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EDUCATION IN EUROPE: KEY FIGURES

2016



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DE L'ÉDUCATION
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L'ENSEIGNEMENT
SUPÉRIEUR ET DE
LA RECHERCHE

direction de l'évaluation de la prospective et de la performance



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2016

In this publication, averages from datasets with OECD (“OECD”, “EU 21”, “TALIS”) sources are not weighted, each country “weighing” the same in the comparison. Averages from datasets with Eurostat sources are however weighted, with the exception of the EHIS survey (6.5.3).

Outermost regions (Azores, Canary Islands, Guadeloupe, French Guiana, Madeira, Martinique, Mayotte, La Réunion, Saint-Martin) are not displayed on the maps. However, data for each country in this publication take these outermost regions into account.

Data used in this publication were the most recent at the time this publication was written.

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International comparisons have been a significant contributor to the public debate preceding the ambitious reforms across all sectors and levels of education that the government has been pushing forward since 2012. Reinforcing the DEPP's diagnosis regarding the impact of the social environment on students' performance, the PISA survey has played a clear part in the implementation of these reforms aiming at tackling inequalities. In return, these reforms are such that France will improve its position in the international comparisons of education systems. For instance, the public expenditure priorities for primary education as well as priority education sector, along with considerable additional wherewithal, will soon be apparent in the international indicators for expenditure on education. The agreement on professional development, career paths and salaries, which will come into force on January 1st, 2017, will enable our teachers to see their salaries rising above the average of the OECD countries.

Although International data are often referred to in public discussion, they are often no less tricky to interpret. Is it possible to isolate one aspect of education whilst it is the whole which makes the system? In this regard, the DEPP's new publication, *Education in Europe: Key figures*, gives decision-makers, the entire educational community and all those concerned by educational issues a wide variety of indicators that have been gathered for the first time in a national publication. It thus provides the chance to compare and contrast the multiple dimensions in play for success in education, and this for all European Union member-states that are facing the same challenges, ranging from education for all to learning how to live together in diversity.

This makes it a new instrument, useful to every citizen and especially important for fully participating in orienting educational policies at the nation- and European-wide levels.



Najat Vallaud-Belkacem

France's Minister
of National Education,
Higher Education
and Research

International comparative data play a growing role in public discussions on education. They have now become an indispensable fulcrum in steering educational systems. With its statistical expertise and its participation in the committees and European and international networks that produce them, the *Direction de l'Évaluation, de la Prospective et de la Performance* (DEPP - Evaluation, Forward-planning and Performance Directorate), within the French Ministry of National Education, Higher Education and Research is deeply involved in producing these data. Historically, it was the DEPP that raised the awareness of the educational community in reading international indicators by publishing *L'état de l'école* ("The State of Education"), beginning in 1991, just as the OECD's work on reference indicators was being implemented in *Education at a Glance*.

Education in Europe: Key figures is a new DEPP publication that intends to make available a reasoned set of indicators dealing with most of the dimensions of the educational system of European Union countries to a broad audience. It should be remembered that since the Lisbon Summit in 2000, these EU countries have committed to a common co-operation framework in the educational and training fields; this initiative was renewed in 2010 with the implementation of the *Education and Training 2020* (ET 2020) programme. The vast majority of indicators selected or conceived for this publication have been drawn from Eurostat, which is the directorate-general of the European Commission in charge of statistical information on a European scale. In some cases, OECD sources, as well as *Eurydice*, have been preferred. The years of reference of the data vary from 2012 to 2014.

The first chapter deals with the **economic and social environment of families with children in the European Union (EU)**. The number of siblings, the parents' educational attainment level and the comfort of their housing reveal significantly different average characteristics from one country to the next. For example, while 60% of the children from 0 to 17 have parents with higher education degrees in Finland or Ireland, there are fewer than 25% in Croatia, Portugal and Romania. While there are less than 1% of families living in housing without a shower or bathtub in the large majority of northern and western European countries, there are 36% in Romania and 20% in Bulgaria. The risk of poverty or social exclusion are systematically higher everywhere when the parents have lower educational attainment levels.

Chapter two presents the **great diversity of educational systems in the EU**. Their very organisation bears the mark of these singularities. Although there are a majority of common-core structures that encompass primary and the first cycle of secondary education, some countries in contrast stream students into different pathways early (Austria, Germany, Lithuania and the Netherlands). These are countries that traditionally have a well-developed apprenticeship system, with the notable exception of Denmark that has long had both a common-core syllabus up to the end of the first cycle of secondary school and an extensive apprenticeship system. The systems for the care

and education of young children, the mandatory enrolment age (beginning and end), the organisation of teaching cycles and the theoretical age of moving from one cycle to the next vary from country to country.

Chapter three is devoted to **education costs**. The share of national wealth allocated to education was on average 5% in 2012 among the 21 EU-member countries of the OECD, but it varied by almost one to two fold within the EU with France located slightly above the average. Likewise, the impact of the 2008 economic crisis on these expenses proved to vary from country to country. The annual education expenditures per student are mainly influenced by four factors likely to lead to different choices according to the country, *i.e.* teachers' salaries and teaching time, students' instruction time and class size.

The fourth chapter presents the **main characteristics of teachers in the EU**. Mostly female, the teaching corps is undergoing uneven aging across countries, which places educational systems before the challenge of the magnitude of future recruitment and training of these new teachers. Very predominantly holders of bachelor or masters degrees, at least for those who teach in secondary education, teachers are subject to highly varying regulations for their working time and the tasks they are assigned within the EU. Some countries, such as France, regulate the teaching time, while others, like the United Kingdom, regulate the time teachers are present in school.

Chapter five deals with the **results obtained by the different educational systems** from the angle of student performances and the equitable distribution of those performances. What are mainly used here are the findings of the PISA 2012 survey, which focuses on children born in 1996. The performances of the European countries are also examined regarding the quantified goals set as part of the Education and Training Strategy 2020 in matters concerning the fight against early school leavers, the proportion of higher-education graduates, pre-primary enrolment, lifelong learning, students' PISA performance in reading literacy, mathematical literacy or science, in matters of learning mobility, and lastly, the employability of recent graduates.

Chapter six focuses on **the movement from initial training to the labour market**. Degrees everywhere play a determining factor in gaining access to employment and income, with continuing studies for attaining higher educational levels invariably proving to be systematically profitable. Penalised in accessing employment, people with few or no degrees also have less access to continuing training, which is unevenly developed within the EU. The gender issue deserves particular attention: although they have lower educational attainment levels on average, males enjoy a systematically better position in the labour market and higher income. The impact of education is far from being limited to the labour market and income. In all European countries, for example, the risk of obesity for adults over 18 increases tangibly for those with few or low-level degrees. ■

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AN INTERNATIONAL NOMENCLATURE OF EDUCATION PROGRAMMES AND LEVELS

In a context of diverse national education systems and the meaning given to degrees, the international comparison first of all uses a common framework of definitions and nomenclatures. This common framework is the product of a long-running process that began with the creation of the International Bureau of Education in 1925, then, and above all, with UNESCO's, created in 1945, which over time has included other organisations (OECD and Eurostat).

Adopted by UNESCO in 1978, the International Standard Classification of Education (ISCED) classifies education/training programmes and attainment levels (this is not "school curricula", attached to a particular grade) in a unified nomenclature that makes it possible to produce international statistical comparisons in education. A first reform occurred in 1997 that led to ISCED 1997. This combined three kinds of criteria, *i.e.* the level (from ISCED 0 to 6, **1.1.1**); the distinction between a general stream intended for continuing education (A), a vocational stream that may give access to upper levels of education (B) and a stream that prepares directly for the labour market (C); and lastly, the duration of programmes. Thus short-term programmes of secondary vocational teaching, called "3C short-cycle", the duration of which lasts strictly less than two years, does not allow for attaining the ISCED 3 level.

The ISCED was reformed in 2011 upon by the three organisations that co-ordinate its implementation (UNESCO, the OECD and Eurostat). From then on the tertiary learning programmes have been classified on 4 levels (ISCED 5 to 8) **(1.1.1)**, and ISCED 0 is subdivided into two sections (ISCED 01 and 02) so as to differentiate the education programme provided in the framework of institutions for early childhood from those for pre-primary education. Each of the ISCED 2 to 5 programmes is, as in the ISCED 1997, subdivided into "general" and "vocational" programmes.

The observation of a population is predicated on differentiating the ISCED level "attained" by the population that corresponds to the last validated ISCED level and the

ISCED "programme" in which this population is working at the time of observation. For example, a student newly enrolled in a French high school has attained the ISCED 2 level since he/she validated the lower secondary education, and he/she is now attending an ISCED 3 programme. It is only once he has obtained a *CAP* (secondary school vocational training certificate), a *BEP* (secondary school vocational degree) or a baccalaureate (equivalent to GCE A-levels) that the student attains the ISCED 3 level.

A CLASSIFICATION THAT LEAVES COUNTRIES ROOM FOR INTERPRETATION

The international definitions and classifications are grounded in a past woven from arbitration and evolutions that have enabled improvement in the quality of international statistics whilst inevitably leaving room for interpretation by each country. Although all European Union countries have degrees, the way in which countries gather information about these degrees in their surveys as well as the way in which the degrees are converted to the ISCED can have an influence on all of the international data (*cf.* 5.2, p. 48).

The two examples given in **1.1.2** show details of the coding of two French programmes. Both the *CAP* and the general Baccalaureate are programmes leading to degrees at the conclusion of upper secondary school; so their classification begins with the number 3. The second number indicates the orientation of the programme, *i.e.* the *CAP* is a "vocational" programme, whilst the general Baccalaureate, a "general" programme, so they are assigned numbers 5 and 4 respectively. Lastly, the third code number indicates whether the programme validates or not the level of the ISCED concerned and whether it gives access to the higher ISCED level. Here the two programmes make it possible to validate ISCED level 3, but only the Baccalaureate allows for accessing tertiary education. The codes of the *CAP* and the general baccalaureate are therefore "353" and "344" respectively. ■

1.1.1 Correspondence table of programmes between ISCED 1997 and ISCED 2011

© UNESCO Institute For Statistics, *International Standard Classification of Education - ISCED 2011, 2012.*

ISCED 1997		ISCED 2011	
ISCED 0	Pre-primary education <i>École maternelle</i>	ISCED 01	Early childhood educational development <i>Education programmes targeting children under the age of 3</i>
		ISCED 02	Pre-primary education <i>École maternelle</i>
ISCED 1	Primary education <i>École élémentaire</i>	ISCED 1	Primary education <i>École maternelle</i>
ISCED 2	Lower secondary education > minimum duration: 3 years orientation: programmes A, B or C <i>Collège</i>	ISCED 2	Lower secondary education > minimum duration: 3 years orientation: programmes 4 or 5 <i>Collège</i>
ISCED 3	Upper secondary education > minimum duration: 2 years orientation: programmes A, B or C <i>Lycée général, technologique, professionnel</i>	ISCED 3	Upper secondary education > minimum duration: 2 years orientation: programmes 4 or 5 <i>Lycée général, technologique, professionnel</i>
ISCED 4	Post-secondary non-tertiary education orientation: programmes A or B <i>Capacité en droit Diplôme d'accès aux études universitaires - DAEU</i>	ISCED 4	Post-secondary non-tertiary education orientation: programmes 4 or 5 <i>Capacité en droit Diplôme d'accès aux études universitaires - DAEU</i>
ISCED 5	First stage of tertiary education orientation: programmes A or B <i>Établissements d'enseignement supérieur (universités, grandes écoles, etc.)</i>	ISCED 5	Short-cycle tertiary education orientation: programmes 4 or 5 <i>Sections de techniciens supérieurs - STS Diplôme universitaire technologique - DUT</i>
		ISCED 6	Bachelor's or equivalent level orientation unspecified <i>Licence (LMD), Licence Professionnelle, Classe Préparatoire aux Grandes Écoles, etc.</i>
		ISCED 7	Master's or equivalent level orientation not used <i>Master (LMD), formations d'ingénieur or d'école de Commerce, etc.</i>
ISCED 6	Second stage of tertiary education orientation: unspecified <i>Établissements d'enseignement supérieur (universités, grandes écoles, etc.)</i>	ISCED 8	Doctoral or equivalent level orientation not used <i>Doctorats</i>

Note: In the ISCED 1997 nomenclature, programmes A, B or C respectively designate general, vocational and short vocational programmes. In the ISCED 2011 nomenclature, programmes 4 and 5 respectively designate general and vocational programmes.

1.1.2 Examples of programmes' codification in France according to ISCED 2011 nomenclature: CAP and Baccalauréat general

CAP (Certificat d'Aptitude Professionnelle)			Baccalauréat general		
ISCED	General / Vocational	Orientation	ISCED	General / Vocational	Orientation
0			0		1
1	4	1	1		2
2		2	2		3
3	5	3	3	4	4
4		4	4		
5			5	5	
6			6		
7			7		
8			8		

1.2 THE DEMOGRAPHIC CONTEXT

A MORE OR LESS PRONOUNCED AGING OF THE EUROPEAN UNION'S POPULATION, DEPENDING ON THE COUNTRY

On January 1st, 2014 the 28 member-states of the European Union (EU) had a population of 507 million, 136 million of whom were aged between 0 and 24 years, or 27% of the total EU population (1.2.1). Ten years earlier in 2003, the same age group numbered 145 million, or 30% of the total population. Thus the European Union is facing an aging demographic where half of the population is now older than 42. Nonetheless, the percentage of young people in the total population shows significant disparities from country to country, which reflects contrasting demographic dynamics within the EU. This percentage is over 30% in Ireland, Cyprus, France, the United Kingdom and Denmark, whereas the percentage in Italy, Germany, Bulgaria, Slovenia and Spain is less than 25%. The percentage of 0 to 17 year-olds varies from 17% in Italy to 26% in Ireland.

CONTRASTING FERTILITY RATES AND MIGRATORY NUMBERS ACCORDING TO THE COUNTRY

The magnitude of the **natural balance**[□] and **migration balance**[□] respectively proves to vary widely from country to country (1.2.2). Linked to growing **life expectancy at birth**[□] (77.8 years in 2004 and 79.9 years in 2013), maintaining a low **total fertility rate**[□] average in the EU (1.47 children per woman between 15 and 49 years old in 2003; 1.55 in 2013) explains the aging phenomenon. However, fertility rates remain highly contrasted from country to country (1.2.3). Ireland, France and Sweden have rates superior to 1.75 children per woman, whereas the rate in Portugal, Spain, Poland, Greece and Cyprus does not surpass 1.3.

As seen with the latest crisis, the flow (intra- and extra-European) of migrants may be a decisive factor in demographic dynamics. In Lithuania and Latvia, for example, the

demographic drop between 2009 and 2014 is almost entirely due to considerable emigration flows. On the other hand Cyprus and Luxembourg see a large part of their demographic growth explained by a positive migratory balance. And Germany and Austria are in a situation where the migratory numbers on their own enable the two countries to maintain a growth in their population numbers. Moreover, this phenomenon is recent for Germany which has gained inhabitants only since 2011, after losing population between 2003 and 2011. The migratory situation is an important factor in demographic dynamics while it challenges education systems from the point of view of intake capacity and integrating non-native speaking pupils and their parents into schools.

TWO-SPEED DEMOGRAPHIC PROGRESS IN EUROPE OVER THE LONG-TERM

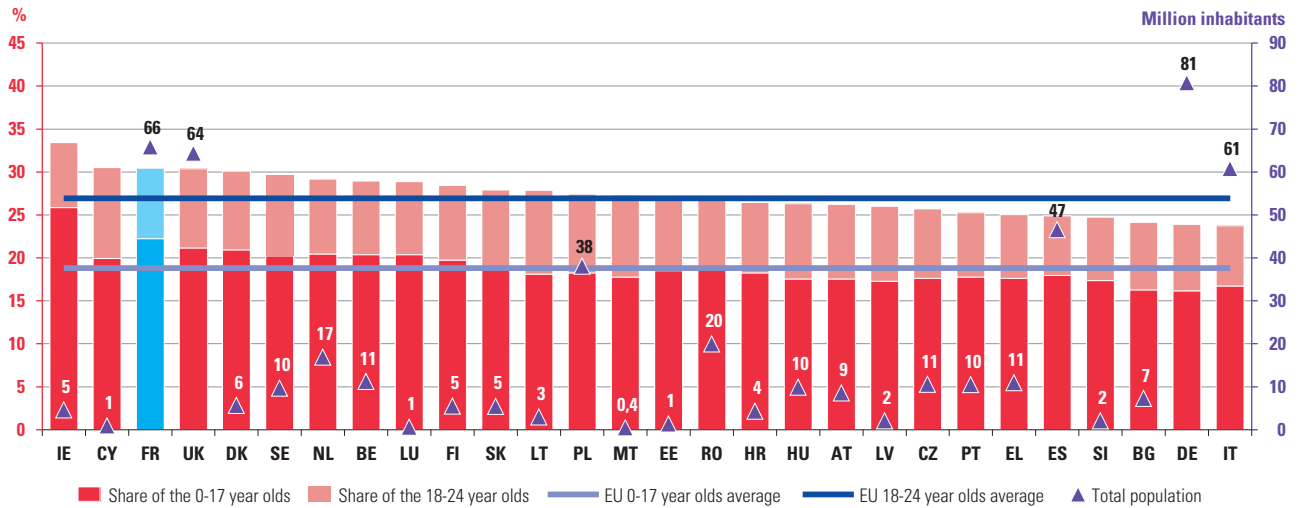
By 2030 the EU should lose inhabitants in the 0 to 24 year-old age group but expand its total population, confirming the continuing overall aging of the population (1.2.4). There are, however, two distinct groups of countries, i.e. a majority of western European countries will see simultaneous growth in their youth population and their overall population (in particular Austria, Belgium, Finland, France, Italy, Luxembourg, Sweden and the United Kingdom), whilst the eastern European countries will see joint shrinkage of their youth and overall populations (the Balkans, Spain, Greece, Portugal, central Europe and the Baltic countries).

In this scenario Italy stands out as the only country to reverse a trend, today unfavourable. With the lowest percentage of a youthful population in the European Union (1.2.1) and a negative natural variation of its population between 2009 and 2014 (1.2.2), the country will probably see an increase in its young and overall populations by 2030. With the Italian fertility rate being among the lowest in the EU (1.2.3), this turnaround will probably be due to the influx of migrants that will continue for the next few years. ■

[□] See definition p. 68.

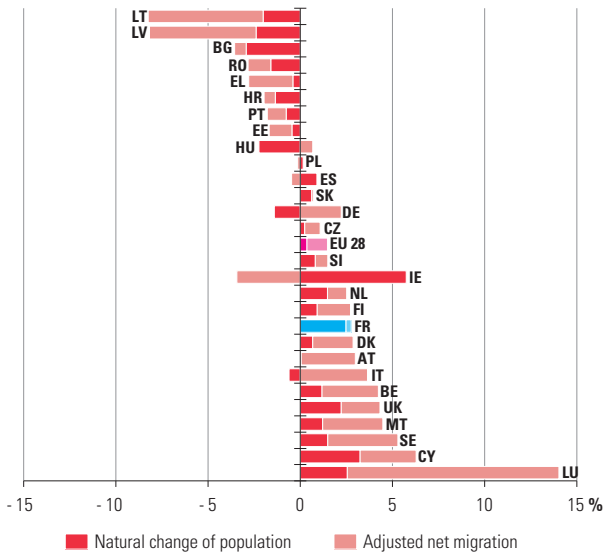
1.2.1 Proportion of 0-17 year olds and 18-24 year olds in the total population and population on 1 January in 2014

↳ Eurostat, demo_pjan.



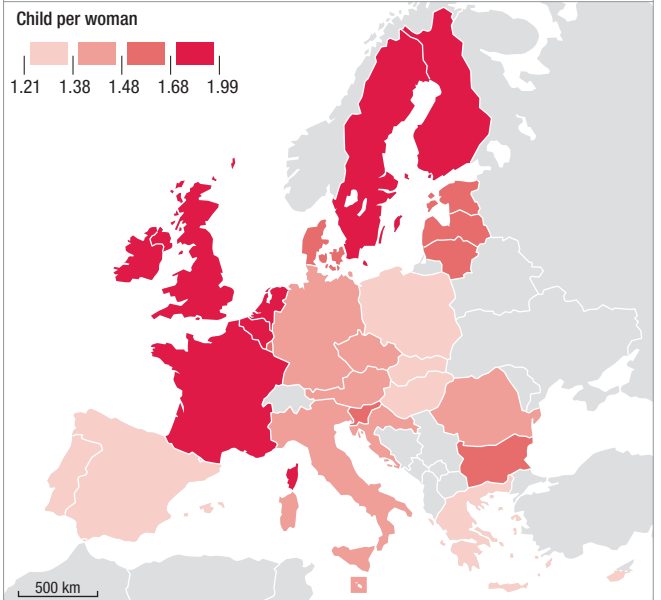
1.2.2 Natural change of the population and adjusted net migration – 2009/2014

↳ Eurostat, demo_gind.



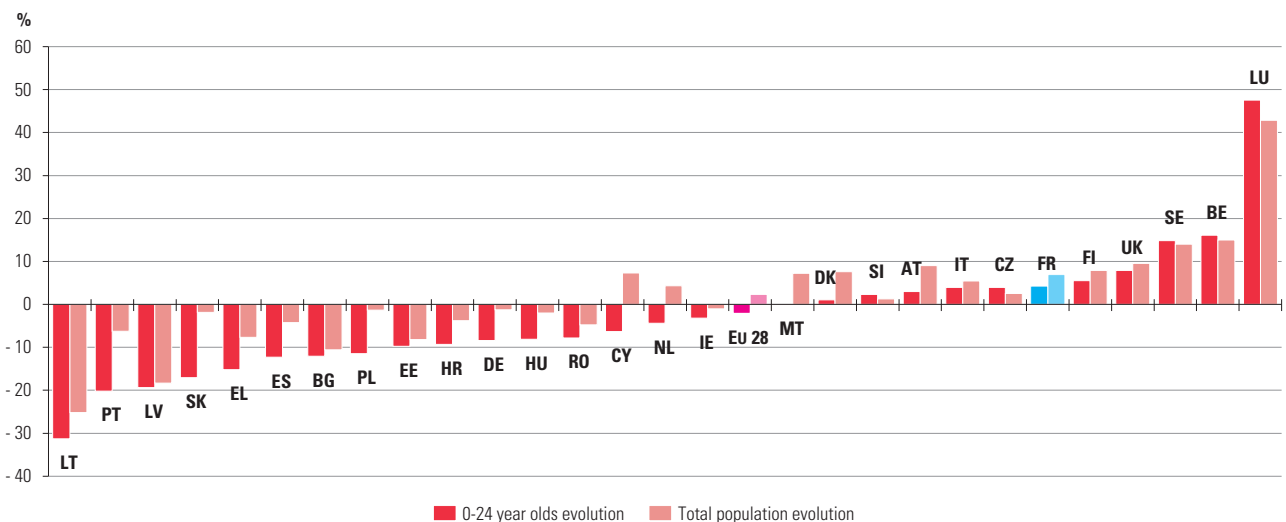
1.2.3 Total fertility rate in 2013

↳ Eurostat, tsdde220.



1.2.4 Relative projection of the evolution of 0-24 year olds population and of the total population between 2014 and 2030

↳ Eurostat, proj_13nprms.



1.3 THE FAMILY BACKGROUND OF THE CHILDREN

A FAMILY OFTEN LIMITED TO ONE OR TWO CHILDREN

Is it possible to draw a “household with children profile in the European Union”? In 2013, 51% of European households with dependent children (minors or less than 24 year-olds without professional activity) had a single child, and 38% had two (1.3.1). The Benelux and Scandinavian countries, Ireland and Croatia had a 15% rate of families with 3 or more children. Only 3% of European households had 4 or more children with a maximum rate of 6% in Finland.

In France the majority of households with dependent children have at least two children. In contrast, Portugal, Bulgaria, Malta, and the Baltic countries have a family profile of an only child (about 60% of the households have only one child). Germany, Greece, Hungary, Spain and the United Kingdom have a family profile that is close to the European Union average.

WHAT IS THE EDUCATIONAL ATTAINMENT LEVEL OF EUROPEAN PARENTS WITH YOUNG CHILDREN?

On average in the EU, 14% of the children from 0 to 17 have parents with an educational level inferior or equal to the lower secondary school, which is qualified here as low educational attainment, and 43% have parents with tertiary educational attainment (university degree or the equivalent) (1.3.2). Here, “parents’ educational attainment” refers to the highest degree between the two parents.

However it is possible to distinguish four groups of countries, *i.e.* the first, also the biggest, is composed of western European countries (France, Germany, the Netherlands and Scandinavia), which contains a majority of children whose parents have attained a tertiary educational level (at least 48% in France’s case), and symmetrically speaking, few children of parents with a low educational-attainment level.

Diametrically opposite to the first group, a second profile (Bulgaria, Italy, Luxembourg, Malta, Portugal and Romania) shows a high level of children whose parents have a low educational attainment level (reaching 48% and 45% in Portugal and Malta respectively). Spain alone comprises a third profile that combines a high rate of children whose parents have low educational attainment levels and a high rate of children whose parents have tertiary education degrees. And finally, the fourth profile (Croatia, Czech Republic, Poland and Slovakia) is characterised by a very large majority of children whose parents have a upper secondary degree (59% in Slovakia and 65% in the Czech Republic).

HOUSING COMFORT: LARGE DISPARITIES FROM COUNTRY TO COUNTRY

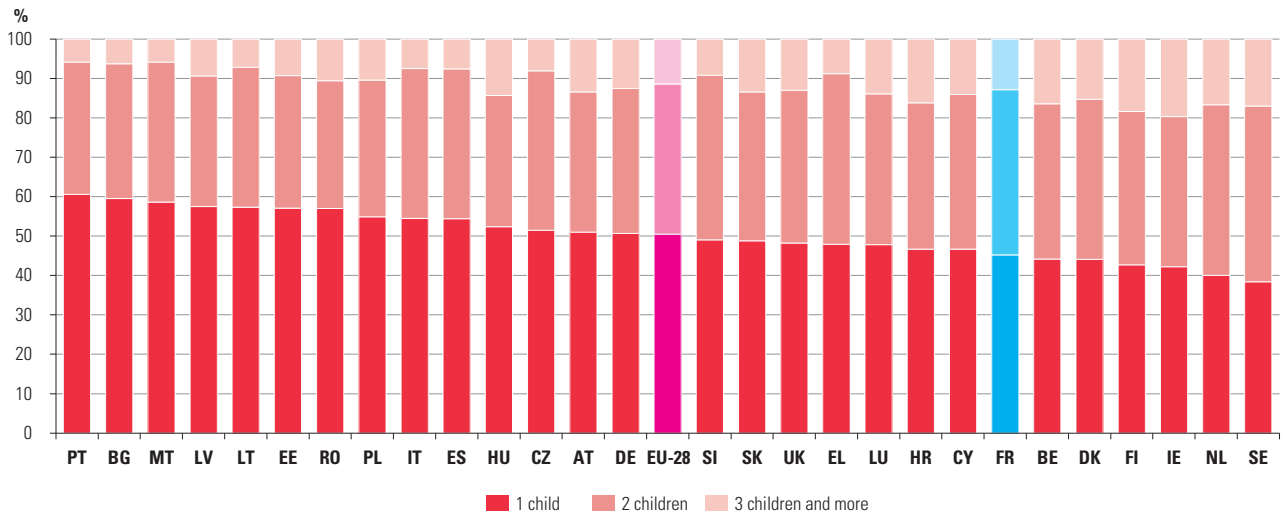
Two indicators have been selected here to gauge the living conditions of young school-age children, *i.e.* on the one hand the **overcrowding rate**⁶⁸, and, on the other hand, the percentage of children living in households without access to either a bath or shower (1.3.3). The first indicator makes it possible to distinguish between the western European countries and those of eastern Europe. Indeed, with the exception of Italy and Austria, there is no country in western Europe where the overcrowding rate for households with dependent children surpassed 17% in 2013. In contrast, this rate was notably higher in central European countries and the Balkans; in Romania it reached 70%.

The second indicator – the hygienic conditions in dwellings – also shows a notable disparity between western and eastern Europe (1.3.4). Romania (36%), Bulgaria (19%) and the Baltic countries show a lack of access to hygiene in the young person’s dwelling. All western European countries have distinctly more favourable access to hygiene. Ireland (the data of which are from 2013) is unique in that it combines a low rate of over-crowding (4%) and a relatively high rate of lack of access to hygiene compared to other western European countries (1.5% of its children do not have a shower or bath in their dwelling). ■

⁶⁸ See definition p. 68.

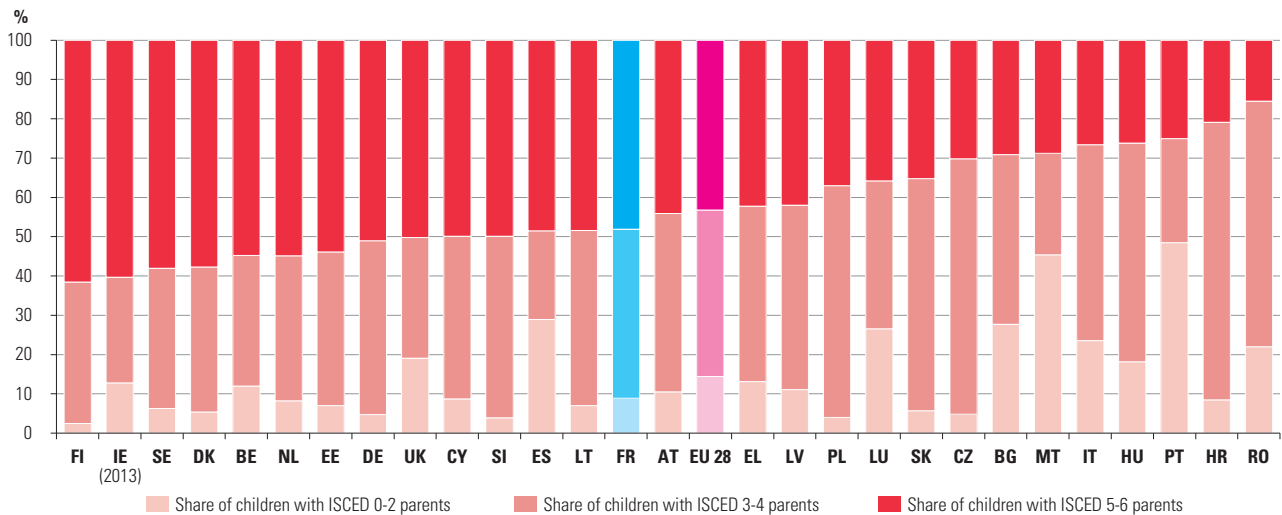
1.3.1 Siblings: distribution of households with children by number of children in 2014

↳ Eurostat, *ilc_lvph05*.



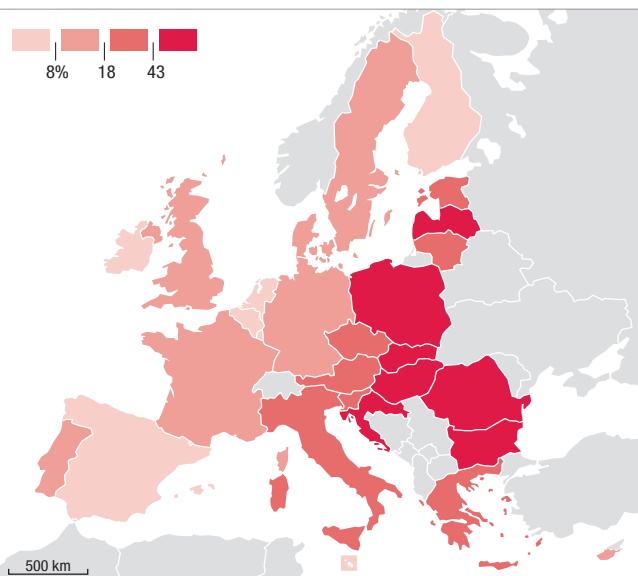
1.3.2 Distribution of 0-17 year old children by educational attainment level of their parents (ISCED 1997) in 2014

↳ Eurostat, *ilc_lvps25*.



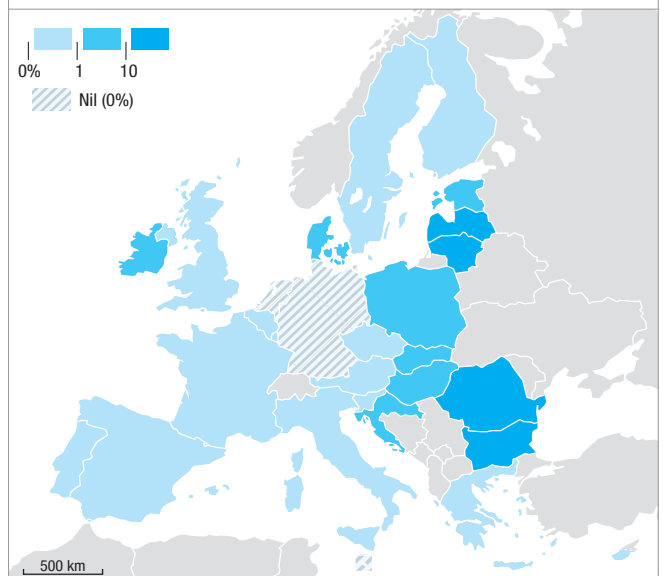
1.3.3 Overcrowding rate of households with 0-17 year old children in 2014

↳ Eurostat, *ilc_lvho05b*.



1.3.4 Share of 0-17 year olds having neither a bath, nor a shower in their dwelling in 2014

↳ Eurostat, *ilc_mdho02c*.



1.4 HOUSEHOLD INCOME AND RISK OF POVERTY

VERY DISPERSED INCOME IN EUROPE

The Eurostat **EU-SILC**[□] survey (*EU Statistics on Income and Living Conditions*) gives European statistics on the total disposable income of households, i.e. the income that remains disposable to households after the deduction of fiscal and social charges. What are counted are all earned income and capital, inter-household transfers and social transfers (excepting rent paid to owners). Median income denotes the value for which the population is split into two equal parts, i.e. those with income higher than the median and those with income lower.

ZOOM

The median **household disposable income**[□] of households with dependent children varies a lot within the European Union (**1.4.1**). The highest income is found in Austria, the Benelux countries, France, Germany and the Scandinavian countries. It is worth noting that within this group Luxembourg is an extreme case with a median income of households with dependent children above 25,000 **purchasing power standard (PPS)**[□]. The former Soviet Union countries have a lower level of income, sometimes up to 7-fold less than of Luxembourg (Romania: 3,590 PPS in 2014). With a median dependent-children household income of 9,730 PPS, Portugal is the western European country with the lowest income level.

THE CRISIS-DRIVEN IMPACT ON HOUSEHOLD INCOME, FROM COUNTRY TO COUNTRY

Although all countries faced the financial and economic crisis of 2008, the European countries did not, for all that, suffer the same impact. In the period from 2008 to 2014 (**1.4.2**), net household disposable income saw differing evolutions from one country to the next. Admittedly contained, there was a drop in disposable income in Italy as early as 2008, whereas this drop had a much steeper curve in Greece where it continued unabated from 2009 to 2014, especially because of the influence of the budgetary policy adjustments. Both Spain and the United Kingdom also saw a decrease in disposable household income starting in 2009, deepening between 2011 and 2012 in Spain's case whilst there was a slight upturn over the same period in the United Kingdom. Outside of the euro zone, as with the United Kingdom, Sweden maintained net positive growth in disposable household income between 2008 and 2014. On the other hand the impact evolved weakly throughout the entire period in Germany and France where the social buffers managed to come into play.

[□] See definition p. 68.

A VERY HIGH LEVEL OF THE RISK OF POVERTY AND EXCLUSION IN UNDER-QUALIFIED HOUSEHOLDS

There are highly contrasting proportion of young people at **risk of poverty or social exclusion**[□] in the European Union (**1.4.3**), from 15% in the Czech Republic and 17% in Sweden, Finland and the Netherlands, to 40% in Bulgaria. The rates are very high in the Balkans and the Baltic countries but also in Spain (29%), Italy (28%) and Ireland (27%). The rates of poverty risk and social exclusion of young people from 0 to 17 are systematically higher when the parents have a lower level of educational attainment (**1.4.3**).

Measuring the risk of poverty or social exclusion

ZOOM

Eurostat offers a summary measurement of the number of people at risk of poverty and social exclusion, i.e. those whose income is located below the poverty line set at 60% of the national median of disposable income after social transfers and/or those who live in material want (a lack of access to certain staple foods and goods) and/or live in very low labour-intensive households (under 20% of potential work time).

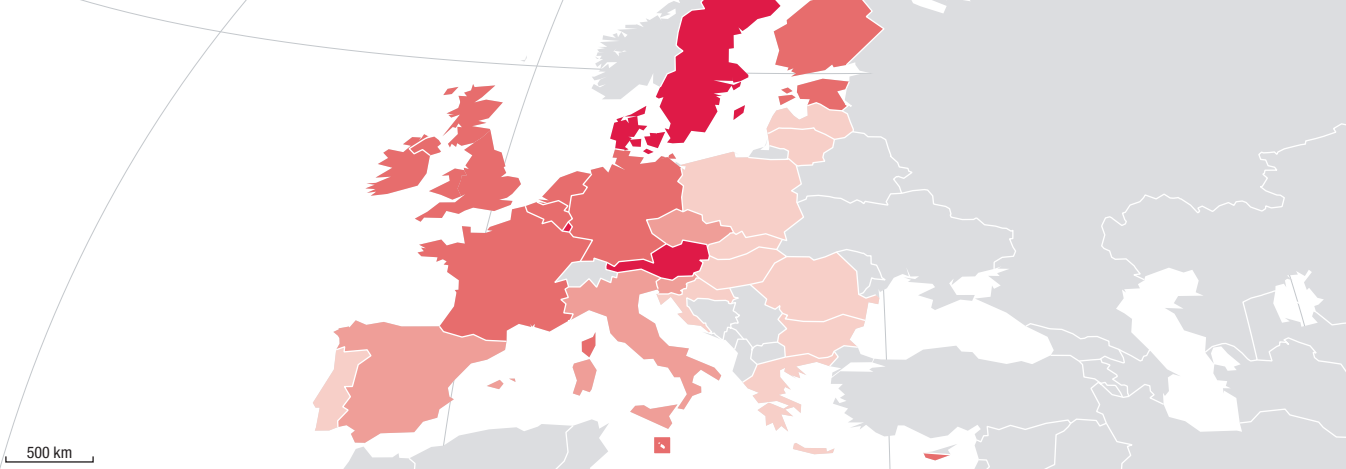
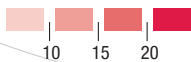
Two groups stand out in the case of children whose parents have a low level of educational attainment. The first, composed only of eastern European countries (Bulgaria, the Czech Republic, Hungary, Romania and Slovakia), shows a high risk of poverty for the children of these households. Whereas the second group shows a lower risk of poverty (Austria, Finland, Luxembourg, Malta, the Netherlands, and Portugal).

When the profiles of households of parents with a high educational attainment level are observed, two groups stand out. The first, with a relatively high risk rate for young people from 0 to 17 (greater than 15%), is composed of Cyprus, Ireland, and the United Kingdom Latvia. The second group, comprising the Czech Republic, Finland, France and Slovenia shows a risk rate of poverty and social exclusion of less than 10% for the same age group. The Czech Republic whose risk of poverty is the lowest in Europe (15%) is also the country with the widest spread of risk according to the parents' level of educational attainment with an 82 point differential between those children with poorly educated parents and those whose parents have attained a tertiary education degree. ■

1.4.1 Median net income (PPS equivalent) of households with children in 2014

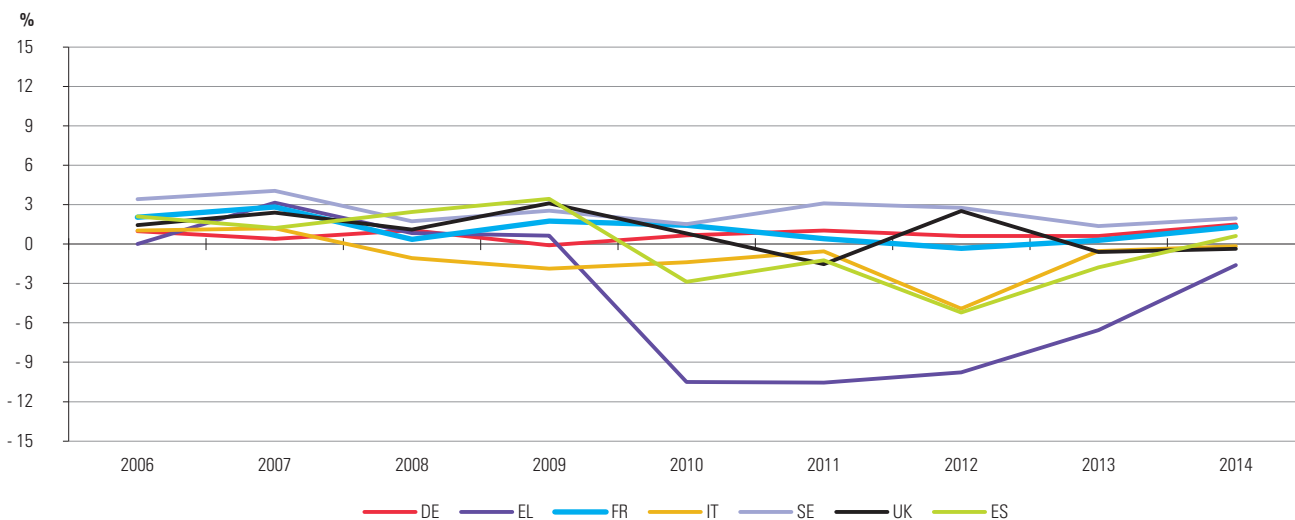
Source: Eurostat, *ilc_dio4*.

Thousand PPS



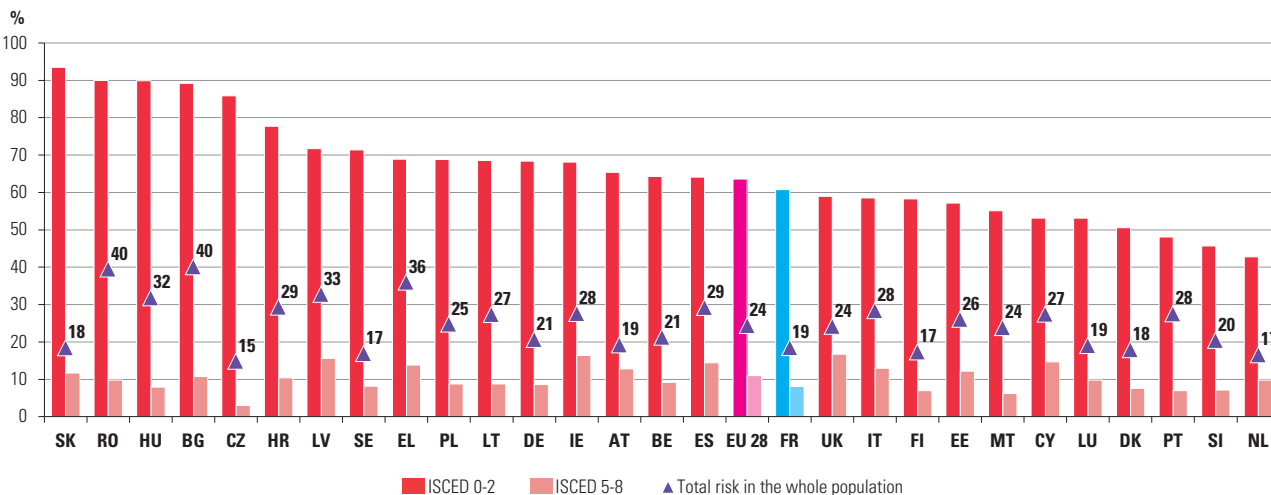
1.4.2 Annual gross rate of the household disposable income between 2006 and 2014

Source: OECD, *data.oecd.org*.



1.4.3 0-17 year old children at risk of poverty or social exclusion by educational attainment level of their parents (ISCED 1997) in 2014

Source: Eurostat, *ilc_peps60* and *ilc_peps01*.



Note: In 2014, in France, the poverty or social exclusion risk of the total population is 19%, while it goes up to 61% for children with parents that have a lower secondary education level.

1.5 UNEMPLOYMENT, EMPLOYMENT AND INTERGENERATIONAL MOBILITY

THE LESS QUALIFIED EVERYWHERE ARE HARDER HIT BY UNEMPLOYMENT

The **unemployment rate**[□] in the entire European Union (EU) made a palpable increase because of the 2008 crisis, rising from an average of 7% in 2007 to 11% in 2014 (1.5.1). Greece and Spain in particular saw their unemployment rates increase three-fold between 2007 and 2014. In most of the EU's southern countries, the unemployment rate in the working population rose beyond the 15% threshold. Only three countries bucked the trend in the EU, i.e. Germany, Malta and Poland. Although the unemployment rate receded very slightly over the period in Malta and Poland, it was cut nearly in half in Germany where **slack work**[□] measures made it possible to buffer the shock of the crisis and jobs were created in large part through part-time employment.

Unemployment rates were higher in the entire European Union for those without degrees. In 2014 it stood at over the 30% threshold in Lithuania, Slovakia and Spain where it was three times higher than for the average of the working population.

