable income, but instead that the differences between groups become bigger as family income increases. The poorest families' annual mean spending on education is €422, which is less than half the amount that middle-class families spend (€928), whereas the wealthiest families spend €3,136 on average, nearly two-and-a-half times the amount that middle-class families do.

SPENDING ON EDUCATION BY INCOME LEVELS AND BY PRIVATE-SECTOR, PUBLIC-SECTOR AND PUBLICLY FUNDED PRIVATE-SECTOR EDUCATION

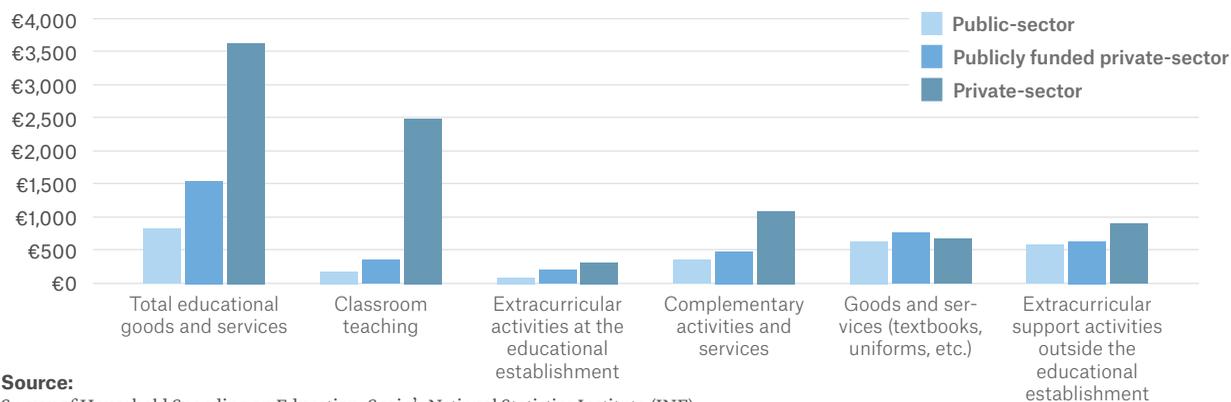
Figure 10. Fewer complementary activities are carried out in public-sector schools. Percentage of students who use different educational goods and services, by educational establishment ownership, 2011/2012 academic year.



Source:

Survey of Household Spending on Education (EGHE), Spain's National Statistics Institute (INE).

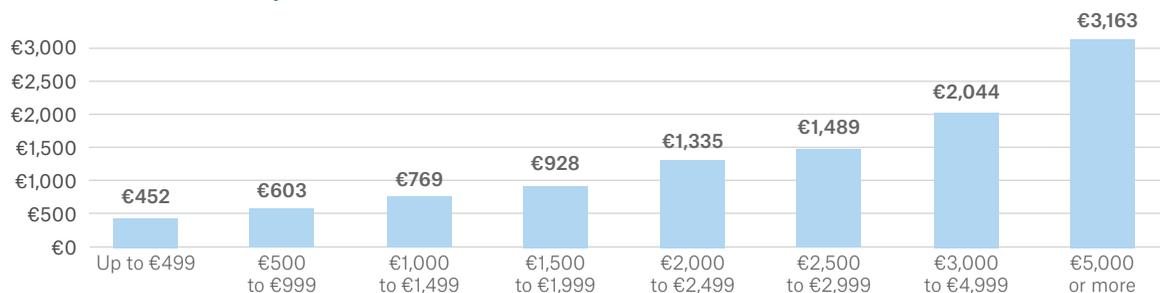
Figure 11. What it costs to study. Mean per-student spending on different educational goods and services by educational establishment ownership, 2011/2012 academic years, in Euros per year.



Source:

Survey of Household Spending on Education, Spain's National Statistics Institute (INE).

Figure 12. The wealthiest families spend more. Annual mean spending on education by monthly income level, 2011/2012 academic year.



Source:

Survey of Household Spending on Education, Spain's National Statistics Institute (INE).

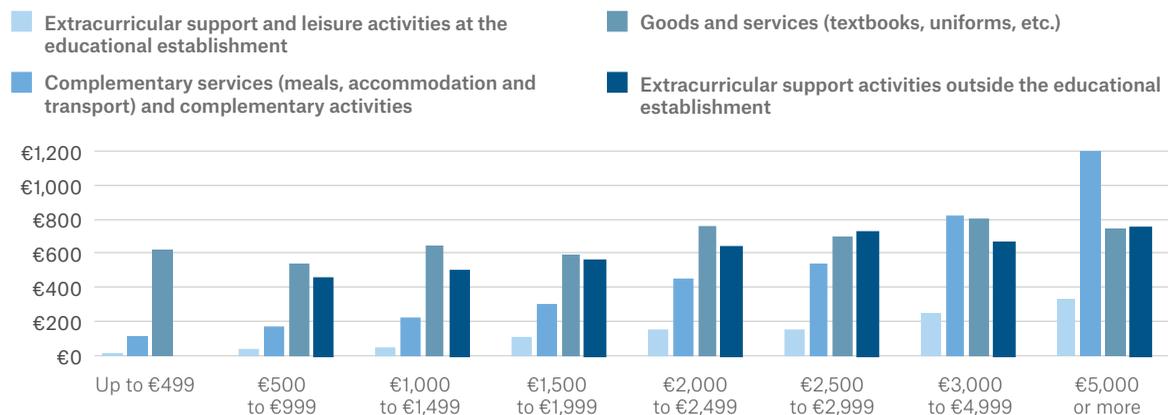
SPENDING ON EDUCATION BY INCOME LEVELS AND BY PRIVATE-SECTOR, PUBLIC-SECTOR AND PUBLICLY FUNDED PRIVATE-SECTOR EDUCATION

Lastly, Figure 13 distinguishes between the different types of goods and services on which families spend money. Spending on textbooks, uniforms, etc. and spending on extracurricular support activities outside the educational establishment represent a higher proportion of humble families' spending on education because their

cost does not differ significantly at any income level. In contrast, other spending on complementary services such as meals, accommodation or transport, and spending on extracurricular activities at the educational establishment represent a higher proportion of spending on education as families' income levels increase.

Figure 13. Education: what families spend money on.

The poorest families mainly spend money on textbooks and uniforms, and extracurricular activities outside the educational establishment. Annual mean spending by monthly income level, by types of educational goods and services, 2011/2012 academic year:



Source: Survey of Household Spending on Education (EGHE), Spain's National Statistics Institute (INE).

Lastly, in this challenge we considered it very important to measure the degree of segregation in schools by student's socioeconomic background. The literature studying the repercussions of segregating students by socioeconomic background at different educational establishments has identified impacts on learning, competencies and social integration, and concludes that it is a major hindrance to schools playing a decisive role in social cohesion. The more segregated a school is, the more it will reproduce and perpetuate existing inequalities in society, thereby preventing the benefits of a social mix. To measure segregation, we have used a very simple indicator that also enables it to be measured in each socioeconomic group of interest (students from low, medium and high social backgrounds) in relation to the education system as a whole. The interpretation of this index of local segregation is more intuitive and easier to understand: it is the percentage of students who would have to change educational establishment so that there is no segregation in the education system.

The results reveal that school segregation tends to be structural in nature, and there have been few changes in the period analysed. It was situated between 21.4% and 23.8% with a certain downward tendency between 2003 and 2012 and slight increase from then to 2015. This result indicates that between 1 in 4 and 1 in 5 students should change school so that there is no segregation. Eighty percent of such segregation is explained by the concentration of students from low and high socioeconomic backgrounds in certain educational establishments. In other words, nearly 1 in 2 students from high or low socioeconomic backgrounds should change educational establishment so that there is no segregation. In contrast, students from a medium socioeconomic background contribute to just 20% of total segregation, which indicates that there is a much better distribution of these students across educational establishments.