A LOWER EMPLOYMENT RATE OF SINGLE-PARENT FAMILIES

The employment situation of parents varies with the kind of household they have (single-parent families or not) (1.5.2). So single-parent families are more often jobless than families composed of adult couples with children. Single-parent families mean women in 85% of the cases in Europe, and the **activity rates**[□] are much higher among single men with children than women in the same situation. In a lot of northern European families there is an important gap between the employment rates of parents living as a couple and those of single parents, sometimes surpassing 20% (Belgium, Ireland, the Netherlands and the United Kingdom). France occupies an intermediate position with a difference of 12 points.

The percentage of children from 0 to 17 living in a household where no family member is in work is high in Bulgaria, Greece, Ireland and Spain, but also in Belgium and the United Kingdom (1.5.3). In Belgium and the United Kingdom, the rise in unemployment was relatively contained

in the 2008 to 2014 period. Italy's intermediate position is similar to France's and the European average where in 2014 about 11% of the 0 to 17 year-olds lived in jobless families.

ON AVERAGE ADULTS WITH HIGHER DEGREES THAN THEIR PARENTS

PIAAC[□] (*Programme for International Assessment of Adult Competencies*) is an international survey by the OECD that seeks to measure, through a range of items, the literacy and numeracy skills of the 16 to 65 year-old population. Literacy represents the ability to understand and use information from written texts in a variety of contexts. It comprises a range of skills, from the coding of words and sentences to the comprehension. Numeracy is defined as the ability to use, apply, interpret, and communicate mathematical information and ideas. The initial findings (PIAAC 2012, done in 24 countries/economies, including 16 European ones) were published in October of 2013. **ZOOM**

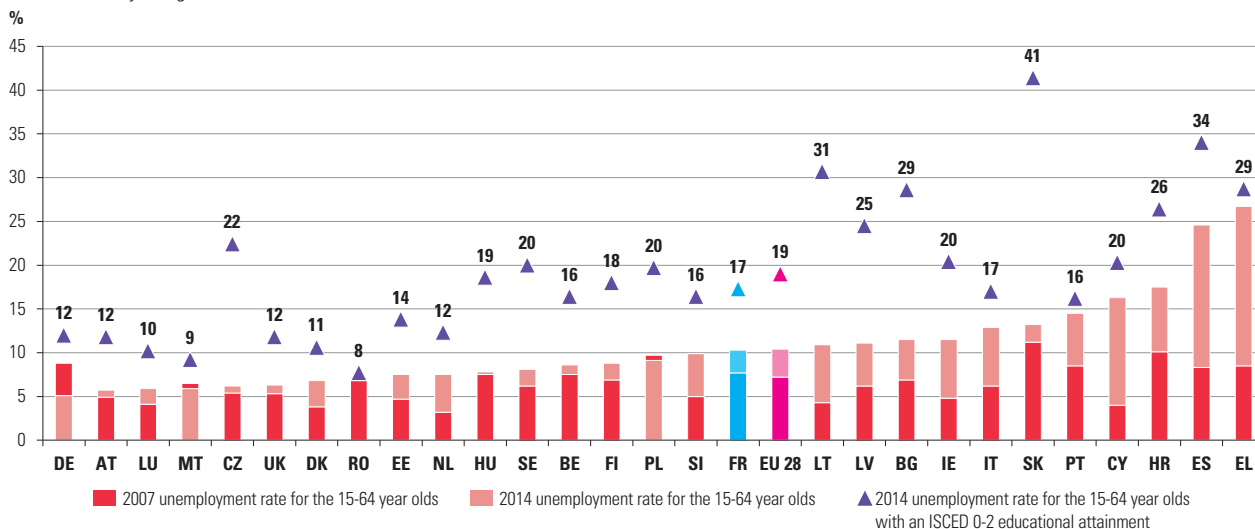
On average, of the countries participating in the OECD PIAAC 2012 survey, 39% of adults from 25 to 64 attained a higher level of education than their parents (the highest degree of the two parents). This proportion reached 56% in Finland and 45% in France and Ireland. On the other hand, it was only 21% in the Czech Republic and 24% in Germany (1.5.4).

It is, of course, the expanding educational systems that reflect this rising mobility. Moreover, 50% of adults from 25 to 64 have the same educational attainment as their parents. The size of the age group explains in part the relative inertia of the distribution of educational attainment from one generation to the next. Nonetheless these "status quo" situations can assume different configurations from one country to the next. In Denmark, Estonia and Germany 18% of adults have tertiary-education degrees as do their parents; whereas in Italy 51% of adults have a low educational attainment, which is also the case of their parents. And in the Czech Republic 56% of adults have an ISCED 3 or 4 degree, on a par with their parents. Descending mobility between generations is less common but far from inexistent, i.e. the proportion of adults from 25 to 64 in these situations varies from 4% in Italy to 18% in Germany and Sweden. ■

[□] See definition p. 68.

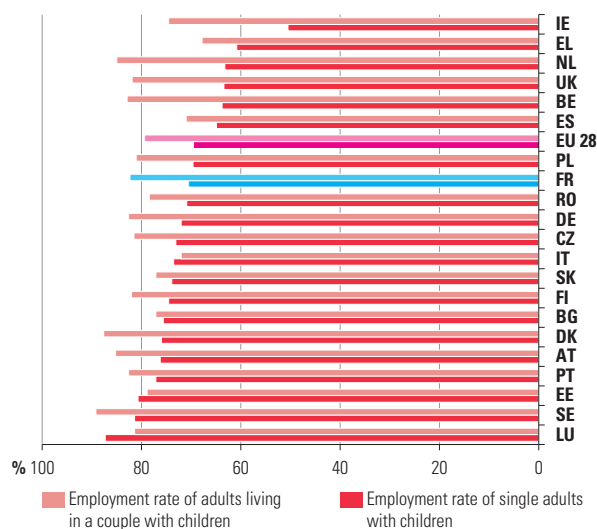
1.5.1 Average unemployment rate in 2007 and 2013, and unemployment rate of individuals with an ISCED o-2 educational attainment in 2014

Source: Eurostat, *lfsa_urgaed*.



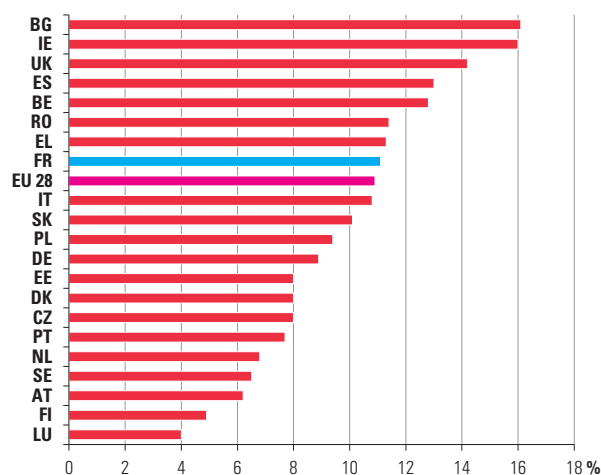
1.5.2 Employment rate of 15-64 year old mothers by family status in 2014

Source: Eurostat, *lfsl_jhh_a*.



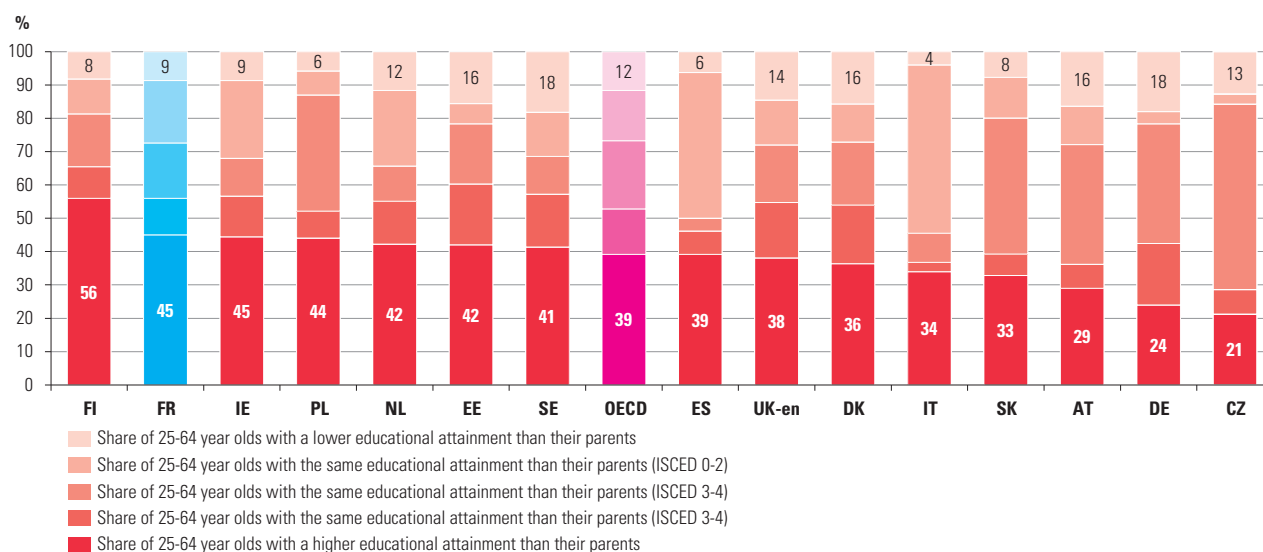
1.5.3 Share of 0-17 year old children that live in a jobless household in 2014

Source: Eurostat, *lfst_hheredy*.



1.5.4 Intergenerational mobility: educational attainment of 25-64 year olds relative to their parents' educational attainment in 2012 (ISCED 1997)

Source: OECD, EAG 2015, tableA4.1a, source PIAAC 2012.



Note: In 2012, in Finland, among 100 individuals between 25 and 64 years old, 56 have higher educational attainment than their parents; 36 have the same level of education as their parents; and 8 have a lower educational attainment than their parents. Among the 36 that have the same educational attainment than their parents, 10 have an ISCED 5-6 degree, 16 have an ISCED 3-4 degree and 10 have an ISCED 0-2 degree.

2.1 THE DIVERSITY OF EUROPEAN EDUCATION SYSTEMS (1)

EDUCATION SYSTEMS ARE GROUNDED IN EACH NATION'S HISTORY

Each country's education system is the result of a singular history, sometimes including disruptions (various countries of the former Soviet bloc, for example, completely revamped their educational systems in the 1990s). It is the reflection par excellence of and the vector for transmitting a nation's culture and values; the place for defining education's grand objectives and the ways to accomplish them (educational programmes). With greater or lesser amounts of inertia, evolving programmes reflect the major changes in a society and its means of production (by guiding the training and the organisation of the streams on offer).

Europe's education systems in their institutional diversity have been or are marked by shared phenomena such as the progressive mass enrolment of students at the various educational levels. Although generalised in Europe, this process has not occurred at the same pace from country to country. So, for example, the massification of upper secondary education in the Scandinavian countries as early as the 1960s was only seen later in most of the Mediterranean countries.

LONG COMMON-CORE CURRICULA OR EARLY TRACKING?

In most cases, the European educational systems demonstrate the existence of a common-core curriculum defined by a structural continuity between primary and first-cycle secondary education without specialisation at this level. The Mediterranean countries (including France), the eastern Europe countries and Scandinavia have these common-core curricula (cf. national education-system charts). This model was strongly promoted in Sweden in the 1960s, followed by the other Scandinavian countries. It was implemented in France in 1975. The common-core curricula in the Scandinavian countries and those of the Balkans are different because schooling may take place in a single institution (Grundskola in Sweden).

In the 4 European countries without a common-core curriculum (Austria, Germany, Lithuania and the Netherlands), students are streamed early. These are countries that are traditionally endowed with a highly developed apprenticeship system (Denmark is an exception, however, for it has both a common-core curriculum from 6 to 16 and a strong apprenticeship system). In these countries early streaming is "legitimised" by a lack of ranking in the collective belief between the vocational and general streams. ■

The German Dual System

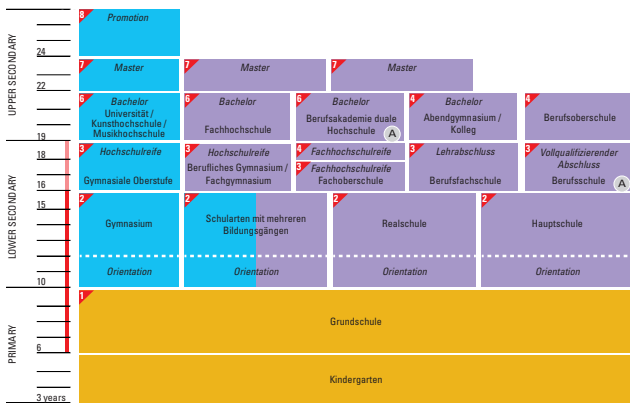
ZOOM

The dual system unique to Germany offers combined school- and work-based programmes comprised of at least 12 hours of courses per week in vocational institutions and apprenticeships in companies spread over 3 to 4 days per week. It is founded on three key players, *i.e.* the Federal Institute of Vocational Training (BIBB), which is in charge of defining the training references under the authority of the Department of Education and Research (BMBWF), the *Länder* (regions) and, finally, the social partners, who are present at all governance levels.

Since its founding in 1969, the dual system relies on a strong partnership model where the social partners are responsible for the follow up and quality control of the vocational training institutions and on-the-job training in companies, for advising companies and instructors, for the recording of apprenticeship places available in companies and for setting apprentice-skill examinations. This makes it possible to define training in relationship to the needs of economic sectors and to maintain a sufficient number of training places in a sector even when that sector is undergoing cyclical recession. In 2010 this system in Germany had about 1.5 million young people enrolled in a combined school- and work-based programme cycle [source: DARES, *Document d'études: le modèle dual allemand*, september, 2014]. And although in 2012 Germany had a percentage of ISCED 3 students in vocational streams close to that of the European Union (48% compared to 50% for the EU), the German students were massively enrolled in apprenticeships, which was not the case of the students in the EU vocational streams (87% compared to 27%) [source: CEDEFOP, *Statistical overviews on VET – Germany*, 2014].

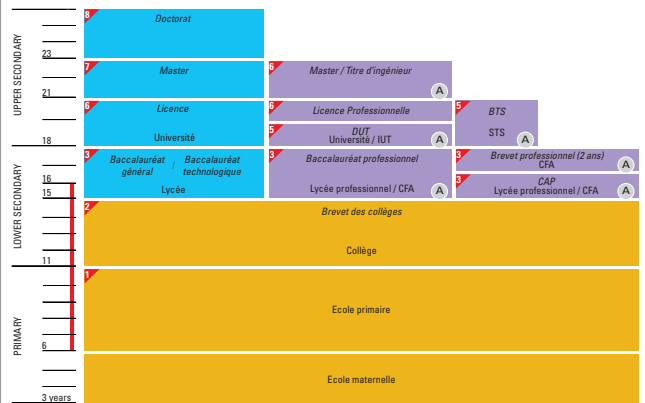
See definition p. 68.

2.1.1 The German education system



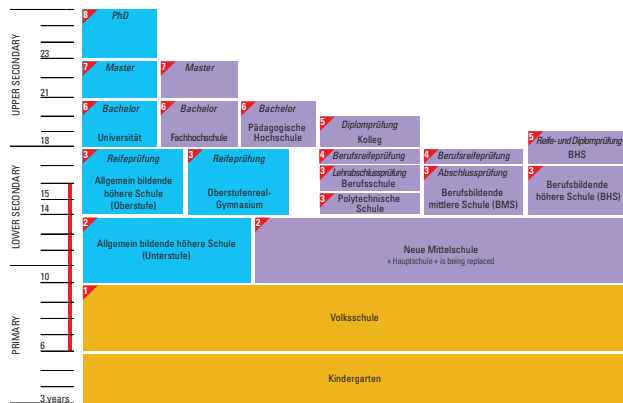
See details on p. 72

2.1.2 The French education system



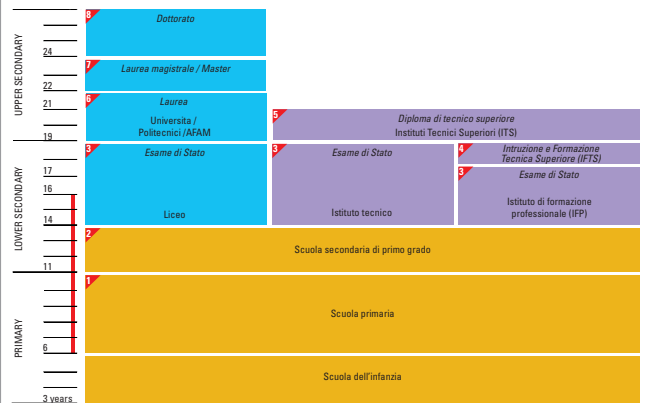
See details on p. 72

2.1.3 The Austrian education system



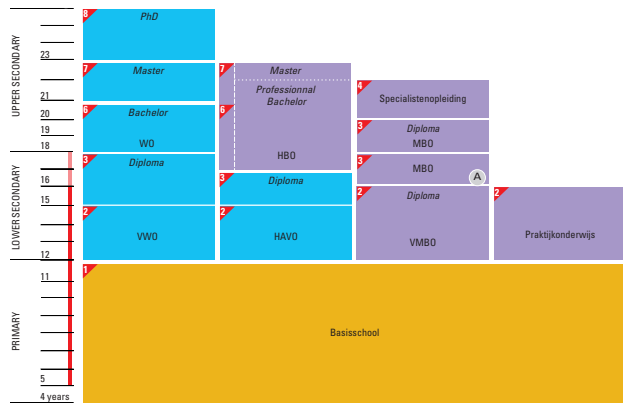
See details on p. 73

2.1.4 The Italian education system



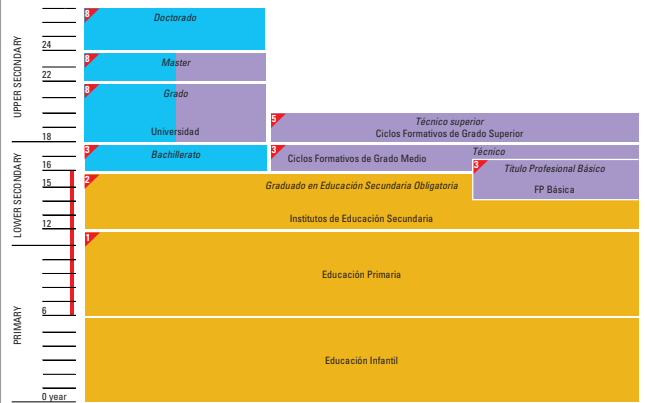
See details on p. 73

2.1.5 The Dutch education system



See details on p. 74

2.1.6 The Spanish education system



See details on p. 74

- Full-time compulsory education
- Part-time compulsory education
- A Apprenticeship available
- Common core curriculum
- General stream
- Vocational stream

G. Official national data, Eurydice, Onisep.



2.2 THE DIVERSITY OF EUROPEAN EDUCATION SYSTEMS (2)

ISCED-3 PROGRAMMES

The organisation of educational cycles varies from one country to another, in particular the theoretical age of moving from one cycle to another. If we compare ISCED 3 in the 12 education systems presented here¹ (2.1.1 to 2.2.6), it can begin at 14 as in Austria, England and Italy, 15 in France, the Netherlands and Romania or 16 in Estonia, Finland and Germany. The length of the programmes classified in ISCED 3 also varies in these countries from 2 years (such as the vocational degrees in Spain and the CAP in France) to 5 years (such as the *Maturità* in Italy, which is similar to the French baccalauréat).

If, in the majority of the countries presented, the ISCED 3 degrees certify the end of a programme cycle, there can be exceptions. In England, for example, the General Certificate of Secondary Education (GCSE) is taken by students in the middle of the ISCED 3 cycle. Moreover the theoretical age for sitting the ISCED 3 degrees depends on the age at entry into the programme and its duration. Thus in the Netherlands an ISCED 3 vocational degree is given at the age of 20 (2.1.5).

THE POST-SECONDARY NON-TERTIARY EDUCATION

ISCED 4 education aims at pupils acquiring knowledge, aptitudes and skills the complexity level of which is lower than that of tertiary education. At this level students acquire learning experience that completes secondary education and prepares them for entering the labour market or, as in certain cases, for entering tertiary education.

This type of education exists in France in the forms of the *Diplôme d'accès aux études universitaires* (DAEU – Degree for Access to University Education) or the *Capacité en Droit* (Basic Legal Qualification), but it is numerically marginal, *i.e.* 44,000 students in 2012 (Eurostat). Nonetheless it is more frequent in countries where the vocational streams are more developed

(Germany, Poland, Finland and Sweden). The first two countries on their own accounted for 59% of the European ISCED 4 students in 2012, *i.e.* 548,000 and 317,000 students respectively (Eurostat). This high number of ISCED 4 students may go a way to explaining the low percentage of tertiary degrees among the 30 to 34 year-olds in Germany compared to France, the United Kingdom and the northern European countries (cf. 5.3, p. 50). Usually, programmes at this level are designed for direct labour market entry, without pursuing tertiary education.

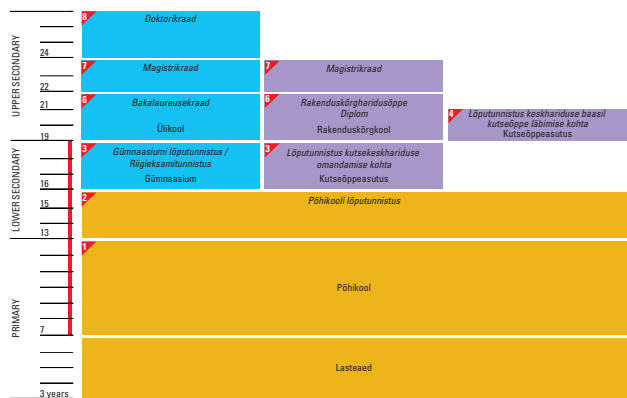
TERTIARY EDUCATION

The increase in the student flows towards tertiary education is a shared trend in the European countries, which the Bologna Process, begun in 1999, contributed to boosting even beyond the European Union framework (46 countries involved). Of the six priority goals of the Bologna Declaration, two actively foster the organisation of tertiary education training, *i.e.* adopting a degree system that is “easily readable and comparable” and a system based on “two cycles: undergraduate and graduate”. Thus a standardised tertiary education system has been implemented in the countries involved in the stream known as “academic”, *i.e.* a 3-year (or 4 in Spain’s case) undergraduate degree (often called a “Bachelor” degree as in the British and American systems), a two-year Masters degree and a PhD.

Nevertheless there is a great disparity in the distribution between the 4 ISCED levels of tertiary education as listed by the 2011 ISCED. The ISCED 5 programmes (short-cycle tertiary) are not systematically offered in all the 28 EU-member education systems, and when they are, their duration is not uniform, *e.g.* one year in England compared to 3 years in Poland and Spain. The ISCED 6 programmes range in duration from one year (as with the vocational undergraduate degree in France which can be prepared after a DUT or a BTS, which are ISCED 5 level degrees) to 5 years (such as certain ISCED 6 level vocational degrees in Finland). ■

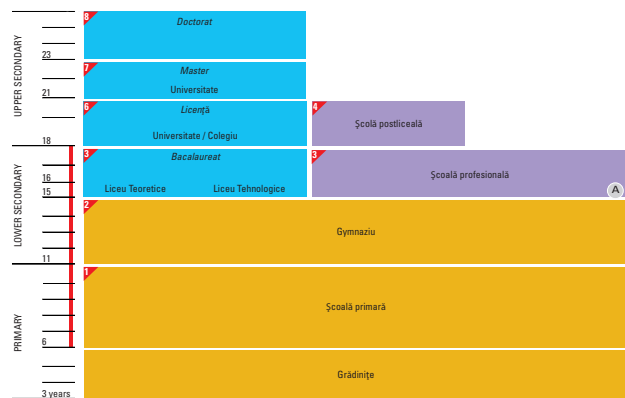
¹ Selecting 12 education systems makes it possible to:
a) study the EU’s most populous countries;
b) observe the large institutional diversity within the EU.

2.2.1 The Estonian education system



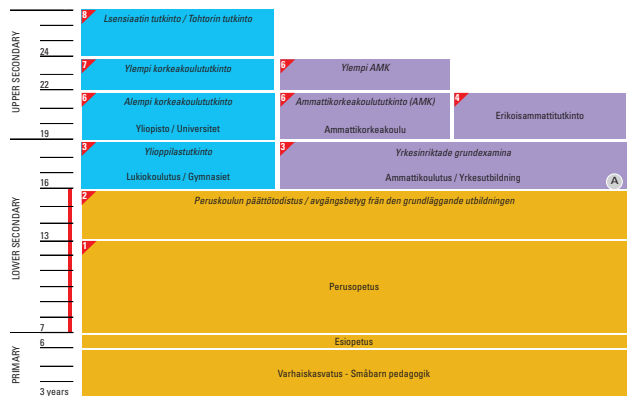
See details on p. 75

2.2.2 The Romanian education system



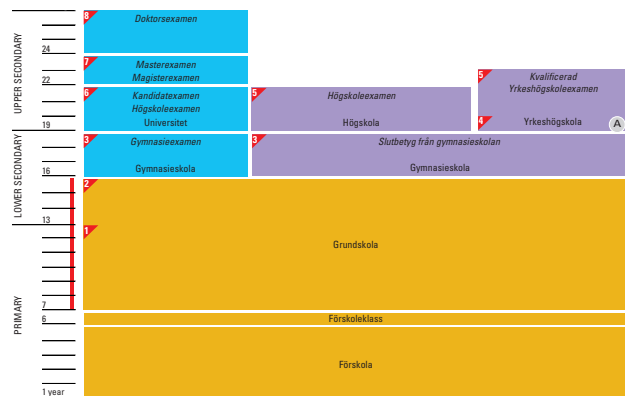
See details on p. 75

2.2.3 The Finnish education system



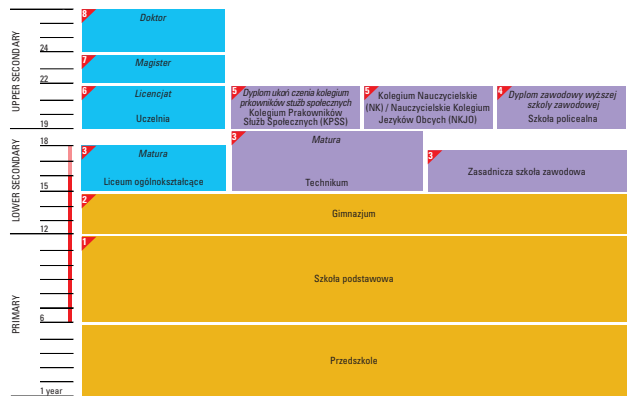
See details on p. 76

2.2.4 The Swedish education system



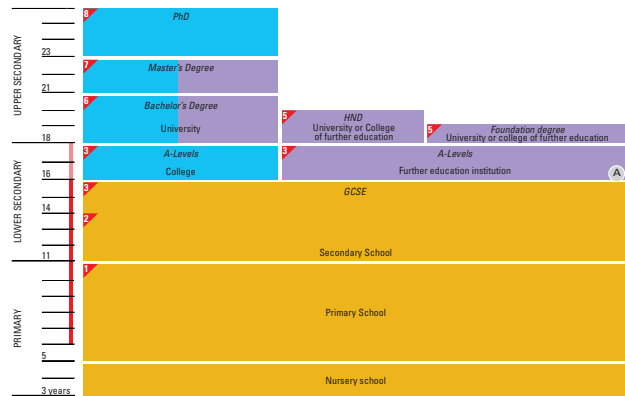
See details on p. 76

2.2.5 The Polish education system



See details on p. 77

2.2.6 The English education system



See details on p. 77

- Full-time compulsory education
- Part-time compulsory education
- A Apprenticeship available
- Common core curriculum
- General stream
- Vocational stream

☞ Official national data, Eurydice, Onisep.



2.3 EARLY CHILDHOOD EDUCATION AND CARE

THE ECEC'S REGULATORY FRAMEWORK IN EUROPE

Early Childhood Education and Care (ECEC)

ZOOM

ECEC covers, on the one hand, all conditions of the child's care from their earliest years in an authorised institution, more often than not under the authority of the Ministry of Social Affairs (day nurseries, nursery schools, family day care and authorised child-minders) and, on the other, all the pre-primary education curricula offered to children in a dedicated institution up to the age of compulsory education.

Only eight countries in Europe guarantee in law a place in an institution, usually immediately after the post-natal parental leave period. Those countries are the Scandinavian nations, pioneers in the matter (in Sweden the first law on compulsory enrolment by municipalities occurred in 1982), Estonia, Germany, Slovenia (since August, 2013, for children over a year old) and Malta (since April, 2014, if both parents are working or in training). In the other countries the time lapse between the end of post-natal parental leave and the legally guaranteed enrolment of children is greater than two years. In certain countries (Ireland, Portugal, Spain and the United Kingdom) three year-old children have a right to free access to ECEC in a public framework. In France this legal access occurs at 2 (although not systematically guaranteed) and at 2.5 in Belgium.

FEMALE EMPLOYMENT RATES AND WORKING TIME: CONTRASTING SITUATIONS IN THE EU

The European Union has placed the development of the enrolment of young children as a core issue in terms of support for birth rates, but also in terms of the participation of women in employment and the development of all children's cognitive and conative skills.

The **employment rate** of women between 15 and 64 is showing palpable variations between countries in 2014 (2.3.1). Although the northern European countries do not show a large

percentage variation, there are notable differences in Greece (a 17 point spread in the male-female employment rates), Italy (18 points) and Malta (26 points). Moreover the distribution of part-time employment per gender remains deeply skewed. Whilst 7% of men from 15 to 64 in the EU are in partial employment, 19% of the women are in this situation.

Two countries stand out on this point, *i.e.* Bulgaria at the one end with the rates of part-time employment at the lowest of the EU's 28 member countries (1.4% for men and 1.8% for women), and, at the other, the Netherlands with the highest rates of the 28 EU countries (22% for men and 52% for women).

TWO KINDS OF NATIONAL INSTITUTIONS FOR EARLY CHILDHOOD CARE

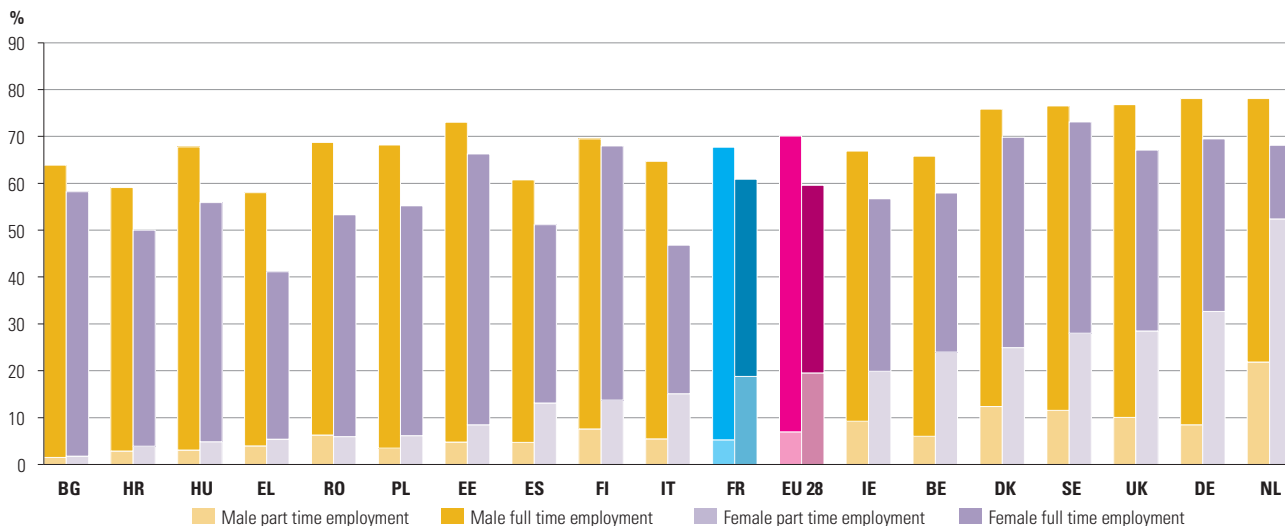
Every national configuration is unique, but it is possible to distinguish two models of ECEC organisation (2.3.2). The first is the integrated model. This is a single institution for all pre-primary age children, *i.e.* a single administration for children of all age groups, the same staff qualification level (generally university educated) and the same funding source. Generally speaking these institutions enrol children from under one to six. This first model is found in the Nordic and the Baltic countries, likewise in Croatia and Slovenia.

The second is the juxtaposed model and is the most widely adopted in Europe, offering two kinds of institutions, more often than not successive, each under different authorities according to the children's age group, *i.e.* the first covers children from 0 to 3 or 4, most often under the authority of Social Affairs, with the second institution offering child care from 3 (or 2, in France, even 2.5 in Belgium) to 5 or 6 years under the authority of the Department of Education.

Lastly Austria, Bulgaria, Denmark, Spain, and the United Kingdom have both systems where families can choose between the integrated or the juxtaposed models. ■

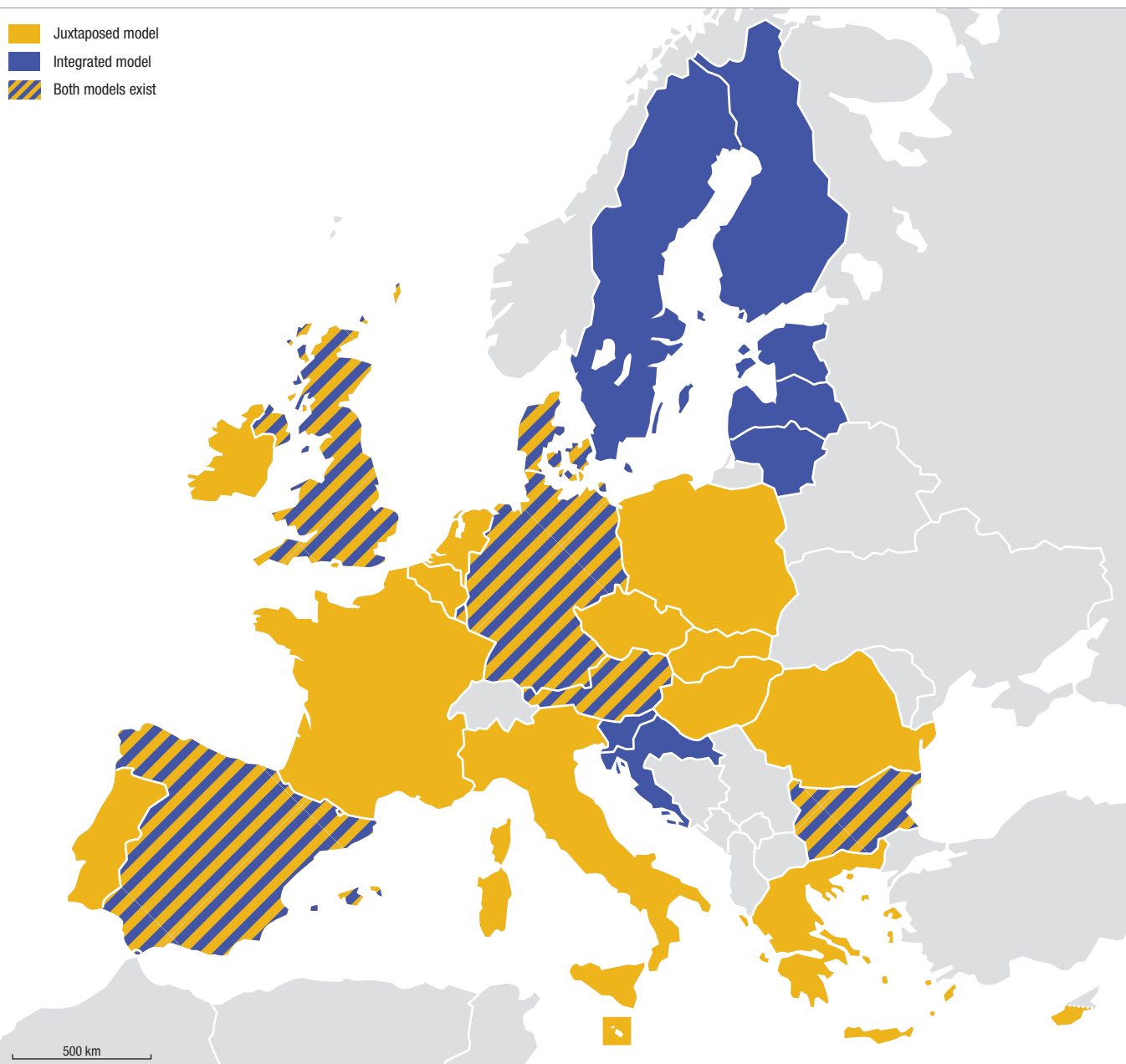
2.3.1 Full-time and part-time employment rates by gender of 15-64 year olds

↳ Eurostat, *lfsi_emp_a*.



2.3.2 Organisation of centre-based early childhood education and care in Europe

↳ Eurydice, *Key data on ECEC in Europe, 2014*.



2.4 SCHOOL EXPECTANCY

UP TO 13 YEARS OF COMPULSORY EDUCATION

Along with the structure of an education system, the compulsory length of education varies from one country to another. Figure 2.4.1, detailing the compulsory length of education according to a student's age in 2014, highlights several reasons for these differences. The first among them, which is notable, is the student's age at the start of their compulsory education, which varies from 4 years old in Luxembourg to 7 in Bulgaria, Estonia or Finland. 8 countries of the European Union (including England, Greece and the Netherlands) start their compulsory education at the age of five, and nearly half of the countries (13 of 28, including France, Germany, Italy and Spain) start it at 6.

Over half of the EU's 28 member-countries (16 countries including Estonia, France, Ireland and Sweden) set the end of compulsory education at the age of 16, but it varies from 14 years in Croatia to 18 years in Hungary, the Netherlands, and Portugal (2.4.1). In the Netherlands case, the end of compulsory education at 18 years old is only applicable to students that don't obtain a diploma during the academic year they reach their 16th birthday. Moreover, it should be noted that the legal age for the end of compulsory education occurs at the end of ISCED 2 in numerous countries, including Estonia, Finland and Germany, whereas it is set during ISCED 3 in England, France and Italy. To sum up, the length of compulsory education varies from 9 years in Austria, Croatia and Finland to 13 years in Hungary and Netherlands (for the specific case of non-graduate 16 year olds).

In 5 countries (Belgium, England, Germany, the Netherlands and Poland), the period of full-time compulsory education is extended by a part-time compulsory education phase. This period makes it possible to follow a vocational training programme for a period of time that varies according to the country. This period lasts 3 years in Belgium and Germany while it lasts 2 years in Poland and England where the student may choose between: obtain a degree through an apprenticeship; pursue his/her studies on a part-time schedule along with a professional activity or as volunteer or even staying in full-time education programmes. In the Netherlands, this part-time compulsory education period only applies to students that did not obtain a diploma by the age of 16, and follow an apprenticeship until they turn 18.

SCHOOL EXPECTANCY AND THE INDICATOR'S LIMITATIONS

School expectancy⁶⁸ or the probable length of education is defined by Eurostat as the number of education years—including tertiary education—that a person can expect to receive in their lifetime. It is calculated annually by adding the enrolment rates observed in the given year to each period of life. An 80% rate, for example, at a given age represents 0.8 year. This kind of estimate is only exact when present models of schooling do not undergo significant changes. However, numerous factors “blur” the indicator's relevance. First of all, the quality of data enabling the measurement of enrolment rates can vary from one country to the next. Secondly, the indicator potentially contains important biases:

- it is dependent on the theoretical duration of education cycles that vary between countries;
- the extensive use of repeating, or the obtention of multiple diplomas of the same ISCED level which is standard in some countries may artificially extend school expectancy.

ZOOM

Between 2007 and 2012 school expectancy generally increased in the 28 EU member-countries (2.4.2 and 2.4.3). The minimum (Luxembourg and Cyprus) went from 14 years to 15, while the maximum (Finland) stayed the same at 21 years for the period. Whilst the “leading” countries (Scandinavia, Belgium and the Baltic countries) evolved only slightly after 2007, there is a phenomenon of catching up over the period by the countries with lower expectancies. 13 countries, including Austria, France, the Netherlands, Spain and the United Kingdom, saw their populations' school expectancy increase in 5 years. It should be noted that the indicator proves to be sensitive to certain institutional factors. Encouraging part-time enrolment enabling students to work while doing tertiary education or else a developed system of adult education leads to longer school expectancy in certain countries, Scandinavia for example.

Moreover it can be observed that the countries with the longest compulsory school enrolment in the EU-28 are not necessarily those with the highest school expectancy, such as Luxembourg, Hungary and the Netherlands. Symmetrically, some countries with the shortest compulsory school enrolment also enjoy the highest school expectancy (Finland and Sweden). ■

⁶⁸ See definition p. 68.

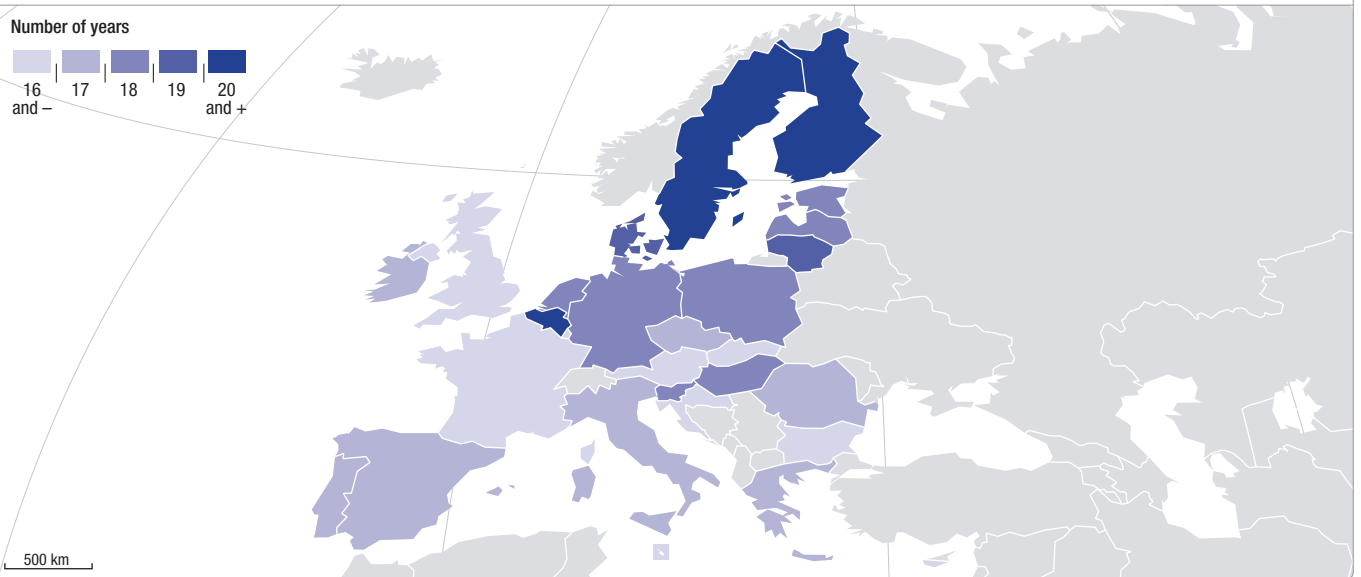
2.4.1 Compulsory education in Europe in 2014

↳ Eurydice, *The structure of the European Education Systems - 2014/2015*.



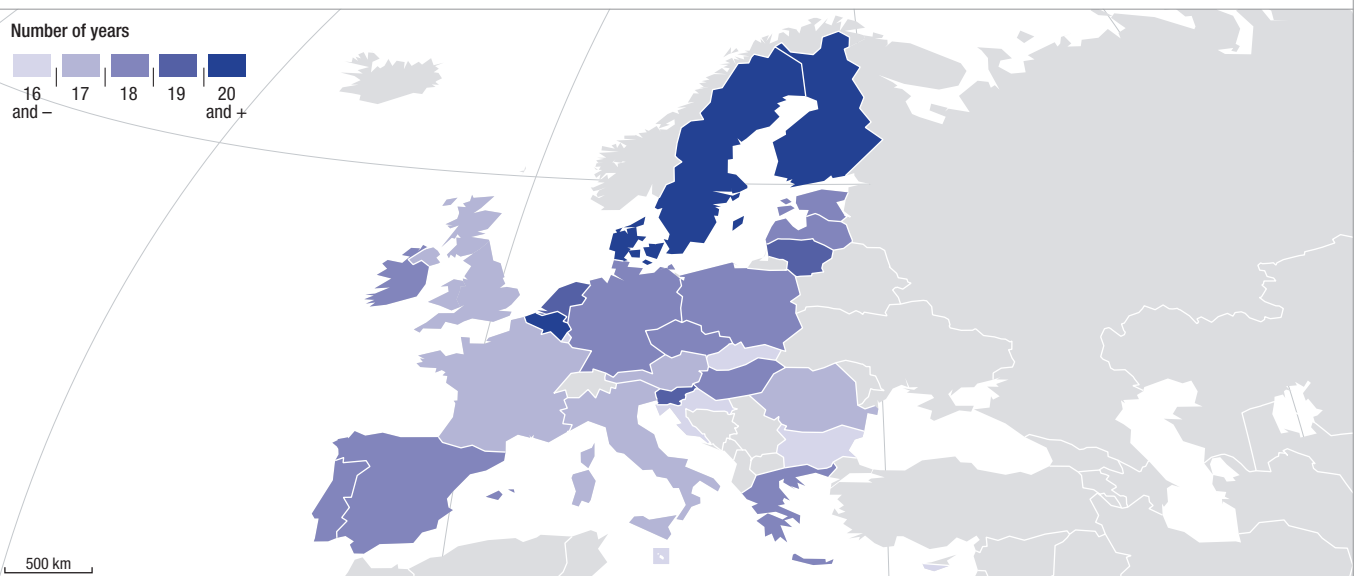
2.4.2 School expectancy of students in 2007

↳ Eurostat, *educ_igen*.



2.4.3 School expectancy of students in 2012

↳ Eurostat, *educ_igen*.



2.5 ENROLMENT RATES

A DOUBLE EUROPEAN GOAL FOR EARLY CHILDHOOD EDUCATION AND CARE

In matters of early childhood education and care (cf. 2.3, p. 22), the European Union has set two quantified goals, *i.e.* offering care for at least 33% of the children under 3 and ensuring pre-primary education for at least 95% of children between 4 and the age of compulsory education. This latter goal is, moreover, one of the reference goals of the Education and Training 2020 strategy. Eight countries attained both goals in 2012, *i.e.* Belgium, Denmark, France, Luxembourg, the Netherlands, Portugal, Spain and Sweden (2.5.1), and six countries attained one of the two goals, *i.e.* Germany, Italy, Ireland, Malta, Slovenia and the United Kingdom.

The 4 year-old-and-over goal was practically attained on average in the EU (95% in 2012), and the observed enrolment rates ranged from 72% in Croatia to 100% in France and Malta. On the other hand, the goal of the first age category demonstrated greater variation among the countries. Whilst 67% of the under threes attended institutions in Denmark, a mere 3% attended in the Czech Republic. Moreover it is appropriate to stress – cause or consequence of the low-care rate of young children? – that in some eastern European countries, post-natal parental leave was especially long, e.g. over 100 weeks in Bulgaria, the Czech Republic, Hungary and Romania [Eurydice, *Key data on Early Childhood Education and Care in Europe*, 2014].

A RISING ENROLMENT RATE IN THE ENTIRE EUROPEAN UNION

What is the **enrolment rate of students**[□] at the end of compulsory education? First of all it is important to remember that the age at the end of compulsory education varies between 14 and 18 years old according to the country (cf. 2.3, p.22). What's more, the enrolment rate indicator contains certain methodological limitations that explain, for example, why the observed rates can be higher than 100% in some cases and calls for cautious interpretation. Nonetheless it is possible to draw a few general and comparative lessons.

Generally speaking, a rise in the enrolment rates in the 28 EU member-countries was observed between 2007 and 2012. Of the 9 countries with a rate lower than 91% at the age of the end of compulsory education in 2007, only five were still in the same situation by 2012. Some countries saw their enrolment rates grow quite considerably in that time, *i.e.* 6 points in Luxembourg, 8 points in the Netherlands and even 10 points in Greece (2.5.2 and 2.5.3).

[□] See definition p. 68.

UNEVEN PARTICIPATION IN TERTIARY EDUCATION

To be relevant, observing participation in tertiary education should be applied to a relatively broad age group. Indeed young adults do not necessarily continue their tertiary studies immediately after completing their secondary cycle. Civic and military duties, long internships or gap years carried out before or during tertiary education are common constraints or practices in the European Union.

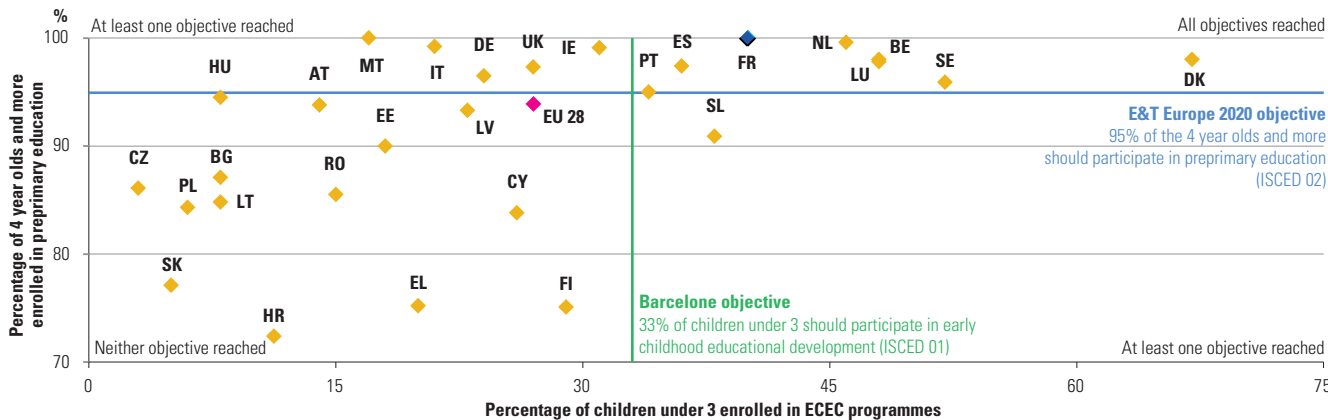
The 28 EU member-countries in 2012 had a participation rate by 20 to 29 year-olds in tertiary education of 32% with a minimum of 9% in Luxembourg and a maximum of 54% in Greece (2.5.4). The low rate in Luxembourg may be explained in particular by the relatively recent creation of the University of Luxembourg (2003) and the large amount of Luxembourg students going to study abroad. In the 28 EU countries, 21, including Belgium, France, Germany and Spain, had a participation rate higher or equal to 30%, and 5 of them (Denmark, Finland, Greece, Lithuania and Slovenia) had a rate higher than 40%.

Does participation in tertiary education lead to a higher rate of degrees among the 30 to 34 year-old age group (cf. 5.3, p. 50)? It is interesting to note that it is not necessarily the countries with the highest participation in tertiary education that show the largest number of advanced degrees. In Luxembourg in 2012 the participation rate in tertiary education was 9%, whereas 50% of the 30 to 34 years-olds held advanced degrees, a large part of them having studied abroad. The opposite is also seen in Austria, which had high rates of participation (35% in 2012), but had fewer higher education graduates in the 30 to 34 year-old age group than the EU-28 average (26% of tertiary education degrees in 2012, compared to 36% for the EU-28). Besides the fact that students may have left the country where they graduated, two factors may explain this situation:

- a temporal effect: a recent rise in higher education participation that does not show yet in the percentage of 30-34 year-olds that hold a higher education degree;
- a dropout effect: a non-negligible part of the students do not graduate from the higher education programme.

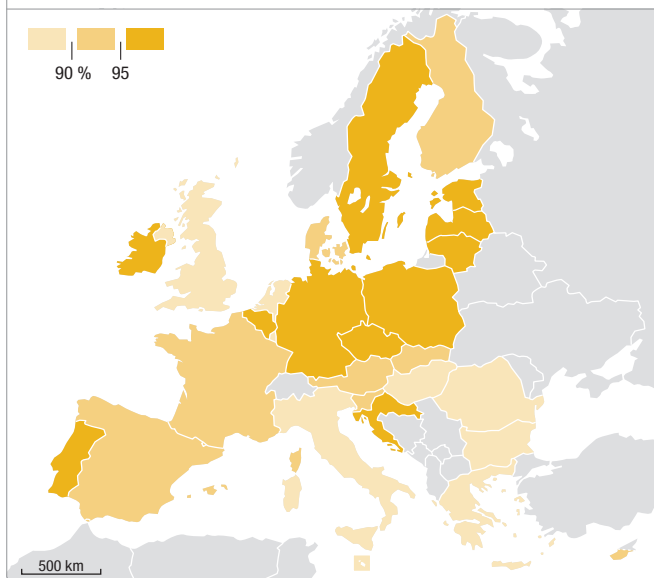
2.5.1 Enrolment of less than 3 year olds and of 4 to 6 year olds to educational programmes in Europe in 2012

↳ Eurostat, *educ_ipart, ilc_caindformal*.



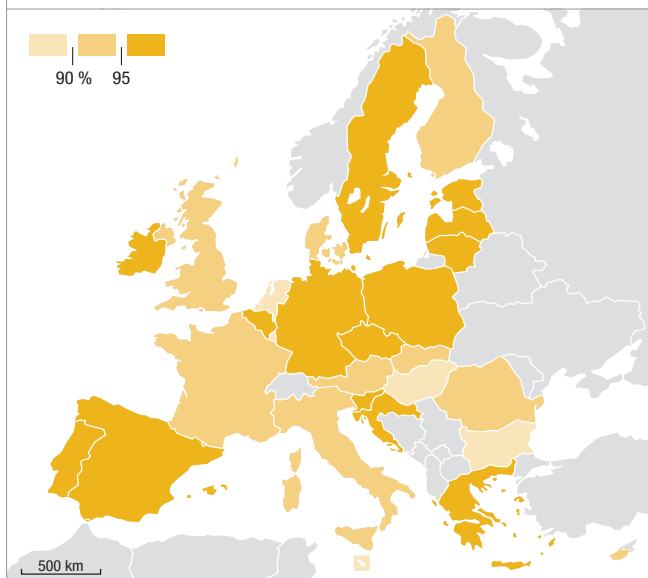
2.5.2 Enrolment rate and the age at the end of compulsory age in Europe in 2007

↳ Eurostat, *educ_ipart_s*.



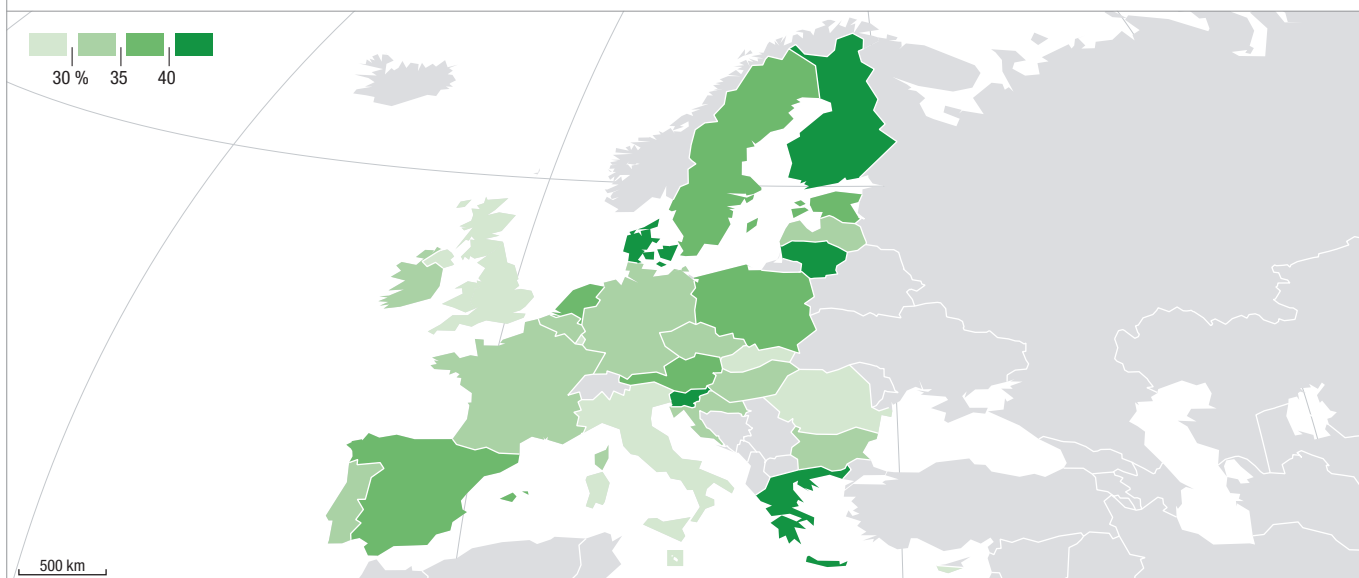
2.5.3 Enrolment rate and the age at the end of compulsory age in Europe in 2012

↳ Eurostat, *educ_ipart_s*.



2.5.4 20-29 year olds participation to tertiary education (ISCED 5-6, 1997 nomenclature) in 2012

↳ Eurostat, *hrst_fl_tepart*.



2.6 STUDENTS' PLACE IN THE EDUCATION SYSTEM

STUDENT DISTRIBUTION BETWEEN THE GENERAL AND VOCATIONAL STREAMS

The general and vocational streams in each country do not have the same relative weight and are not seen in the same light. Although in some countries vocational training systems have been developed and valued for a long time (Austria, Denmark, Germany, Lithuania, the Netherlands and Poland), in other countries they developed later and initially suffered because of a lesser reputation than that for general education (cf. 2.1, p. 18). This can have an impact on the distribution of students according to these streams.

In the European Union in 2012 there was an even distribution of ISCED 3 students between the general and vocational streams (2.6.1). But this, depending on the country, hides disparities. Only 8 of the EU countries (including France, Germany, Spain and Sweden) had a relatively balanced distribution, whilst imbalances were more numerous. Indeed, four countries (Cyprus, Hungary, Lithuania and Malta) had over 70% of their ISCED 3 students in a general stream. On the contrary in 7 European countries (including Belgium, the Czech Republic and Finland) the percentage of students in general streams was 30% or less.

THE NUMBERS IN PUBLIC EDUCATION REMAINED STABLE THROUGHOUT THE DECADE

Public/Private institutions categorisation is not so self-evident

ZOOM

The relative weight of public or private education in each country often depends on the history of the relationships maintained by the State with religious institutions. Education given in "private institutions independent of public authority" is still not very wide-spread in the EU-28 (2.6.2 and 2.6.3). Private education is most often given in "private institutions that depend on public authority". These Eurostat categories refer to a clear partition in France. Categorisation is not, for all that, so self-evident in certain countries. Thus, in the Netherlands the important shift in the distribution of numbers between the private and public sectors recorded between 2003 and 2012 derived from the decision to reclassify students in private religious institutions as being in the public sector. The private religious institutions enrolling the vast majority of students were in fact almost totally State-funded.

On average in the EU-28 the portion of ISCED 1 to ISCED 4 students in public institutions rose from 81% to 83% between 2003 and 2012, which can be interpreted as relatively stable if the Dutch student numbers are excluded from the average (cf. zoom). The countries presented here showed little variation in their distribution over the decade. Belgium had the fewest number of students in public institutions in 2012 (43%), and Slovenia the most (98%). Lastly, only 6 countries presented here (including Italy, Spain and the United Kingdom) had a proportion higher or equal to 5% of students enrolled in independent private institutions.

BIGGER CLASS SIZES IN LOWER SECONDARY EDUCATION

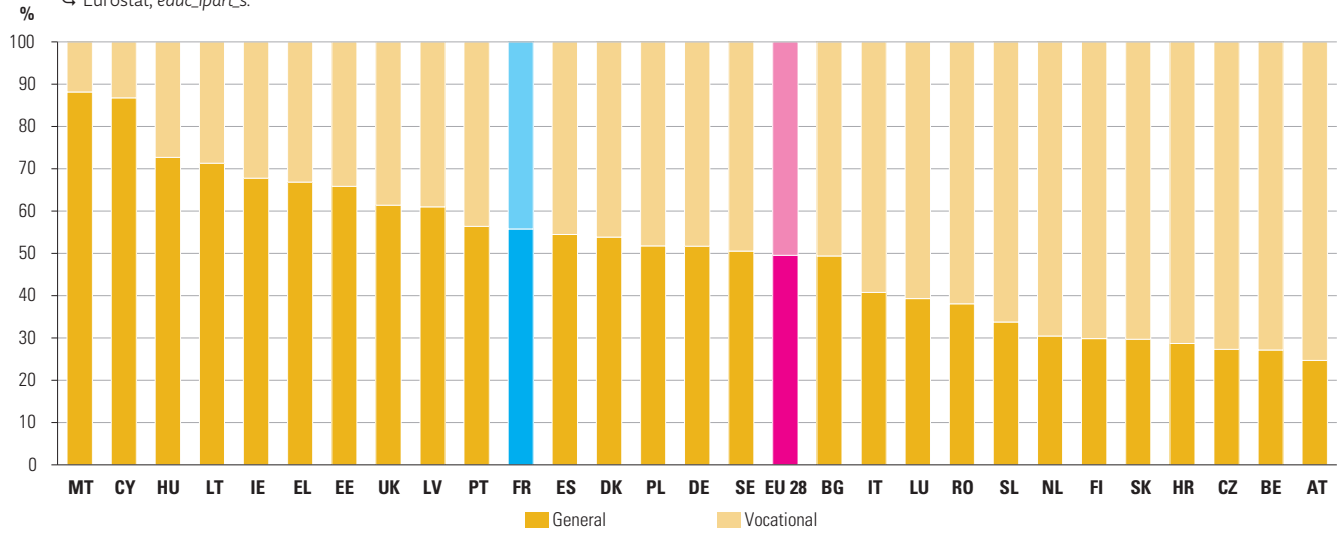
There were big variations in the average class size[□] in primary and lower secondary education in the European Union. Of the 17 countries presented here (2.6.4), 13 (including Finland, France, Germany, and Italy) had smaller average class sizes in primary education than the first cycle of secondary education. The average class size in the United Kingdom was the highest at 25 students per class in ISCED 1, with the lowest being Luxembourg at an average of 15 students per class. These two countries were also the ones with the widest extremes of student numbers at this educational level, with 35,000 students in Luxembourg and 4,600,000 in the United Kingdom. The Czech Republic, Portugal, Hungary, Germany, Spain, France and the United Kingdom formed the minority of countries that had over 20 students per class in primary education.

In lower secondary education, France, Germany and Spain had the largest classes in 2013 with an average of 25 students per class. The smallest classes were found in Latvia with 14 on average per class. Luxembourg had the lowest number of ISCED 2 students with 22,000 in 2013, compared to Germany's 4,700,000 students, the EU country with the highest number of students in ISCED 2.

[□] See definition p. 68.

2.6.1 ISCED 3 students' distribution between general and vocational programmes in 2012

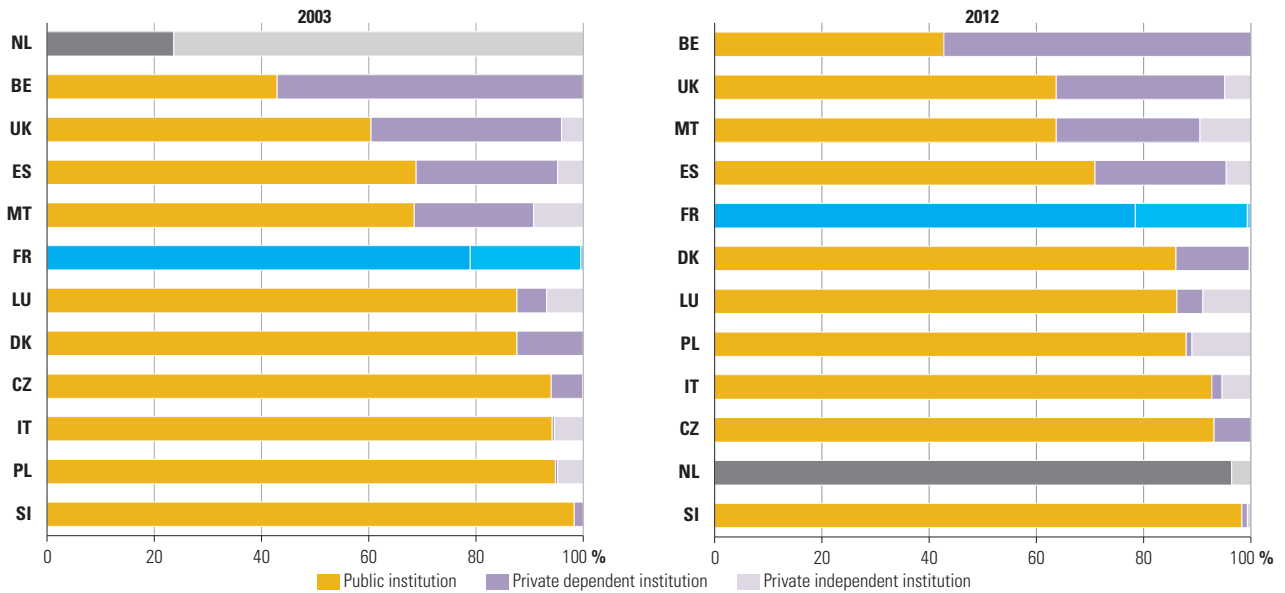
↳ Eurostat, educ_ipart.s.



Note: In France, the general stream includes the technological programmes.

2.6.2 and 2.6.3 ISCED 1 to 4 students' distribution by type of institution in 2003 and 2012

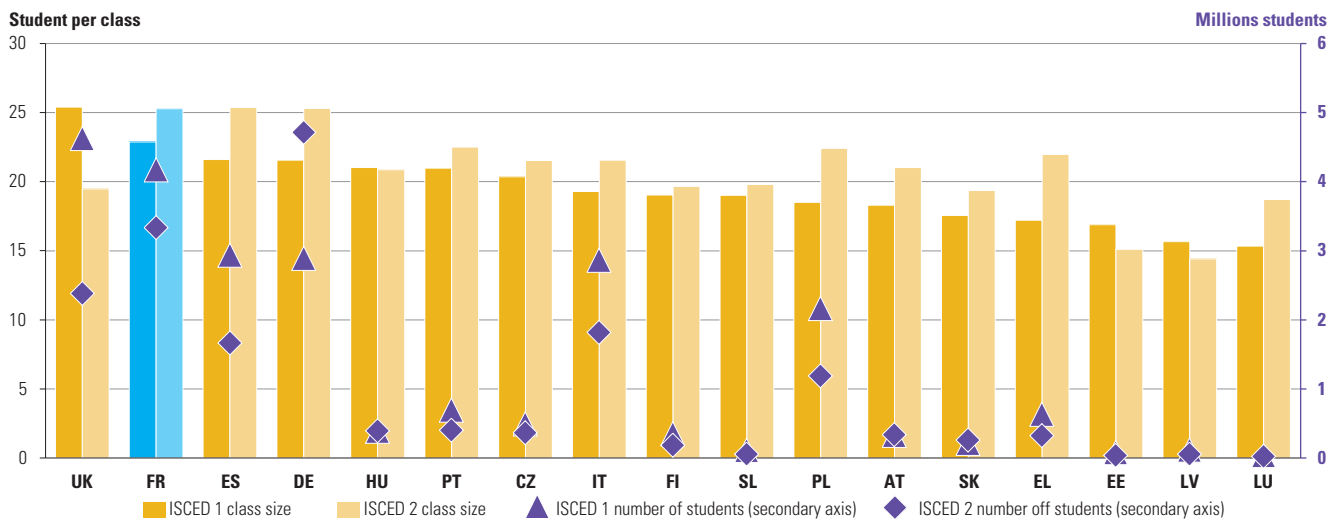
↳ Eurostat, educ_ipart.



Note: France's National data present a lower rate of share of student going in private institutions; the scope that Eurostat covers here includes institutions that aren't under the French Department of National Education, Higher Education and Research's supervision.

2.6.4 Average class size and total student population in ISCED 1 and ISCED 2 in 2013

↳ Eurostat, educ_uoe_enrao2; OECD, EAG 2015, table D2.1.



3.1 THE PROPORTION OF NATIONAL WEALTH DEVOTED TO EDUCATION

OECD's education expenditure

ZOOM

Expenditure on education for educational institutions, for the OECD, includes all costs (educational services, auxiliary services and Research & Development) funded by the central administration, local governments, private sector (households and enterprises) and international agencies. Extracurricular household expenses, public funds for financing certain extracurricular student expenses (e.g. housing) and continuing education-related costs are excluded. Costs are either expressed as a percentage of GDP or as equivalent US dollars in **purchasing power parity (PPP)**[□]. PPP is a currency conversion rate making it possible to express the purchasing power of different currencies in a common unit.

EDUCATION EXPENSES VARY FROM ONE COUNTRY TO ANOTHER

In 2012 the average education expenditure by the 21 European-Union OECD members amounted to 4.9% of the **gross domestic product**[□] (3.1.1). Of the countries presented here, 8 surpassed this average, including Finland, France and the Netherlands, with a maximum of 6.3% spent by the United Kingdom. With its spending on education at 5.3%, France was located slightly above this European average.

Denmark traditionally spends the greatest amount (slightly higher than the United Kingdom, a statistic not shown in 3.1.1 because of an interruption in the series). This proportion is the lowest in Luxembourg (3.7%). Eleven countries, including Estonia, Germany, Italy and Spain, devote a lower proportion of their GDP than the European average. With a decade's hindsight, what is observed is a certain stability, even a slight increase. Of 12 European OECD-member countries, the statistics of which are available and comparable over time, the proportion of expenses from national wealth devoted to education rose from 4.4% in 2000 to 4.8% in 2012 (3.1.1).

FACING THE ECONOMIC CRISIS: FIRST RESISTANCE THEN A SLIGHT FALL IN PUBLIC SPENDING ON EDUCATION

What was the impact of the crisis on public spending for education in the European-Union countries? It may be relevant here to focus on the public expenditure on education in order to gauge the budgetary responses of countries facing the crisis. So what is examined here is only the spending made by the central administration, the local governments and international agencies.

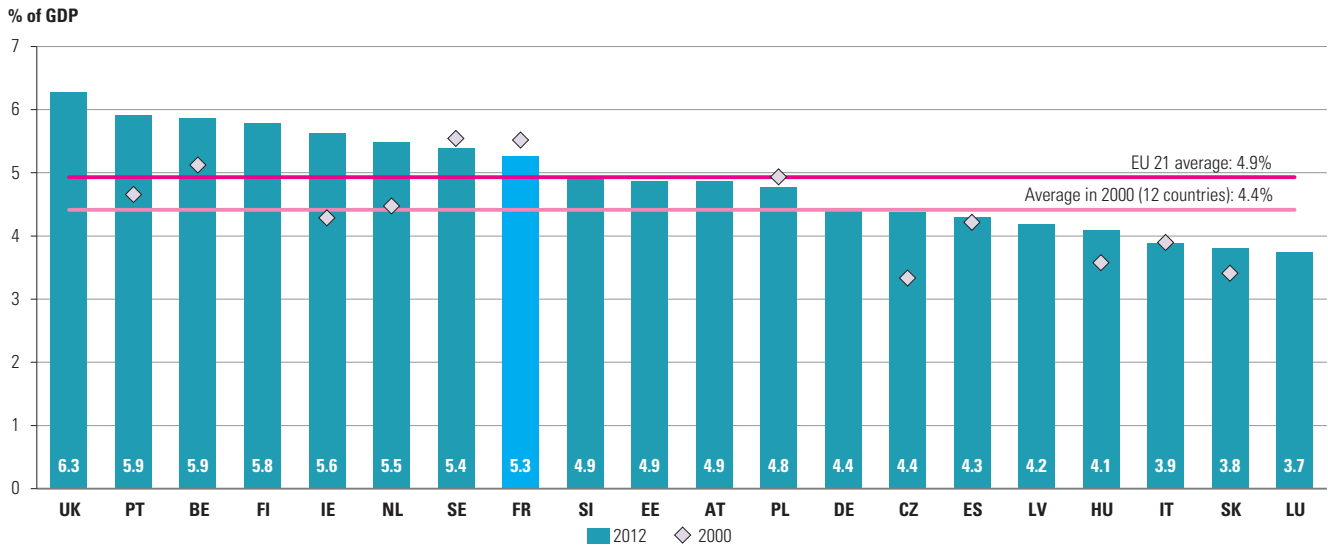
It is possible to distinguish between two periods (3.1.2 and 3.1.3). From 2008 to 2010 there was an average increase of 3% in public spending on education in the European member-countries of the OECD (where the statistics are available), whereas the GDP of these same countries saw an average fall of 3%, with the result of an average mechanical rise in the share of public spending in the GDP. The developments were, however, far from identical in each of the countries. In the majority of them, including France, public spending on education increased, and in some cases even considerably (e.g. + 18% in Slovakia, + 14% in Portugal, + 8% in the Netherlands and + 5% in Finland and Poland), although their GDP decreased. In Ireland there was a 3% increase in public spending while the GDP fell by 7%. On the other hand, in four of the other countries (Estonia, Hungary, Italy and Slovenia), public spending on education fell, sometimes sharply (Estonia and Hungary), along with a fall in their GDP.

In the second period from 2010 to 2012 there was an average adjustment downward in public spending (- 3% on average in the European OECD-member countries, where statistics are available), although the GDP on average showed a very slight rise (+ 1%). Here too developments were contrasting according to country. Although the variation in expenditure was positive over the period in Belgium, the Czech Republic, Finland and Sweden, it was negative for the 9 other countries, including France (- 2%) and sometimes even significantly negative as in Italy (- 9%), Hungary (- 13%), Spain (- 12%) and Portugal (- 14%). In a few countries, such as France, downward adjustments of public spending on education occurred even though the GDP experienced a positive upturn. In Estonia, for example, the decrease of public spending on education, certainly less than in the previous period, occurred although the GDP rose by 13%. ■

[□] See definition p. 68.

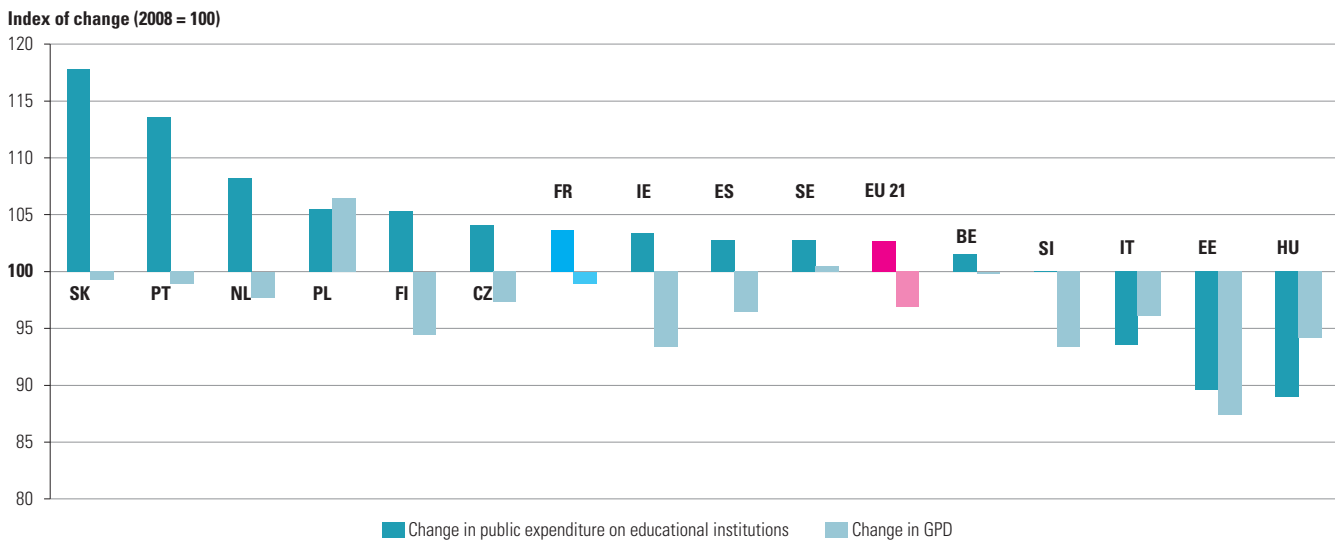
3.1.1 Expenditures on educational institutions as a percentage of GDP in 2000 and 2012

OECD, EAG 2015, table B2.1.



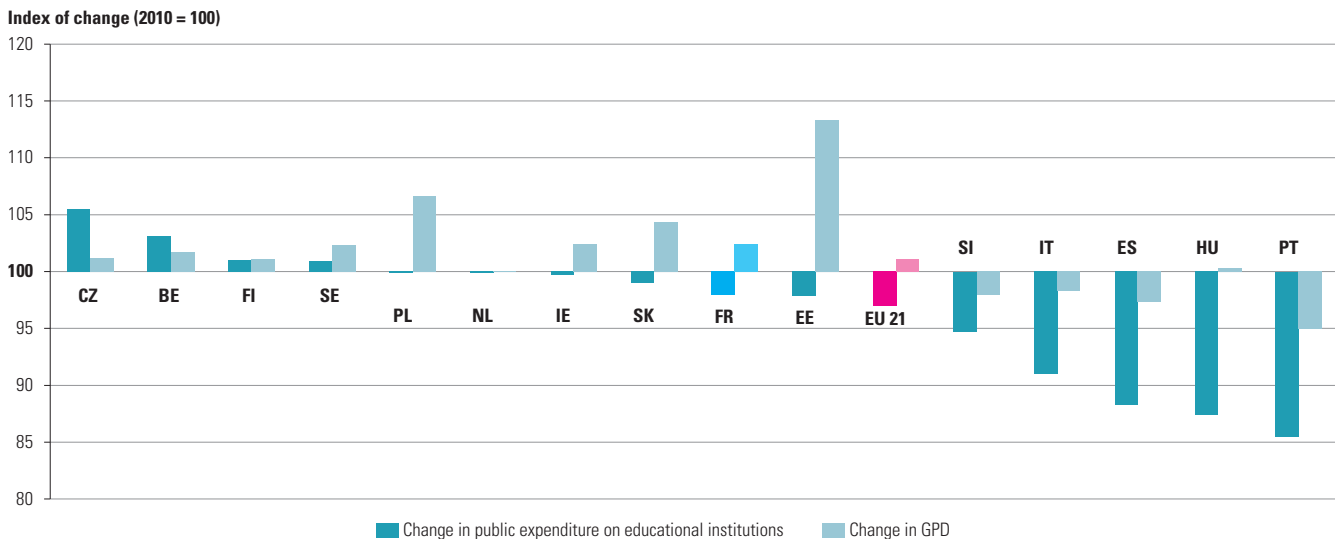
3.1.2 Change in public expenditure on educational institutions and change in GDP between 2008 and 2010

OECD, EAG 2015, table B2.4.



3.1.3 Change in public expenditure on educational institutions and change in GDP between 2010 and 2012

OECD, EAG 2015, table B2.4.



3.2 THE COST PER STUDENT

CONTRASTING EXPENDITURE PER STUDENT AND PER EDUCATIONAL LEVEL IN EUROPE

In 2012 the education expenditure per student (cf. 3.1, p. 30) for the average of the 21 European OECD member-countries was higher for students in secondary education (10,030 US \$ PPP) than for students in primary education (8,370 US \$ PPP) (3.2.1 and 3.2.2). There were significant differences between the EU-21 countries with Hungary showing the lowest annual expenditure per student of less than 4,500 US \$ PPP for each ISCED level and Luxembourg the highest at over 20,000 US \$ PPP.

Observed by the level of education, the annual expenditure per student reveals different permutations from country to country. In a most singular way in the EU-21, Finland devoted a remarkably high amount for ISCED 2 (12,910 US \$ PPP) compared to that for ISCED 1 (8,320 US \$ PPP) or ISCED 3 (8,600 US \$ PPP). Denmark and Slovenia, focused on ISCED 1 and 2, allocating a tangibly lower amount of money to ISCED 3. Germany and France showed fairly similar profiles with expenditures per student below the EU-21 average in ISCED 1 but rising with the educational level to attain ISCED 3 significantly above the average values.

Four main factors influenced the amount of money spent per student, *i.e.* teachers' salaries (the main factor of expense), their teaching time, student learning time and, lastly, class size. So, for example, the amount spent per student in ISCED 2 was slightly higher in France (11,330 US \$ PPP) than in Germany (11,060 US \$ PPP), but it led to differing permutations in the two countries, with teacher salaries noticeably higher in Germany (gross effective salary of 66,510 US \$ PPP) in Germany in 2013 compared to 42,700 US \$ PPP in France; cf. 4.3, p. 40); teaching time tangibly lower in France (648 annual hours in France compared to 752 in Germany in 2013); compulsory student learning time tangibly higher in France (991 class hours in France compared to 906 in Germany in 2014); with the class size identical in the two countries (25 students per class in 2013; cf. 2.6, p. 28).

THE COST OF A STUDENT'S PATHWAY FROM ISCED 1 TO 3

In 2012 in the EU-21 countries the primary and secondary education of a student costs on average of 117,060 US \$ PPP (3.2.3). The extreme values were recorded in Hungary (57,090 US \$ PPP) and Luxembourg (256,020 US \$ PPP).

The hypothetical cost of a student's pathway

ZOOM

The hypothetical cost of a student's pathway from the beginning of primary to the end of secondary education can be calculated by weighting the annual expenditure per student at each of the educational levels (ISCED 1 to 3) with the expected duration of enrolment at this same level. The expected duration corresponds to the number of years required to complete a training course (excluding repeating or "skipping" school years). For the same ISCED level, training courses can have expected durations that vary even within the same country (cf. 2.1, p. 18 and 2.2, p. 20). Only the general programmes are studied here.

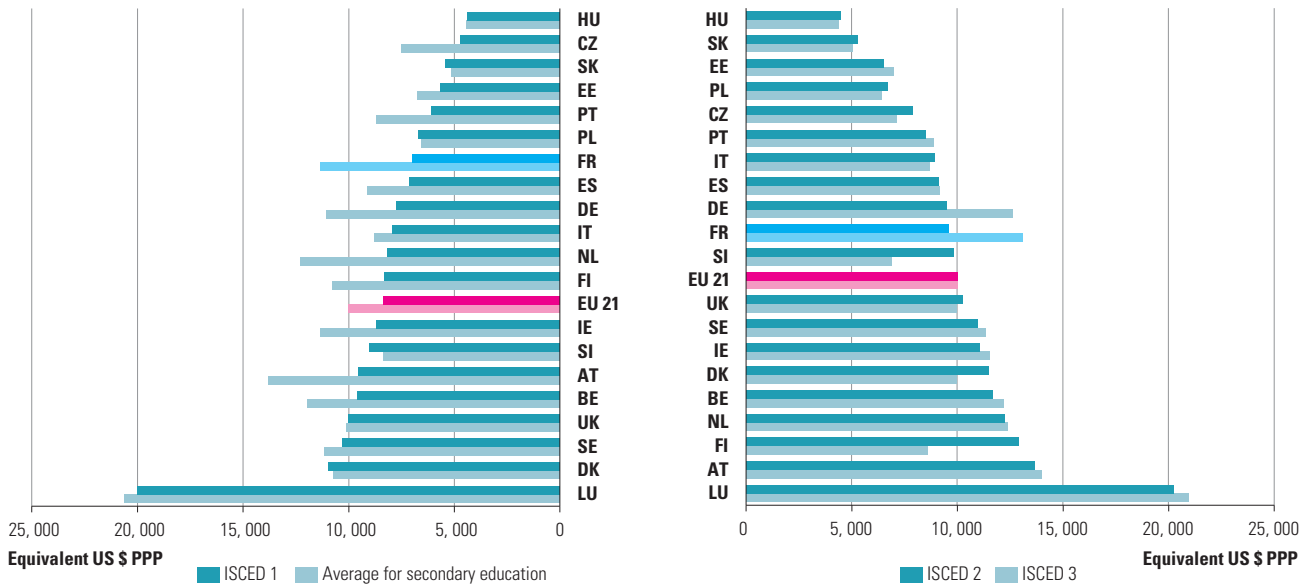
Germany and France showed similar profiles with cumulative expenditures of all student pathways close to the EU-21 average but with the ones of ISCED 1 alone below the average. There are two factors that pull in the same direction for these two countries, *i.e.* the expenditure per student is lower in ISCED 1 and the expected duration of the primary level relatively short (5 years in both countries). England and Ireland showed another kind of profile where the hypothetical pathway of a student costs less than in France or Germany for ISCED 2 but more for ISCED 1 and 3.

THE COST OF A STUDENT'S PATHWAY IN TERTIARY EDUCATION

In 2011 the average length of higher education in the EU-21 was 4.1 years, ranging from 2.7 years in the United Kingdom to 5.3 in Austria and the Netherlands (3.2.4). Measured by the average length of higher studies in 2011 and the expenditure per higher education student in 2012, the cost of a higher education student pathway was a minimum of 29,200 US \$ PPP in Hungary and a maximum of 101,630 US \$ PPP in Sweden. With 61,430 US \$ PPP, France was located at the EU-21 average, despite a slightly higher annual expenditure (15,280 US \$ PPP annually in France compared to 14,960 US \$ PPP on average in the EU-21) and this taking into consideration the slightly lower average length of study (4 years). Sweden, the Netherlands, Finland and Austria had the highest student pathway costs (over 80,000 US \$ PPP), whilst Hungary, Slovakia, Slovenia and Estonia had the reverse with the lowest pathway costs (under 40,000 US \$ PPP) [DEPP-MENESR, *Note d'information*, 16.05, February 2016]. ■

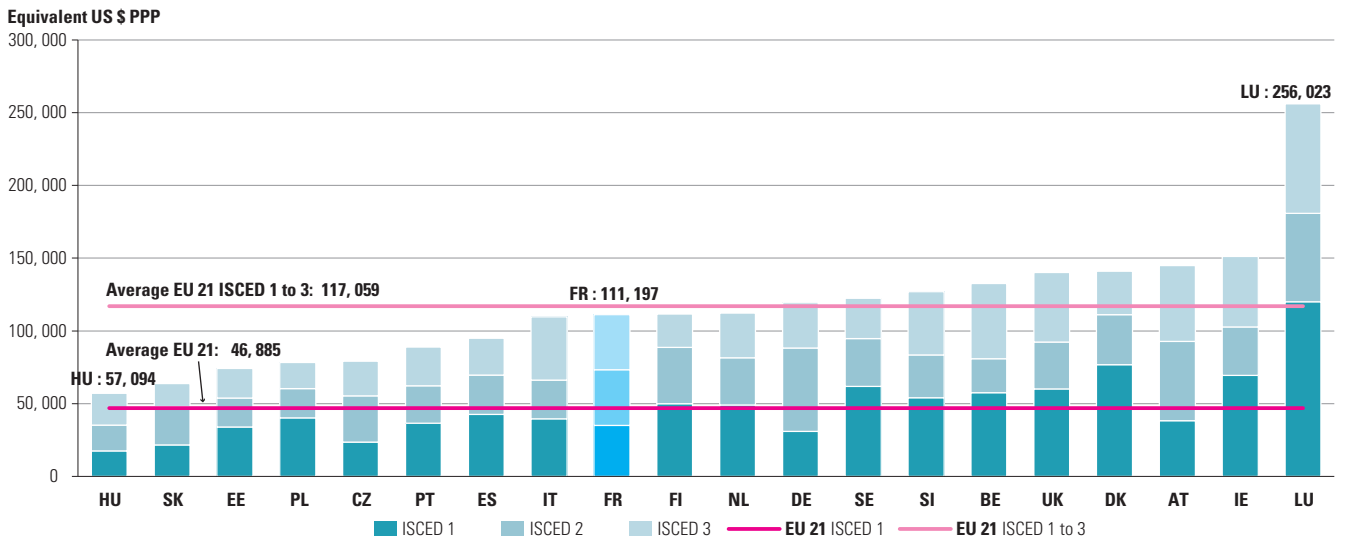
3.2.1 and 3.2.2 Annual expenditure by educational institutions per student and ISCED level in 2012

OECD, EAG 2015, table B1.1a.



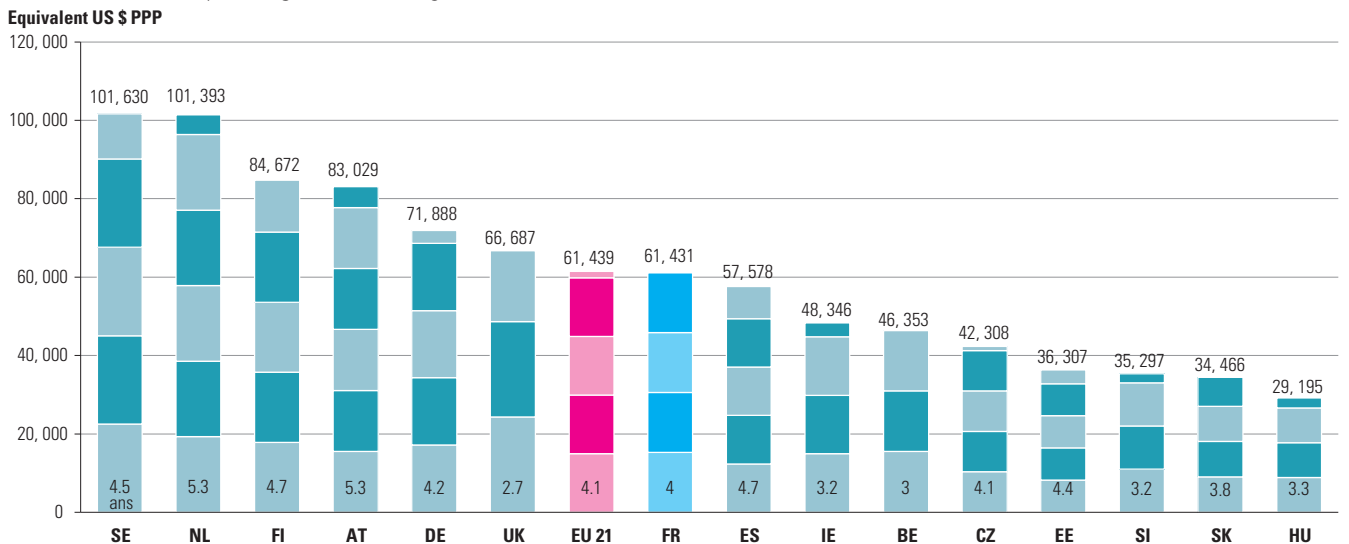
3.2.3 Cumulative expenditure by educational institutions per student and ISCED level in 2012 – general programmes

OECD, EAG 2015, tables B1.3 et B1.6; authors' calculation.



3.2.4 Cumulative expenditure per student over an average higher education in 2012

OECD, EAG 2014, table B1.3a; OECD, EAG 2015, table B1.1a.