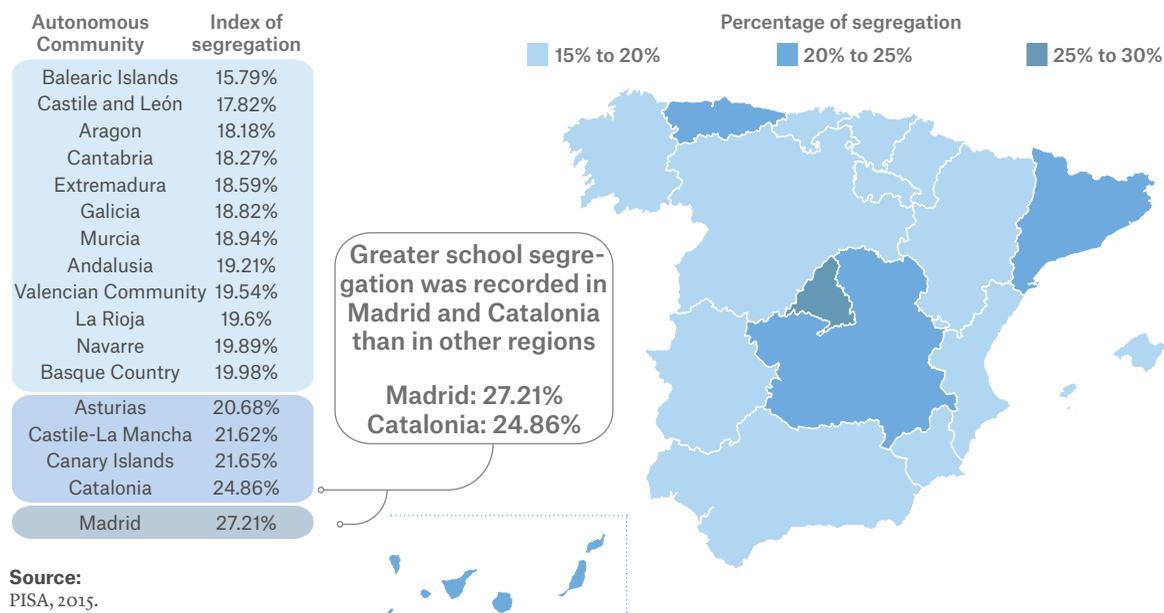
SEGREGATION IN CLASSROOMS BY SOCIOECONOMIC LEVEL: URBAN AND RURAL AREAS

School segregation in Spain is explained by the concentration of students from a high socioeconomic background in some educational establishments and students from a low socioeconomic background in others. The first factor (segregation of students of a high socioeconomic level) has a little more bearing on total segregation. If we analyse the differences in school segregation by Autonomous Community (Figure 14), we can see that the Autonomous Communities with the most segregation are Madrid and Catalonia, which is considerably higher than in all the others. This leads us to think

that, in those territories, a number of differentiating elements might be triggering increased school segregation by social background. On the one hand, such differences could be explained by a greater residential segregation in big cities and by a higher proportion of private-sector and publicly funded private-sector educational establishments in those regions. On the other hand, the generalisation of single-district education policies and legislative reforms in relation to the scores needed to access educational establishments, and particularly those in the Community of Madrid, almost certainly plays an important role in explaining this phenomenon.

Figure 14. Classrooms and social diversity.

Percentage of students who should change school so that there is no segregation by socioeconomic background in 2015, by Autonomous Community.



THE SITUATION IN EUROPE



There are some significant differences in the way the Spanish education system works compared to other EU Members States' education systems. In general, such differences relate more to adequate academic results and to the fact that the system is not sufficiently inclusive than to access to education.

In the challenge relating to quality education, two key indicators have been selected: one that measures the percentage of people who do not attain a high educational level and another that measures the percentage of people who give up studying after compulsory education (early school leaving). The first measures the percentage of people aged 25 to 64 who have not graduated in university or equivalent studies, and the second measures the percentage of people aged 18 to 24 who, regardless of whether they have finished lower compulsory secondary education, do not continue their studies. In the first indicator, Spain is above the European mean. In 2017, the Spanish education system managed to ensure that 35% population reached a high educational level, whereas the European mean was 31%. In the second indicator, Spain is lagging behind other European countries, with 18.3% of people leaving the education system early, which is nearly double the European mean (10.6%).

The indicators selected for the challenge of having the possibility to gain adequate knowledge that contributes to society's development were mathematics competencies in secondary education and adults' foreign language knowledge. In the first indicator, Spain is currently situated above the European mean, and it has gone up in the ranking in recent years from position 20 to 15. In the second indicator, 10% more of the population in Spain does not attain sufficient foreign language competencies compared to the European mean, and it falls within the group of countries with the worst results in foreign languages (United Kingdom, Romania, Hungary and Bulgaria).

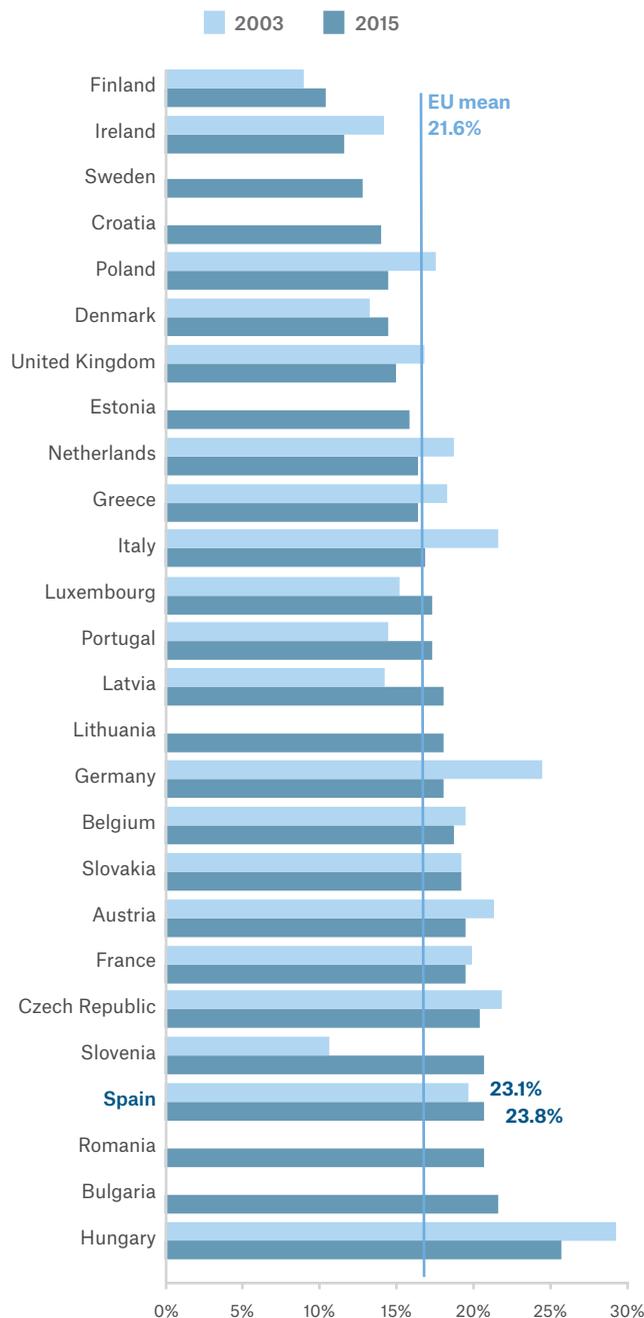
The analysis is completed by analysing the need to have an education system that is inclusive and does not segregate by social background. For that purpose, two relevant indicators have been selected: intergenerational persistence of a low educational level and school segregation by socioeconomic level. The first indicator measures the percentage of people aged 25 to 64 whose parents have a low level of studies that did not attain a higher level than their parents. Spain is situated well above the European mean, which reveals that the persistence of a low educational level is high compared to other European countries. Only 1 in 2 people whose parents have a low educational level manage to attain a higher educational level than their par-

ents, whereas 2 in 3 do so in the European mean. This result may be linked to the late generalisation of intermediate and higher studies in Spain, which can still be detected among the population aged 25 to 64. The concern is the percentage of people aged 25 to 34 with a low educational level whose parents also have a low educational level has increased in the last decade. The fact that the trend in the latter indicator is growing is a warning sign.

A recent study by Murillo and Martínez-Garrido (2018) concludes that Spain is one of the countries with the highest level of school segregation by socioeconomic level at the age of 15, with figures close to those in several eastern European countries and far from the levels of segregation in Eurozone countries. Our results, using the same sources of information as the aforementioned authors, confirm those conclusions (Figure 15). Spain is lagging behind other EU countries in terms of school segregation by socioeconomic level at 10% more than the European country mean in 2015. Whereas 1 in 4 students should change educational establishment so that there is no segregation, only 1 in 5 should do so in the European country mean. In 2015, Finland topped the ranking with the lowest level of segregation in the EU (17%) while Spain - with a level of segregation higher than 23% - joined Hungary, Bulgaria and Romania at the bottom of the country ranking in this need.

Figure 15. High levels of school segregation within the EU context.