Note: Each histogram represents the student's cumulated expense in a country. It is itself divided in annual expense per student over the average duration of a higher education that is indicated in the lower part of the histogram.

HIGHER EDUCATION TUITION FEES LOW IN MOST COUNTRIES

In 2015/2016 in the 28 European Union countries, tuition and administrative fees charged by public higher education institutions or subsidised private institutions were relatively low (3.3.1). In 19 countries (including Finland, France, Germany, Greece and Poland) of 29 (Scotland is here considered separately from the UK), fees were less than 1,000 euros per full-time student per university year; in 11 of them these fees were either inexistent or under 100 euros.

Every year, the **Eurydice** [□] European network publishes **zoom** an annual report with the title *National Student Fees and Support Systems in European Higher Education*. It deals with tuition and administrative fees (including, among other things, compulsory fees for social security) as well as indirect support (in the form of transfers to families) and direct support (grants and public administration-supervised loans) given to students of public higher education institutions or subsidised private institutions. Only the Bachelor and Masters cycles are taken into account here. Private higher education institutions and (for France) secondary education institutions are not included. Monetary units that are used here are either Euros or current national currency without **PPP** [□].

They were highest in the United Kingdom, except for Scotland. The university tuition reform applied at the start of the 2012 school year raised the ceiling of these fees to 9,000 £ (around 10,500 euros on the 3rd quarter of 2016) for the first cycle. To meet these high fees, students take out loans at prime rates that they only pay back once their salary has reached 21,000 £ per year (around 24,700 euros on the 3rd quarter of 2016). Students in Italy, Latvia, Lithuania the Netherlands and Spain also paid fees of over 1,000 euros per year for the majority of public or subsidised higher education programmes.

Estonia is an interesting case: it changed its system in 2013/2014 by linking the amount of tuition fees to the student's performance. That is, students managing to attain 30 ECTS credits (**European Credit Transfer System** [□] – the university credits system) per semester and 60 ECTS credits per year in an educational pro-

gramme given in the Estonian language are exempt from tuition fees. For students failing to attain the necessary credits, higher education institutions are entitled (but not obliged), to demand tuition fees for each missing ECTS credit.

A WIDE INSTITUTIONAL VARIETY OF STUDENT-SUPPORT SYSTEMS

Student financial support in the European Union takes many different forms (see box). But direct financial support in the form of grants and loans supervised by the public authorities is the most common. In the majority of cases these loans rely on distinct procedures (students receive either a loan or a grant), but they may sometimes be combined (in Denmark, for example, only scholarship students may benefit from public loans). Grants may be given based on specific criteria, most often linked to income or special needs (disability). In Finland, Sweden and Denmark where the amount per grant can reach 9,000 euros per year (Denmark), grants are in no way income-based. Some grants are linked to students' performances and not based on family income (e.g. Germany and Estonia) but may also be family income-based as in Austria and Italy.

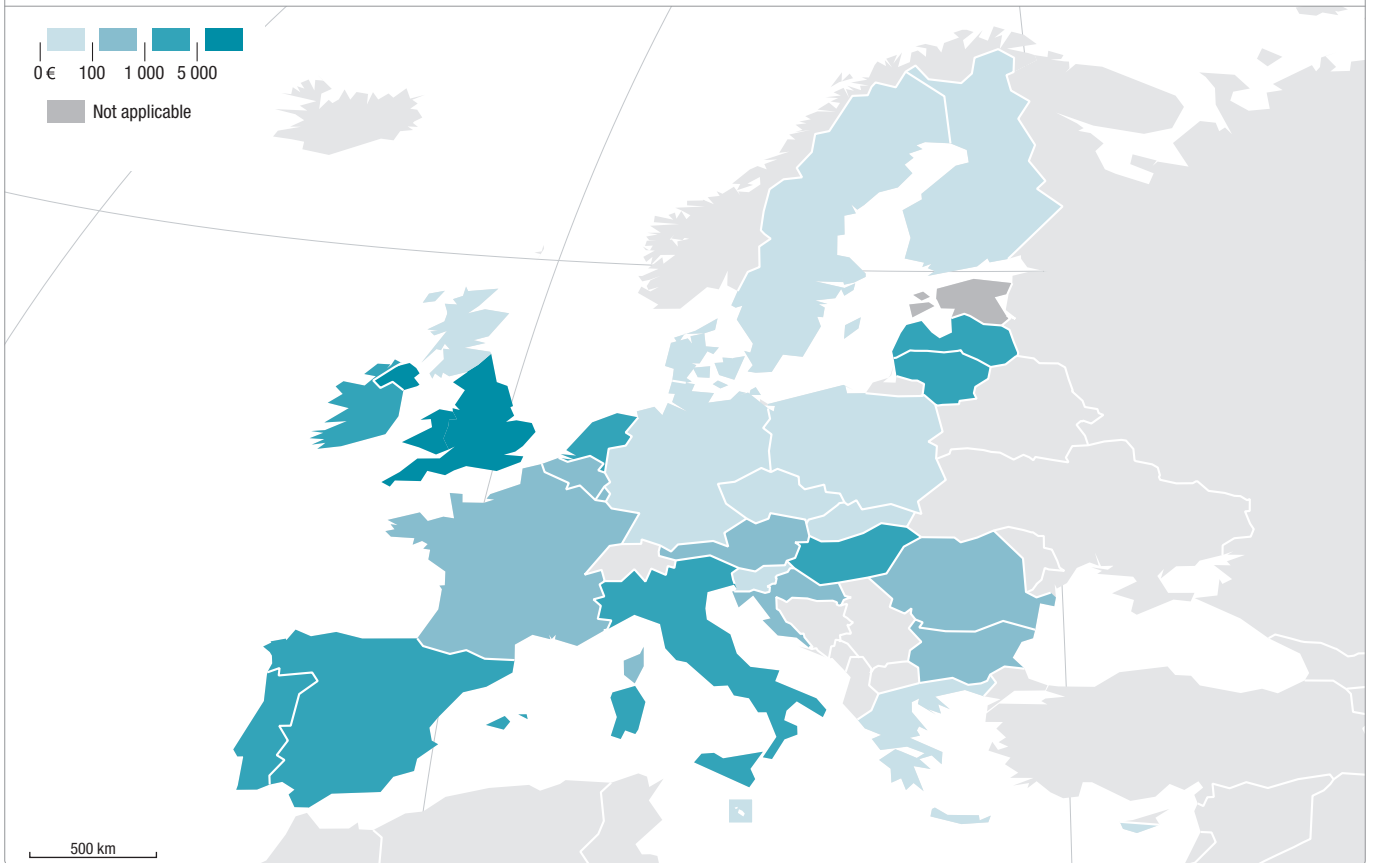
In 2014/2015 the students of the EU-28 countries generally turned to financial support. The representative case (in 19 countries, including France, Germany, Greece, Spain and Poland) is where between 10 to 50% of students received scholarships (3.3.2). Denmark, the Netherlands, the United Kingdom and Sweden had an absolute majority of students receiving grants in 2014/2015.

In 2015/2016 in the EU-28 9 countries (including Finland, France, Germany and Spain) offered grants with the maximum amount greater than 5,000 euros per academic year, whilst 7 other systems (including the Netherlands, Poland, the United Kingdom and Sweden) provided grants for a maximum amount ranging from 3,000 to 5,000 euros. In six of the EU-28 countries (including the Czech Republic, Lithuania and Romania), the maximum amount of grants was less than 1,000 euros. ■

[□] See definition p. 68.

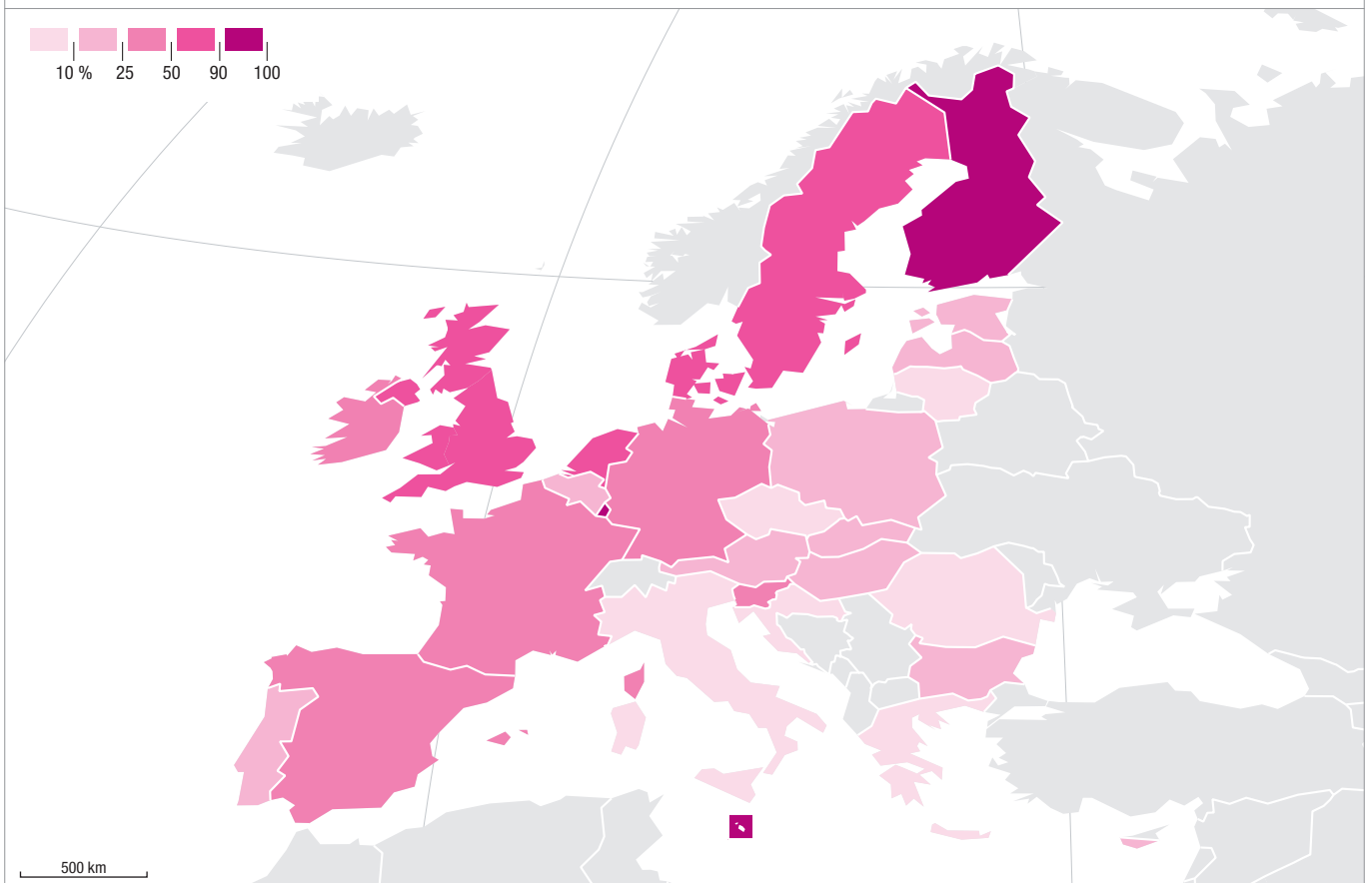
3.3.1 Most common fees (including tuition and administrative fees) in first cycle study programmes, among full-time students paying fees, 2015/2016

↳ Eurydice, *National student fee and support systems in European Higher Education 2015/2016*.



3.3.2 Percentage of full-time students receiving grants in the first cycle, 2014/2015

↳ Eurydice, *National student fee and support systems in European Higher Education 2015/2016*.



4.1 WHO ARE THE TEACHERS?

OLDER TEACHERS AT THE HIGHER LEVELS OF EDUCATION

In the 21 OECD member-countries of the European Union in 2013, the average age of teachers increased with the educational level at which they were teaching. Whilst 38% of the ISCED 1 teachers were under 40 years old, this proportion was no greater than 35% in ISCED 2 and 31% in ISCED 3 (4.1.1). There are contrasting realities among the countries. Belgium, Luxembourg and the United Kingdom were the only countries where the proportion of teachers under 40 was greater than 40% at all educational levels. In contrast, not just the Mediterranean countries but also the Baltic countries, Austria and even Germany had a proportion of teachers under 40 below the average of the 21 countries for the three educational levels. Italy clearly stands out with less than 10% of its teachers under 40 at each educational level. In a context where the number of students is not noticeably dropping, the aging teaching population presents the education system with a dual challenge, *i.e.* the magnitude of recruiting new teachers in future, then training them.

Finland, France and the Netherlands, had a different profile, *i.e.* the proportion of teachers under 40 in ISCED 1 and 2 stood at about 40%. A leap was made in ISCED 3 with a concentration of older teachers. In these three countries the proportion of teachers under 40 at this level was only about 25%.

A PREDOMINANTLY FEMALE PROFESSION IN EUROPE

Women predominate in the teaching profession (4.1.2), but their proportion decreases with the educational level at which they teach, *i.e.* 86% in ISCED 1, 70% in ISCED 2 and 60% in ISCED 3 for the 21 countries presented here. In primary school teaching, these proportions range from 70% in Greece to 97% in Slovenia. There are even greater differences in secondary education (from 51% in the Netherlands to 81% in Latvia).

Belgium, Finland, France, Germany and Portugal have situations close to the average at all ISCED levels. The Netherlands is the exception with a percentage of women conspicuously lower. But the increase in the employment rates of women over the past fifteen years in the Netherlands has seen a higher proportion of younger women teachers.

A STRONG PREDOMINANCE OF TEACHERS WITH BACHELOR OR MASTERS DEGREES

The purpose of the OECD TALIS[□] survey (*Teaching and Learning International Survey*) is to gather declarative data about the learning environments and the working conditions of teachers in lower secondary education institutions (*collèges* in France, ISCED 2). Each country's sample is composed of at least 20 teachers from 250 institutions (public and private) as well as the heads of these institutions. The findings of TALIS 2013 covered 34 countries in 2013, including 24 OECD member-states and 19 EU member-states. Some countries extended the survey to include teachers and school heads of primary and upper secondary education. **ZOOM**

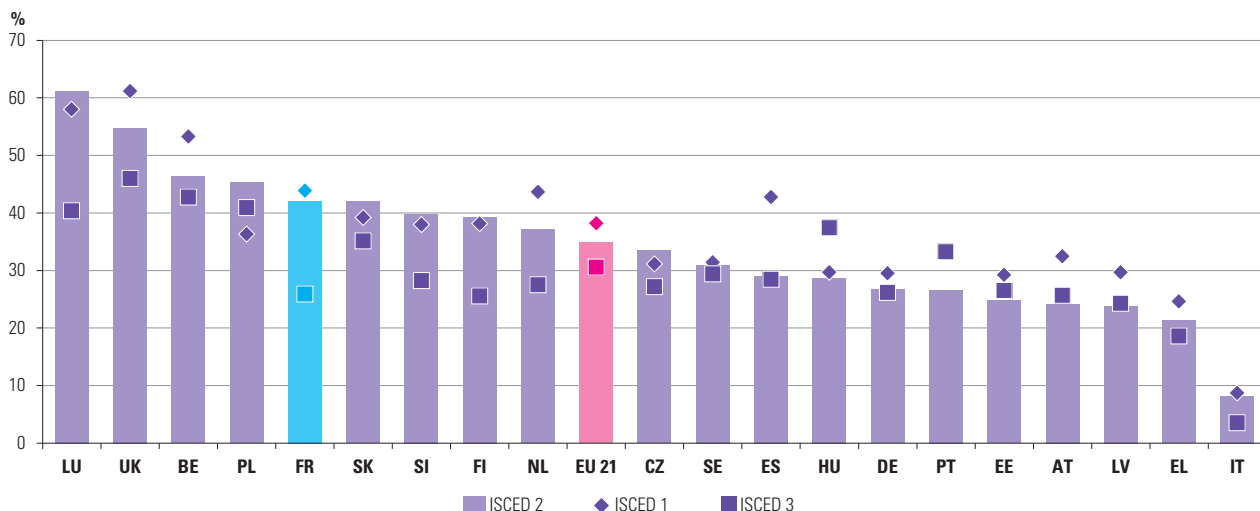
In the European Union countries taking part in the TALIS 2013 survey, the ISCED 2 teachers held either Bachelor or Masters' degrees (ISCED 5 in the 1997 nomenclature) in over 95% of the cases (4.1.3). There were nonetheless certain national specificities. Note the relatively big percentage of first-cycle teachers in secondary education without tertiary education degrees in six countries: the Czech Republic, Estonia, Italy, the Netherlands, Spain and Sweden.

In Portugal the high rate of teachers reported as having an ISCED 6 level (PhD or equivalent in the 1997 nomenclature) was in part due to the ways of classifying a Masters in this country, a holdover from the period prior to the 1999 Bologna Process (cf. 2.2, p. 20). ■

[□] See definition p. 68.

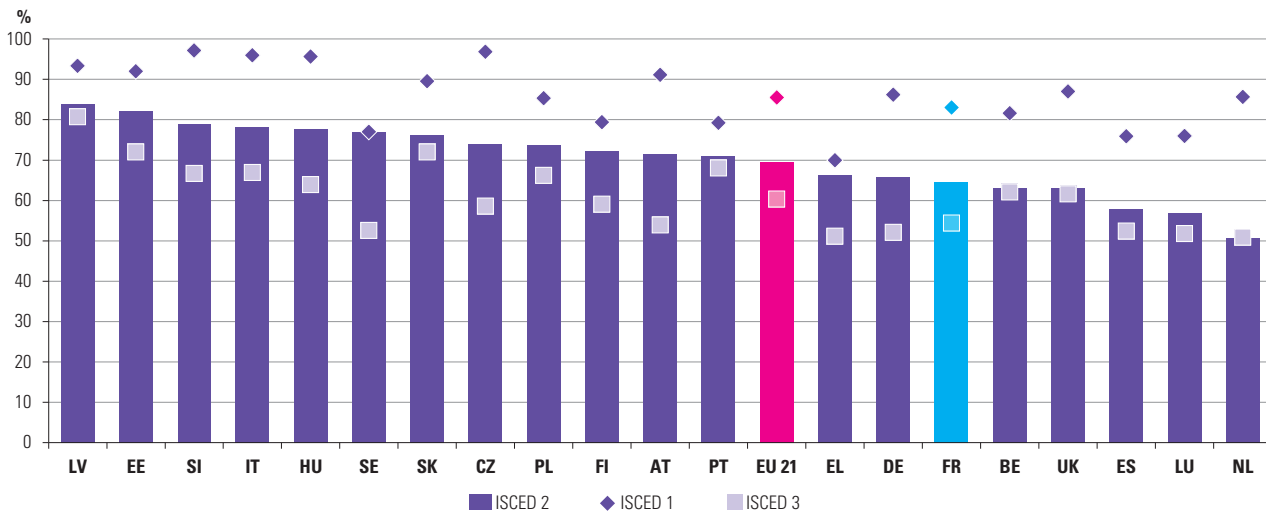
4.1.1 Proportion of teachers that are less than 40 years old by ISCED level in 2013

OECD, EAG 2015, table D5.1.



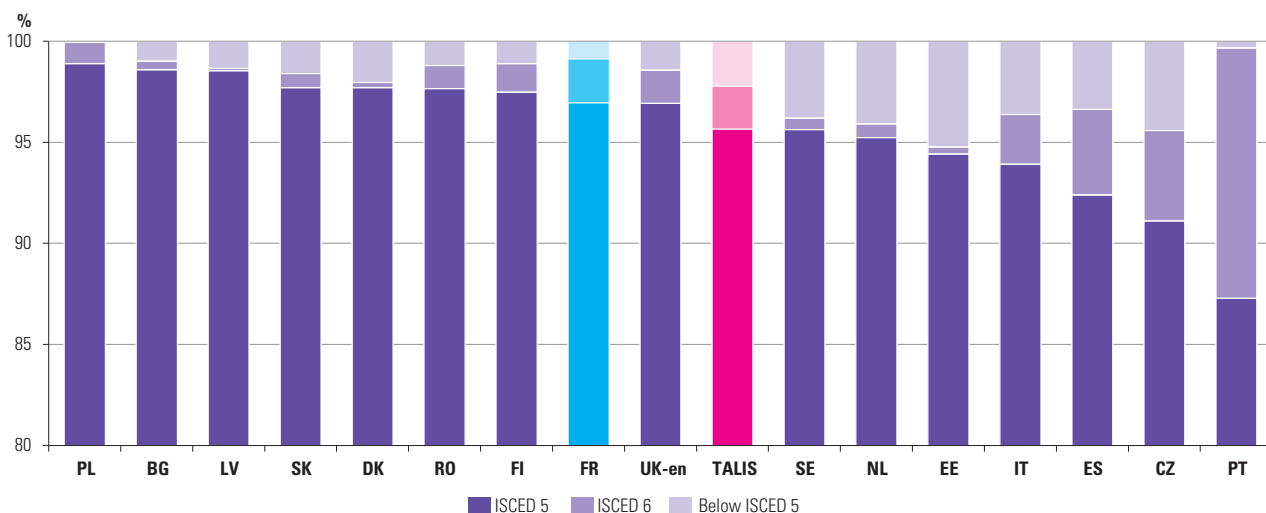
4.1.2 Proportion of female teachers by ISCED level in 2013

OECD, EAG 2015, table D5.3.



4.1.3 Distribution of ISCED 2 teachers by highest level of formal education completed in 2013 (ISCED 1997)

OECD, TALIS 2013, table 2.2.



Note: In Portugal, Master's degree that were obtained before the Bologna Process (cf. 2.2, p. 20) were labelled as ISCED 6 diploma in the 1997 nomenclature.

4.2 TEACHERS' WORKING CONDITIONS

A PREPONDERANCE OF TEACHERS IN THE PUBLIC SECTOR

In 2013 there was a high preponderance of teachers working in the public sector of the 28 European Union countries (4.2.1 and 4.2.2). This indicator is nonetheless subject to the same methodological precautions as the indicator for the distribution of students per type of institution (cf. 2.6, p. 28). Although the different institution categories established by Eurostat can be seamlessly applied to France (public institutions, private institutions under state contract and independent private institutions), the categorisation can prove more troublesome for certain EU-28 countries. The Netherlands, for example, consider all their institutions as public.

The proportion of ISCED 1 teachers working in public institutions surpassed 97% in Croatia, Romania, Bulgaria, Finland and the Baltic countries (4.2.1). The least amount were in Malta where nearly 30% of the primary-school teachers taught in private institutions. The proportion of teachers in private institutions proved relatively high in ISCED 2 in the four countries where it was also high in ISCED 1, i.e. France, Spain, Malta and the United Kingdom (4.2.2). In the United Kingdom it showed the influence of the Academies in England with the proportion of teachers in public institutions conspicuously higher than in the other countries of the United Kingdom.

Academies in England

ZOOM

Implemented in 2000, the Academies are institutions comprised of bodies that are independent of Local Education Authority (LEA), the usual authority over educational institutions. Under the Department for Education authority and mostly funded by the state, with frequent support from private sponsors as well as voluntary contributions from the parents, they enjoy broad governance autonomy.

MIXED WORKING-HOUR REGULATIONS

Beyond their teaching duties, teachers fulfil numerous other tasks: administration, organisation and scheduling, teacher meetings, information sharing with parents or with other players in the educational community. There are three categories of teachers' working hours that may be subject to regulation, i.e. overall working time (most often that which is applied to all employees), teachers' compulsory presence in the institution and teaching time (4.2.3).

The scope of applying legal or conventional standards proved to be especially variable from one country to the next, e.g. only Greece, Hungary and Portugal, Scotland and Spain defined each of the three components, whilst the other countries set regulations for two of them at best. Greece was the only country where the amount of time full-time teachers were supposed to spend on the institution's premises was identical to the total number of working hours established for them. Moreover, England, Estonia, Northern Ireland and Wales did not contractually define a minimum teaching time. Lastly, in the countries where there was no regulation of total working hours, teachers had to be present in the institution for a minimum number of hours and/or teach for a regulated amount of time. Maximum regulatory teaching time (excluding overtime) is conspicuously higher in Germany (28 weekly hours) than in France (20 hours), whilst it is lower in Finland (18 hours) where a minimum presence time in the institution is set at 21 hours.

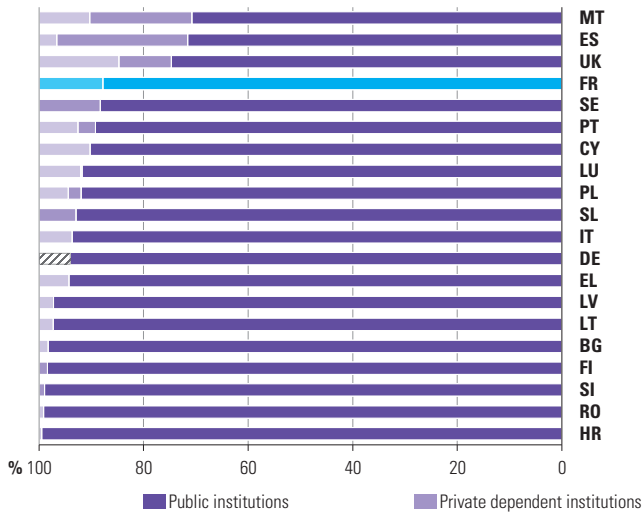
FEWER STUDENTS PER TEACHER IN THE FIRST CYCLE OF SECONDARY EDUCATION

In 2013 the **ratio of students to teaching staff**⁶⁸ in the European Union was better in ISCED 2 than at the other educational levels (4.2.4). In the 21 EU-member countries in the OECD the average ratio in ISCED 2 was 11 students per teacher, whilst it was 14 students in ISCED 1 and 12 students in ISCED 3. Many countries had situations comparable to the European average (including Belgium, Estonia and the United Kingdom). This average, however, covered many national disparities: in Spain, France and Portugal the student-teacher ratio fell as the educational level rose. In France the great numbers of options that can be sat at the general or technological baccalaureate as well as the limited seating capacity of a workshop in vocational education explain this rather low ratio for ISCED 3. ■

⁶⁸ See definition p. 68.

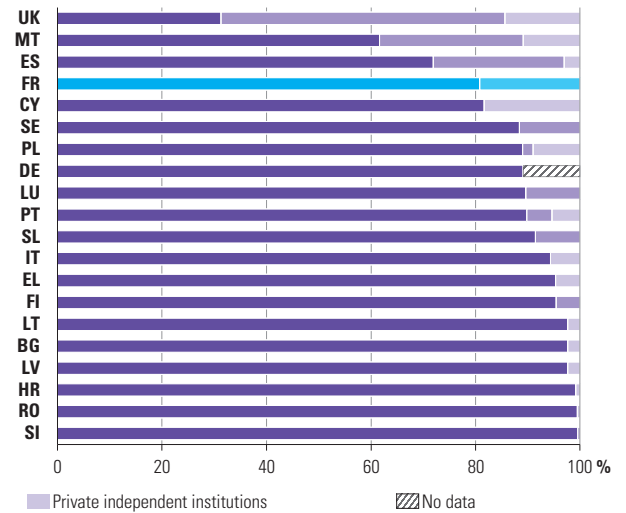
4.2.1 Distribution of ISCED 1 teachers by type of institution in 2013

↳ Eurostat, educ_uoe_perpo2.



4.2.2 Distribution of ISCED 2 teachers by type of institution in 2013

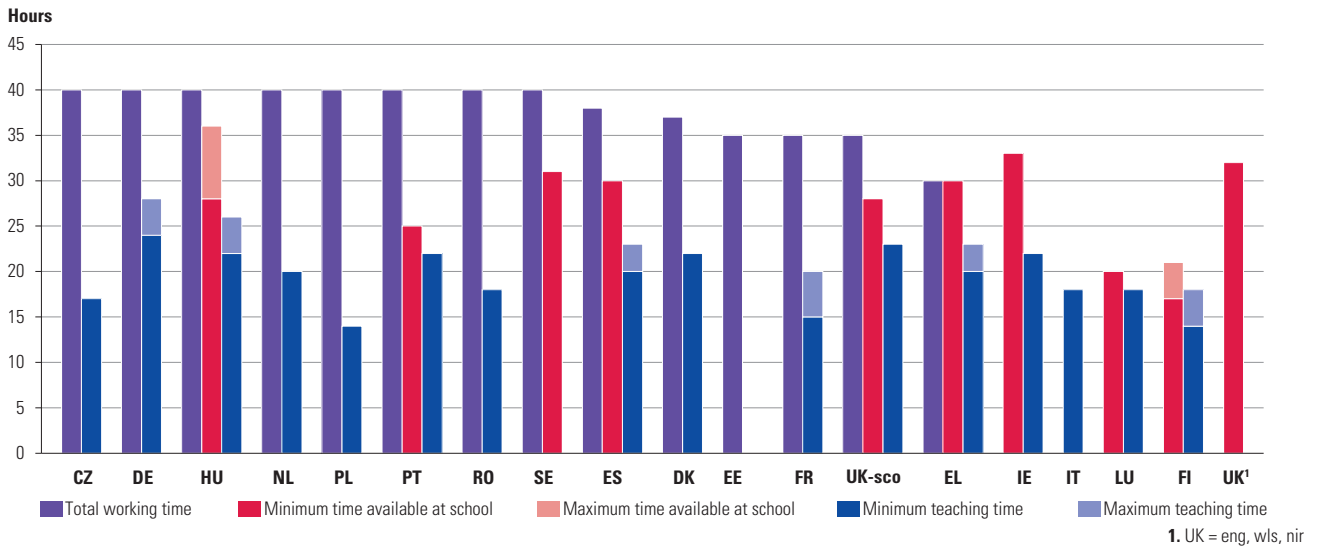
↳ Eurostat, educ_uoe_perpo2.



Note: Data for the different categories of private institutions are not available in Germany.

4.2.3 Official definitions of the weekly workload in hours of full-time ISCED 2 teachers according to central regulations in 2013/2014

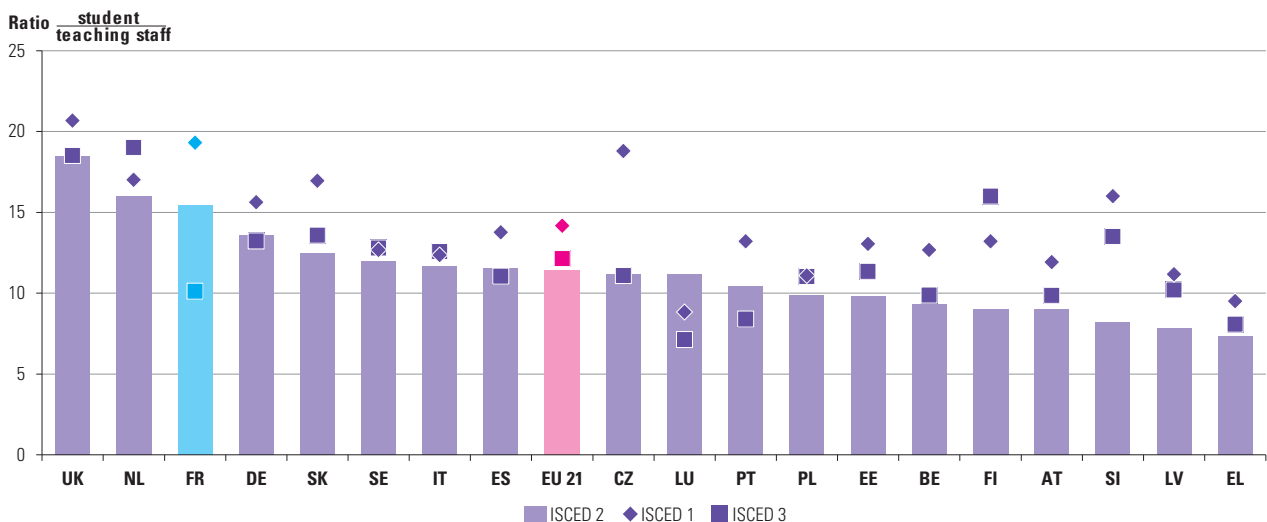
↳ Eurydice, *The teaching profession in Europe*, fig. 1.7.



Note: In France, the minimal teaching time is the one of "agrégés" teachers (15 hours), while they only represent 5% of ISCED 2 teachers in 2014. The maximal teaching time is the one of certified P.E. teachers (20 hours).

4.2.4 Ratio of students to teaching staff in educational institutions by ISCED level in 2013

↳ OECD, *EAG 2015*, table D2.2.



4.3 TEACHER SALARIES

HIGHLY CONTRASTING STATUTORY SALARIES WITHIN THE EUROPEAN UNION

OECD's methodology for statutory and actual salaries

ZOOM

Teacher's statutory salaries are scheduled salaries according to official pay scales of each country (if country has one). The salaries reported are defined as gross salaries (sum of money that is paid by the employer for the labour supplied) minus the employer's contribution to social security and pension (according to existing salary scales). Salaries are "before tax", i.e. before deductions for income taxes. Certain bonuses may be added if allocated to every teacher (e.g. a local allowance). Salaries are given for a full-time teacher with typical qualification (i.e. the level of qualifications of more than half of all current teachers in the system) or maximum qualification. For the past few years the OECD has also gathered statistics about the actual salaries of teachers. In France, data comes from the INSEE's SIASP survey (*Système d'information sur les agents des services publics* – information system about public service agents). In contrast to the statutory salary indicator, the actual salary indicator takes into account all pay received (overtime and bonuses). Salaries are given in **purchasing power parity (PPP)**[□].

In 2013 ISCED 2 teachers in the 21 OECD-member EU countries had highly contrasting salary levels (4.3.1). ISCED 2 teachers in the 21 EU member-countries of the OECD saw entry-level salaries of over 30,000 US \$ - converted PPPs (4.3.1) in eleven countries including Luxembourg (where it reached 80,000 US \$ PPPs), Denmark, France Germany, the Netherlands and Spain, whilst entry-level salaries were under 20,000 US \$ PPPs in six others countries (including Estonia, Greece and Poland). The salary differentials between the beginning and end of career also proved highly variable. Here they are seen at their theoretical maximum (qualification or seniority possibly differing between the beginning and end of career). While ISCED 2 teachers in Austria, France and Greece may have seen their statutory salaries more than double between the beginning and end of their careers, salary rises were limited to 40% in Denmark, Estonia Finland and Germany. In some countries the salary maximum was reached after 15 years of seniority (the Netherlands and Poland), whereas in others (e.g. France and Portugal) longer periods of time are required to reach it.

THE IMPACT OF THE ECONOMIC CRISIS ON STATUTORY SALARIES

Observed between 2000 and 2013, the statutory salary averages of ISCED 2 teachers of the 21 EU member-countries of the OECD initially increased between 2000 and 2005, then decreased between 2005 and 2013 because of the budgetary adjustments made following the financial crisis (4.3.2). Yet this shift of the average does not reflect the change in all European countries. Although some countries saw particularly big downward adjustments between 2005 and 2013 (especially Hungary and Greece), others, such as Estonia and Poland, saw a conspicuous increase in teachers' statutory salaries over the same period. In Austria, Denmark, Estonia, Finland and Ireland teachers saw their statutory salaries increase in the two sub-periods examined. France was the only country where ISCED 2 teachers saw their statutory salaries decrease in the two sub-periods.

HIGHER SALARIES IN SECONDARY EDUCATION

In 2013, 25-64 year-olds teachers' actual salaries were on average higher in secondary than in primary education. In the 21 EU-28 countries with membership in the OECD, the average gross actual annual salary of ISCED 3 teachers was 47,700 US \$ PPPs, whereas salaries of ISCED 1 teachers were 41,250 US \$ PPPs (4.3.3).

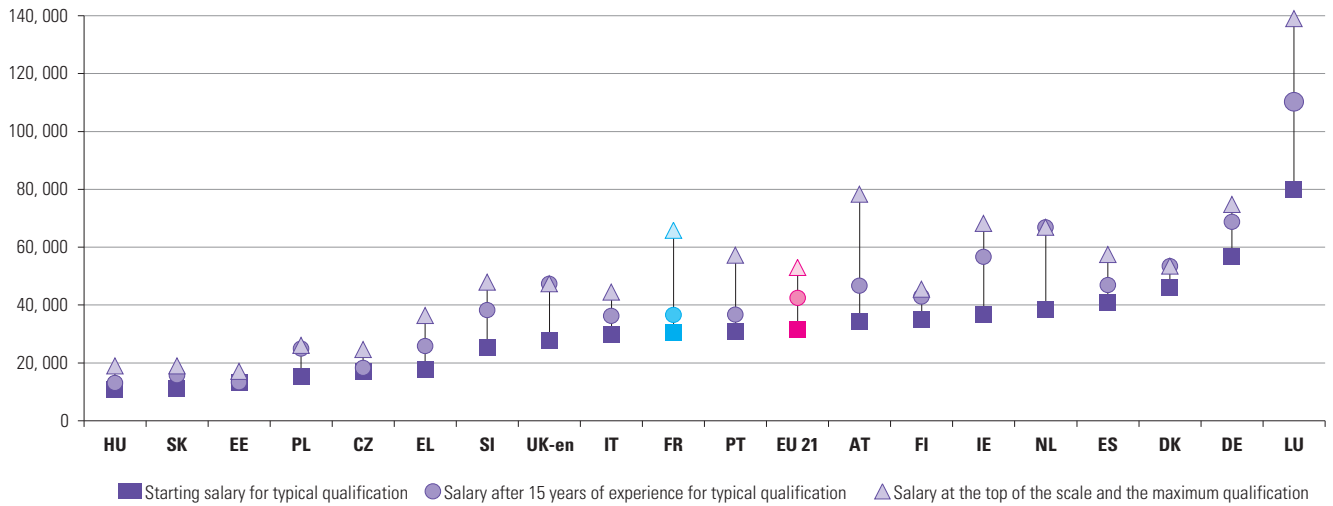
In Germany and the Netherlands teachers' actual salaries were among the highest in the European Union at each teaching level. In Germany it amounted to over 70,000 US \$ PPPs for ISCED 3 teachers. In France the actual salary was pretty much on a par with the average of the OECD countries for ISCED 2 and ISCED 3 teachers. However, it was lower than the OECD average for ISCED 1 teachers. Lastly, Estonia paid identical actual salaries for the three ISCED levels (17,140 US \$ PPPs), clearly lower than the average at all three levels. Compared to tertiary educated workers, primary education teachers are often the one that are faced with lesser-attractive salaries. ■

[□] See definition p. 68.

4.3.1 ISCED 2 teachers' (between 25 and 64 years old) salaries according to their status and seniority in 2013

OECD, EAG 2015, tables D3.1a et D3.6a.

US \$ PPP

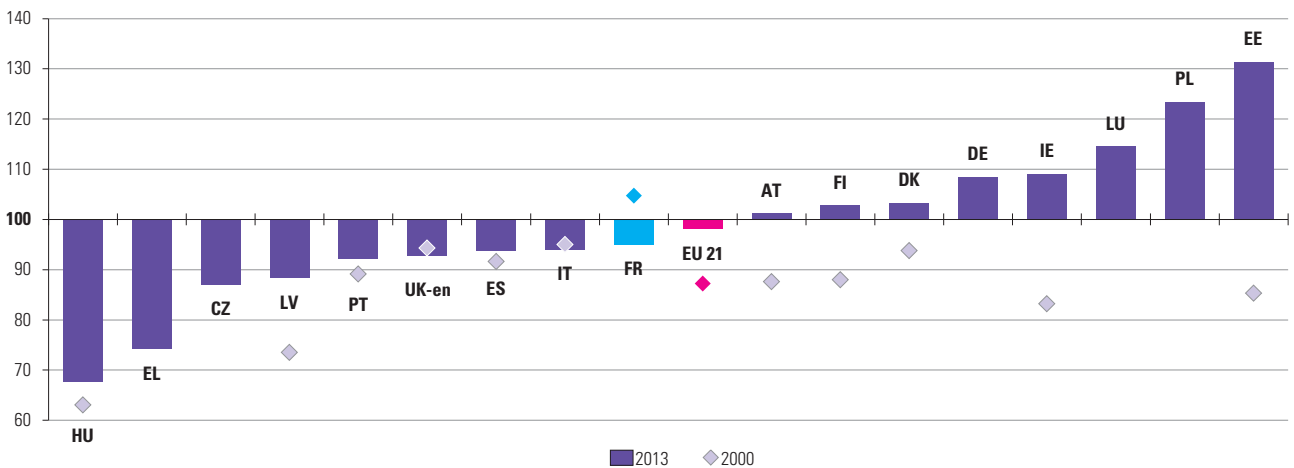


Notes: In France, the typical qualification is the "certified" status, and the maximal qualification is the "agrégé" status.

4.3.2 ISCED 2 teachers (between 25 and 64 years old) statutory salaries' evolution in 2000, 2005 and 2013

OECD, EAG 2015, table D3.5b.

Index of change (2005 = 100)

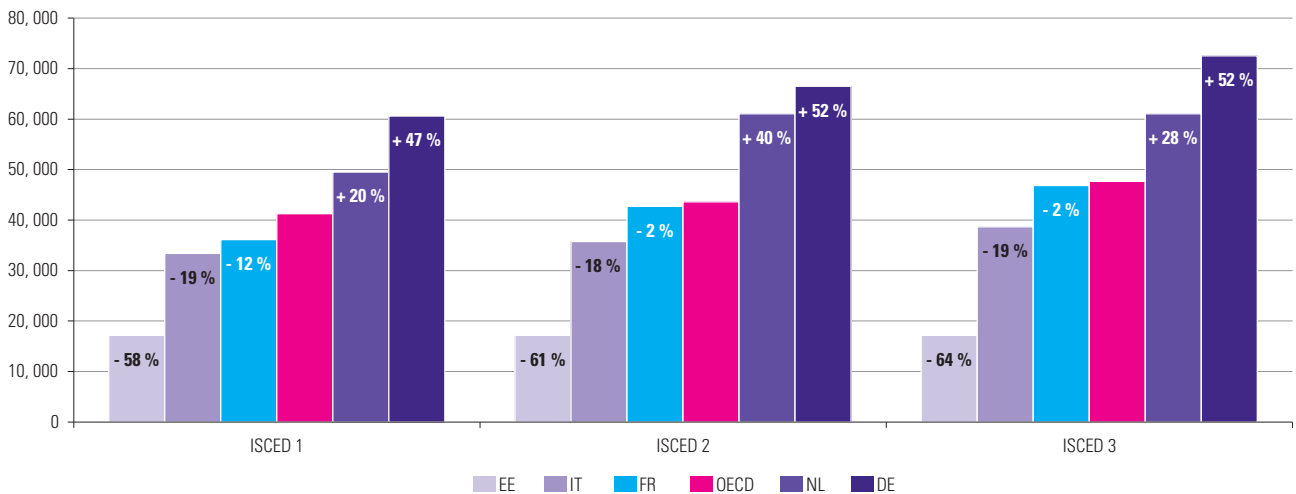


Note: Data for year 2000 are not available for Czech Republic, Germany, Greece, Luxembourg, Poland and Spain.

4.3.3 Public institutions' teachers' (between 25 and 64 years old) gross annual actual salary by ISCED level in 2013 – actual salary data

OECD, EAG 2015, table D3.4.

US \$ PPP



Note: In 2013, in Estonia, ISCED 1 teachers receive an actual salary of 17,141 US \$ PPP, 58 % below OECD average.

4.4 TEACHERS' INITIAL AND CONTINUING EDUCATION AND TRAINING

DIVERSE REGULATIONS FOR THE INITIAL EDUCATION AND TRAINING OF TEACHERS

Figure 4.4.1 shows the requirements set by central regulations framing the initial teaching of future teachers within the European Union. In 15 EU countries, including France (since 2009), Germany, Italy and Spain, a minimum initial education requires a Masters' degree (ISCED 7 in the 2011 nomenclature). Two initial education models exist in the EU. In the first model future teachers take a professional stream in order to specialise as teachers from the beginning of their studies (the model is known as concurrent). In the second model, future teachers start an academic pathway in a specific field and then specialise as teachers (the model is known as consecutive). The concurrent model is predominant in the EU-28 with 21 countries using this type of model (including Finland, Germany, the Netherlands and Poland). It is worth noting that both models can co-exist in some countries (Austria, Finland, the Netherlands and Poland). In this case the figure indicates which of the two models is predominant.

In 24 of the EU-28 countries the number of initial education years required for ISCED 2 teachers is 4 to 5 years. If only the majority or single models are retained in each country, Italy and Luxembourg are the only countries where the duration of initial education is greater than 5 years. Only Austria and Romania have a model lasting less than 4 years. Estonia, France, Portugal and Spain share an identical profile of their teachers' initial education, *i.e.* the consecutive model at the Masters level. In the Netherlands the degree level attained at the end of initial education has an impact on the education level of future teachers, *i.e.* a Bachelor's degree is enough to teach at the ISCED 2 level, but a Masters is required for the ISCED 3 level. In Austria a Masters is needed to teach in the general secondary, whereas a Bachelor's degree makes it possible to teach in the vocational secondary.

A MAJORITY OF TEACHERS TAKE PART IN CONTINUING EDUCATION AND TRAINING

In all of the countries participating in the TALIS⁶⁴ 2013 survey the ISCED 2 teacher participation rate in continuing education courses or workshops dealing with the matters taught and teaching methods over the previous 12 months was 72% (4.4.2). The average length of these courses and workshops was 8 days. Among 18 of the EU-28 countries participating in the survey, 7 (including Finland, France, Italy and Sweden) had a participation rate in continuing education courses and workshops lower than or equal to 60% with a minimum in Slovakia of 39%. Only Estonia, Latvia and Poland had teachers' participation rates higher than 80%.

Participation to continuous training: what measure?