Percentage of students who should change school so that there is no segregation by socioeconomic level.

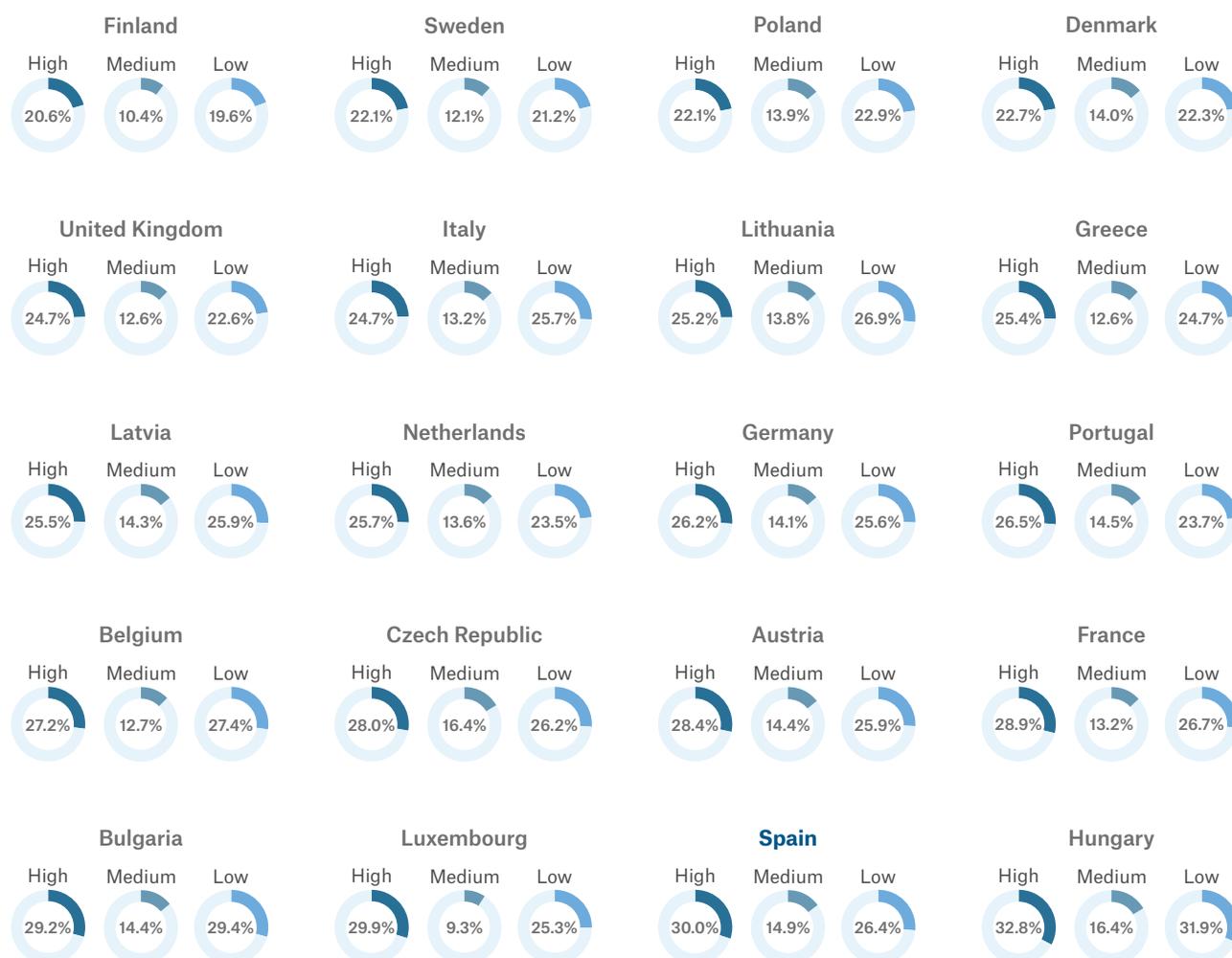


Source:
PISA, 2003 and 2015.

Within the context of a high level of segregation, it is interesting to analyse whether the main driver of segregation in Spain is the greater segregation of groups with higher or lower socioeconomic levels. In Figure 16, we can see that total segregation in Spain is mostly explained by the fact that students from high and low socioeconomic backgrounds are more concentrated in certain educational establishments than they

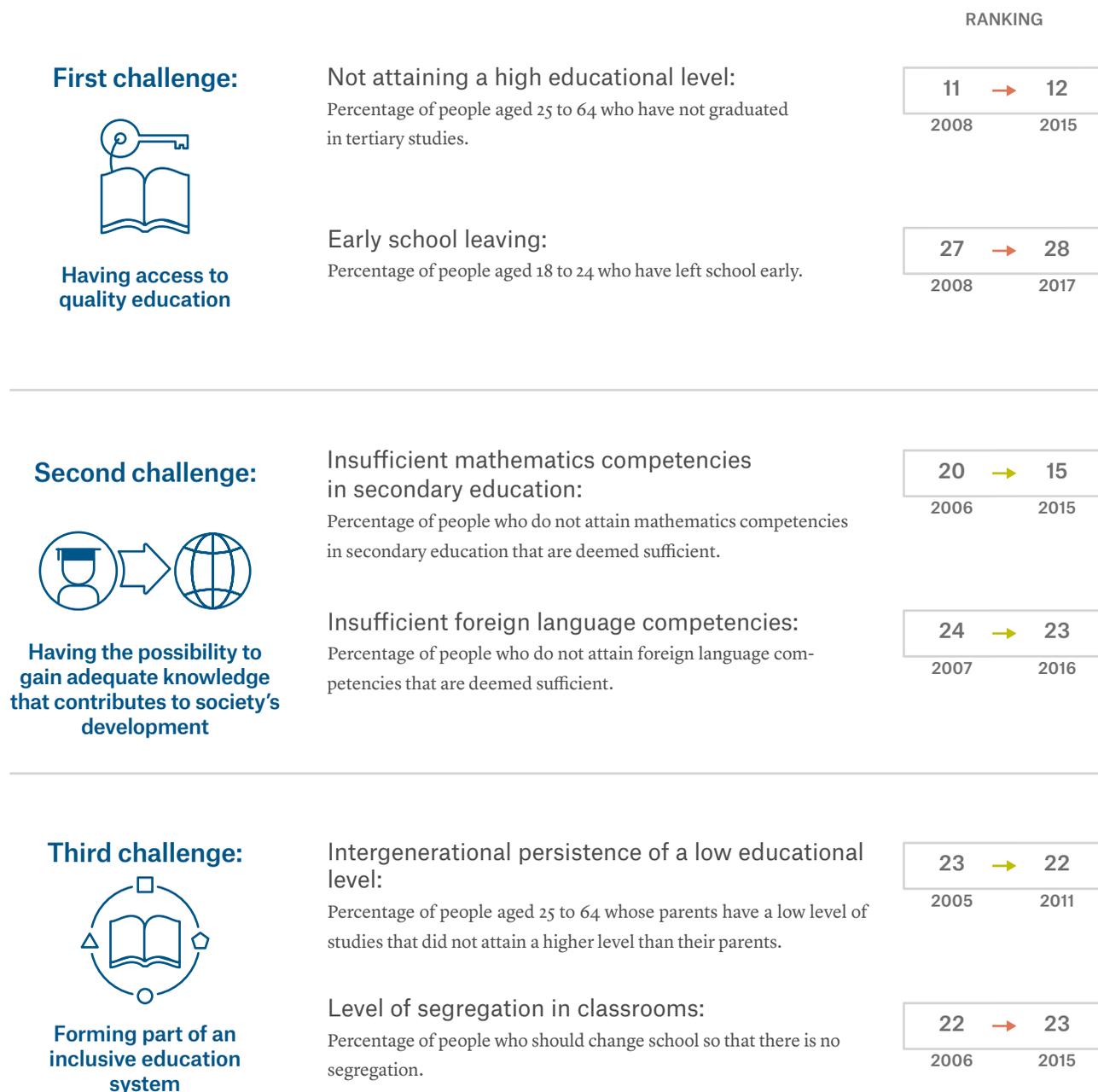
are in the population, and that the most segregated of the two groups is the one comprising students from a high socioeconomic background. Taking into account the results for that group, Spain is actually the second most segregated in Europe after Hungary. However, when considering the level of segregation of the group from a low socioeconomic background, Spain is similar to France and is less segregated than Belgium.

Figure 16. Levels of school segregation, particularly at opposite ends of the social background spectrum. Percentage of students from each socioeconomic background group who should change school so that there is no segregation (selected EU countries, 2015).



Source: PISA, 2015.

Figure 17. Summary of Spain's position in the ranking of education-related social needs in the EU.



Source:

Compiled in-house using data from the Spanish Ministry of Education and Vocational Training, PISA, Eurostat and the Programme for the International Assessment of Adult Competencies (PIAAC).

Spain's position in the ranking of education-related social needs in the EU.

Figure 18. Early school dropout.

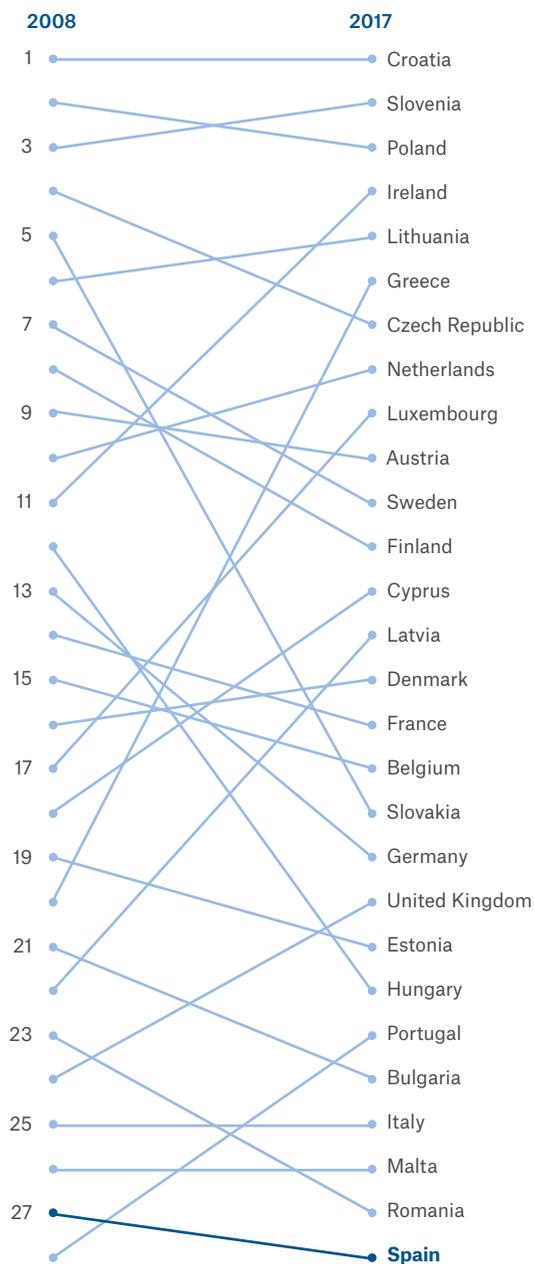
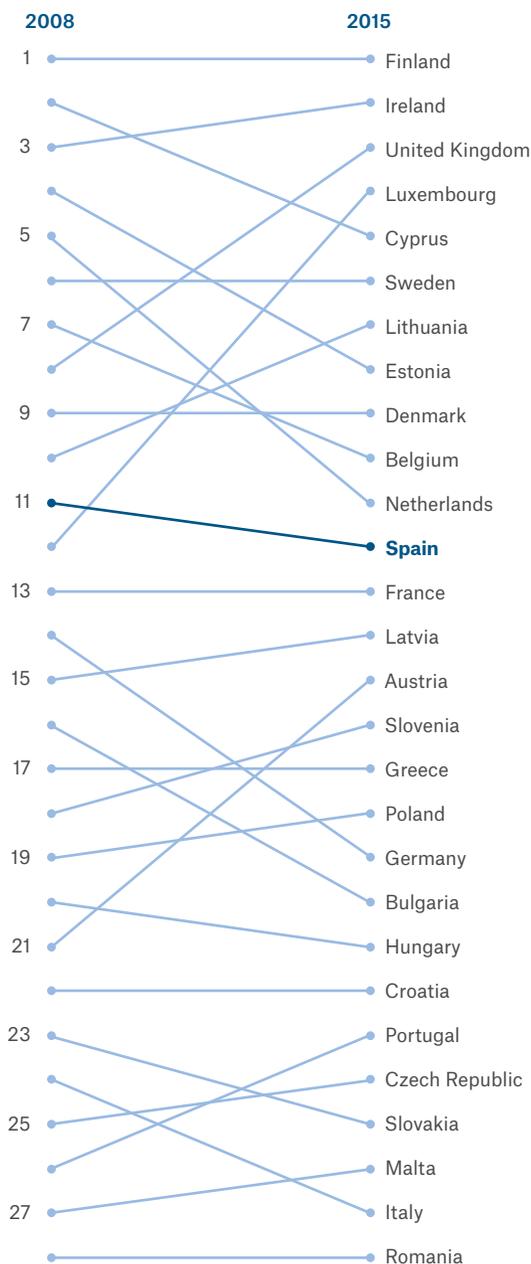


Figure 19. Not attaining a high educational level.



Note:
* Data for Malta for 2008 correspond to 2009.

Figure 20. Insufficient mathematics competencies in secondary education.

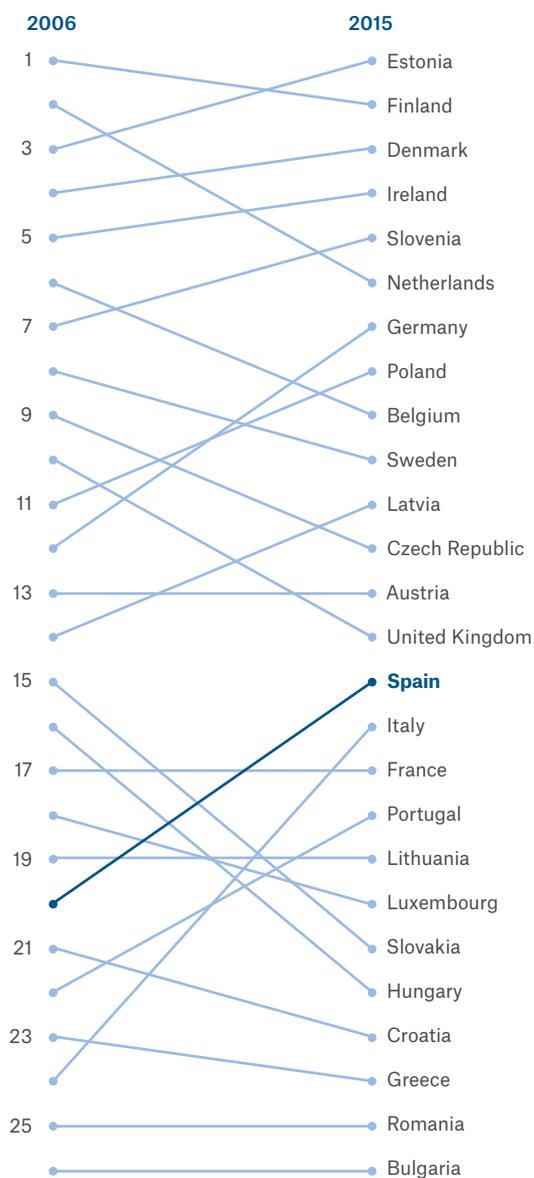
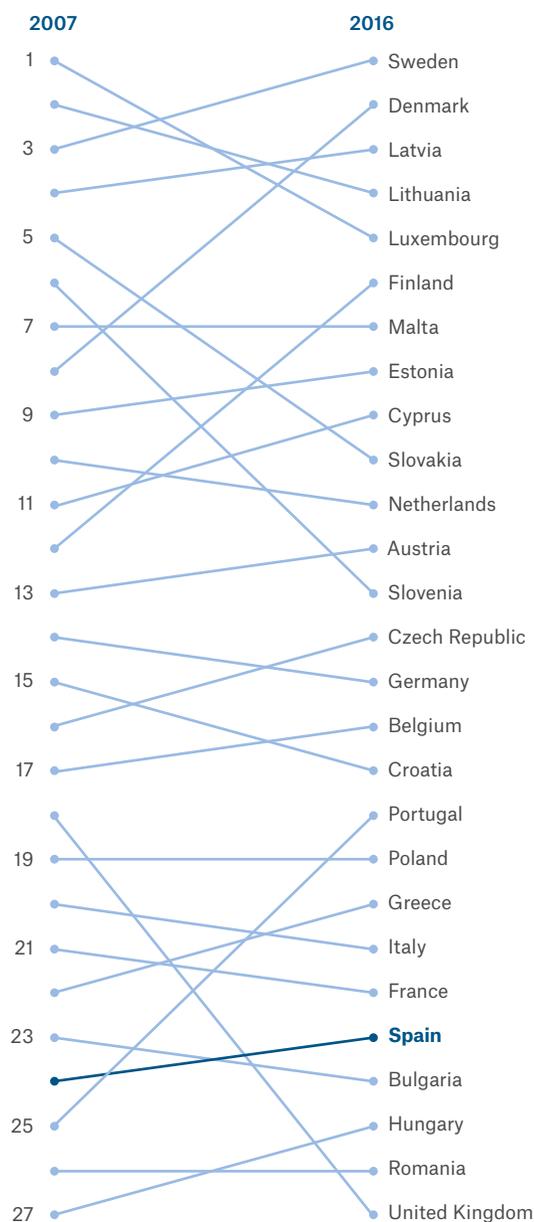


Figure 21. Insufficient foreign language competencies.