ZOOM

OECD's TALIS 2013 survey (cf. 4.1, p. 36) gives the participation rate of teachers in continuing education over the previous twelve months based on several activity categories in continuous training, *i.e.* courses and workshops on matters taught and teaching methods; lectures and teaching seminars; visits to other schools; qualification curricula leading to a degree; the participation in a dedicated teachers network for their continuing education, etc. These different education categories are not mutually exclusive.

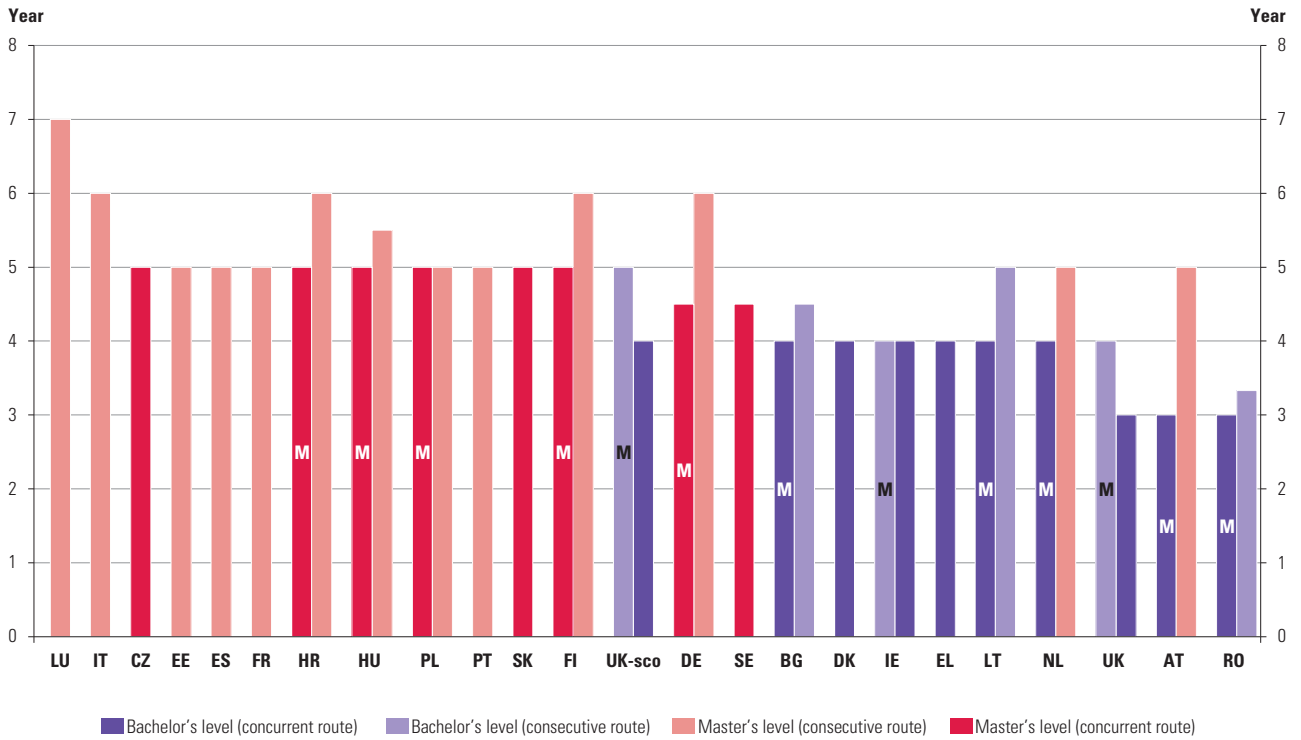
The course duration was predominantly less than 10 days for the EU countries participating in the survey. Romania, Spain and Portugal, however, were exceptions with participation times respectively of 22, 18 and 12 days. In England and Finland ISCED 2 teachers took courses that lasted less than or equal to 3 days.

Lastly, in all of the countries participating in TALIS 2013, the two fields in which teachers felt their greatest training needs lay were, on one hand, teaching students with special needs (disabilities, intellectually precocious students were not taken into account in this variable) and learning difficulties for 22% of the teachers, and, on other hand, the use of ICT in classroom teaching (19%). The percentage of teachers that responded the same way are respectively 27% and 25% in France. Both items are not mutually exclusive. ■

⁶⁴ See definition p. 68.

4.4.1 Minimum level and total duration of initial teacher education required to teach at ISCED 2 level, according to central regulation in 2013/2014

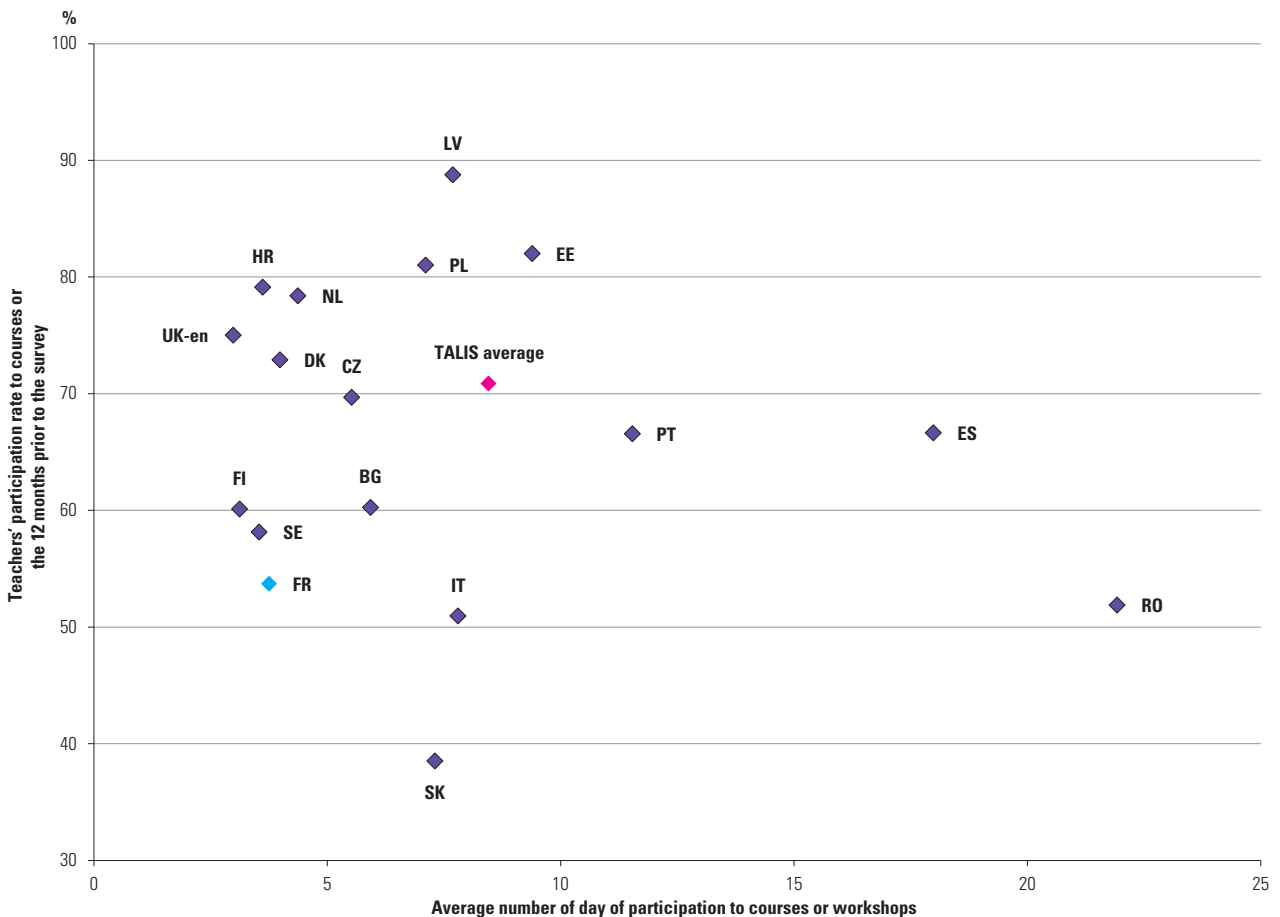
↳ Eurydice 2015, *The teaching profession in Europe*.



Note: Bars with an "M" written on them represent the predominant initial teacher education system when more than one system exists in a country.

4.4.2 ISCED 2's teachers' participation rates and average number of days of professional development in the form of courses or workshops 2013

↳ OECD, *Talis 2013*, tables 4.9 and 4.9 web.



4.5 TEACHER PRACTICES IN THE CLASSROOM AND THE FEELING OF BEING VALUED IN SOCIETY

TEACHING BY PROJECTS AND THE USE OF DIGITAL TOOLS IN THE CLASSROOM ARE INFREQUENT

The TALIS⁴⁴ 2013 survey (cf. 4.1, p. 36) sheds light on the teaching activities used in the classroom by ISCED 2 teachers. First of all it should be remembered that this information is based on teacher statements. The most widely shared practices in all the countries seem to have been the presentation of a summary of what had just been covered in class (73% of the teachers), as well as checking the students' exercise books and homework (72% of the teachers) (4.5.1). Inversely having the students work on projects for at least a week (27% of teachers), using digital tools in class (37% of teachers) or using different kinds of work for students with difficulties (44% of teachers) were less commonly used practices in the countries participating in the survey. France is ranked below the average of the TALIS survey countries for each of these three teaching methods and even very much below the average in the use of differentiated work for students with difficulties.

Italy, Sweden and the United Kingdom were the three countries where teachers stated they had students work on longer projects, more frequently than the average of countries in the survey. Denmark, Latvia and Slovakia were the three countries where teachers stated that they used digital tools in class, more frequently than the average of the countries in the survey.

THE THREE PHASES OF A CLASSROOM SESSION

TALIS 2013 also provides information – always statements – about how a course session, called “normal”, occurred. There were three activity phases: the teaching itself; keeping order in the classroom; and tasks known as administrative. ISCED 2 teachers in all participating countries stated that they devoted an average of 79% of class time to teaching, 13% to keeping order and 8% to administrative tasks (4.5.2).

Of the 18 European countries taking part in the TALIS 2013 survey, 12, including England, Denmark, Finland and Sweden, saw their teachers devoting 80% of classroom time to the teaching itself, with a maximum value reached in Bulgaria (87% of the time) where teachers stated that they spend a particularly small amount of time on administrative tasks (5%) or in keeping order (8%). France and the Netherlands saw the opposite situation occur, where teachers spent the most time keeping order in class, the highest of the European countries participating in the survey (16% in both cases) and, incidentally, with the time devoted to teaching among the lowest observed (76% and 74% respectively).

BETWEEN JOB SATISFACTION AND A LACK OF VALUE FROM SOCIETY

The TALIS 2013 survey highlights a certain paradox, *i.e.* the majority of teachers stated that they found their job rewarding. In all of the countries taking part in the survey 91% of the ISCED 2 teachers said they were satisfied with their job (4.5.3). But only 31% of them felt their job was valued by society.

Of the 18 European countries participating in the survey, 13 (including Estonia, Finland, Italy and Spain) saw more than 90% of their teachers state they found their job rewarding, with the lowest value found in England (82%). Simultaneously more than half of the countries (including Estonia, France, Italy and Spain) recorded a maximum of 15% of their teachers who felt their profession was valued by society. This second variable nonetheless allows for a wider range of scores per country than the first. The feeling of respect was more developed in Finland (59%) and in the Netherlands (40%), whilst it was especially low in Slovakia (4%), France (5%) and Sweden (5%). ■

⁴⁴ See definition p. 68.

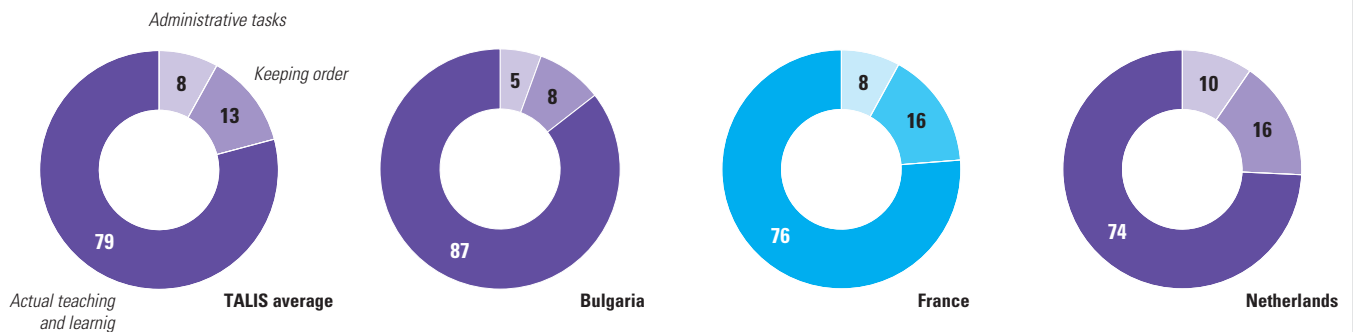
4.5.1 Percentage of ISCED 2 teachers who report using the following teaching practices (“frequently” or “in all or nearly all lessons”) (in %)

OECD, TALIS 2013, table 6.1.

	Present a summary of recently learned content	Students work in small groups to come up with a joint solution to a problem or task	Give different work to the students who have difficulties learning and/or to those who can advance faster	Refer to a problem from everyday life or work to demonstrate why new knowledge is useful	Let students practice similar tasks until teacher knows that every student has understood the subject matter	Check students' exercise books or homework	Students work on projects that require at least one week to complete	Students use ICT for projects or class work
TALIS	73	47	44	68	67	72	27	37
BG	80	44	61	78	79	79	24	34
CZ	88	35	32	70	70	65	13	37
DK	79	80	44	69	57	60	23	74
EE	80	38	47	60	68	71	15	29
ES	72	33	40	77	70	80	26	37
FR	74	37	22	57	55	66	22	24
HR	60	33	51	79	64	70	10	24
IT	64	32	58	81	78	85	28	31
LV	80	35	53	87	84	79	15	41
NL	72	48	20	63	56	66	27	35
PL	78	42	55	76	79	63	16	36
PT	85	49	53	66	61	71	21	34
RO	77	56	58	54	80	84	22	26
SK	90	42	45	74	74	79	22	45
FI	62	37	37	64	51	62	14	18
SE	72	44	53	49	55	51	41	34
UK-en	75	58	63	62	62	85	38	37

4.5.2 Distribution of class time during an average lesson in 2013

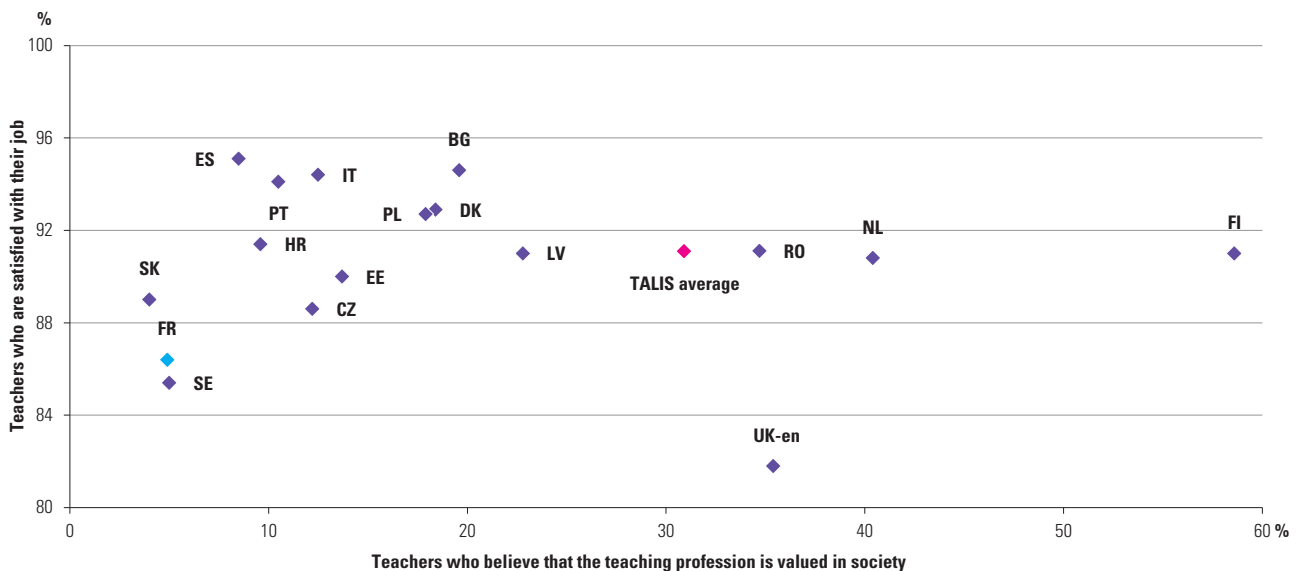
OECD, TALIS 2013, table 6.2o.



Note: Bulgaria and the Netherlands have the extreme teaching time values among the 18 EU countries in TALIS 2013.

4.5.3 Teachers' job satisfaction and how teachers think their profession is valued in society in 2013

OECD, TALIS 2013.



A common strategy steered by the European Commission

ZOOM

The education and training policies have assumed a new place in the European Union (EU) since the adoption in 2000 of the Lisbon Strategy identifying “knowledge” as a central focal point. A year later the member-States of the European Commission defined a co-operation framework in this field which was reinforced in 2009 with the Education and Training 2020 programme and included in the Europe 2020 Strategy. The EU has the competence to support, co-ordinate and complement the action of the member-States. Although each of them maintains policy sovereignty by applying the principle of subsidiarity, the effects are considerable on the national guidance of education and training systems.

SEVEN REFERENCE CRITERIA WERE DEFINED

Each of the following benchmarks have been set by the European Union for 2020:

1. Early leavers: the proportion of young people from 18 to 24 who have left the school system without a degree and without training after their leaving the school system should be below 10% (cf. 5.2, p. 50);
2. Graduates of tertiary education: the proportion of people from 30 to 34 with tertiary education degrees should be at least 40% (cf. 5.3, p. 50);
3. Early childhood education: participation in pre-primary education of children between 4 and the compulsory school age should be at least 95%;
4. Achievement in reading, mathematics and science: the proportion of under-skilled 15-year-olds, as measured by PISA, should be less than 15% in each of these subjects (cf. 5.4; p. 52);
5. Lifelong learning: at least 15% of adults (25 to 64) should participate in lifelong education and training;
6. Learning mobility: two benchmarks have been set, *i.e.* **a.** at least 20% of tertiary-education graduates should study or train abroad for a time in areas linked to their education (including internships), representing a minimum of 15 ECTS credits or a minimum length of three months; and **b.** at least 6% of the 18 to 34 year-olds with initial vocational qualification and training degrees should study or train abroad in this kind of education or training (including internships) for a minimum of two weeks. These two benchmarks will provide a Eurostat measurement beginning in 2018;

7. The employability of young graduates: the employment rate of 20 to 34 year-old graduates of upper secondary and tertiary education having left the education and training system for a maximum of three years should be at least 82%.

In addition to these common objectives, countries have sometimes set national objectives that are more or less demanding than the joint benchmarks. For example, concerning early school leavers, France has set a more demanding benchmark of 9.5% instead of 10%, whilst Spain has set a less demanding benchmark of 15%.

THE EUROPEAN UNION COUNTRIES WITH REGARD TO THE SEVEN REFERENCE BENCHMARKS

Although these targets are set for the European Union as a whole, they are monitored by the European Commission for each member state.

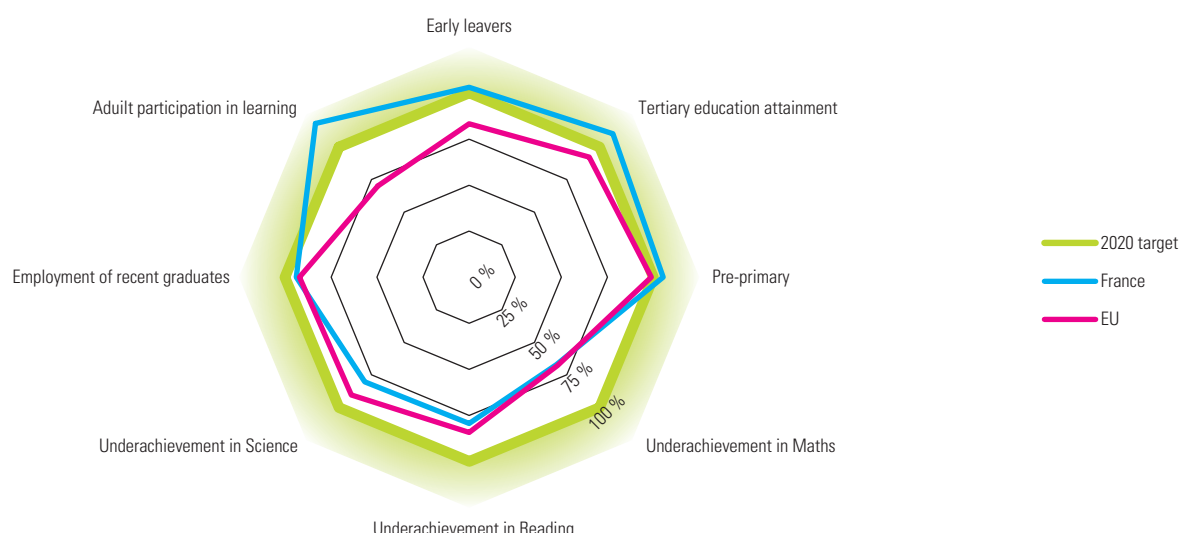
In 2014 the objective of containing the proportion of 18 to 24 year-olds leaving school early to a limit of 10% was attained by 18 countries (including France) of the 28 European-Union member countries. The benchmark of raising the proportion of tertiary graduates in the 30 to 34 year-old age group above 40% was attained by 17 countries (including France) (5.1.2). France had already attained and even surpassed 4 of the 7 benchmarks set by the Education and Training 2020 strategy (5.1.1). The Netherlands was the only EU country to attain or surpass all of the quantified benchmarks. 17 of the European-Union countries attained at best three of the seven benchmarks. ■

Labour Force Survey and benchmarks

ZOOM

Early leavers, the proportion of tertiary education graduates and the proportion of adults in life long learning are measured in the **European Labour Force Survey (EU-LFS)**²¹. Even though this survey allows it, it hasn't been designed to record education attainment levels, which thus require caution while doing international comparisons. Moreover, due to the restricted sample size, numbers after the comma are not reliable enough to be taken into account in comparisons.

5.1.1 Relative position of France and of the EU-28 with respect to Education and Training 2020 targets, as of 2014



Note: As of 2014, France achieved and went beyond 4 targets of Education and Training 2020 framework: Adult participation in learning, Early leavers of education and training, Tertiary education achievement and Early childhood education and care. The Early leavers objective, with a 9 % score for France, (which is below the 10 % threshold), is translated on the figure by a 10/9*r radius, if r is the European target's radius.

5.1.2 The 28 countries of the European Union's situation regarding each Education and Training 2020 headline target, as of 2014

↳ Eurostat.

2014	Early leavers	Tertiary education attainment	Pre-primary	PISA underachievement			Employment rate of recent graduates	Adult participation in learning
				Reading	Maths	Science		
EU 28-2020 targets	10	40	95	15	15	15	82	15
EU 28	11,2	37,9	93,9	17,8	22,1	16,6	76,1	10,7
BE	9,8	43,8	98,1	16,1	19	17,7	79	7,1
BG	12,9	30,9	87,8	39,4	43,8	36,9	65,4	1,8
CZ	5,5	28,2	85,7	16,9	21	13,8	81,3	9,3
DK	7,8	i	98,3	14,6	16,8	16,7	83,8	31,7
DE	9,5	31,4	97	14,5	17,7	12,2	90	7,9
EE	11,4	46,6	90,4	9,1	10,5	5	81	11,5
IE	6,9	52,2	97,2	9,6	16,9	11,1	73,9	6,7
EL	9	37,2	76,4	22,6	35,7	25,5	44,3	3
ES	21,9	42,3	97,1	18,3	23,6	15,7	65,1	9,8
FR	9	44,1	100	18,9	22,4	18,7	75,4	18,6
HR	i	32,2	71,4	18,7	29,9	17,3	62	2,5
IT	15	23,9	98,7	19,5	24,7	18,7	45	8
CY	6,8	52,5	84,3	32,8	42	38	68,7	6,9
LV	8,5	39,9	94,1	17	19,9	12,4	77	5,5
LT	5,9	53,3	86,5	21,2	26	16,1	80,7	5
LU	6,1	52,7	99,4	22,2	24,3	22,2	83,8	14
HU	11,4	34,1	94,7	19,7	28,1	18	78,5	3,2
MT	20,3	26,6	100				91,7	7,1
NL	8,7	44,6	99,5	14	14,8	13,1	87,3	17,8
AT	7	40	93,9	19,5	18,7	15,8	87,2	14,2
PL	5,4	42,1	83,8	10,6	14,4	9	75,6	4
PT	17,4	31,3	93,9	18,8	24,9	19	69,4	9,3
RO	18,1	25	86,4	37,3	40,8	37,3	66,2	1,5
SL	4,4	41	89,8	21,1	20,1	12,9	70,1	11,9
SK	6,7	26,9	77,5	28,2	27,5	26,9	72,7	3
FI	9,5	45,3	84	11,3	12,3	7,7	77	25,1
SE	6,7	49,9	95,7	22,7	27,1	22,2	85	28,9
UK	11,8	47,7	96,1	16,6	21,8	15	83,2	15,8

Note: Figures in bold represent the cases where the country already reached the objective of the Education and Formation 2020 framework. For instance, as of 2014, with 5.5 % of Early leavers, Czech Republic already reached the common target of 10%. The letter "i" designates statistically inconsistent data due to the size of the sample. Malta did not take part in PISA 2012.

What is meant by the term early school leaving? ZOOM

Young persons are considered as an early leavers when they have a low level of education, when they have left the school system and when they are not in training (**formal or non-formal education**^[1]). What is defined as a “low level of education” (ISCED 0-2) are degrees that are less than or equivalent to the end of the first cycle of secondary education or those that are attended beyond this first cycle but the duration of which is strictly inferior to two years.

A MEASUREMENT DEPENDENT ON THE DEGREE CLASSIFICATION

There are two examples to illustrate the difficulty of ranking degrees per country. The first derives from the existence of degrees that intervene in the middle of ISCED 3 and not at its end, e.g. Malta, the education system of which is very similar to that of the United Kingdom, did not use the same classification of holders of the General Certificate of Secondary Education (GCSE) because it was late in applying the 1997 ISCED. A Eurostat simulation for the years 2010 and 2011 made it possible to show that just the re-classification of holders of GCSE (cf. 2.2, p. 20) from ISCED 2 to ISCED 3 made the indicator of early leavers in Malta fall by more than 10 points. The second example concerns the vocational training degrees obtained in under two years that exist in numerous eastern European countries. It appears difficult for these countries to define the holders of such degrees, which traditionally give access to the labour market, as early leavers.

THE GAPS BETWEEN COUNTRIES REMAIN CONTRASTED DESPITE AN OVERALL DECREASE

In the European Union in 2014 the rate of early leavers was 11%, which represents approximatively 4,600,000 young adults between 18 and 24 years-old. Italy, Malta, Portugal, Romania and Spain had very high rates, ranging from 15 to 22% (5.2.1). In contrast most of the northern and eastern EU member-States had rates of under 8%. The United Kingdom was an exception in northern Europe with a 12% rate of early leavers. Finally, a last group of countries (including France) were in an intermediary position (between 8 and 10%).

It is worth noting that there has been a general fall in early-leaver rates in the EU since the early 2000s. The European average fell from 16% to 11% between 2004 and 2014. Numerous breaks in the survey series (European Labour Force Surveys) weaken comparisons over time. By 2014, 19 countries had already attained the Europe 2020 benchmark of 10% of early leavers. With the exception of Italy, the countries with difficulties with regard to the EU’s benchmark had not attained their own national objectives as well, even though less demanding.

Voluntary and co-ordinated policy interventions seem to lead to results. In the Netherlands, for example, the policy revolves around three paths, *i.e.* the law now obliges degreeless students to take one or two additional part-time educational year to the age of 18 and requires the school to report any possible early leavers; early detection of absenteeism and possible early leaving enable an individual follow-up of those students involved; contracts between the State, the municipality and the school stimulates the co-ordination of players on a local level (social, medical and legal services, employment promotion centres) and make it possible to better guide early leavers to a vocational stream in close association with the economic players. Finally, a financial incentive is set towards schools that manage to reduce their early leavers’ figures.

WOMEN: LESS FACED WITH EARLY LEAVING BUT MORE PENALISED ON THE LABOUR MARKET

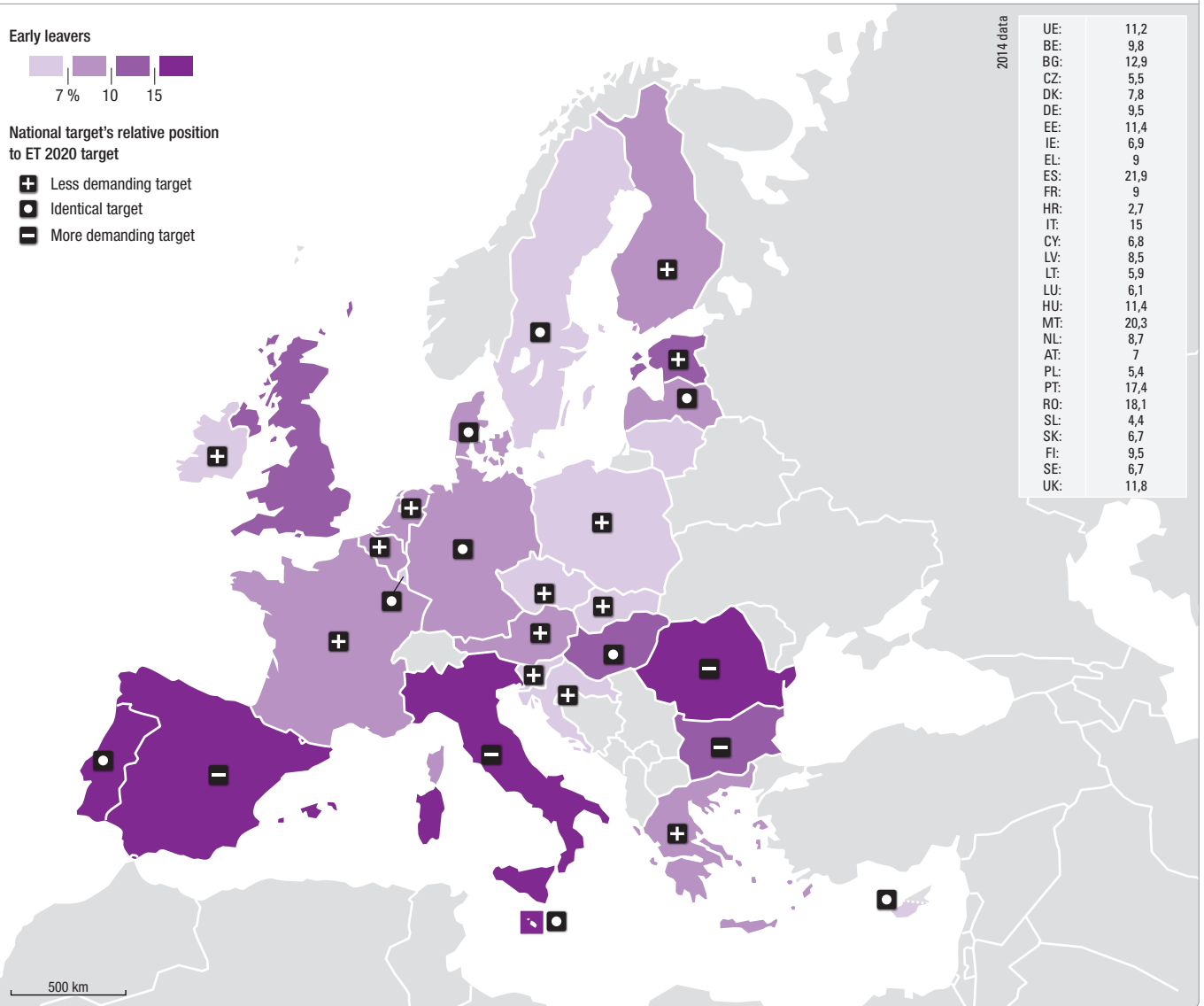
Women are less often early school leavers than men. In 2013 in the EU-28 this difference was 3,5 percentage points (5.2.2 and 5.2.3). There were only two countries with lower rates for men than women (the Czech Republic and Bulgaria). In 8 countries (including Italy, Portugal and Spain) the gap between men and women was higher than 5 points (11 points in Cyprus). In contrast 12 other countries (including France, Germany, Finland, Sweden and the United Kingdom) had a difference of less than 3 points.

Although men are more involved than women in early leaving, women are more often faced with inactivity than their male counterparts, which indicates that women are further from the labour market. The higher rate of employment among male early leavers does not, however, portend anything about the quality of these jobs. ■

^[1] See definition p. 68.

5.2.1 Proportion of early school leavers among 18-24 year olds and national targets as of 2014

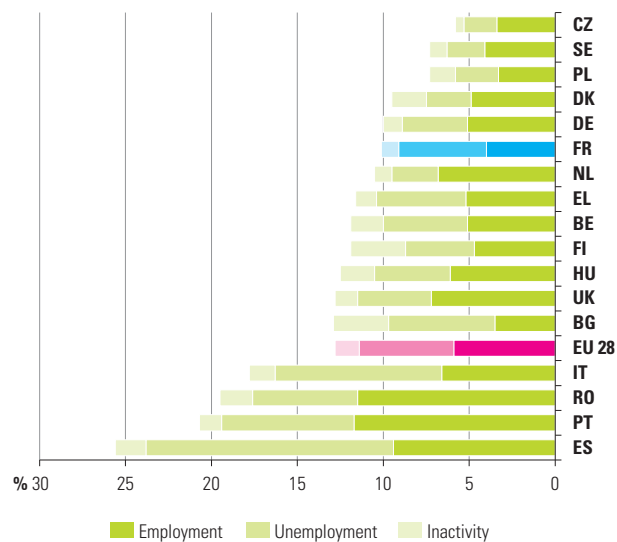
↳ Eurostat, edat_lfse_14.



Note: As of 2014, there are 9% of early leavers among the 18-24 years old while the national target is 9.5%. The United Kingdom did not set a national target.

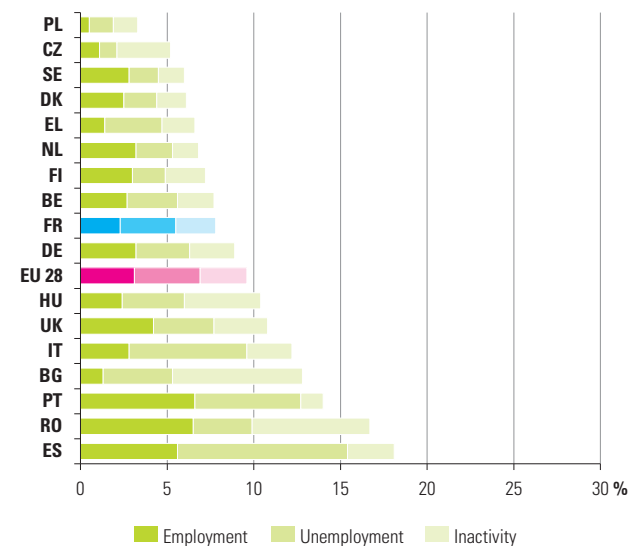
5.2.2 Early school leavers (males) by labour status as of 2014

↳ Eurostat, edat_lfse_14.



5.2.3 Early school leavers (females) by labour status as of 2014

↳ Eurostat, edat_lfse_14.



Note: As of 2014, in France, 10% of the males between 18 and 24 years old are early school leavers; 4% of males of the same age group are both early school leavers and in employment; 5% of males of the same age group are both early school leavers and unemployed; 1% of males of the same age group are both early school leavers and inactive.

5.3 THE DEGREE LEVEL OF THE 25 TO 34 YEAR-OLDS

MORE AND MORE SECONDARY EDUCATION DIPLOMAS

The proportion of the 25 to 34 year-old population with at least a second-cycle certificate of secondary education (ISCED 3) has seen a general increase within the European Union. Between 2004 and 2014, the rate of ISCED-3 qualifications rose from 78% to 83% in the EU-28. Spain (66%), Portugal (65%) and Malta (60%) were the only EU-28 countries with qualification rates in secondary education lower than 70% in 2014 (5.3.1). As for early leavers (c.f. 5.2, p. 48), countries of southern Europe have seen a lower percentage of ISCED 3 qualified-individuals in the 25 to 34 population. Nonetheless between 2004 and 2014 this percentage saw a sharp rise in Portugal (60%) and in Malta (48%), whilst in Spain it rose only 5%.

AN APPRECIABLE INCREASE IN TERTIARY EDUCATION

One of the priority objectives of the Europe 2020 strategy is to attain or surpass the 40% threshold of qualification holders in tertiary education in the 30 to 34 year-olds by 2020. The EU-28 average in 2014 was 38% (5.3.2). Since 2003 this average has grown by 25% with some countries increasing two-fold their proportion of young qualification holders as in Latvia (rising from 18 to 40%) and Slovakia (from 12 to 27%). 16 countries in all either attained or surpassed the target. The highest rates in the EU-28 are for the most part located in northern Europe (Lithuania, 53%, Ireland, 52% and Sweden, 50%). The lowest rates were seen in Italy (24%), Romania (25%), Malta (27%) and

Why choose the 30 to 34 year-old age group?

ZOOM

In some countries, such as the Nordic countries, the earning of degrees may occur late because of frequent interruption then resumption of tertiary education. The measurement deals with the highest level of degree obtained. In countries, such as France, where the age for obtaining the first tertiary degree is usually at 20 or 21, the indicator mainly takes into account the degrees awarded some ten years earlier and provides little visibility on recent changes.

Slovakia (27%). France surpassed the European target with 44%. Some countries set objectives more or less ambitious than the common objective, e.g. Greece set a target of 32%, which it surpassed in 2013 (37%); whilst Ireland set a 60% rate that has not yet been attained.

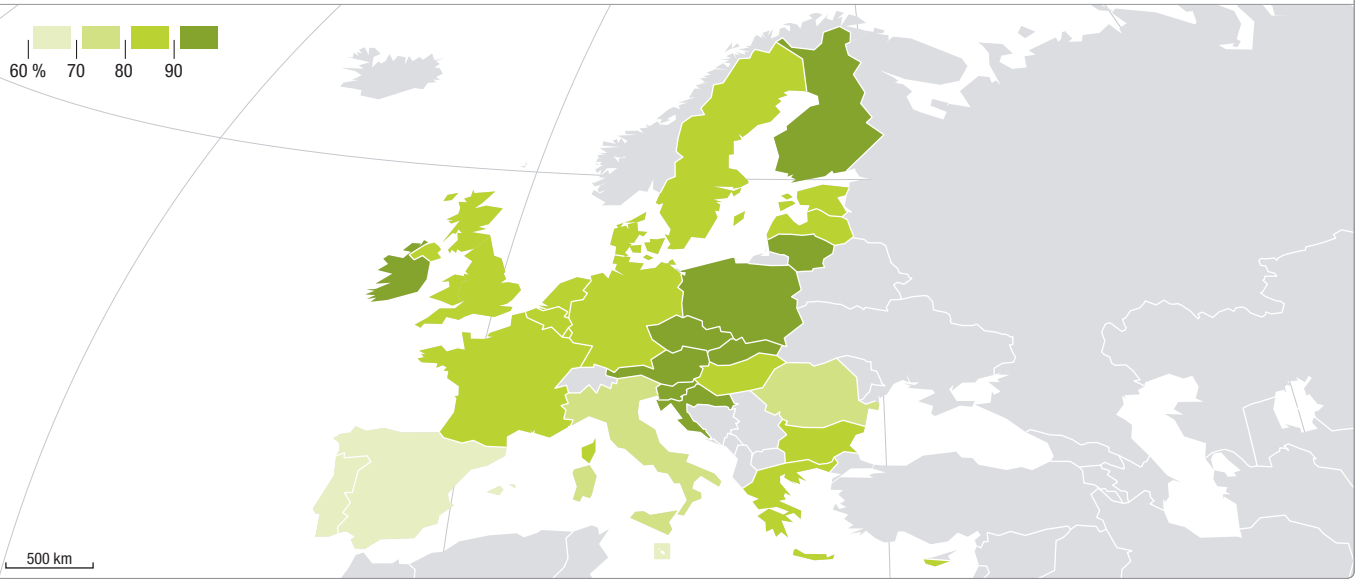
The rates of tertiary education graduates do not always reflect the performance of a national education system. The brain gain/drain, for example, which is the migration of highly qualified individuals, influences this rate upwards or downwards depending on the country receiving the already trained individual or else training them, then seeing them emigrate (cf. 5.2, p. 48). In certain countries, the sway of the apprenticeship system (as in Germany) or the system of professional streams in secondary education (eastern Europe) may “compete with” on-going tertiary education. Lastly, in general, countries that have a high rate of early leavers also have lower tertiary education attainment levels. Spain, on the other hand, illustrates a situation where the two indicators did not follow this logic in 2014 with 42% of tertiary graduates despite an early-leaver rate of 22%.

MORE WOMEN GRADUATES BUT LESS PRESENCE IN THE SCIENCES

Except in Germany, women everywhere are more often higher education graduates than men (5.3.3). The central European countries with the lowest rates of graduates among the EU-28 are the same ones where the gap between men and women is also the lowest. In contrast these gaps between the genders can be greater than 20% in the countries where the tertiary degree rates are higher. With a majority of women in training leading to the teaching or health professions, the literary and artistic fields, the social sciences, the economy and management, women are much less numerous in the sciences, engineering and the manufacturing industry. Although tertiary degrees may indeed constitute relative protection from unemployment and the risk of poverty, the orientation of women into secondary and tertiary education contributes in part to explaining the inequalities between men and women, in particular in terms of salaries and status (c.f. 6.4, p. 64). ■

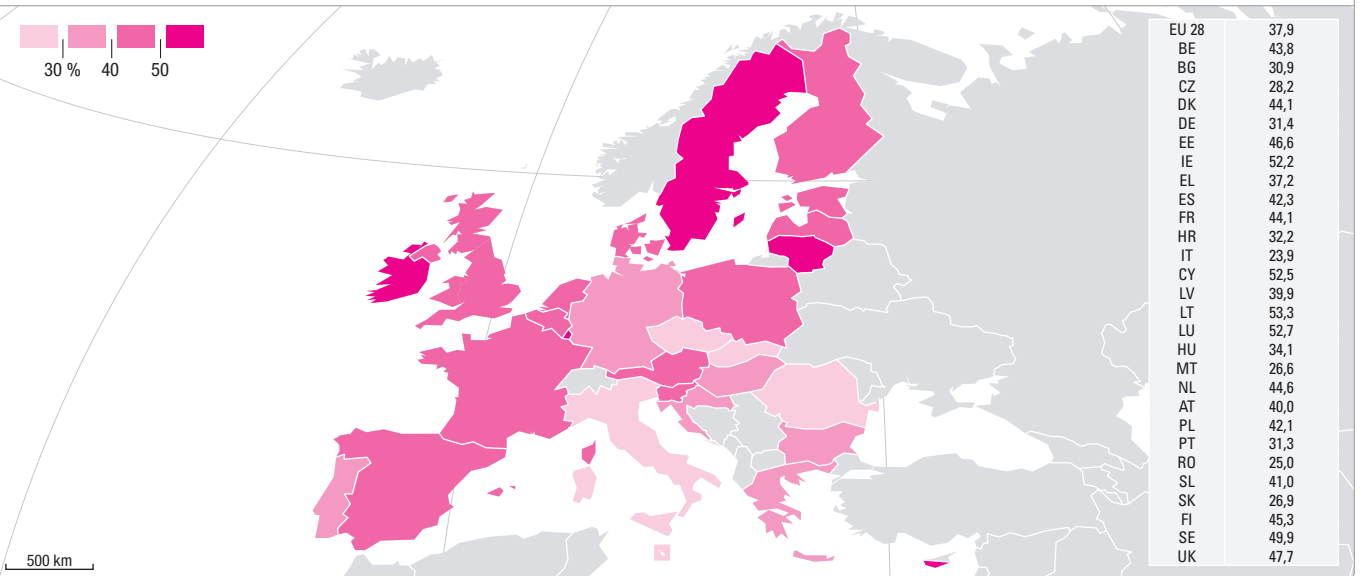
5.3.1 Proportion of 25-34 year olds with at least a upper secondary degree in 2014

↳ Eurostat, edat_lfse_o3.