Note:
* Data for Luxembourg and the Netherlands for 2007 correspond to 2011.

Figure 22. Intergenerational persistence of a low educational level.

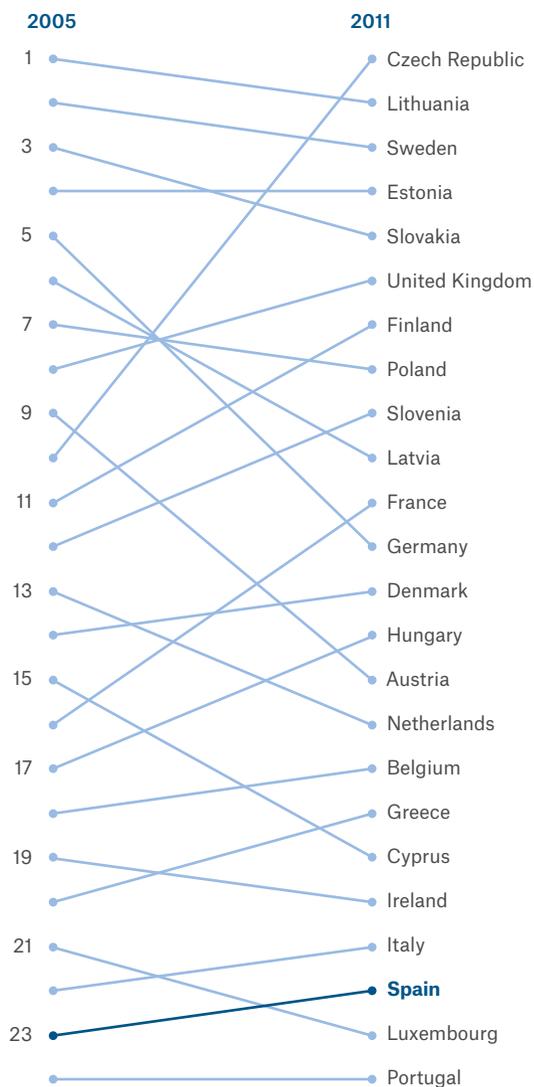
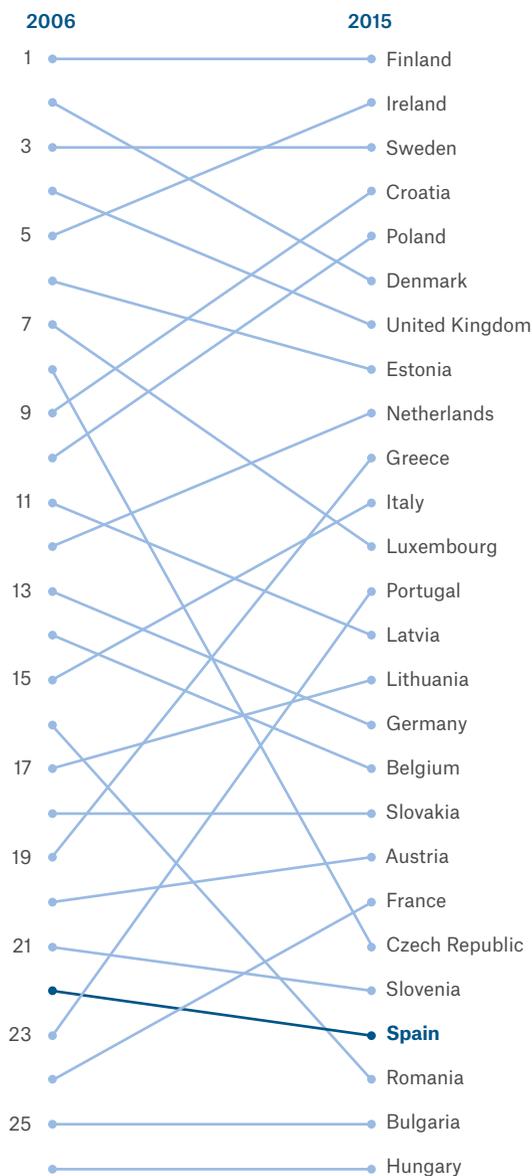


Figure 23. Level of segregation in classrooms.



Source: Compiled in-house using data from the Spanish Ministry of Education and Vocational Training, PISA, Eurostat and PIAAC.

PUBLIC POLICIES

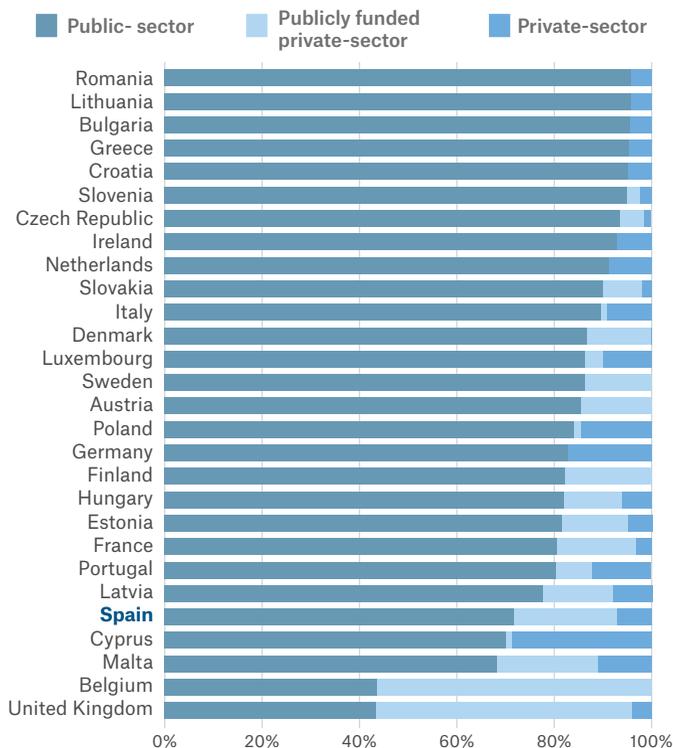
The comparative situation of Spain in the different areas described in the previous section is clearly linked to the level of resources allocated to the education system and the type of design chosen for education policies. In the same way as education in any society can act as a means of reproducing or reducing background-related inequalities, public decision makers' ambition in terms of budgetary commitment in this area determines the ultimate impact of education on society, as well as the degree to which households' educational needs are met.

Within this comparative context, the Spanish experience is quite unique because it is one of the few European countries where public authorities fund private education in various ways. In most European countries, the education system is usually organised in such a way as to make it a very generalised public-sector one, where access to private institutions is more limited. In practice, after the United Kingdom and Belgium, Spain is the country with the highest number of students in publicly funded private-sector education (Figure 24). Given that several studies have shown the publicly funded private-sector educational establishments take in a high proportion of students from families with a high socioeconomic level, this type of spending on publicly funded private-sector education is regressive in nature, i.e., it favours the wealthiest more than the poorest.

In the same way as in other reports on Social Needs

in Spain by the Social Observatory of "la Caixa", presented below are indicators referring to the volume of resources invested and the intensity of protection offered, as are indicators for policies specifically aimed at meeting social needs.

Figure 24. Percentage of students by type of education, 2016.



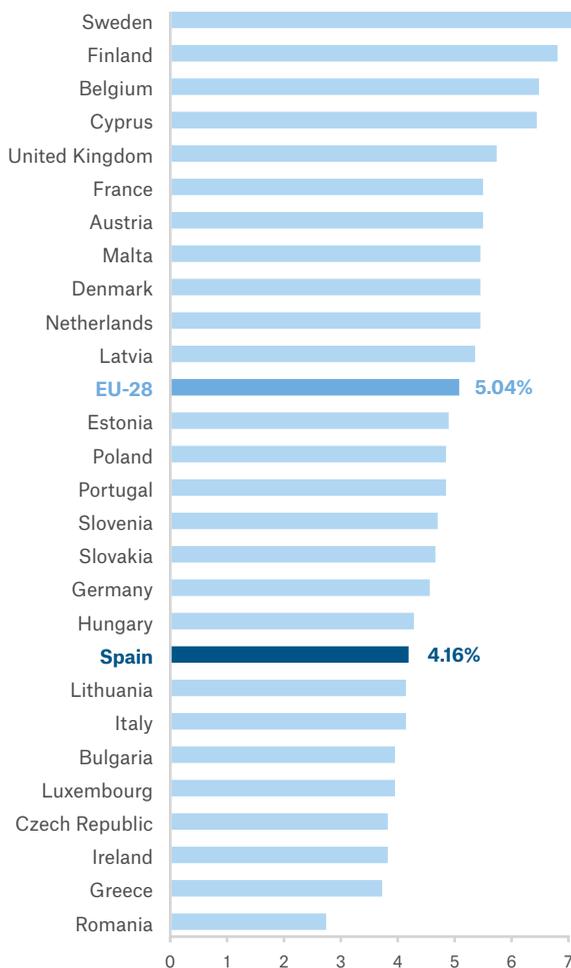
Source: Education and Training Statistics (Eurostat).

Low spending on education within a comparative context

One of the features that best defines the characteristics of the constraints faced by education policies in Spain is the allocation of a lower relative volume of resources (4.2% of GDP) than the European country mean (more than 5%). Since 2009, such spending has gradually fallen and Spain – alongside other Mediterranean countries – is currently characterised as a country that makes a lower budget allocation to the education system. That said, Spain’s relative spending is higher than that of Greece or Italy.

The progressive drop in the birth rate and the narrowing of the base of the Spanish population pyramid, which are not offset by migratory flows, mean that the indicators relating to volume of spending do not reflect its protective intensity well. A more direct indicator is per-student public spending. The calculation of such spending for the different EU countries confirms the previous portrayal because it puts Spain at a lower level than EU mean (10% less than the European mean).

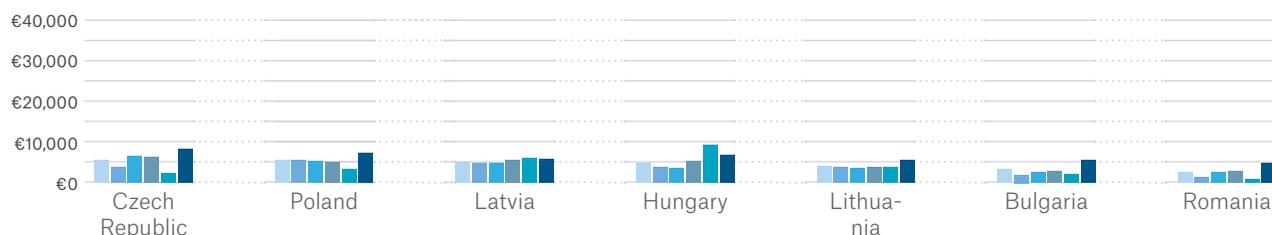
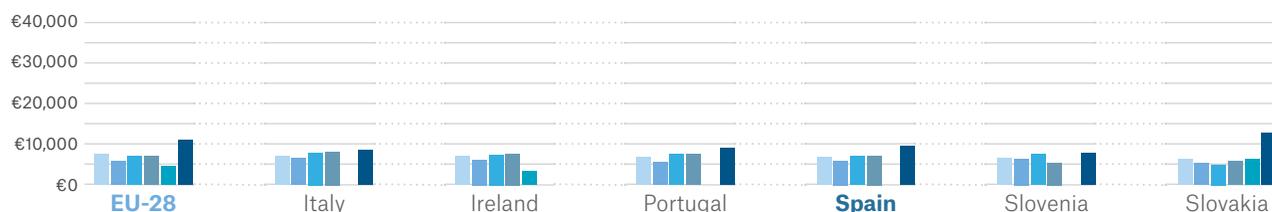
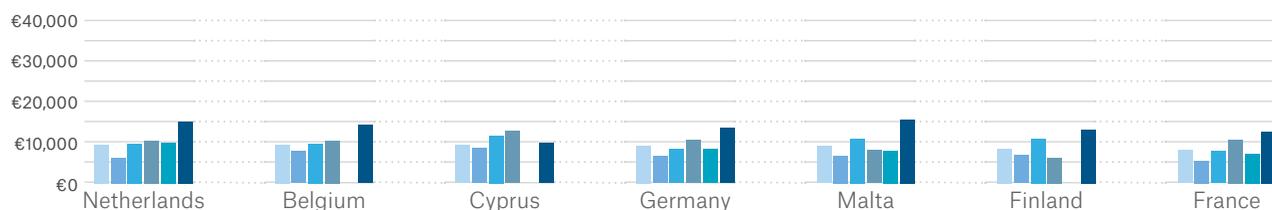
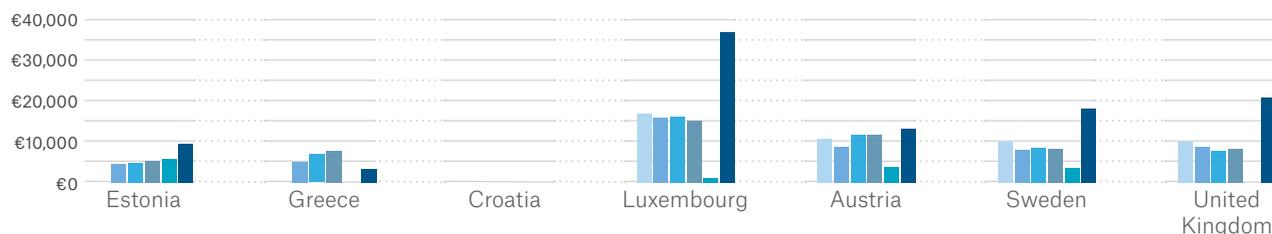
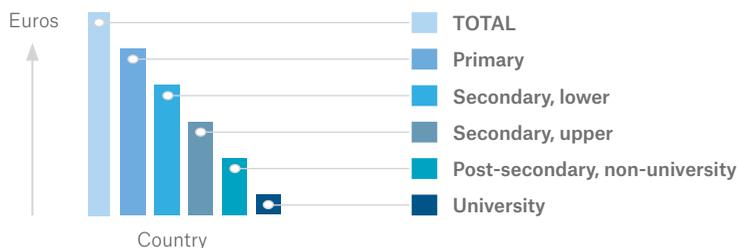
Figure 25. Spending on education as a percentage of GDP, 2015.



Source: Education and Training Statistics (Eurostat).