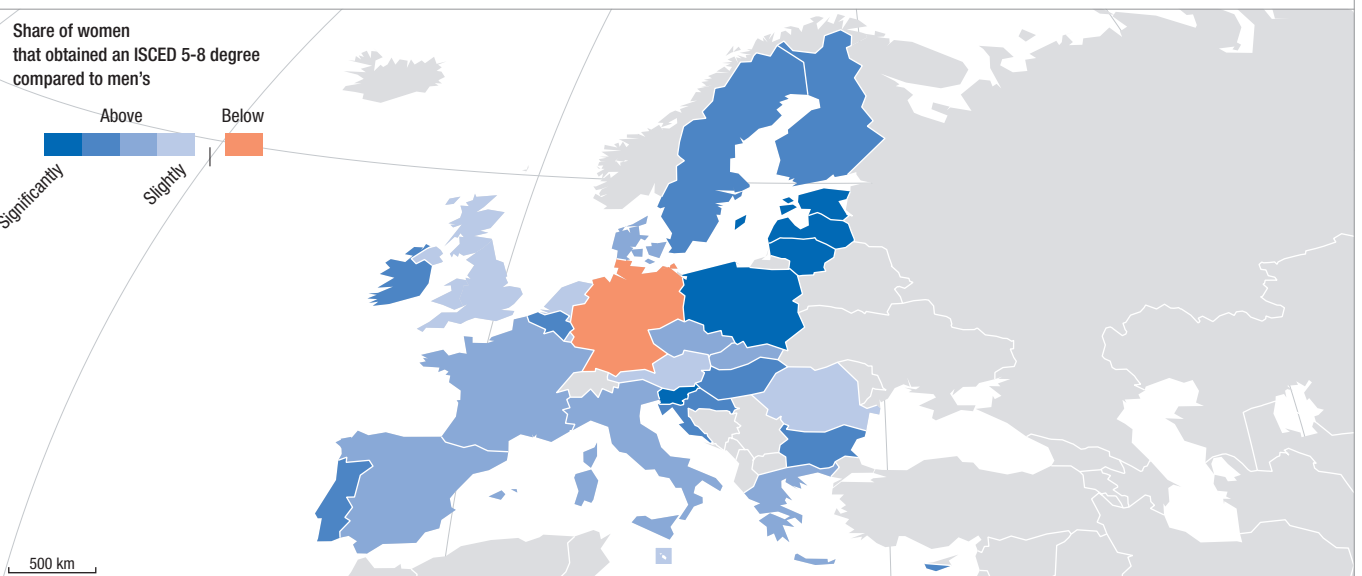
5.3.2 Proportion of 30-34 year olds with a Tertiary education degree in 2014

↳ Eurostat, edat_lfse_o3.



5.3.3 Gender difference in Tertiary education achievement in 2014

↳ Eurostat, edat_lfse_o3.



Every three years since 2000, the **PISA**[□] survey (Programme for International Student Assessment), under the authority of the OECD, assesses the skills of 15-year-old students in three subjects, *i.e.* writing, mathematics and scientific literacy. PISA is aimed at the age group that arrives at the end of compulsory education in most of the OECD countries, whatever their past and future educational careers. In France this mostly means students in 10th grade in *lycée* (general and technological or vocational) and students in 9th grade in *collège* (a quarter of the students for PISA 2012). Students are not assessed on knowledge in the strict sense but on their ability to mobilise and apply their knowledge in a variety of situations, sometimes removed from those encountered in the educational framework. The survey covered a sample of 510,000 students of the 65 PISA 2012 countries/economies [source: MENESR-DEPP, *Note d'information*, 13-30 and 13-31, 2013].

ZOOM

A DECREASE IN MATH-LITERACY TEST PERFORMANCES SINCE 2003

In 2012 the survey mainly focused on mathematics literacy (the aptitude of a person to formulate, use and interpret mathematical reasoning in a range of real-life situations) in 65 countries or “economic partners”, including 34 OECD member-countries and 27 countries of the European Union (Malta alone did not participate). Each PISA survey contains one major subject and two minor subjects. To be fully relevant, comparison must be done per major subject in nine-year cycles. So mathematics literacy in PISA 2012 should only be compared to PISA 2003.

The mean mathematical literacy scores of the 34 OECD member-countries was 496. It was 500 in 2003. Of the 19 EU-member countries participating in PISA in 2003 and 2012, a general downward trend of scores can be observed (5.4.1). In that period 9 EU countries (including Finland, France, the Netherlands and even Sweden) saw a considerable fall in their mean scores, whilst 4 other countries saw a rise (Germany, Italy, Poland and Portugal). Although Sweden and Finland recorded biggest falls in scores (respectively 31 and 26 points) between the two PISA surveys, the former falls below the OECD average, while the latter stays significantly above. Portugal, which recorded a very sharp rise in its score between 2003 and 2012, managed to hoist itself up to the OECD mean (+21 points with 487 in 2012).

Can we rank countries in PISA?

The PISA scores are subject to statistical uncertainty connected in particular to measurement error due to the size of the sample used. The use of rankings is therefore not relevant, for two countries that follow one another in the ranking rarely have significantly different scores. In mathematical literacy therefore France in 2012 can be considered to rank between 13th and 23rd of the OECD countries [source: MENESR-DEPP, *Note d'information*, 13-31].

ZOOM

BOYS PERFORM BETTER THAN GIRLS IN THE MATHEMATICAL LITERACY TEST

For the mean of the countries taking part 11 points is the mean difference in scores between boys and girls (5.4.2). Five countries (Austria, Ireland, Italy, Luxembourg and Spain) saw the gap in scores between boys and girls surpass 15 points for this test. Ten other countries (including France, the Netherlands and the United Kingdom) saw a gap in the scores of the genders of between 8 and 12 points, near the mean for the OECD countries. The difference in scores between the two genders in France was among the lowest of the EU-27, which was, moreover, the same as in 2003. Finland, Sweden and Latvia were the only countries where the score differences were to the advantage of the girls. These statistically insignificant data, however, have not been presented here.

FRANCE HAS MORE WEAK STUDENTS IN READING THAN THE OECD MEAN

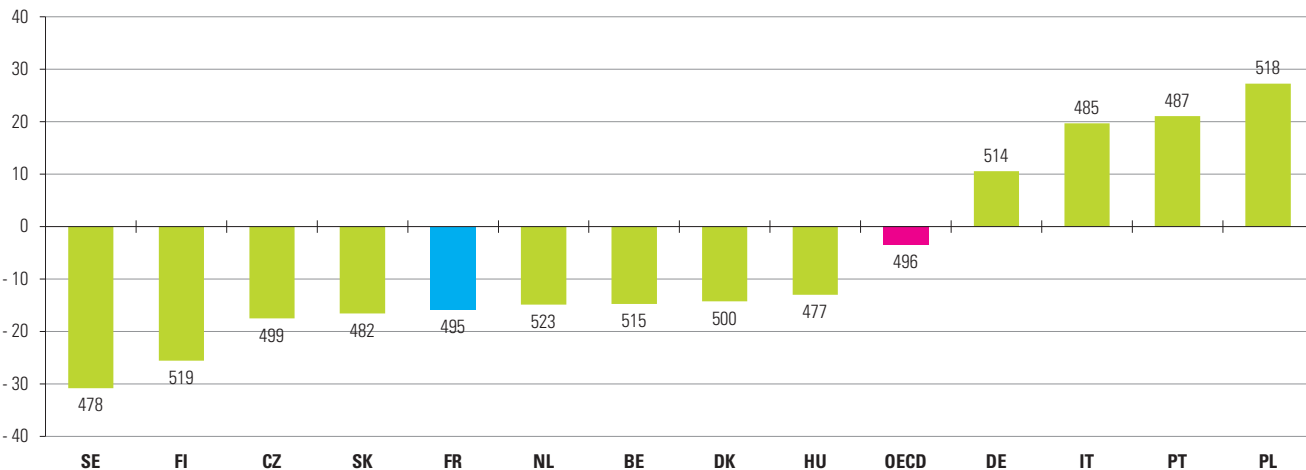
Reading literacy was assessed by PISA 2012 as a minor subject. The distribution profile of the **level groups**[□] in the reading literacy test was highly contrasting depending on the country (5.4.3). The OECD considers level 2 as a baseline above which students possess skills enabling them to participate effectively and productively in the life of society. In the average of the OECD-member countries, the proportion of students not yet attaining these skills (levels strictly below baseline level 2) was 18% (19.7% for the UE-27 mean). In 2012 Bulgaria was the EU-27 country with the greatest proportion of under-performing students in reading with nearly 40% of students at a low level. At the other extreme two countries had the highest rates in Europe of highly performing students (France and Finland at 13%). France had a unique profile with both Europe's highest rate of highly-performing students and the a high rate of under-performing students (19%) both higher than the OECD mean. ■

[□] See definition p. 68.

5.4.1 Evolution of the mean score in mathematics between PISA 2003 and PISA 2012

↳ MENESR-DEPP, OECD, « Résultats PISA 2012 en culture mathématique », Note d'information, 13-31, 2013.

Score difference

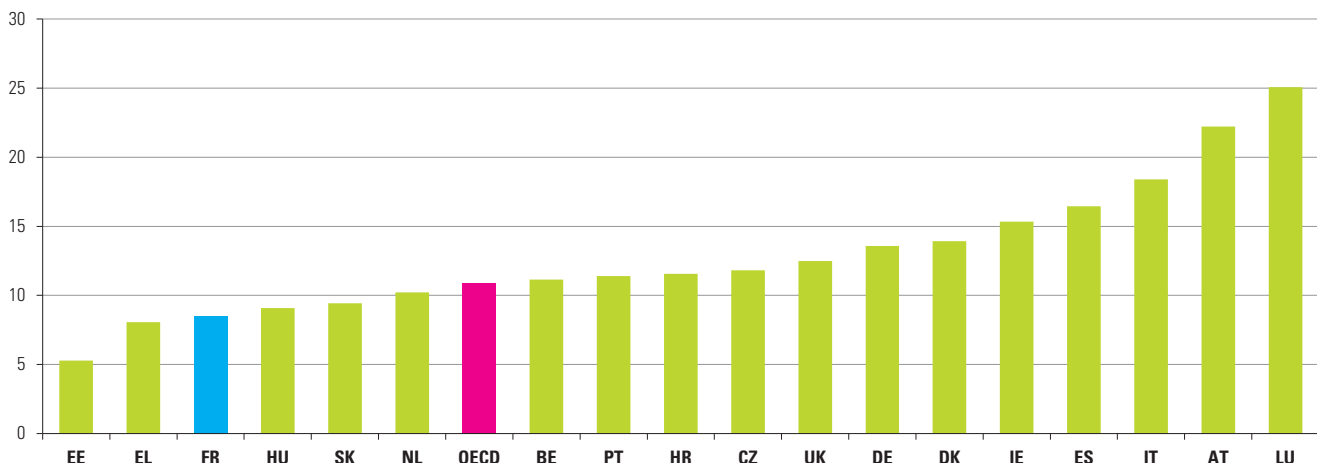


Note: Between 2003 and 2012, the mean score of performance of 15 year old students at the PISA mathematics assessment in France went down by 16 points and reached 495 in 2012.

5.4.2 Gender difference in mean score in mathematics in PISA 2012

↳ MENESR-DEPP, OECD, « Résultats PISA 2012 en culture mathématique », Note d'information, 13-31, 2013.

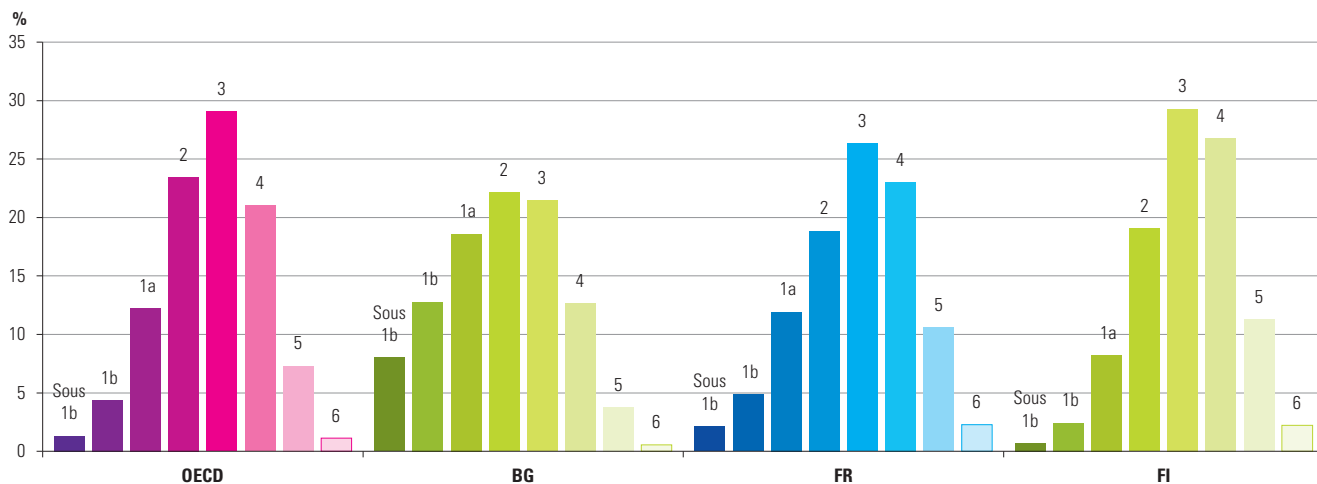
Score difference



Note: In 2012, in France, male students obtained on average a superior mean score by 9 points than girls at the PISA mathematics assessment. The scores presented on the figure are only the ones that are statistically significant.

5.4.3 Distribution of students between each proficiency level in reading in PISA 2012

↳ MENESR-DEPP, OECD, 2013.



Note: In 2012, in the OECD, in the reading literacy test, 23% of the students are in the group "2".

The measure of the impact of the student's socioeconomic environment

ZOOM

So as to measure the impact of the student's socioeconomic environment on their results in the PISA⁶⁸ test scores, the OECD has created an Index of Economic, Social and Cultural Status (ESCS) based on a set of information about the student's parents' background (educational attainment and the father and mother's occupational status) and on the student's access to certain study materials and conditions (individual room, work desk, internet connection, the number of books at home, etc.). The students are then ranked in four like-numbered groups, the "disadvantaged" containing 25% of the students with the lowest ESCS index (bottom quarter), and the "advantaged" containing 25% of the students with the highest ESCS index (top quarter) [source: MENESR-DEPP, *Note d'information*, 13-31, 2013].

PISA 2012: PERFORMANCE INEQUALITIES DUE TO SOCIAL ENVIRONMENT

In 2012 the mean score of all OECD students was 496 in the mathematics literacy test (cf. 5.4, p. 52). The "disadvantaged" students of the OECD scored a mean of 452 points, whilst the "advantaged" students scored a mean of 542 (5-5-1). In the 27 EU-member countries (only Malta did not take part in the survey) the mean score of all students was 489. Estonia was the country where the "disadvantaged" children had the highest score of the EU-27 (496), whereas Belgium and Poland had the highest scores of the "advantaged" (575 and 571 respectively). In contrast, Cyprus, Bulgaria and Romania recorded the lowest scores both for their "advantaged" students (492, 501 and 501 respectively) and their "disadvantaged" students (398, 384 and 407 respectively).

Estonia and France showed two contrasting profiles (5-5-1). Estonia was characterised by a high mean student score – among the best of the EU-27 countries – but also with little score differences between the "advantaged" students and the "disadvantaged" students. The reverse was true of France where its "disadvantaged" students achieved scores below the OECD mean (and those of the EU-27), and its "advantaged" students one of the highest. This strong relationship between the students' socio-economic status and their performances, otherwise known as the "social determinism" of performances, was, moreover, greater in 2012 than in 2003.

PERFORMANCE AND EQUITY: CONTRASTING CONFIGURATIONS WITHIN THE EUROPEAN UNION

Graph 5-5.2 makes it possible to compare **social equity of performances**⁶⁹ (the horizontal axis) and the students' mean scores in PISA 2012 (the vertical axis). Although all the EU-27 countries are distributed in equal numbers above and below the mean performance score of the OECD countries, only 8 EU-27 countries show an equity score higher than that of the OECD. France combined a low equity score (comparable to Hungary and Bulgaria) and a performance score similar to the OECD mean. The United Kingdom, also achieving a performance score identical to the OECD mean, had an equity of results higher than the OECD mean. Bulgaria, Hungary and Romania showed both low performance scores and low equity. Only 3 European countries combined high performances and equity greater than the OECD mean (Estonia, Finland and the Netherlands).

MULTIPLE FACTORS INFLUENCING PERFORMANCE

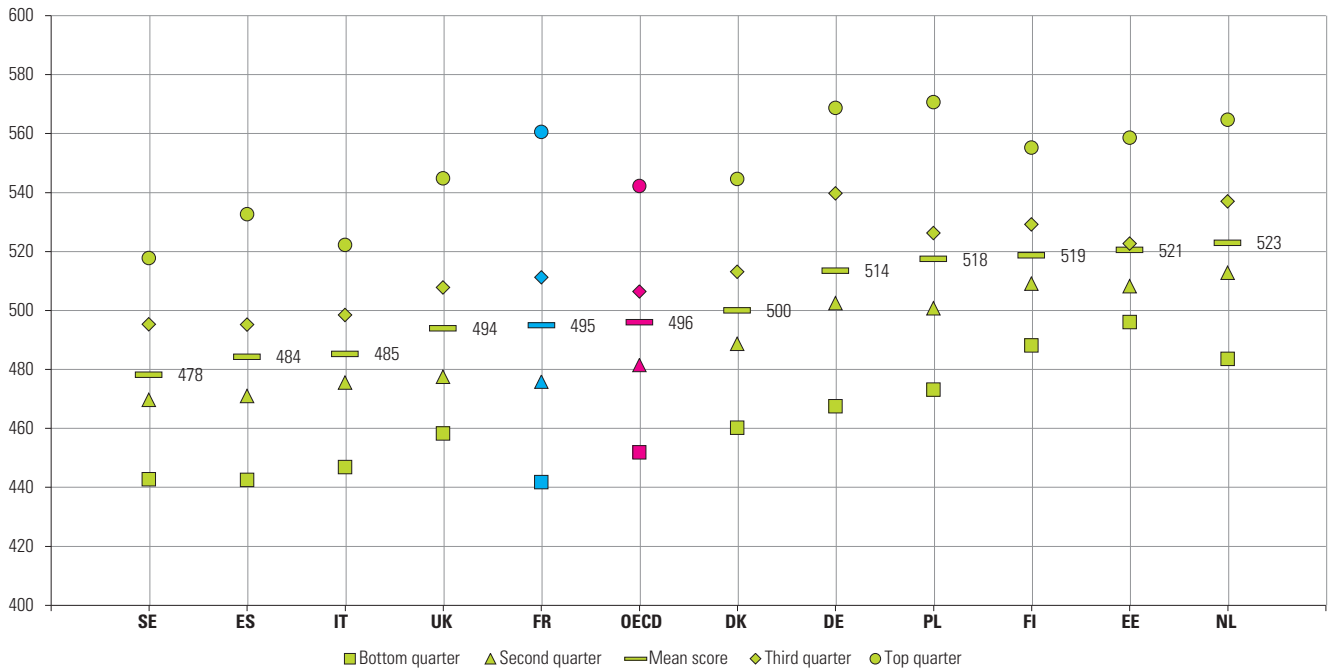
The factors increasing the probability for 15-year-old students to be strictly below the baseline skills level (level 2) of PISA mathematics literacy were not limited to the disadvantaged socioeconomic environment but included other family and individual factors. On average in the OECD countries, a male student from an advantaged socioeconomic background, living in a two-parent, native family and speaking the same language at home as at school, living in an urban area, having had more than one year of pre-primary schooling, never having repeated a class and enrolled in a stream/general school, had a 5% chance of under-performing in maths. In contrast a female student from a disadvantaged socio-economic background, living in a single-parent immigrant family, speaking a different language at home than at school, living in a rural area, never having been to preschool, already having repeated a class and following a vocational stream, had an 83% chance of under-performing [OECD, *PISA in Focus*, n° 60, February, 2016]. ■

⁶⁸ See definition p. 68.

5.5.1 Mean score in mathematics by PISA index of student's economic, social and cultural status (ESCS) in PISA 2012

© MENESR-DEPP, OECD, « Résultats PISA 2012 en culture mathématique », Note d'information, 13-31, 2013.

Mean score

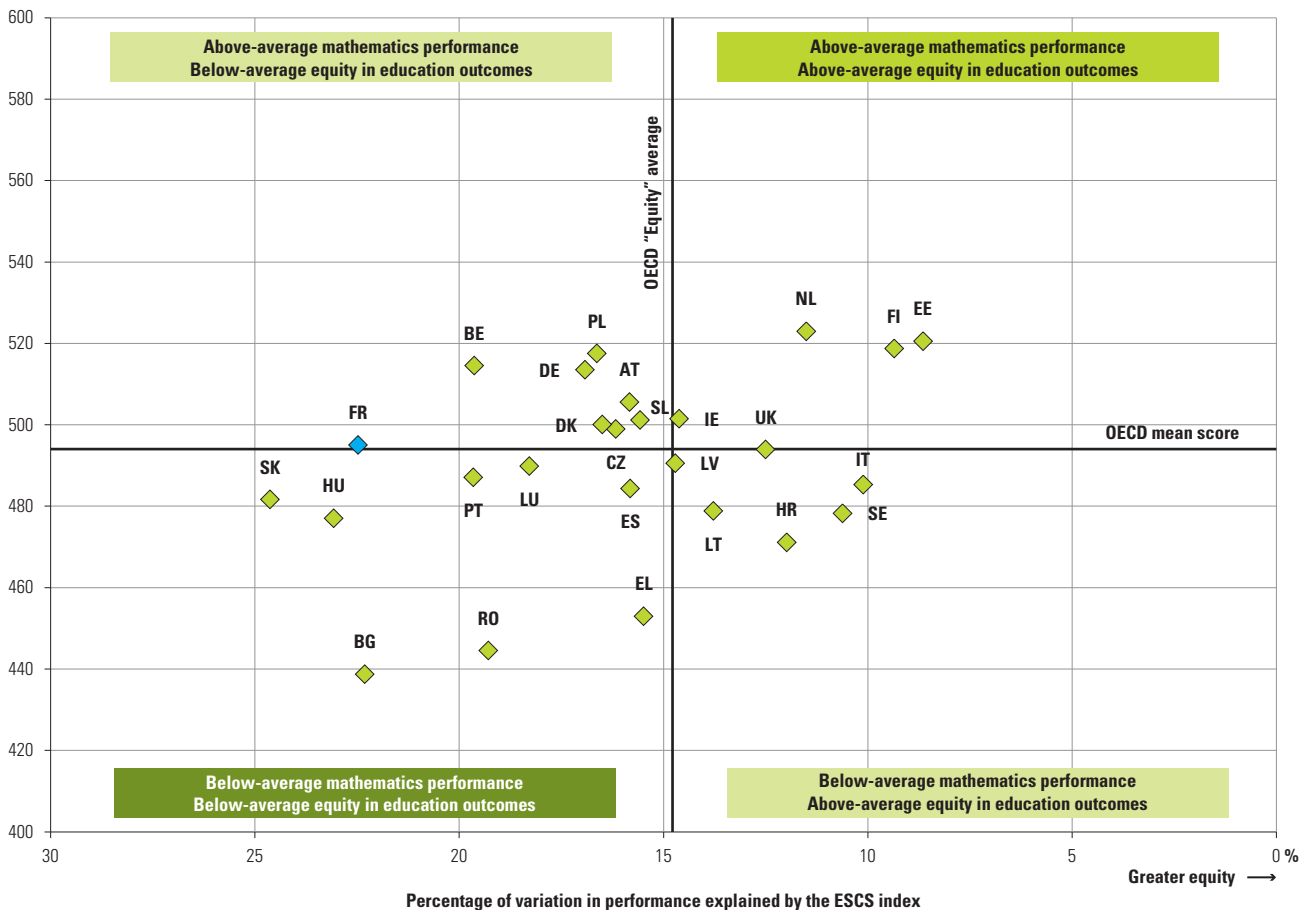


Note: In 2012 in France, the mean score in mathematics for students of the bottom quarter in the ESCS index is 442, while the mean score of the students of the top quarter of the index is 561. The mean score for the entirety of the sample is 495. Only a panel of the EU-27 countries participating in PISA is presented above.

5.5.2 Student performance and equity in mathematics in PISA 2012

© OECD, PISA 2012, Results, Excellence through equity, vol. 2, figure II.1.2, 2014.

Mean score



Note: In 2012 in France, the mean score in mathematics of the students is 495, while the percentage of variation explained by the social and economic status of the student is 22% (see annex "social equity in performances").

The PISA⁶⁴ 2012 survey (cf. 5.4, p. 52) was done with paper-based assessments that lasted two hours. **ZOOM**
 In a certain number of countries and economies, students, given forty additional minutes, also sat computer-based assessments in maths, reading comprehension (also called “computer-based reading”) and problem solving.

DIGITAL ASSESSMENTS IN MATHEMATICS: A CLEAR ADVANTAGE FOR BOYS

In 2012 the OECD’s students did not achieve better results in computerised assessments in maths than in paper-based assessments on average. Nonetheless some countries saw their scores tangibly improve (e.g. France, Italy and Sweden), whilst other countries saw their scores fall (e.g. Estonia, Ireland, Poland, Slovenia and Spain).

Boys enjoyed greater success than girls in mathematics literacy (cf. 5.4, p. 52), and the computerised assessment in maths increased this difference in success between the genders in all of the OECD countries participating in the survey. Boys achieved 15 points more than in the paper-based assessment, whilst girls lost 9 points (5.6.1). In the 12 countries presented here, girls generally attained better scores in paper-based assessments, whereas such was the case for boys in only two countries (Poland and Slovenia). Of the European-Union countries participating in the survey, the boys in France, Italy and Slovakia recorded the largest score differences between the digital-based assessment and the paper-based assessment (25, 32 and 26 points respectively).

COMPUTER-BASED READING: BOYS CATCHING UP WITH GIRLS

Although computer-based assessment of mathematics literacy accentuates the difference in success between girls and boys, the digital-based assessment of reading tends inversely to reduce them. Whatever the medium for assessing reading literacy, girls performed better than boys. Yet in all of the OECD countries participating in the survey, the girl-boy differences in computer-based reading assessment were tangibly less than in

the paper-based assessment, i.e. respectively 26 points difference (5.6.2) against 38 points, even though the mean score of all students was no different (497 in the digital-based assessment against 496 on paper). Within the EU, the difference favouring girls in the digital-based assessment remained tangible (more than 30 points) in five countries (Hungary, Sweden, Poland, Estonia and Slovenia). Inversely, Portugal, Slovakia, Italy and France were the countries where the difference between girls and boys in the digital-based reading assessment was lower.

GREATER EQUITY IN THE PROBLEM-SOLVING ASSESSMENTS

PISA’s problem-solving assessment **ZOOM**
 Of the 65 countries/economies participating in PISA 2012, 44 (including 28 OECD-member countries and 22 EU countries) participated in the problem-solving assessment. Exercises were given to a sub-sample of students drawn from the main sample. Problem-solving assessment aims at assessing a student’s ability to explore and understand given information, visualise a problem, formulate theories, plan and execute a strategy and, finally, assess the results obtained. The items are designed so as to elicit a student’s knowledge in PISA’s three main fields [source: MENESR-DEPP, *Note d’information*, 14.08, 2014].

In 2012 in all OECD countries participating in the survey, 15-year-old students’ mean scores in the problem-solving assessment was 500 (5.6.3). Within the EU this score ranged from 402 for Bulgaria (not presented in the graph) to 523 for Finland. With an mean score of 511, France was above the OECD mean and that of the 22 EU countries participating in the survey. France’s results were comparable to Germany’s, the Netherlands’ and Estonia’s, these three countries being among the best in the other 2012 PISA tests. In France, moreover, as in most of the other European countries, the impact of the students’ socioeconomic status (cf. 5.5, p. 54) was tangibly lower here than in the other subjects. The difference in scores between the “advantaged” and the “disadvantaged” nonetheless remained distinct in France but drew closer to Germany’s (86 points against 87 in France), whilst the difference was 52 points in Estonia. ■

⁶⁴ See definition p. 68.

5.6.1 Mean score difference between paper-based and computer-based assessments in mathematics in PISA 2012, by gender

OECD, *Students, computer and learning, making the connection*, 2015

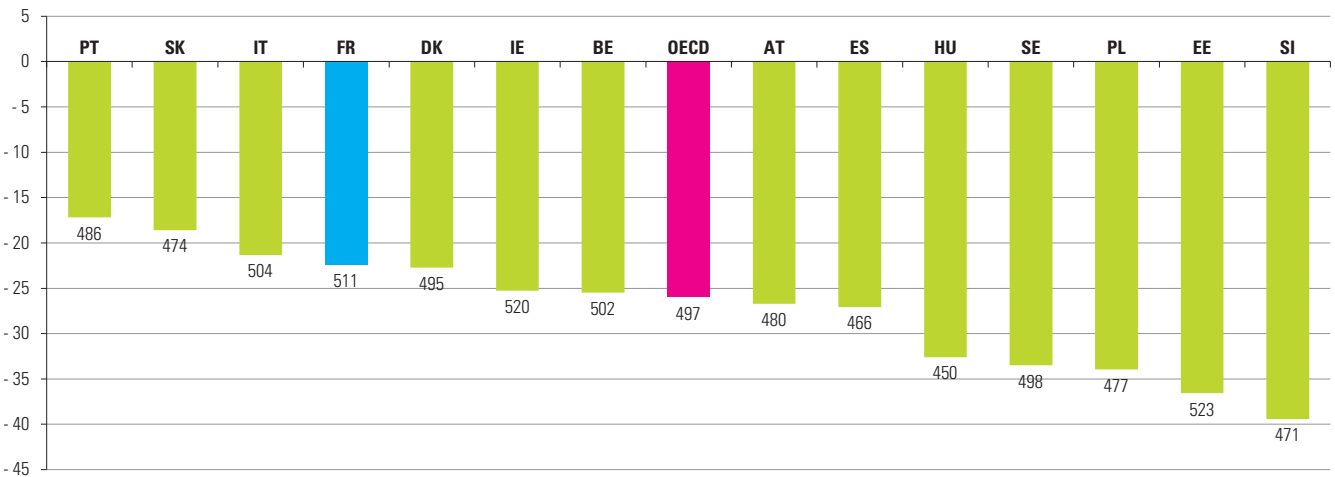


Note: In 2012, in Poland, boys obtained an average score in computer-based mathematics 21 points lower than in paper-based mathematics, when girls obtained an average score 36 points lower between the two tests. The score difference between paper-based and computer-based assessments for the whole sample of students is not the simple addition for of the score differences by gender. To be able to compare the scores, each gender score has been standardized on another scale.

Results that are not statistically significant are shown in grey, boys and girls alike.

5.6.2 Gender score difference in digital reading in PISA 2012

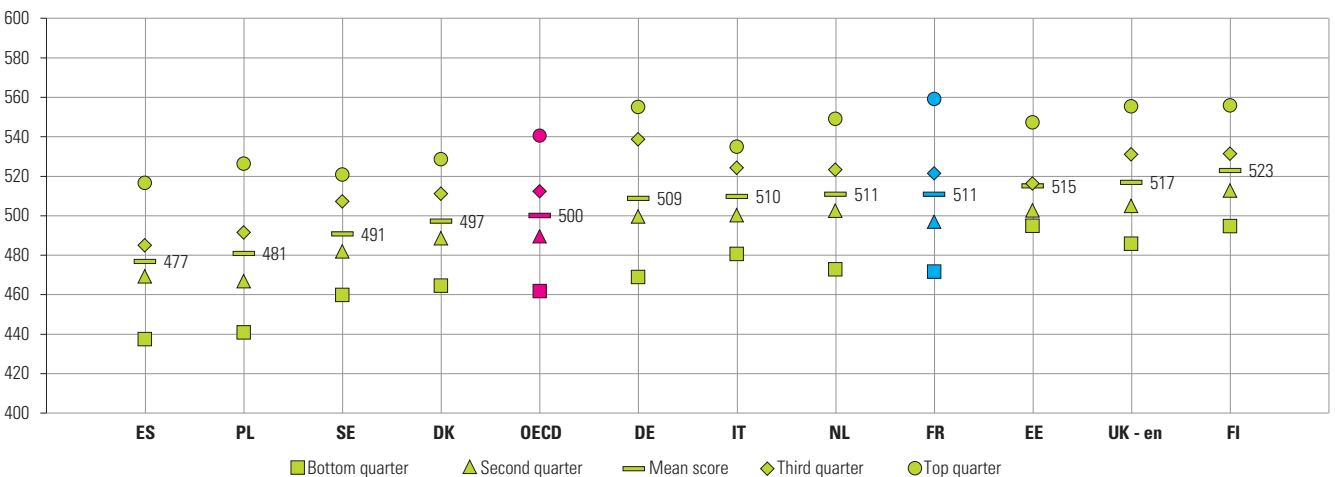
OECD, *Students, computer and learning, making the connection*, 2015



Note: In 2012, in France, the 15 year old boys' mean score in the PISA digital reading test is 22 points below the one of the girls. In France, the mean score for the whole sample of students is 511. In the countries that did take part in this test, all score differences are statistically significant and are to the benefit of the girls.

5.6.3 Mean score in problem solving test by PISA index of student's economic, social, cultural status (ESCS) in PISA 2012

OECD, *PISA 2012, volume V*, 2014



Note: In France, in 2012, the mean score in problem solving for students of the bottom quarter in the ESCS index is 472, while the mean score for students of the top quarter of the index is 559 and the mean score for the whole sample of students is 511.

THE NATIONAL DIFFERENCES IN THE RELATIONSHIP BETWEEN STUDIES AND THE LABOUR MARKET

In 2013 young people from 15 to 29 years old in the 21 European Union member-countries of the OECD were distributed in the following manner: 39% were students; 35% were employed; 11% combined studies and employment; and 16% were in neither **formal education**[□] nor employment (6.1.1). In 12 countries, including France, at least 40% of people from 15 to 29 were in education (in the strict sense). Young people in Austria, the United Kingdom and the Czech Republic were most frequently in employment (in the strict sense, over 40%) whereas in Greece only 24% of the young people were.

The extent of young people both studying and working varied between countries. There was a lot of it in countries with a strong apprenticeship system (Germany, Austria, Denmark and the Netherlands) where the status of apprenticeship assumes employment. These situations are, on the other hand, less frequent in countries where vocational training is more massively provided as an academic pathway (in particular in the southern European countries and France). Students working to finance their studies or ensure their financial independence, or else those who do long, paid internships in their chosen field of study, illustrate other types of concurrent work/study models.

The proportion of 15-29 year-olds that are neither in education or employment varied from 28% in Greece to 6% in Luxembourg, with France, Poland and the Czech Republic being near the European average. It is noteworthy that this proportion is lower in countries with a strong apprenticeship system.

DEGREES ARE A DECISIVE FACTOR IN THE LABOUR MARKET

The risk of **unemployment**[□] is all the lower when people's degree-attainment level is high. In 2014 in the EU28 the **unemployment rate**[□] of the higher education graduates from 25 to 64 stood at 6% whilst unemployment among ISCED 0-2 people stood at 17% (6.1.2). This distribution of the decreasing unemployment rates per level of ISCED was seen in all EU28 countries whatever the national average unemployment rate. On the other hand the differences in unemployment between the ISCED levels varied from country to country. In Slovakia this difference was 34 points between higher-education graduates and non-graduates (average unemployment rate: 12%). It was 4 points in Denmark and Luxembourg (unemployment rates: 6% and 5% respectively); 9 points in France and 10 points in Germany (unemployment rates: 9% and 5% respectively).

[□] See definition p. 68.

DO THE YOUNG FACE GREATER UNEMPLOYMENT THAN OLDER PEOPLE?

The measure of youth unemployment in international comparisons

ZOOM

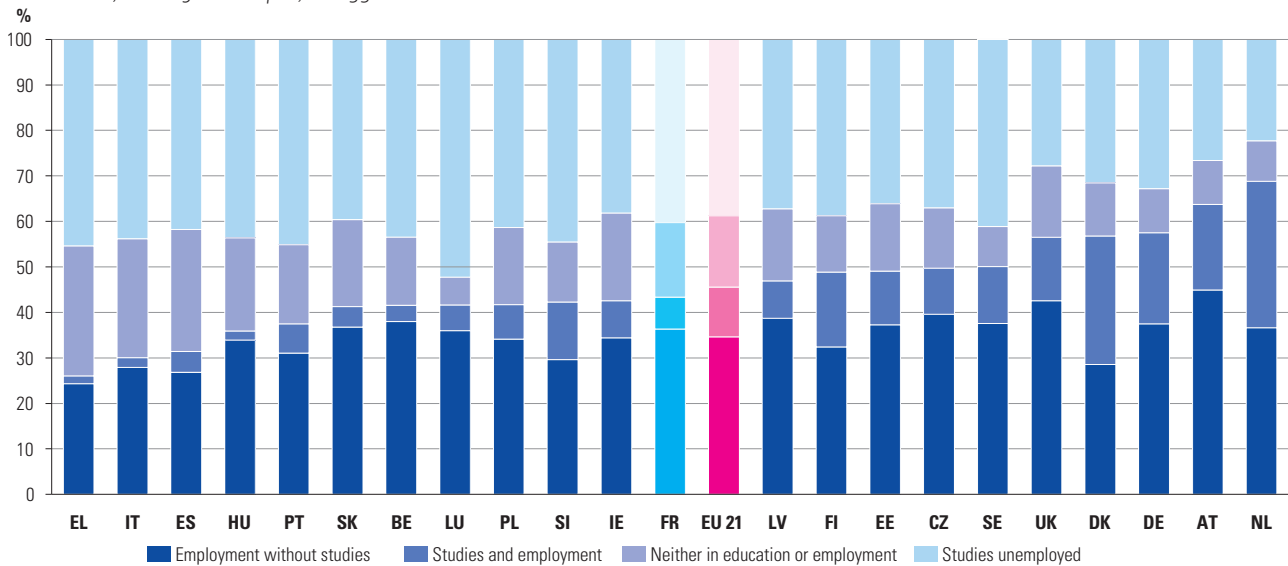
Used in international comparisons, the unemployment-rate indicator applied to the youth age groups contains an important bias. It relates the number of the unemployed to the number of working people in the age group under consideration. But **activity rates**[□] of youth vary considerably from country to country, in particular according to the modes by which vocational training is provided (apprentices are considered as employed) and more broadly the traditions of the work-study combination. For the 15 to 24 year-old age group the employment levels in 2014 were therefore 37% in France whereas in Germany they were 50%. To measure the extent of unemployment in the youth age group, it may be preferable to use the proportion-of-unemployed indicator, which relates the number of unemployed people to the age group under consideration (percentage of unemployment = the unemployment rate × the activity rate). However, by ISCED level, this indicator is to be taken with precaution, as the population it applies to is mostly in the process of obtaining a degree (a high-school student is still considered ISCED 0-2).

The situation of individuals from 15 to 64 varies considerably depending on their age group and their attained-degree level (6.1.3). In the EU28 in 2014 the unemployment rate decreased with the age group, with a degree being relatively protective from the risk of unemployment for each age group. Germany, France and Italy demonstrated three different profiles.

Germany saw low unemployment for each age group and degree-level attained, but with a spike of 17% for the 25 to 39 year-old age group at the ISCED 0-2 levels. France's profile was close to that of the EU28, however with greater differences in unemployment for the 15 to 24 year-olds. This unemployment rate nonetheless dealt with a limited number of working people because of the considerable size of this age group's student population in situation of **inactivity**[□]. If we consider the proportion of unemployment among the 15 to 24 year-olds, France was in the European average (9% at all ISCED levels). Lastly Italy saw a very high unemployment rate among the 15 to 24 year-olds and an unemployment rate among the 60 to 64 year-olds that was lower than in Germany. However, the proportion-of-unemployment of the 15-24 year-olds in Italy allows the reader to put its unemployment rate into perspective for the same age group. ■

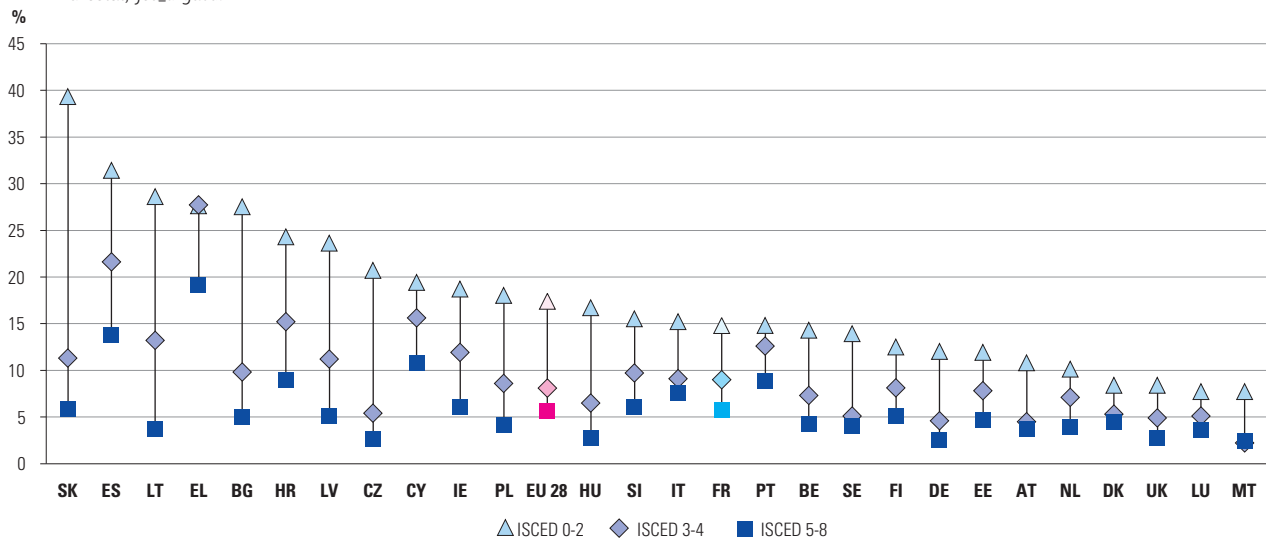
6.1.1 Distribution of the 15-29 year olds in education or not in education by work status in 2013

OECD, EAG 2015 interim report, table 3.3.



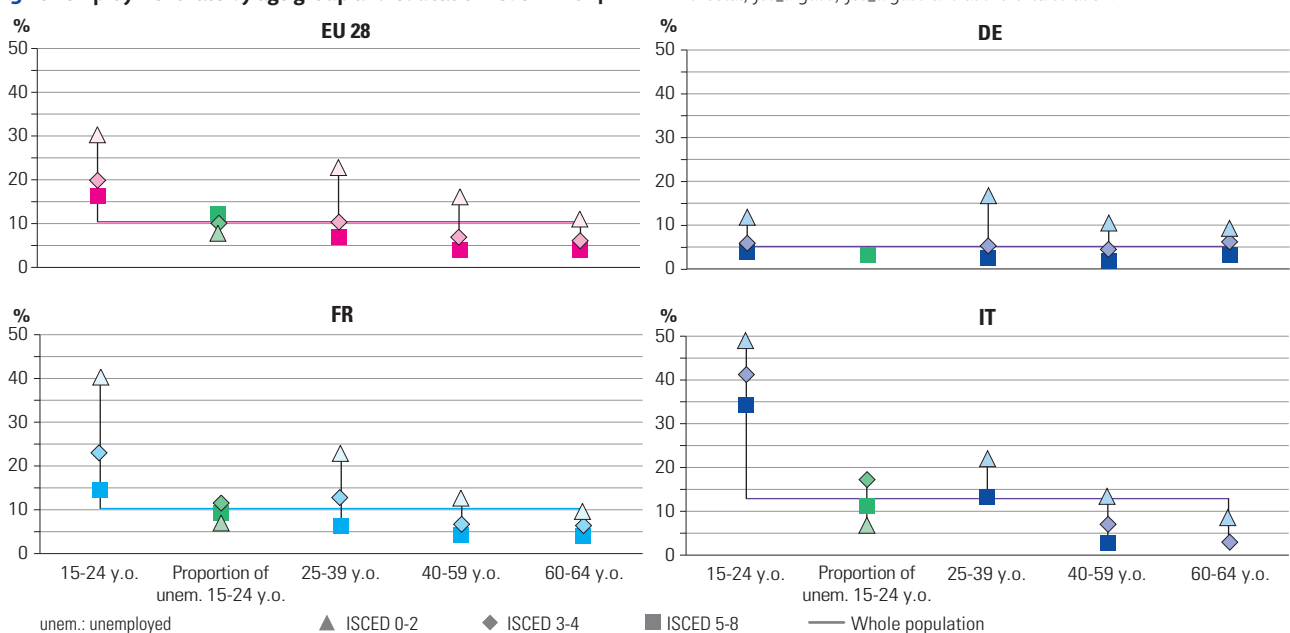
6.1.2 Unemployment rate of 25-64 year olds by education level in 2014

Eurostat, *lfsa_urgaed*.



6.1.3 Unemployment rate by age group and education level in 2014

Eurostat, *lfsa_urgaed*, *lfsa_argaed* and authors' calculation.



6.2 ACCESS TO EMPLOYMENT ACCORDING TO GENDER OR ORIGINS

EMPLOYMENT RATES ARE IN FAVOUR OF MALES

In 2014 in the 28 European Union countries males from 25 to 64 years-old systematically had higher **employment rates**⁶² than females, whatever the education level attained (6.2.1). But the differences between the two genders were smaller as the degree-level increased. In the EU28 the average percentage-point difference of the employment rate between males and females was 20 points at the ISCED 0-2 levels but only 7 points at the ISCED 5-8 levels. The two extremes between males and females were found in Malta for the non-graduates (45 point difference) and in Croatia for higher-education graduates (1 point difference).

It is interesting to see that if, in the vast majority of the European countries, the employment rate differences fell with the degree level rising, there were four countries with atypical situations, *i.e.* Greece, for which the employment-rate difference between males and females was identical at the ISCED 0-2 and ISCED 3-4 levels; Cyprus and the Czech Republic, for which the difference was slightly greater for ISCED 3-4 than for ISCED 0-2; and lastly, Slovakia, where the difference of employment rates between males and females for the non-graduates was tangibly lower to that observed for higher-education graduates.

WOMEN MORE AFFECTED BY INACTIVITY OR PART-TIME EMPLOYMENT

In 2014 males from 15 to 39 years olds in the EU28 countries were more often in employment than females, *i.e.* 65% of the males were employed whereas only 56% of the females were (6.2.2) (cf. 6.1, p. 58). The unemployment proportions being relatively close (10% for males and 9% for females), the difference of status derived from the inactive portion in the age group (25% for males and 35% for females). The inactivity status combines both pupil or student status without the work/studies combination (cf. 6.1; p. 58) and withdrawal from the labour market, which cannot be separated out here.

The proportion of unemployed females in the age group was systematically higher than that of the unemployed males. In Italy, Poland and the United Kingdom the proportion of unemployed females in the age group was at least 10 points higher than unemployed males, whereas it was only 4 points higher in Sweden. The proportion of the working population

(employment rates) in the age group was always symmetrically higher for males. This proportion was 13 points higher than the females in Italy and Poland, whereas there was only a 3 point difference in Sweden. The largely female part-time employment contributed to reducing the difference in the employment rates between males and females, with about 25% of the females in the age group in the United Kingdom and 27% in Sweden.

ACCESS TO EMPLOYMENT IS AFFECTED BY THE PARENTS' ORIGINS

Migratory status: what methodology?

ZOOM

The choice was made here to take into account only those people between 20 and 64 who were born in the country under consideration, either of native-born parents, or parents of mixed origins (one foreign parent) and foreign-born (both parents born abroad). These people theoretically attended this country's education system. In effect, retaining people born abroad who then immigrated to the country under consideration carried the risk of including those who did not attend this country's education system, which resulted in a serious limitation of comparison with people of native-born parents as for the impact produced by educational attainment levels.

Observed in certain European countries marked by a history of immigration, the 20 to 64 year-old population that is born in the country with mixed-origin or foreign-born parents nearly systematically had a lower employment rate than that of the population with native-born parents (6.2.3). However, the differences in employment rates with degrees being equal were relatively limited, with the exception of Spain which saw a 22 point difference in favour of native-born Spaniards at the ISCED 3-4 attainment levels. This difference in France was 10 points.

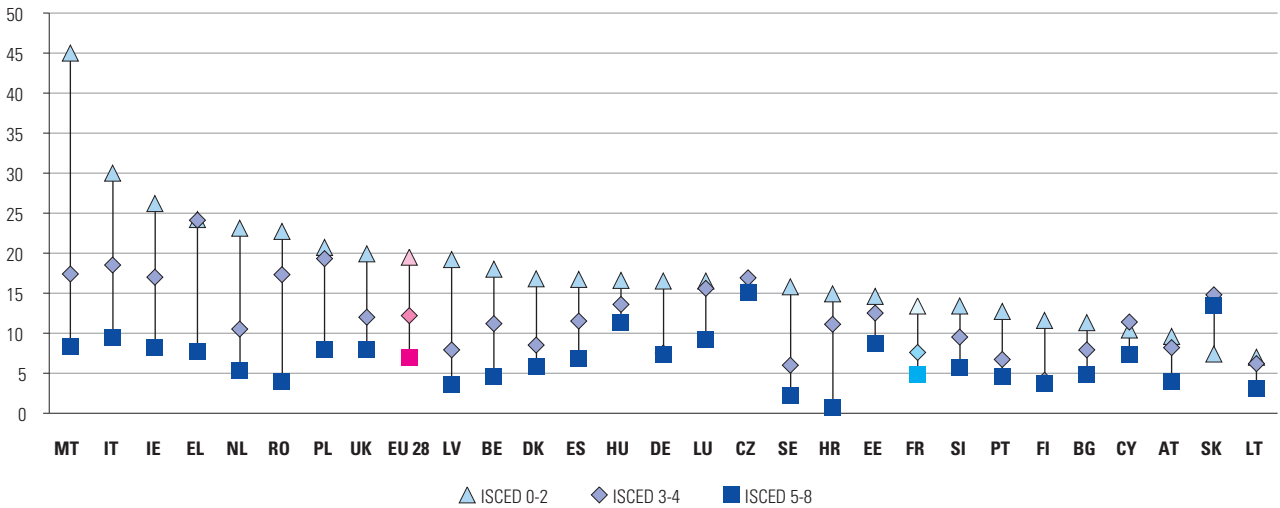
Moreover in the countries presented, the ISCED 3-4 education-attainment levels showed the widest difference in employment rates in the 20 to 64 year-olds with native-born parents and those of mixed-origin or foreign-born parents (favouring the former) with the exception of Germany where there was only a 2 point difference. The observed difference for higher-education graduates was lower on average than for the ISCED 3-4 graduates, *i.e.* it varied from 4 points in favour of the native-born (Spain) to 4 points in favour of children of foreign-born or mixed parents (Germany). ■

⁶² See definition p. 68.

6.2.1 Gender employment rate difference among the 25-64 year olds by education level in 2014

↳ Eurostat, *lfsa_urgaed*.

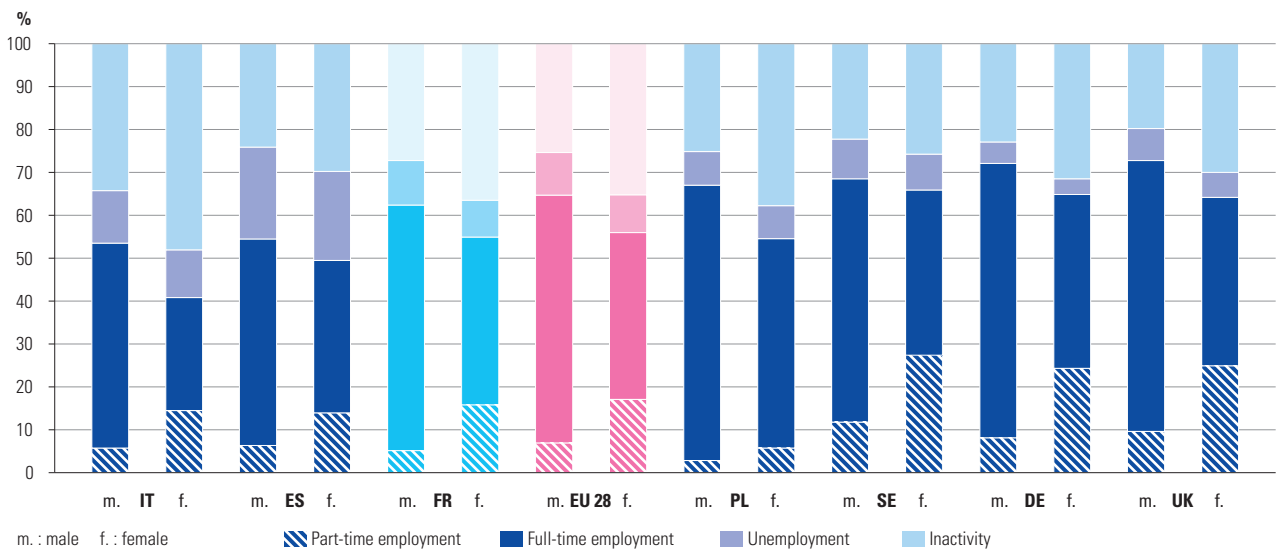
Percentage point difference



Note: Here, employment includes all types of work activity, no matter its duration.

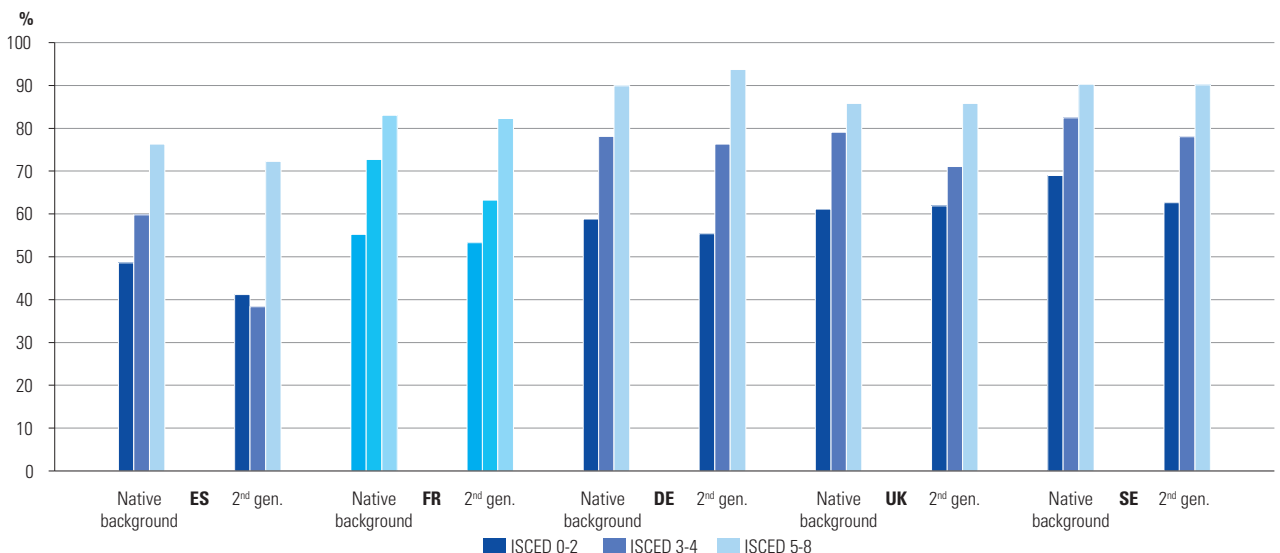
6.2.2 Distribution of the 15-39 year olds by gender and work status in 2014

↳ Eurostat *lfsa_pganws*, *lfsa_epgaed* and authors' calculation.



6.2.3 Share of the working population among the 20-64 year olds born in the country by education level and parents citizenship in 2014

↳ Eurostat, *lfsa_14lel*.



6.3 THE RISKS OF EXCLUSION FROM EMPLOYMENT AND TRAINING

THE PROPORTION OF NEETS VARIES FROM ONE TO FOUR TIMES IN THE EUROPEAN UNION

NEETs[□] (Neither in Employment nor Education and Training) are defined as people either unemployed or inactive as defined by the ILO, who do not continue their initial studies and who state that they have not been in **formal or non-formal education**[□] in the four weeks prior to the survey (LFS[□]). The NEET indicator compares this population for a certain age group to the entire population of the same age group (population on January 1st, Eurostat's Population Statistics). It thus focuses on the person's situation regarding employment rather than their qualification level. Here it is applied to the 18 to 24 year-old age group so as to be able to compare it to that of the early school leavers (cf. 5.2, p. 48). **ZOOM**

In 2014 in the 28 European Union member countries, the proportion of NEETs among 18 to 24 year-olds was 17%, which amounted to some 7 million young adults. The European Commission incorporated the fight against NEETs into the major goals of the 2020 Europe strategy. The proportion of NEETs in the 18 to 24 year-old age group differed largely from country to country (6.3.1). Only 6 countries (Germany, Austria, Denmark, Luxembourg, the Netherlands and Sweden) saw the proportion of NEETs in this age group at less than 10%, whereas in 5 countries (Bulgaria, Croatia, Cyprus, Greece and Italy) the NEETs surpassed 25%.

THE LINK BETWEEN NEETS AND EARLY SCHOOL LEAVERS

The two indicators, Early School Leavers (cf. 5.2, p. 48) and NEETs, both denote young people who have left the education system and are not doing any sort of training. The first group however only retains the people with low education level, whatever their status in the labour market, whereas the second group deals only with unemployed young people. They are therefore complementary indicators, the first dealing more with the challenges of steering educational policies, and the second with employment policies.

Chart 6.3.2 shows the situations of young people from 18 to 24 regarding these indicators. So in the EU28 10% of the young people in this age group were degree-holding NEETs and 7%

were non-degree-holding NEETs. Still in the EU, 4% of the 18-24 were both early school leavers and employed, whilst 7% were both early school leavers and unemployed (this is the same group as non-degree-holding NEETs). In France and Italy about a third of the early leavers were in work, whereas this proportion surpassed 40% in the entire EU28 or in Germany. It thus appears more difficult to find employment for the non-degree-holding leavers in these two first countries than for the EU average. Moreover the proportion of graduates among the NEETs, which was about 60% in the EU28, France and Italy, was only 42% in Germany.

The number of non-degree-holding NEETs (or jobless early leavers) potentially constituted the population at the highest risk of job-insecurity among the 18 to 24 year-olds. This population amounted to 5% and 6% respectively of the 18 to 24 year-olds in Germany and France, whereas it stood at 7% in the EU28 average and 10% in Italy.

THE POORLY QUALIFIED HAVE LESS ACCESS TO TRAINING

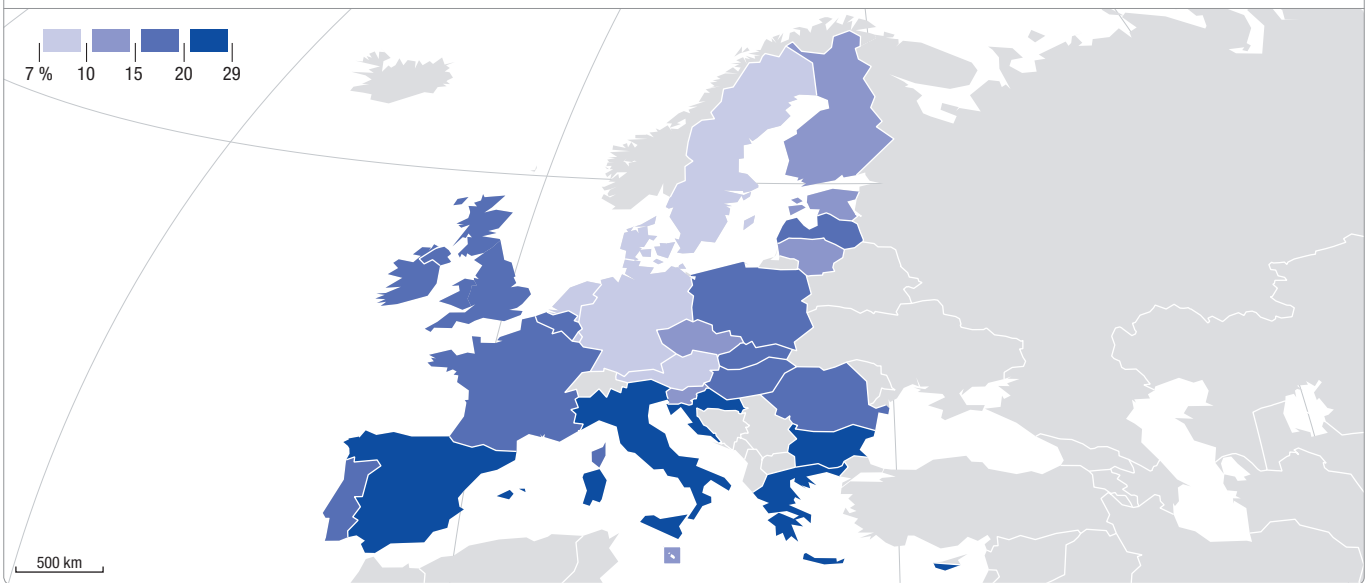
The participation of adults in continuing training is a goal in the Education and Training 2020 Strategy (cf. 5.1, p. 46). Life-long learning may be provided as **formal or non-formal education**[□], or even **informal learning**[□]. In the EU28 in 2014 people with higher-education degrees (ISCED 5-8) participated systematically more in continuing training than the others (6.3.3). The rate of participation in continuing training by people with ISCED 5-8 level attainment (19%) was over twice as high as that by people at the ISCED 3-4 levels (9%) and nearly four-times higher than that of the poorly qualified (5%). In each of the EU28 countries this rate systematically increased with the degree level.

The three countries with the highest level of participation in continuing training were Denmark, Sweden and Finland where a long tradition of the lifelong-training model exists. Austria, France, the Netherlands and even the United Kingdom had lower participation rates but still quite high, with a specificity in Denmark where there is less of a gap between people with advanced degrees and the others for turning to continuing training. Lastly 8 countries (including Germany, Belgium, Ireland and Hungary) had participation rates that didn't surpass 15%, all ISCED attainment levels combined. ■

[□] See definition p. 68.

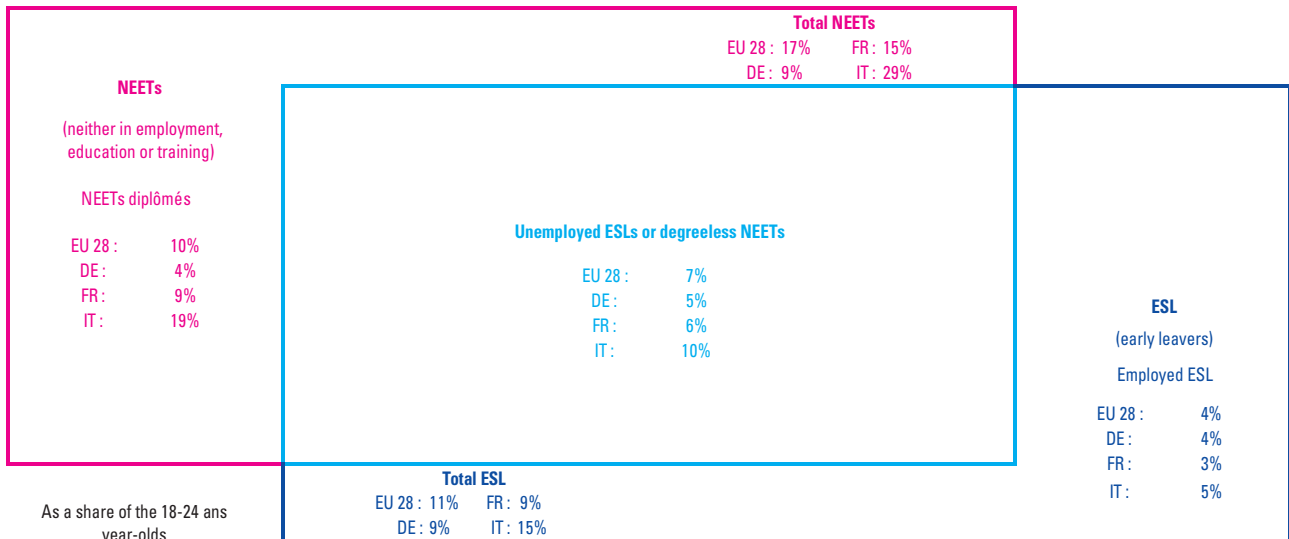
6.3.1 Proportion of the 18-24 year olds being Neither in employment, education or training (NEET rate) in 2014

↳ Eurostat, edat_jfse_21.



6.3.2 NEETs and Early School Leavers in the European Union, in France, in Germany and in Italy in 2014

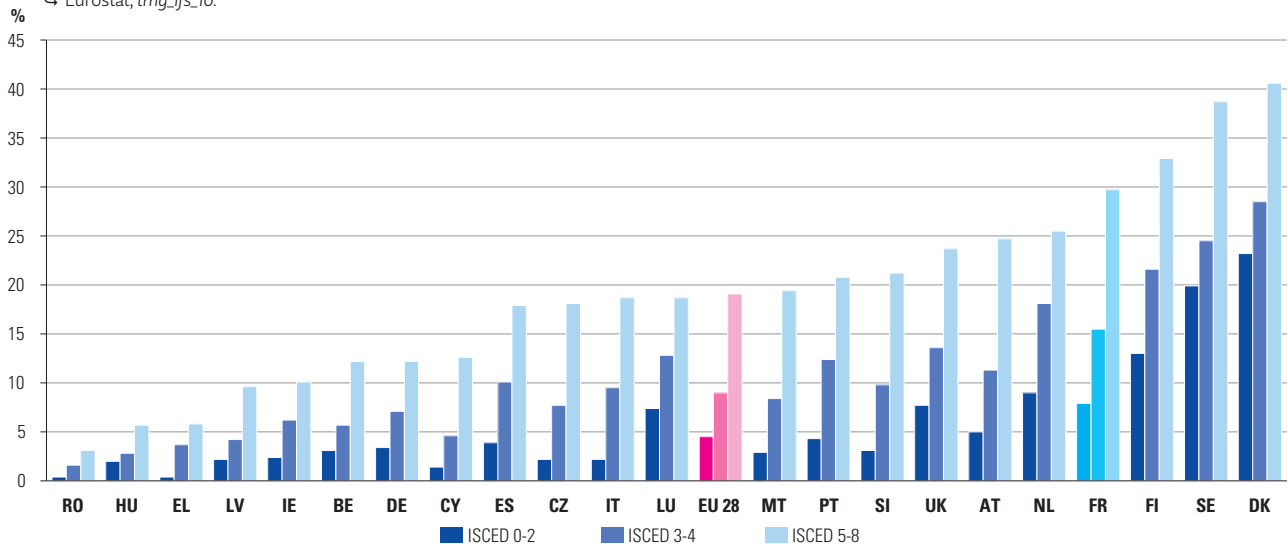
↳ Eurostat, edat_jfse_14 and edat_jfse_21.



Note: ESL: Early School Leavers; NEET: Neither in Education, Employment or Training.

6.3.3 Participation rate in education and training the last 4 weeks by education level in 2014

↳ Eurostat, trng_jfs_10.



6.4 INCOME PER DEGREE LEVEL AND GENDER

THE POSITIVE IMPACT OF A DEGREE ON INCOME

EU-SILC[□] methodology with income

ZOOM

The Eurostat EU-SILC survey (EU Statistics on Income and Living Conditions) gives European statistics on the total disposable income of households, *i.e.* the income that remains disposable to households after the deduction of fiscal and social charges. What are counted are all earned income and capital, inter-household transfers and social transfers (excepting rent paid to owners). Median income denotes the value for which the population is split into two equal parts, *i.e.* those with income higher than the median and those with income lower.

In 2014 in all 28 countries of the European Union, the gross disposable income of people of 18 and over grew with the level of the degree attained. Nonetheless the amount varied tangibly according to the country's GDP level per inhabitant and the distribution of income within each. Whether it was for ISCED 0-2 or ISCED 5-8, the value extremes were in Romania (the lowest incomes) and Luxembourg (the highest). The median annual incomes per country (in PPS[□] equivalents) of people at ISCED attainment levels 0-2 ranged from 2,970 PPS to 23,660 PPS. For people with ISCED 5-8 levels it ranged from 7,750 PPS to 40,470 PPS (6.4.1 and 6.4.2). Whatever ISCED level considered, France was among the 4 countries where median annual incomes were the highest.

In 2014 in the EU28 the ratio between the median annual income of holders of a higher-education degree and that of people with low level of attainment was 1.43 in Denmark (the lowest ratio) and 2.61 in Romania (the highest). It was 1.47 in France, 1.49 in the Netherlands, 1.60 in Germany and Italy and 1.62 in the United Kingdom.

WOMEN AT THE SAME DEGREE LEVEL ARE LESS WELL PAID

In 2014 in the 21 EU member-countries of the OECD, females systematically earned lower incomes than their male counterparts with the same degree level of attainment (6.4.3). Indeed on average in the 21 countries, poorly qualified females earned the equivalent of 78% of male earned income. This ratio was 74% for women at the ISCED 5-8 attainment levels. Note that with only two exceptions (Spain and Estonia), the relative earned income of females compared to that of males was all the lower for their ISCED level attainment being high. However, this observation does not take into account the income dispersion within an ISCED level for the whole population.

Female relative earned income (compared to that of males) varied from 63% in Estonia to 85% in Belgium and Hungary for the ISCED 0-2 levels of attainment, whilst it ranged from 68% in Hungary and Slovakia to 83% in Slovenia and Sweden for the ISCED 5-8 attainment levels. In France it was very close to the European average (74% and 73% of the males' salary respectively for ISCED 0-2 and ISCED 5-8 attainment levels).

OECD methodology with labour income

ZOOM

The OECD earned-income indicator used here (6.4.3 and 6.4.4) deals with the fully employed work force, remunerated throughout the whole of the reference year. Only gross income is presented here. The sources for the European countries can come from the EU-SILC survey, the Labour Force Survey (LFS[□]) or national sources. These statistics for France have come from the EU-SILC survey. Countries not presenting full statistics per ISCED have been discounted. In the case of EU-SILC sources, only labour-related income is retained.

HIGHER EDUCATION: THE "NEXT DEGREE" IS ALWAYS REWARDED

In 2014 in the average of the OECD European member-countries where the statistics were available, earning a higher degree in higher education was always rewarded from the point of view of the increased earned income associated with this higher degree (6.4.4). In effect on average, compared to the employed 25 to 64 year-olds at the ISCED 3 attainment level, the people in the same age group at ISCED 5 received 21% more; those at ISCED 6 39% more; and those at ISCED 7 and 8 75% more. With the exception of Austria and Estonia, income in each country increased with the level of degree attained. It was in Hungary where earning a Masters or a Ph.D raised one's income the most in relation to holding an ISCED 3 degree or even a lower higher education degree.

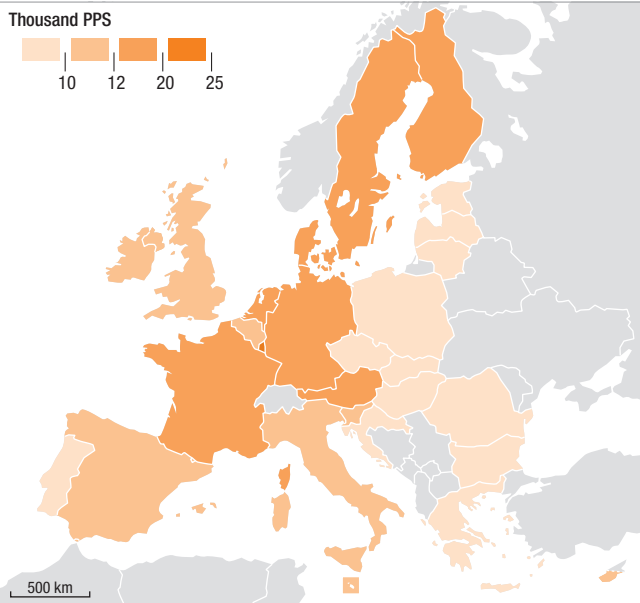
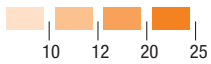
In some countries, such as Germany, Hungary and the United Kingdom, the additional income obtained from a higher ISCED level was distributed in a balanced way among ISCED levels. In other countries such as Denmark, Finland and France, passing from ISCED 5 to 6 created a limited benefit from an income standpoint with the relative benefit being higher at the ISCED 7 and 8 levels. It was clear that in France earning a Masters resulted in much higher income. ■

[□] See definition p. 68.

6.4.1 Median income of the 18 years old or over with ISCED 0-2 education levels, PPS equivalent

↳ Eurostat, ilc_dio8.

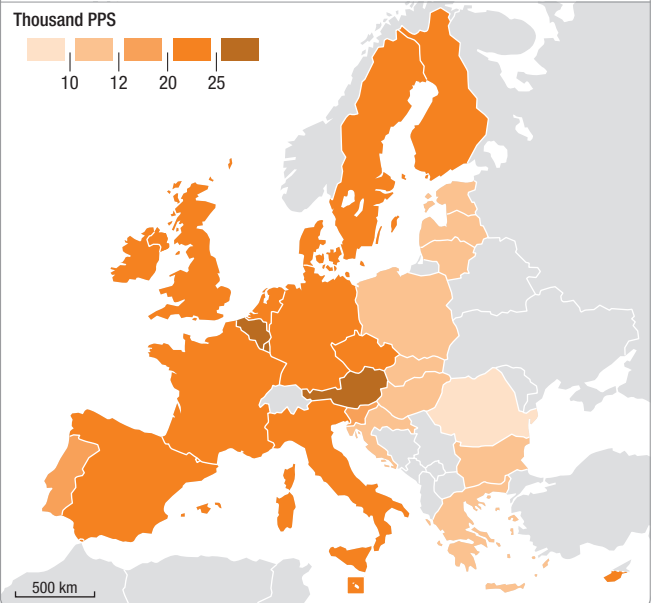
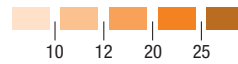
Thousand PPS



6.4.2 Median income of the 18 years old or over with ISCED 5-8 education levels, PPS equivalent

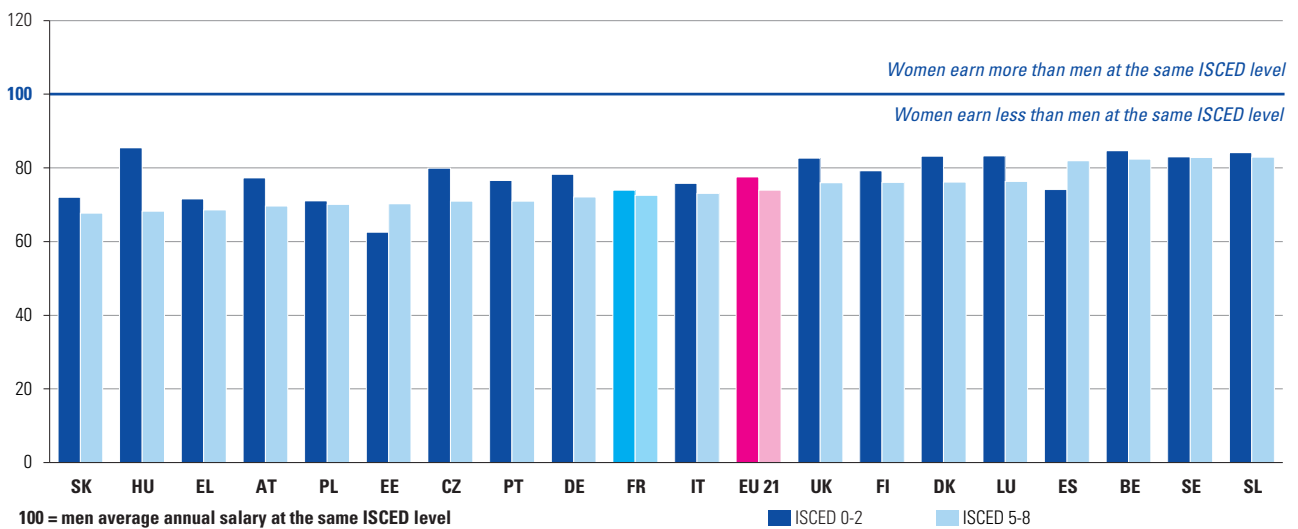
↳ Eurostat, ilc_dio8.

Thousand PPS



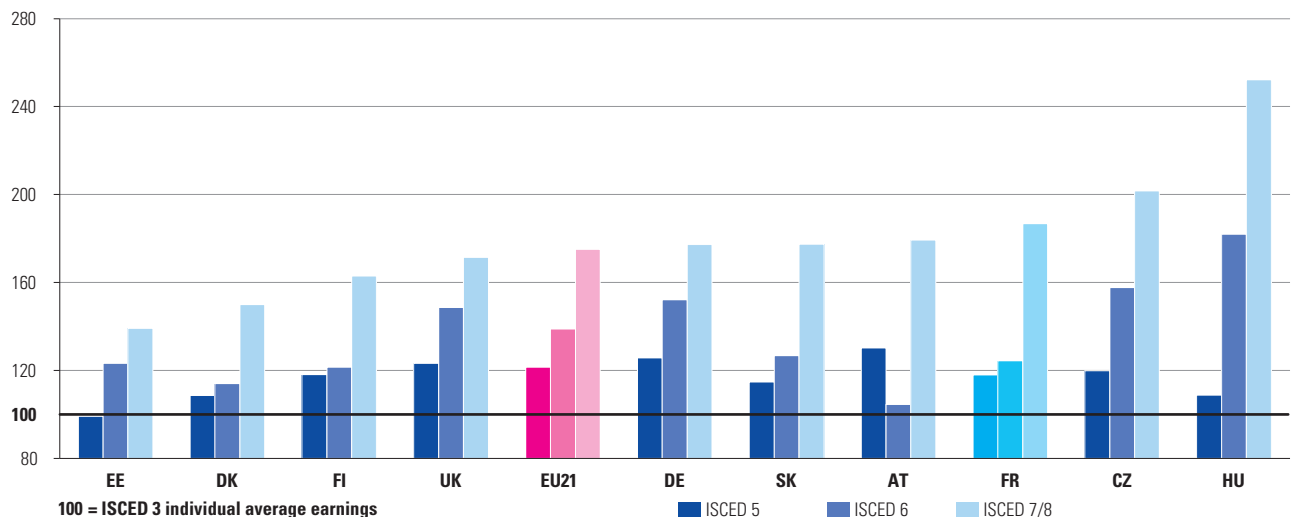
6.4.3 Difference in earnings between female and male worker (full-time employment) by educational attainment in 2014

↳ OECD, EAG 2016, table A6.2a.



6.4.4 Relative earnings of adults working full-time by educational attainment in 2014

↳ OECD, EAG 2016, table A6.1.



MALES AND FEMALES LIVE EQUALLY LONG IN GOOD HEALTH

The **number of healthy life years (HLY)**[□] is one of the three indicators supplied by Eurostat thanks to the statistics gathered in the **Minimum European Health Module (MEHM)**[□] of the EU-SILC survey (cf. 6.4, p. 64). The HLY is the equivalent number of years that a person of a given age might hope to live in good health. This indicator is calculated separately for males and females. An individual is considered “in good health” when they suffer neither from a functional limitation nor an incapacity. The following question is asked: “Has a health issue limited you in doing activities for at least six months that people normally do? Yes, severely limited; yes, limited but not severely; no, not limited at all”.

ZOOM

In 2014 in the 28-member countries of the European Union females had a much higher **life expectancy**[□] than males (**6.5.1 and 6.5.2**), living an average of 6 years longer than males (84 years compared to 78). In Spain, France and Italy they attained the European maximum of 86 years of life expectancy, whereas in Bulgaria their life expectancy was lower (78 years). Males attained maximum life expectancy in Cyprus and Italy (81 years), whereas the lowest life expectancy was seen in Latvia and Lithuania (69 years). The Baltic countries saw the highest excess mortality for males in the EU28 (at least ten years difference in life expectancy compared to females).

However, although females lived longer than males, the number of healthy life years (HLY) was roughly the same for both genders. Overall in the EU28 it was 62 years for females and 61 years for males. For both genders, Malta, Ireland and Cyprus saw the highest HLY in the EU28. The biggest difference in the HLY between females and males was found in Bulgaria, Estonia, Latvia and Lithuania (4 more years for females in each of the 4 countries). Males in the Netherlands and Portugal, on the other hand, lived respectively 4 and 3 years longer than females.

[□] See source p. 70.

IS SELF-PERCEIVED HEALTH INFLUENCED BY THE EDUCATIONAL LEVEL ATTAINED?

The MEHM module of the SILC Survey

ZOOM

The MEHM module of the SILC Survey also made it possible to gauge self-perceived health. The question asked of people was the following: “How is your general state of health? Very good, good, fair, bad, very bad”. [INED, *Populations et sociétés*, n° 499, April, 2013].

In 2013 in the EU28, while 80% of people 15 years old and over and with higher education degrees stated they were in good or very good health, the rate was only 70% for people at the ISCED 3-4 levels of attainment and 54% for people at the ISCED 0-2 levels (**6.5.3**). France had rates close to those of the EU28 average, *i.e.* 79%, 70% and 53% respectively. Although the level of self-perceived health grew, again, with the level of education attained (with the exception of Malta), the differences between the ISCED levels varied within each country. The greatest differences were in Poland with a 40 point spread; Germany and Denmark had the lowest difference (15 points). There were only 8 countries where at least 60% of their people at the ISCED 0-2 levels stated they were in either good or very good health.

THE RISK OF OBESITY IS REDUCED WHEN THE EDUCATION LEVEL INCREASES

The Body Mass Index

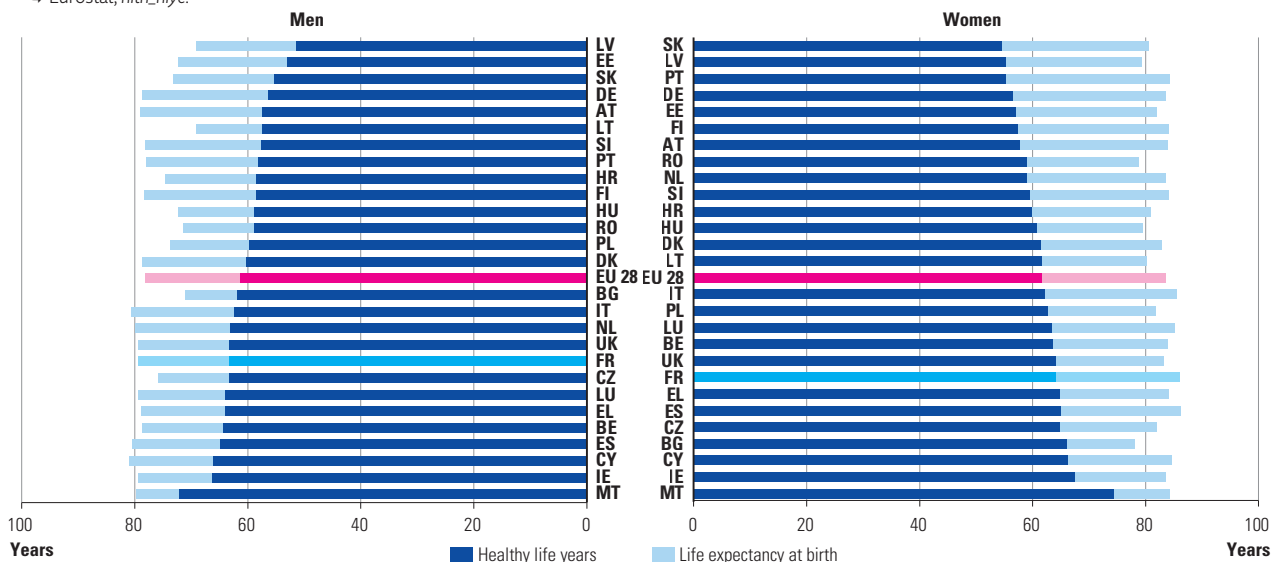
ZOOM

The World Health Organization (WHO) uses the Body Mass Index (BMI) to monitor over-weight and obese people. The BMI is calculated by dividing the body mass in kilogrammes by the height in metres squared (kg/m^2). The WHO has set BMI thresholds to rank individuals, e.g. a “normal” BMI is located between 18.5 and 25 kg/m^2 , above which the risk of death increases considerably. Overweight is located between 25 and 30 kg/m^2 , above which it becomes obesity. These statistics come from the **European Health Interview Survey (EHIS)**[□], the second edition of which has been on-going since 2013.

In the 26 countries that participated to the 2014 EHIS Survey, the proportion of obese people is almost always negatively correlated to the ISCED level (**6.5.4**). Among the 26 countries that participated, only 4 have less than 20% of their ISCED 0-2 population in a situation of obesity. Malta has the highest values of the EU28 for ISCED 0-2 and ISCED 5-8 population. It was the opposite in Romania with minimum values at each ISCED level. In France, the proportion of obese individuals among the population is slightly below EU28’s average, for each ISCED level. ■

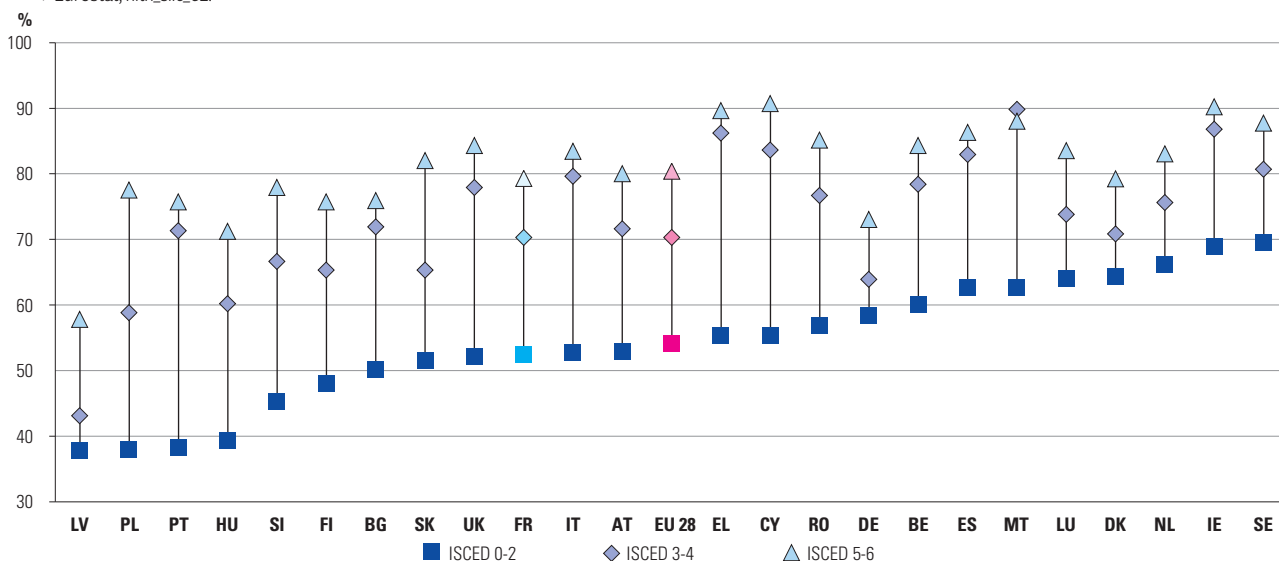
6.5.1 et 6.5.2 Life expectancy at birth and Healthy life years by in 2014

↳ Eurostat, *hlth_hlye*.



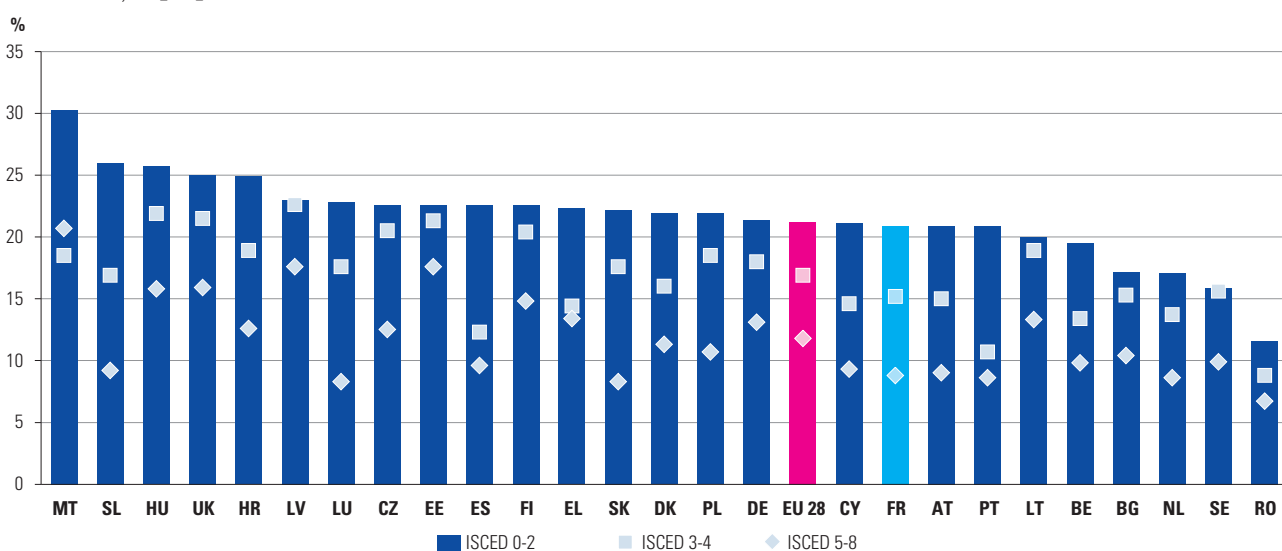
6.5.3 Proportion of the population in good or very good health among the 15 years old or over by educational attainment level in 2013

↳ Eurostat, *hlth_silc_o2*.



6.5.4 Proportion of the population with obesity among the 18 years old or over by educational attainment level in 2014

↳ Eurostat, *hlth_ehis_bme*.



Activity

The occupied labour force “in the sense of the ILO” includes the persons (aged 15 years or older) who have worked (even for one hour) in the course of a given week (called reference week), be they salaried, self-employed or helpers in an enterprise or a family operation. It also includes persons who have a job but who are temporarily absent for reasons such as sickness (less than one year), paid leave, maternity leave, industrial dispute, training, bad weather, etc. National servicemen, apprentices and paid interns are included in the occupied labour force.

Activity rate

The activity rate is the ratio between the number of active persons and the corresponding population.

Class size

Class size is calculated by the OECD by dividing the number of students enrolled by the number of classes. Special-needs programs are excluded, as well as sub-groups the regular classroom setting. (def. OECD)

Employment rate

The employment rate of a class of individuals is the ratio of the number of individuals in the class who have a job to the total number of individuals in the class. It can be calculated for the whole population of a country, but is usually restricted to the population of working age (generally defined, for the purposes of international comparison, as persons of between 15 and 64 years of age), or to a sub-category of the population of working age (women aged 25 to 29 years, for example).

Enrolment rate

The enrolment rate is the percentage of young people of a given school age who are schooled, against the total population of the same age.

European Credit Transfer system (ECTS)

ECTS is a credit system is student-centred, based on the learning achievements, the workload and the learning outcomes of a given course or programme. ECTS helps with the planning, delivery and evaluation of study programmes, and makes them more transparent. Greater transparency of learning achievements simplifies mobility through the recognition of studies done in other countries. 60 ECTS credits are the equivalent of a full year of study or work. (def. European Commission)

Formal education

Education that is institutionalized, intentional and planned through public organizations and recognized private bodies and, in their totality, make up the formal education system of a country. Formal education programmes are thus recognized as such by the relevant national educational authorities or equivalent, e.g. any other institution in co-operation with the national or sub-national educational authorities. Formal education consists mostly of initial education. Vocational education, special needs education and some parts of adult education are often recognized as being part of the formal education system. (def. UNESCO)

Full-time equivalent employment

Total number of hours worked divided by the annual average number of hours worked in full-time jobs on a given economic territory.