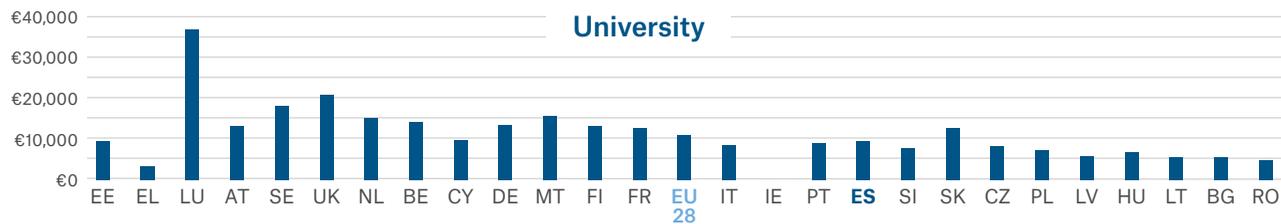
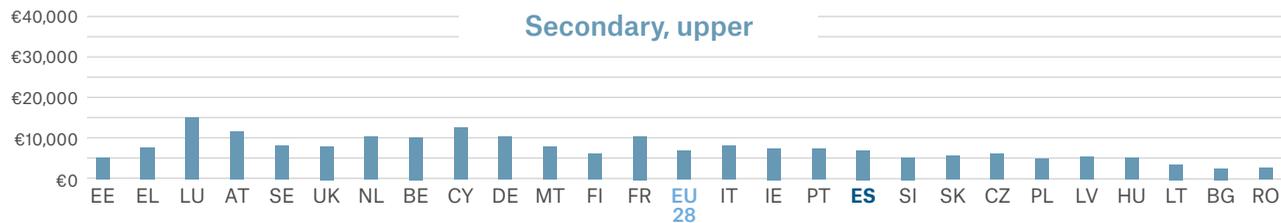
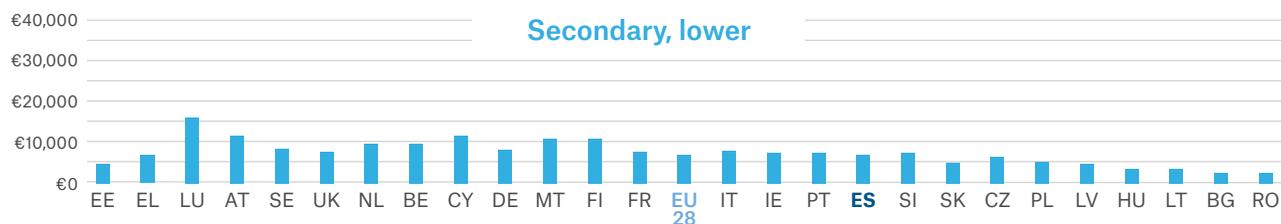
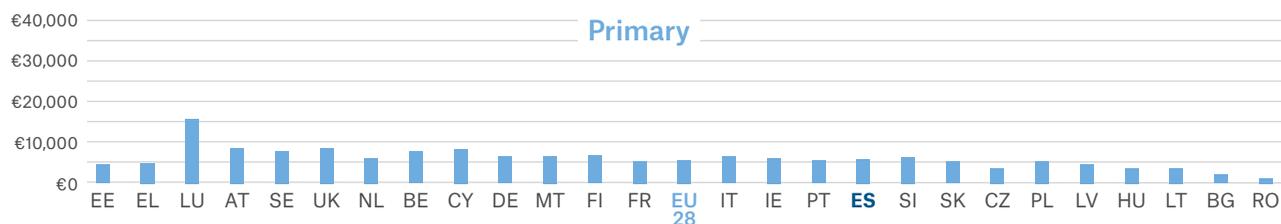
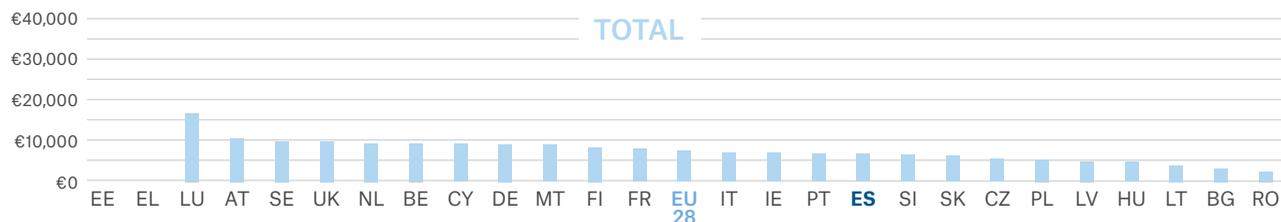
Figure 26. Per-student public spending in Euros on different educational levels at purchasing power parity, 2015.

Comparison of per-student public spending on different educational levels at purchasing power parity, 2015, in each country.



Source: Education and Training Statistics (Eurostat).

Comparison of per-student public spending in the EU-28 countries on different educational levels at purchasing power parity, 2015, by category.

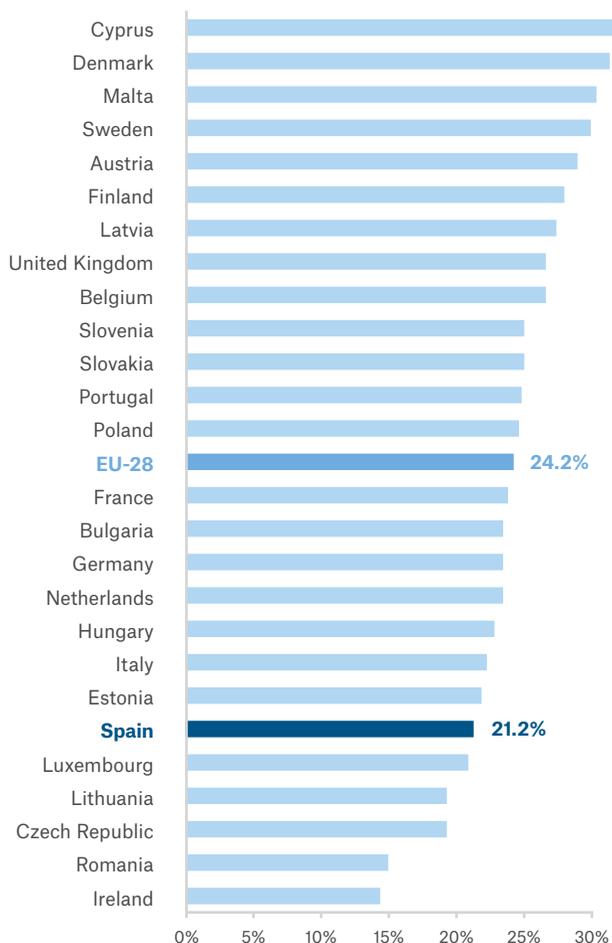


Source: Education and Training Statistics (Eurostat).

That lower relative intensity of spending as a whole does not manifest itself in the same way in the different educational levels. It is slightly above the EU mean in primary education and upper secondary education, and around the mean in lower secondary education. At the first two levels mentioned, Spain is situated right at the mean of the 27 countries for which there are data. Of note in a negative sense is the gap that still exists in per-university-student resource investment (14% below the EU mean). At this educational level, Spain spends less than all the countries that have a higher mean income, with the exception of Italy, and the effort is also lower than that of some lower income countries. The figure is nearly a quarter lower than the EU mean and, what is more, the trend has been a downward one since the beginning of the decade.

A commonly used indicator of the relative intensity of spending on education that complements the previous one is per-student spending expressed as a proportion of GDP per capita. This indicator offers a measure of the intensity of effort that a society makes on education in relation to its level of economic development, and it allows the effects of wealth and population differences to be reduced in comparisons between countries. The calculation of this indicator for EU countries using available information gives a worse result than the previous ones. Spain is situated in the last quartile, further below the European mean than in the previous indicators. A relevant piece of information is that there does not appear to be a clear statistical relationship between the countries' income level and that relative effort, although it is generally below the mean in less wealthy countries.

Figure 27. Per-student spending as a percentage of GDP per capita, 2015.



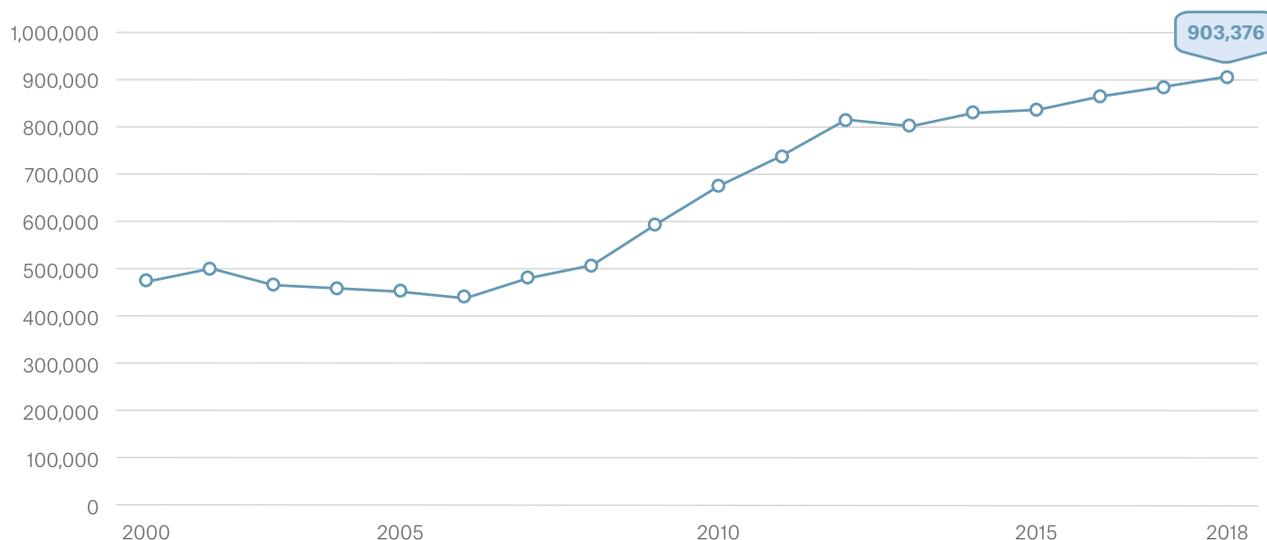
Source: Education and Training Statistics (Eurostat).

Containment of spending on scholarships and grants

Two relevant indicators for measuring the achievement of the first challenge – having access to quality education – were the percentage of students who accessed the different educational levels and the incidence of the school leaving problem. In all the countries, a factor for improving both indicators is the extension of the scholarships and grants system. A policy of scholarships and grants that is sufficiently generous and properly focused on households with the biggest problems in accessing the education system reduces the cost of access to the different stages of the education system and increases the opportunity costs of leaving it. That is why scholarships and grants have normally been considered instruments that are crucial to equal opportunities.

As noted by various authors, scholarships and grants, and the costs corresponding to these items that are published annually by the Spanish Ministry of Education, refer to different items that require a certain conceptual differentiation (Tiana, 2015). At the stages when access to public-sector and publicly funded private-sector educational establishments is free (second stage of early childhood education, primary education and compulsory secondary education), there are no enrolment costs and scholarships and grants help to wholly or partially offset households' education-related spending (materials, meals, etc.). At the following stages (baccalaureate and intermediate vocational education and training), enrolment is only free at public-sector educational establishments. A significant proportion of scholarships and grants is therefore allocated to university education or equivalent studies, where the fees students pay only cover a small part of the real cost of their studies.

Figure 28. Evolution in the number of beneficiaries of the Spanish Ministry of Education's general study scholarships and grants for university and non-university students.



Source: Academic year data and figures, various years (Spanish Ministry of Education).

The available data on the evolution of the number of students who are beneficiaries of general study scholarships and grants for the last two decades show a succession of three clearly distinct stages. In the period before the financial crisis, the number of beneficiaries remained relatively stable, albeit with a slight downward trend. From the middle of the last decade, the number of scholarships and grants began to grow considerably, at a very pronounced rate of increase.

That growth came to a drastic halt in the 2011/12 academic year. Moreover, in 2013, Spanish Royal Decree 609/2013 made the requirements for obtaining a scholarship or grant tougher. At the same time, there was a significant increase in university fees in most Autonomous Communities. The simultaneity of the two processes within a context of drastically increased household needs put a major brake on the contribution of public policies in Spain to university education access. Although the number of scholarships and grants grew, that increase was insufficient to cope with the growing demand resulting from households' drop in income. There are two further factors that make it necessary to think about the suitability of the scholarships and grants system. Firstly, since the above-mentioned reform, the mean amounts awarded have gone down in real terms. Secondly, as various studies have shown, a large part of the spending does not go to those households most in need, thus limiting its potential contribution to equal opportunities. On top of that, the spending allocated to higher education is, in the majority of instances, awarded to households that fall within the highest income deciles (Calero, 2015).

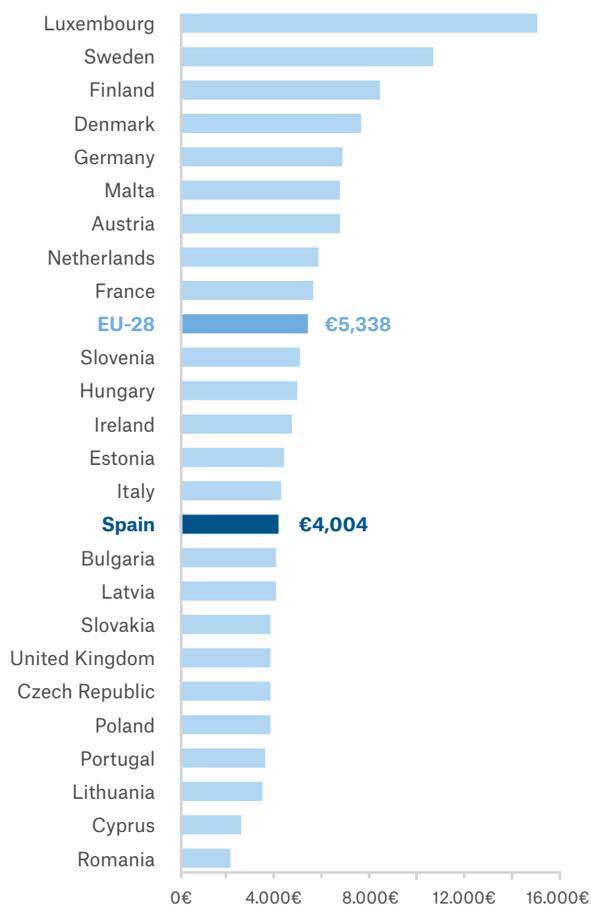
Differences compared to Europe in early childhood education

The set of actions promoting access to education can be considered an investment in future economic growth and a commitment to improving equal opportunities. Besides the usual arguments of social equality and justice, investment in education from very young ages can also be considered a means of boosting the capitalisation of human resources, with positive effects on economic growth in the long term. From the perspective of individual opportunities, early childhood education promotes the development of cognitive and non-cognitive skills that may be important for lifelong individual development.

As emphasised by the OECD in various reports (Starting Strong), early childhood education programmes can improve the above-mentioned skills, help to lay the foundations for continued learning, make the results of learning more equitable, reduce poverty and improve intergenerational mobility. In most countries, governments have used different formulas to gradually increase the resources allocated to early childhood education. However, universal access to such programmes does not exist in every country, and the resources invested in them differ considerably.

Eurostat data once again enable it to be shown that Spain is situated below the EU country mean and far from those countries that invest the most public resources in this type of education, such as the Nordic countries. In those countries, there is a much stronger tradition of systems that integrate early childhood education and care. However, the data show that per-student spending in Spain is situated below that of all the other higher income countries apart from the United Kingdom, which means that clear and consistent strategies have to be devised for the efficient allocation of public resources to this priority area.

Figure 29. Per-student public spending on early childhood education at purchasing power parity, 2015.



Source:
Education and Training Statistics (Eurostat).

CONCLUSIONS

1 Good in access, average in competencies, poor in foreign languages

The Spanish education system is characterised by high levels of access to early childhood education and by a marked improvement in access to all educational levels in recent decades, including higher education. The knowledge and competencies of primary and secondary education students are situated close to the European mean, with significant improvements in recent years, particularly in primary education. However, the results for foreign language competencies are far from the European mean. This deficit tends to be structural in nature, and it has changed very little in the last decade.

2 High rates of school leaving and repetition of a school year

School leaving after compulsory education is much higher than the European mean in both the expansive and recessive stages. Repetition of a school year in secondary education in Spain is much higher than the European mean. One in 5 young people aged 18 to 24 do not continue their studies by taking a baccalaureate, vocational education and training or any unregulated training course. The school leaving rate was even higher before 2009, and only the deep economic recession managed to bring it down due a lack of employment opportunities for people with a low educational level.

3 Public-sector, private-sector, publicly funded private-sector

Most of the 10 million students at all educational levels in Spain (from early childhood to university education) are enrolled in public-sector educational establishments: 7 in 10. Two in 10 students are enrolled in publicly funded private-sector educational establishments, and 1 in 10 in private-sector ones.

4 Intergenerational persistence of a low educational level

The intergenerational persistence of a low educational level is high in Spain compared to other European countries, and a certain worsening of this indicator is observed among younger cohorts. In Spain, 1 in 2 people aged 25 to 64 whose parents have a low educational level do not manage to attain a higher educational level than their parents. In the EU country mean, this only happens to 1 in 3 people.

5 High degree of segregation

The level of segregation by social background in Spanish educational establishments is high within the European context, which hampers the possibilities that the generalisation of education offers in terms of improving the opportunities of children born into the most vulnerable environments. Specifically, whereas 1 in 4 students in Spain should change educational establishment so that there is no segregation, only 1 in 5 should do so in the European country mean. Such segregation is basically explained by the concentration of students from low and high socioeconomic backgrounds in certain educational establishments.

6 Low per-student spending

Spain is one of the EU countries that spend the least on education in relation to both its economic level and per-student spending. As the financial crisis progressed, the volume of spending on education in Spain moved further away from the European mean. The biggest gap in per-student investment in resources is at university level, whereas per-student investment in primary and secondary education situates Spain close to the European country mean. Per-student public spending on education from ages 0 to 3 is below the European mean. So, despite the fact that access to early childhood education is becoming more generalised, families have to make a major financial effort to fund it. This may be hampering its potential positive impact on the development of cognitive and non-cognitive skills in young children from vulnerable environments.

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