Gross domestic product (GDP)

An aggregate representing the final result of the production activity of resident production units. The GDP is equal to the sum of the final domestic uses of goods and services (final effective consumption, gross fixed capital formation, variations in stocks) plus exports and minus imports.

Healthy life years (HLY)

Healthy life years, abbreviated as HLY and also called disability-free life expectancy (DFLE), is defined as the number of years that a person is expected to continue to live in a healthy condition. This statistical indicator is compiled separately for men and women, at birth and at ages 50 and 65. It is based on age-specific prevalence (proportions) of the population in healthy and unhealthy condition and age-specific mortality information. A healthy condition is defined as one without limitation in functioning and without disability. The indicator is calculated following the widely used Sullivan method. It is based on measures of the age-specific proportion of population with and without disability and on mortality data. Its interest lies in its simplicity, the availability of its basic data, and its independence of the size and age structure of the population. However, cultural differences in reporting disability can influence the HLY indicator.

Households' disposable income

The disposable income of a household includes the income from its activity (after deduction of social security contributions), the income from its assets, the transfers from other households, and social benefits (including retirement pensions and unemployment benefits), net of direct tax. The median income divides the population in two: 50% of the population earns less, 50% of the population earns more. Using the median instead of the mean allows mitigating the impact of extreme values.

Inactivity

Inactive are conventionally those who are neither in employment (ILO) nor unemployed: young people under 15, non-working students and pensioners, men and housewives, people unable to work, etc.

Income poverty

An individual (or a household) is considered to be poor when living in a household where the standard of living is below the poverty line. The INSEE, like EUROSTAT, measures income poverty in a relative manner. In this approach, the poverty line is determined in relation to the distribution of the standards of living in the whole population. Generally speaking, EUROSTAT and the European countries use a line at 60% of the median of standards of living.

Informal learning

Forms of learning that are intentional or deliberate but are not institutionalized. They are less organized and structured than either formal or non-formal education. Informal learning may include learning activities that occur in the family, in the work place, in the local community, and in daily life, on a self-directed, family-directed or socially-directed basis. (def. UNESCO)

Life expectancy at birth

Life expectancy at birth (or at age 0) represents the mean length of life of a synthetic cohort exposed at each age to the mortality patterns of a given year. It is a measure of mortality that is independent of the effects of age structure. Life expectancy at birth is a particular case of life expectancy at age x , which represents the mean number of remaining years of life beyond age X , under the mortality conditions of the year in question.

Migration balance

The migration balance is the difference between the number of persons having entered the territory and the number of persons having left the territory in the course of the year. This concept is independent of nationality.

Natural balance

The natural balance is the difference between the number of births and the number of deaths recorded over a period.

Neither in employment, education or training (NEET)

NEETs (Neither in Employment nor Education and Training) are defined as people either unemployed or inactive as defined by the ILO, who do not continue their initial studies and who state that they have not been in formal or non-formal education in the four weeks prior to the survey.

Non-formal education

Education that is institutionalized, intentional and planned by an education provider. The defining characteristic of non-formal education is that it is an addition, alternative and/or a complement to formal education within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all. It caters for people of all ages, but does not necessarily apply a continuous pathway-structure; it may be short in duration and/or low intensity, and it is typically provided in the form of short courses, workshops or seminars. Non-formal education mostly leads to qualifications that are not recognized as formal qualifications by the relevant national educational authorities or to no qualifications at all. (def. UNESCO)

Overcrowding rate

The dwelling occupancy indexes characterise the occupancy level of the dwelling by comparing the number of rooms it has with a number of rooms that is considered necessary for the household. Their definition depends on the way we combine the number of available rooms, the degree of intimacy which have the occupants of the housing and the available surface per person. A dwelling that has fewer available rooms than inhabitants is generally considered as over-crowded, depending on the norms.

PISA performance level groups

PISA's proficiency levels are not built ex-ante but ex-post, based on the results. The range of scores (maximum value - minimum value) is divided by a defined number of groups. From this result are given thresholds that constitute the proficiency levels. A required level of skills, knowledge and field understanding is tied to each level. The student is assigned to a level according to his/her score, which corresponds to him/her a probability of success to items linked to this level of at least 50%. According to the OECD: "level 2 is considered the baseline level of proficiency that is required to participate fully in modern society."

Purchasing power parity (PPP)

Purchasing power parity (PPP) is a money conversion rate used to express the purchasing powers of different currencies in common units.

Purchasing power standard (PPS)

Purchasing power standard is an artificial common reference currency unit used in the European Union which eliminates the differences of price levels between countries. So, a PPS allows to buy the same volume of goods and services in all the countries.

Ratio of students to teaching staff

The ratio of students to teaching staff is obtained by dividing the number of full-time equivalent students at a given level of education by the number of full-time equivalent teachers at that level and in similar types of institutions. (def. OECD)

Risk of poverty or social exclusion

A person is deemed to be at risk of poverty or social exclusion when they live in a household faced with at least one of the following three scenarios: an equivalised income below the income poverty threshold, inability to afford at least four or more items from a list of nine essential requirements, household living in a (quasi-)jobless household.

School expectancy

School expectancy or the probable length of education is defined by Eurostat as the number of education years—including tertiary education—that a person can expect to receive in their lifetime. It is calculated annually by adding the enrolment rates observed in the given year to each period of life.

Slack work

When a company reduces its activity below the legal hours or periodically stops all or part of its activity and is not planning to break the employment contracts that bind it to its employees, it may resort to slack work. The slack work compensation system makes it possible to manage an occasional drop in activity that is limited over time and has the civil year as its framework.

Social equity in student performance

Many indicators exist in PISA to measure the impact of the social and economic background of a student on his/her performance (S. Keskipaik et T. Rocher (2011), "Pour une mesure de l'équité dans PISA: pour une décomposition des indices statistiques", *Éducation et Formations* n°80, MENESER-DEPP). In the figure 5.5.2, the one that was used is the Percentage of variation in performance explained by the ESCS index. It gives a measure of the "strength" of the link between performance and socio-economic background; it indicates to what extent is the performance of a student predictable when accounted for his/her background.

Total fertility rate

Total period fertility measures the number of children a woman would have in the course of her life if the fertility rates observed at each age in the year in question remained unchanged. It should not be forgotten that it is a synthetic benchmark in which the rates used are those observed over a given year for the whole female population (composed of several generations) and therefore do not represent the rates for an actual generation of women.

Unemployment

In application of the international definition adopted in 1982 by the International Labour Organisation (ILO), an unemployed person is a person of working age (15 or over) who meets three conditions simultaneously: being without employment, meaning having not worked for at least one hour during the reference week; being available to take up employment within two weeks; having actively looked for a job in the previous month or having found one starting within the next three months.

Unemployment rate

The unemployment rate is the percentage of unemployed people in the labour force (occupied labour force + the unemployed). An unemployment rate per age can be calculated by calculating the ratio of the unemployed persons in an age group to the labour force of the said age. The unemployment rate is different from the share of unemployment which measures the proportion of unemployed people in the population as a whole.

Education at a Glance (EAG)

Created by the OECD at the beginning of the 90's, Education at a Glance is the main statistical publication of the OECD in education. These indicators look into the participation in education (access to education, participation rates to each ISCED level, distribution between public and private institutions, fields of study in tertiary education, etc.); on results (diplomas and titles success); on resources and teaching methods that influence these results (invested budgets, instruction time, teachers, salaries, etc.); and finally the returns of education (professional integration, income by ISCED level, etc.). Gender inequality data hold an ever growing place. Many of these indicators come from a joint data collection made by three international institutions: the UNESCO, the OECD and Eurostat (UOE joint data collection).

European Health Interview Survey (EHIS)

Health interview surveys offer comprehensive data on the health status of a population and health-related topics based on answers by respondents of a representative sample of the population. EHIS covers the following topics: Health status (self-perceived health, chronic diseases, accidents, etc.); Health determinants (smoking and alcohol consumption, body weight, etc.); Health care (use of health care services and use of medicines, but also unmet needs for health care). EHIS is used as a data source for important health and social policy indicators such as the European Core Health Indicators (ECHI) or indicators of the health and long-term care strand developed under the Open Method of Coordination on social protection and social inclusion (EU social indicators).

European Statistics on Income and Living Conditions (EU-SILC)

The EU statistics on income and living conditions, abbreviated as EU-SILC, is the reference source for comparative statistics on income distribution and social inclusion in the European Union (EU). EU-SILC is a multi-purpose instrument which focuses mainly on income. Detailed data are collected on income components, mostly on personal income, although a few household income components are included. However, information on social exclusion, housing conditions, labour, education and health information is also obtained. The reference population in EU-SILC includes all private households and their current members residing in the territory of the countries at the time of data collection.

European Labour Force Survey (EU-LFS)

A labour force survey, abbreviated as LFS, is an inquiry directed to households, designed to obtain information on the labour market and related issues through a series of personal interviews. The European Union (EU) LFS covers all citizens living in private households and excludes those in collective households, such as boarding houses, residence halls and hospitals. The definitions used are common to all EU Member States and are based on international recommendations by the International Labour Organization (ILO).

Eurydice

Eurydice, an information network of the European Union, was created in 1980, and is part of the "Education, Audiovisual and Culture" Executive Agency. The network, which regroups 42 national units based in 38 countries participating in the programme regarding education and life-long learning (28 Member States, Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Iceland, Liechtenstein, Montenegro, Norway, Serbia, Switzerland and Turkey), is centered around the mutualisation of information regarding education systems and policies, as well as the production of comparative studies and indicators.

Minimum European Health Module (MEMH)

The Minimum European Health Module (MEHM) is a set of three general questions characterizing three different concepts of health: Self-perceived health ("How is your health in general? Is it..." with answer categories Very good / Good / Fair / Bad / Very bad); Chronic morbidity ("Do you have any longstanding illness or health problem?" Yes / No); Activity limitations due to health problems ("For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do? Would you say you have been ..." with answer categories "severely limited / limited but not severely or / not limited at all?"). The module was developed to be used in all social surveys and is at present implemented in the EHIS and EU-SILC.

Programme for International Assessment of Adult Competences (PIAAC)

PIAAC (Programme for International Assessment of Adult Competences) is an international survey by the OECD that seeks to measure, through a range of items, the literacy and numeracy skills of the 16 to 65 year-old population. Literacy represents the ability to understand and use information from written texts in a variety of contexts. It comprises a range of skills, from the coding of words and sentences to the comprehension. Numeracy is defined as the ability to use, apply, interpret, and communicate mathematical information and ideas. The initial findings (PIAAC 2012, done in 24 countries, including 16 European ones) were published in October of 2013.

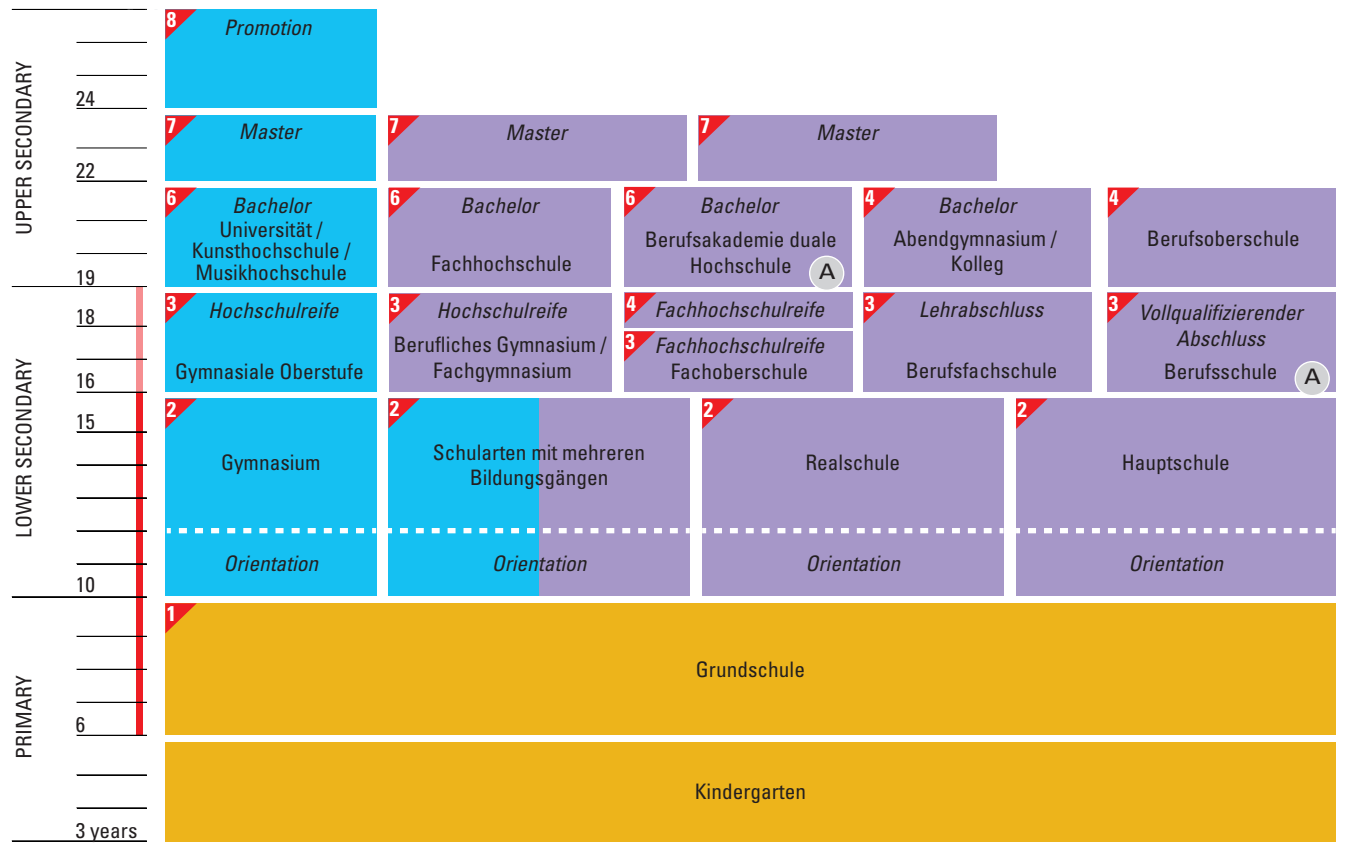
Programme for International Student Assessment (PISA)

Every three years since 2000, the PISA survey (Programme for International Student Assessment), under the authority of the OECD, assesses the skills of 15-year-old students in three subjects, i.e. writing, mathematics and scientific literacy. PISA is aimed at the age group that arrives at the end of compulsory education in most of the OECD countries, whatever their past and future educational careers. In France this mostly means students in 10th grade in *lycée* (general and technological or vocational) and students in 9th grade in *collège* (a quarter of the students for PISA 2012). Students are not assessed on knowledge in the strict sense but on their ability to mobilise and apply their knowledge in a variety of situations, sometimes removed from those encountered in the educational framework.

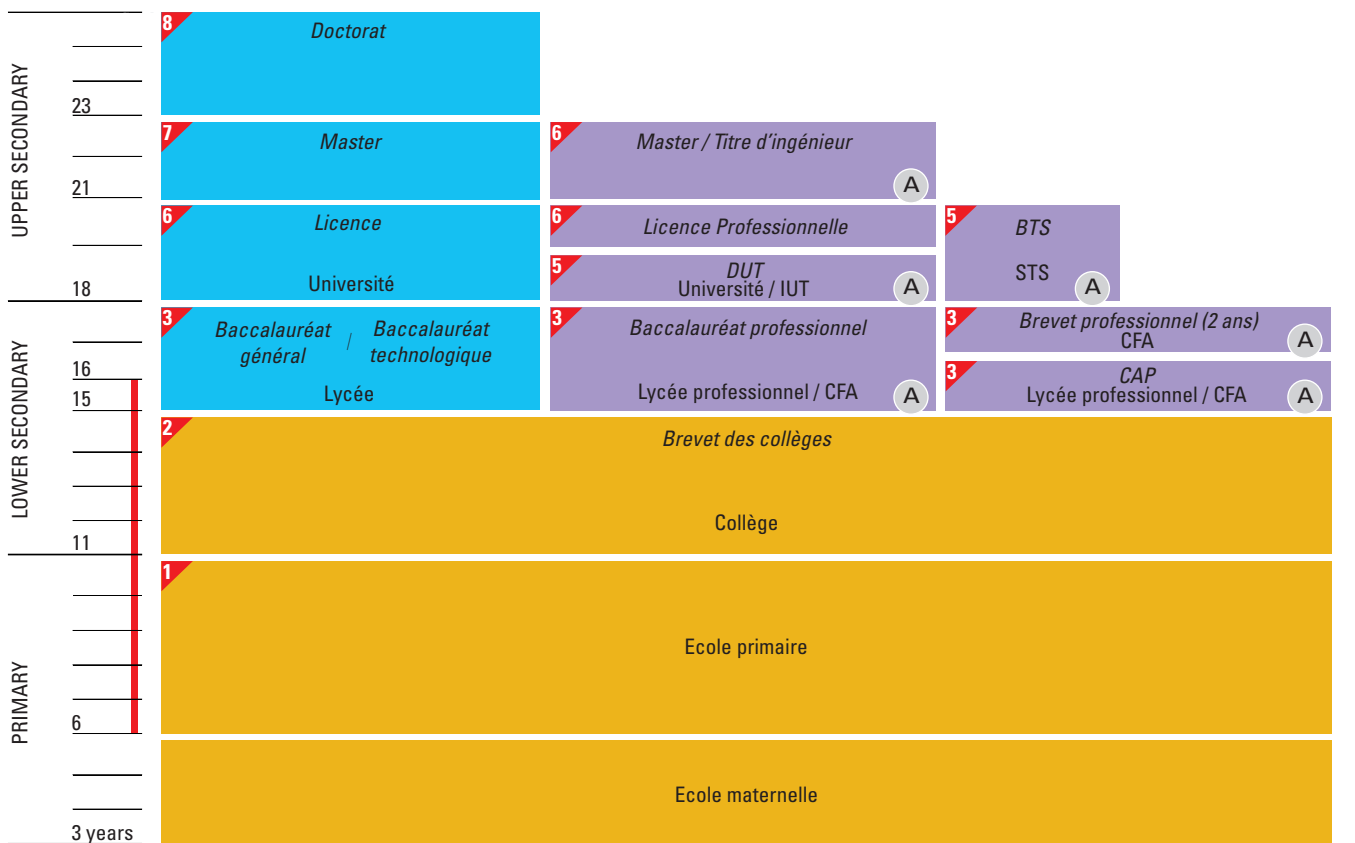
Teaching and Learning International Study (TALIS)

The purpose of the OECD TALIS survey (*Teaching and Learning International Survey*) is to gather declarative data about the learning environments and the working conditions of teachers in lower secondary education institutions (*collèges* in France, ISCED 2). Each country's sample is composed of at least 20 teachers from 250 institutions (public and private) as well as the heads of these institutions. Some countries extended the survey to include teachers and school heads of primary and upper secondary education.

2.1.1 The German education system



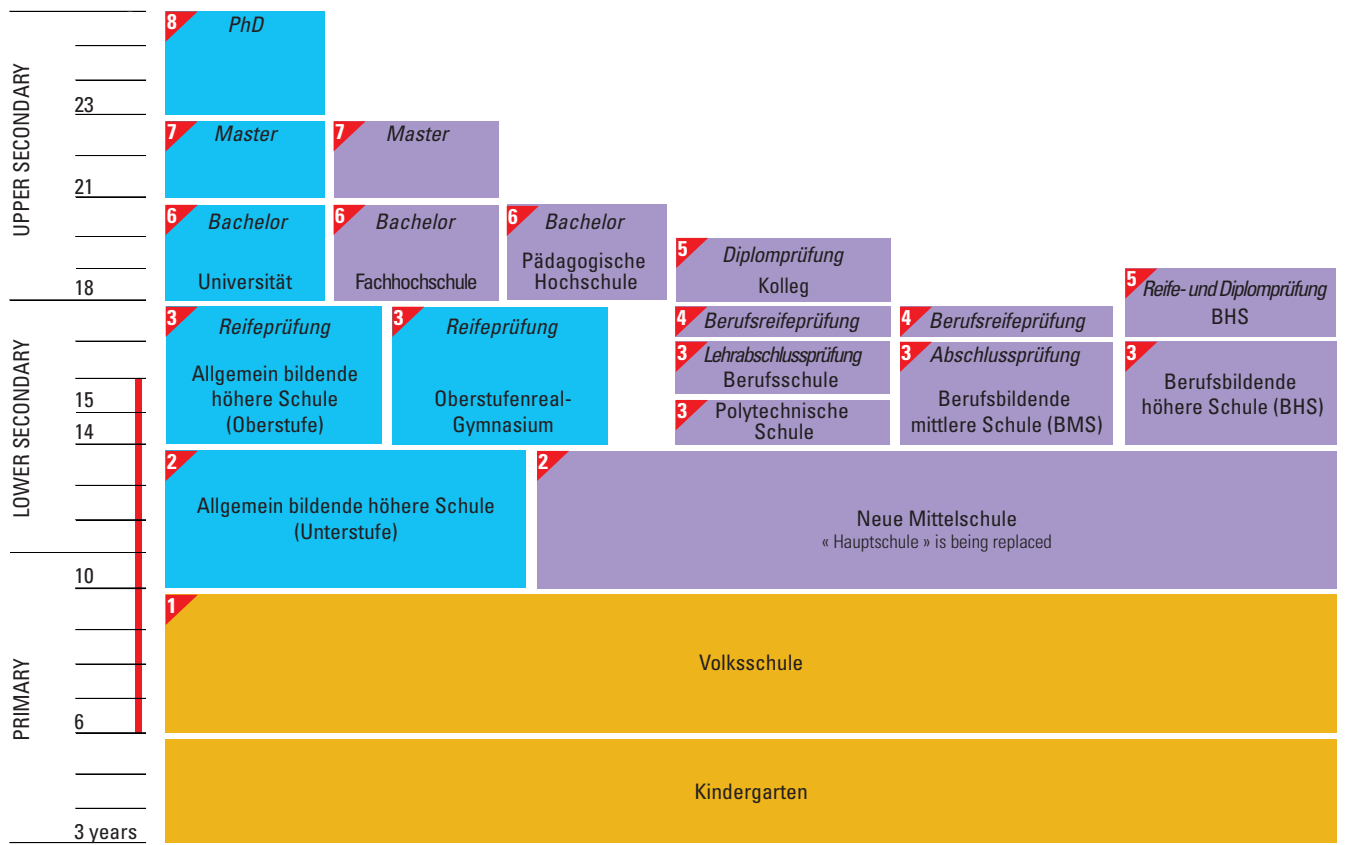
2.1.2 The French education system



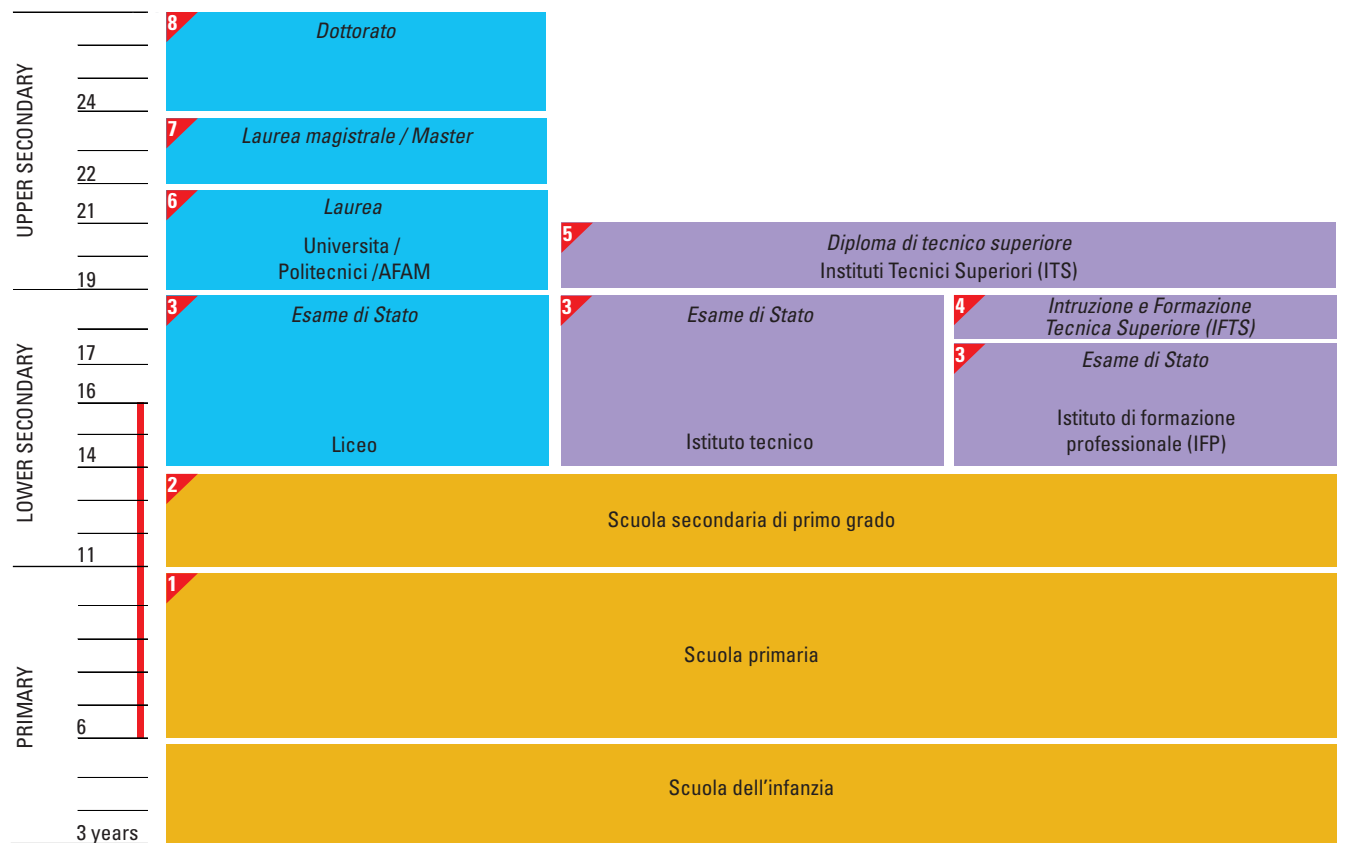
- Full-time compulsory education
- ▬ Part-time compulsory education
- A Apprenticeship available
- Common core curriculum
- General stream
- Vocational stream



2.1.3 The Austrian education system

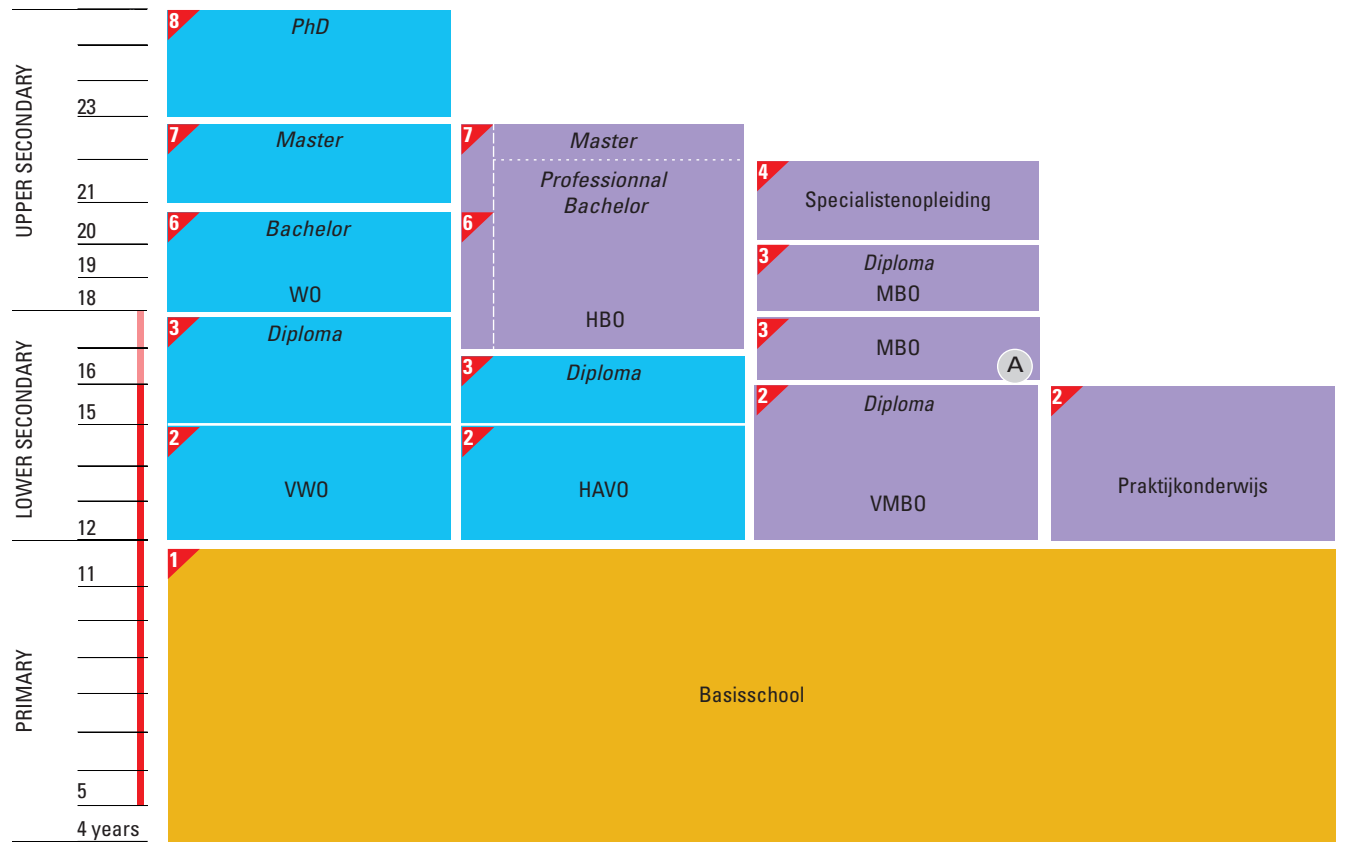


2.1.4 The Italian education system

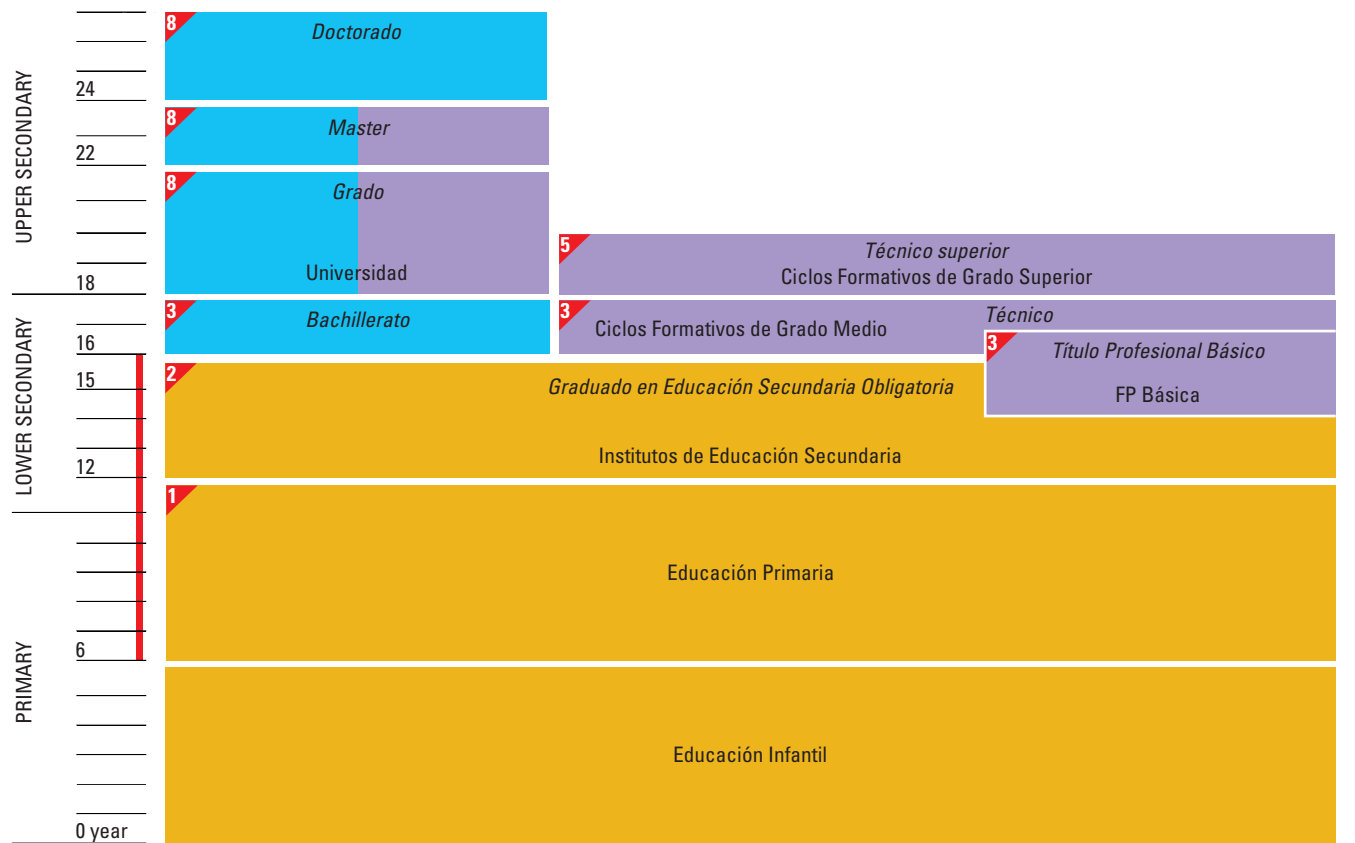


- Full-time compulsory education
- Common core curriculum
- ▲ ISCED
- Part-time compulsory education
- General stream
- A Apprenticeship available
- Vocational stream

2.1.5 The Dutch education system

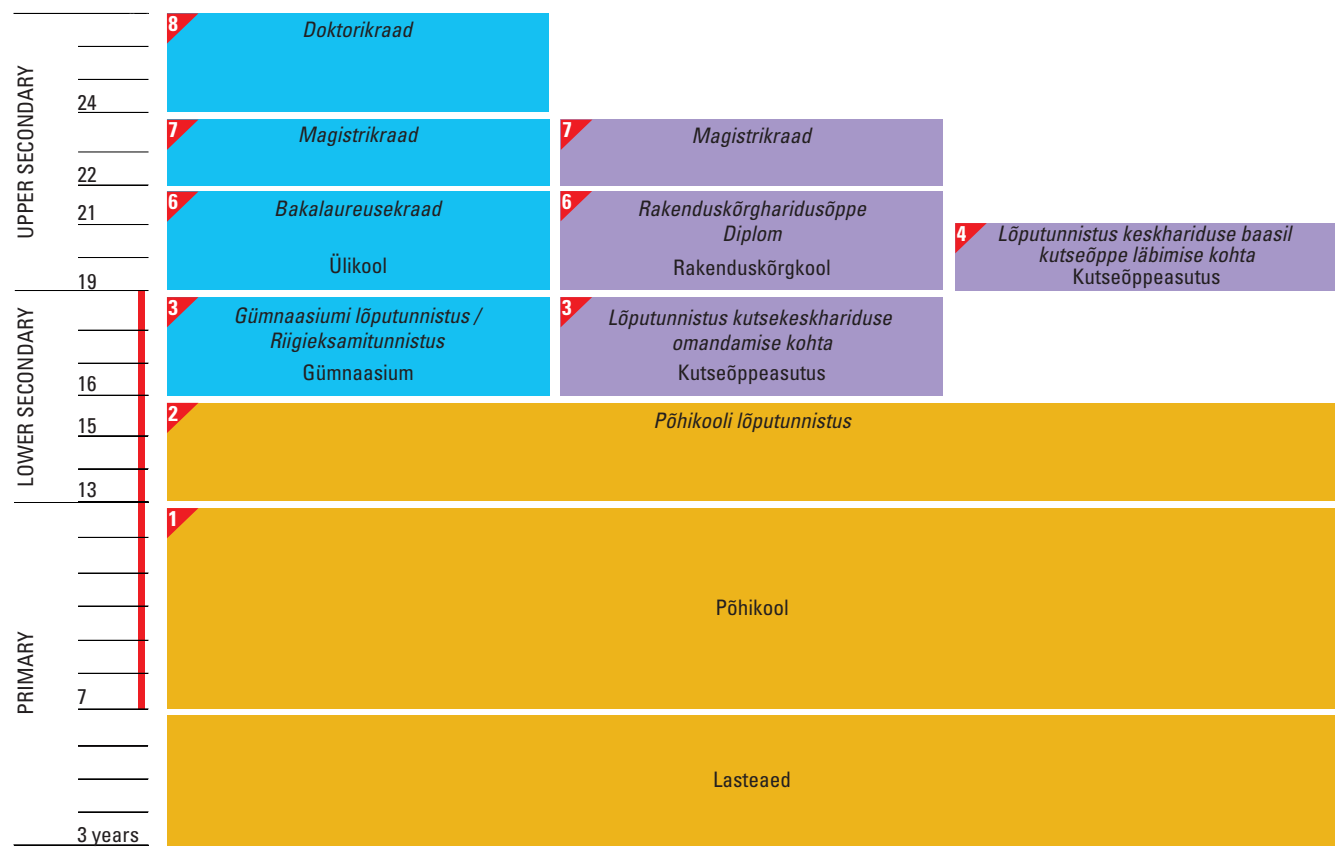


2.1.6 The Spanish education system

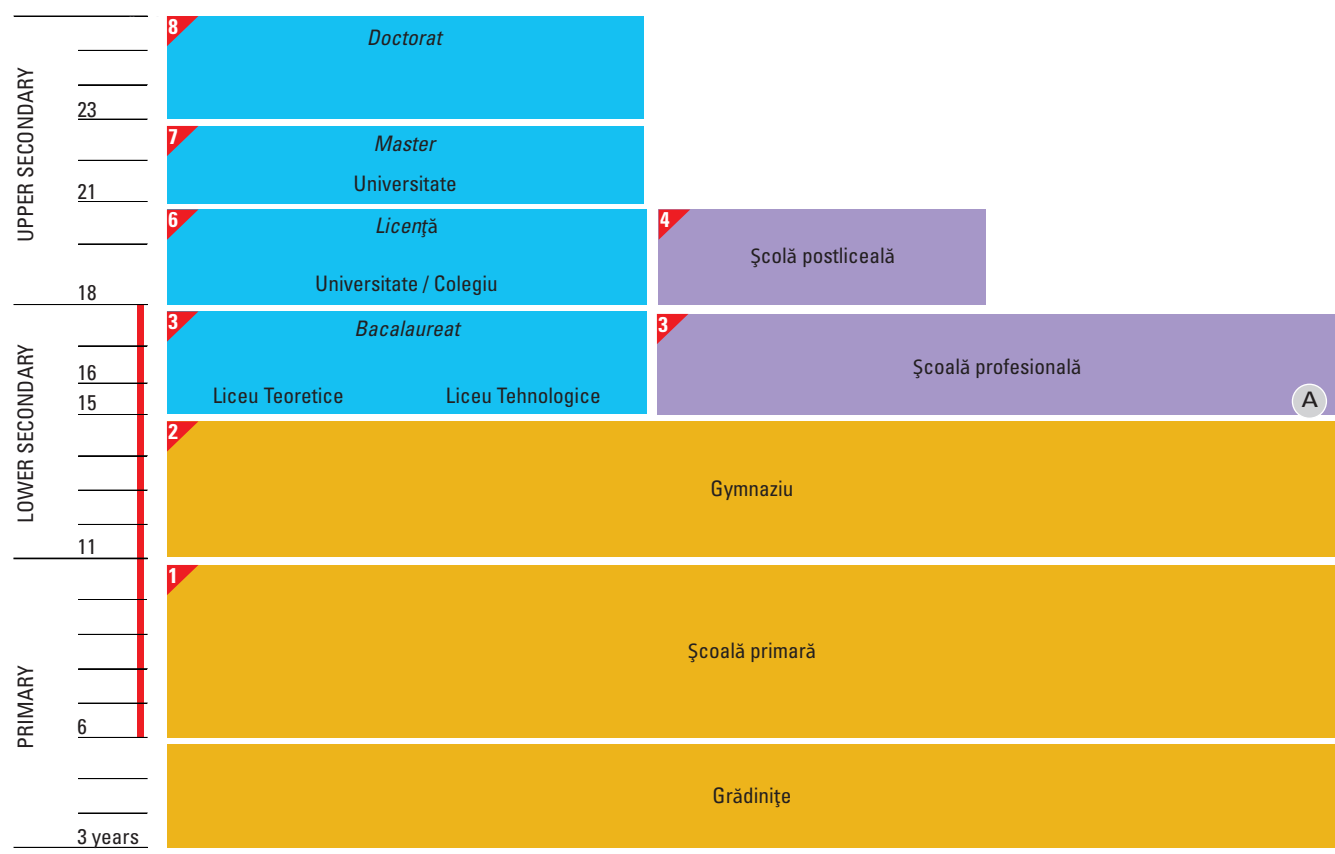


- Full-time compulsory education
- Part-time compulsory education
- A Apprenticeship available
- Common core curriculum
- General stream
- Vocational stream
- ▲ ISCED

2.2.1 The Estonian education system

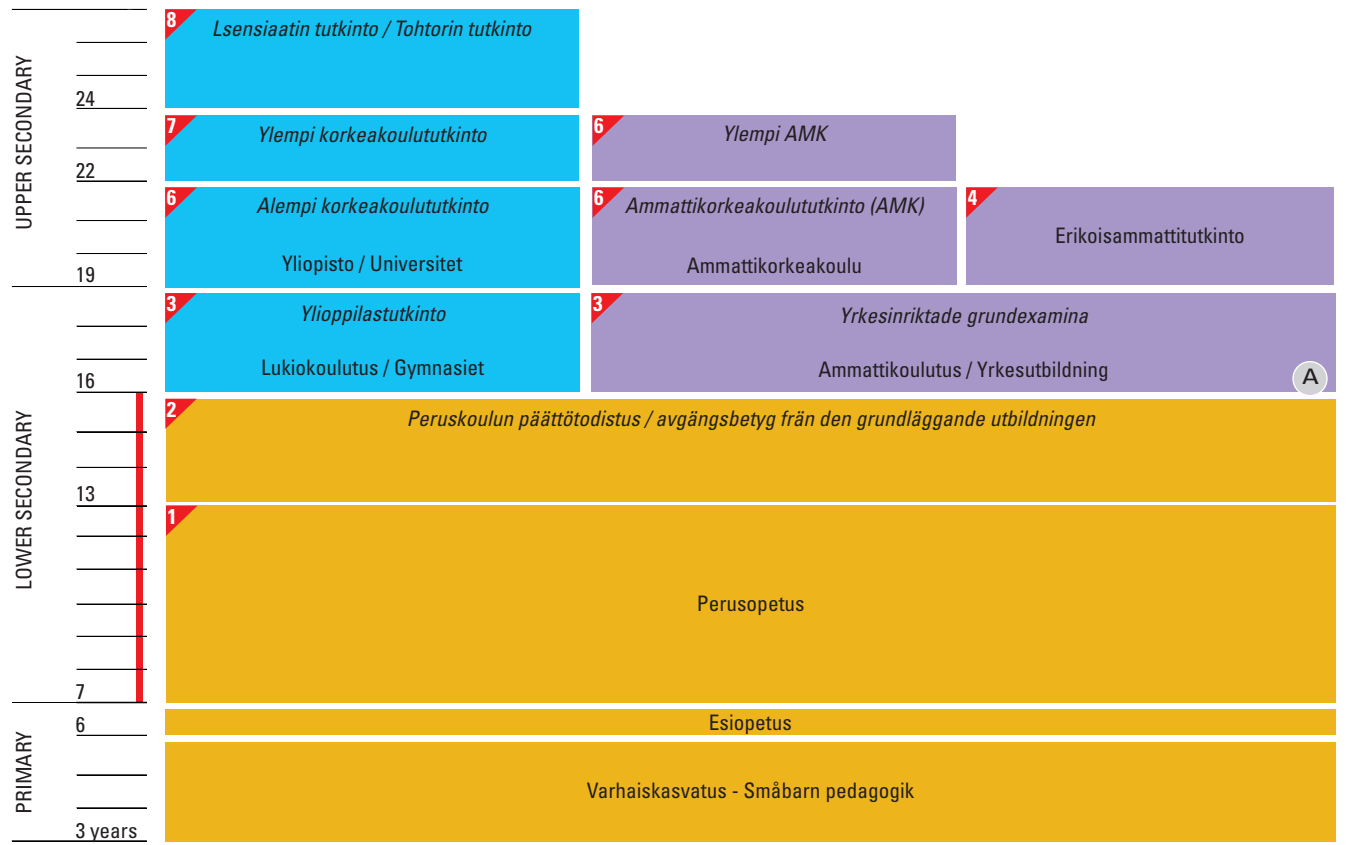


2.2.2 The Romanian education system

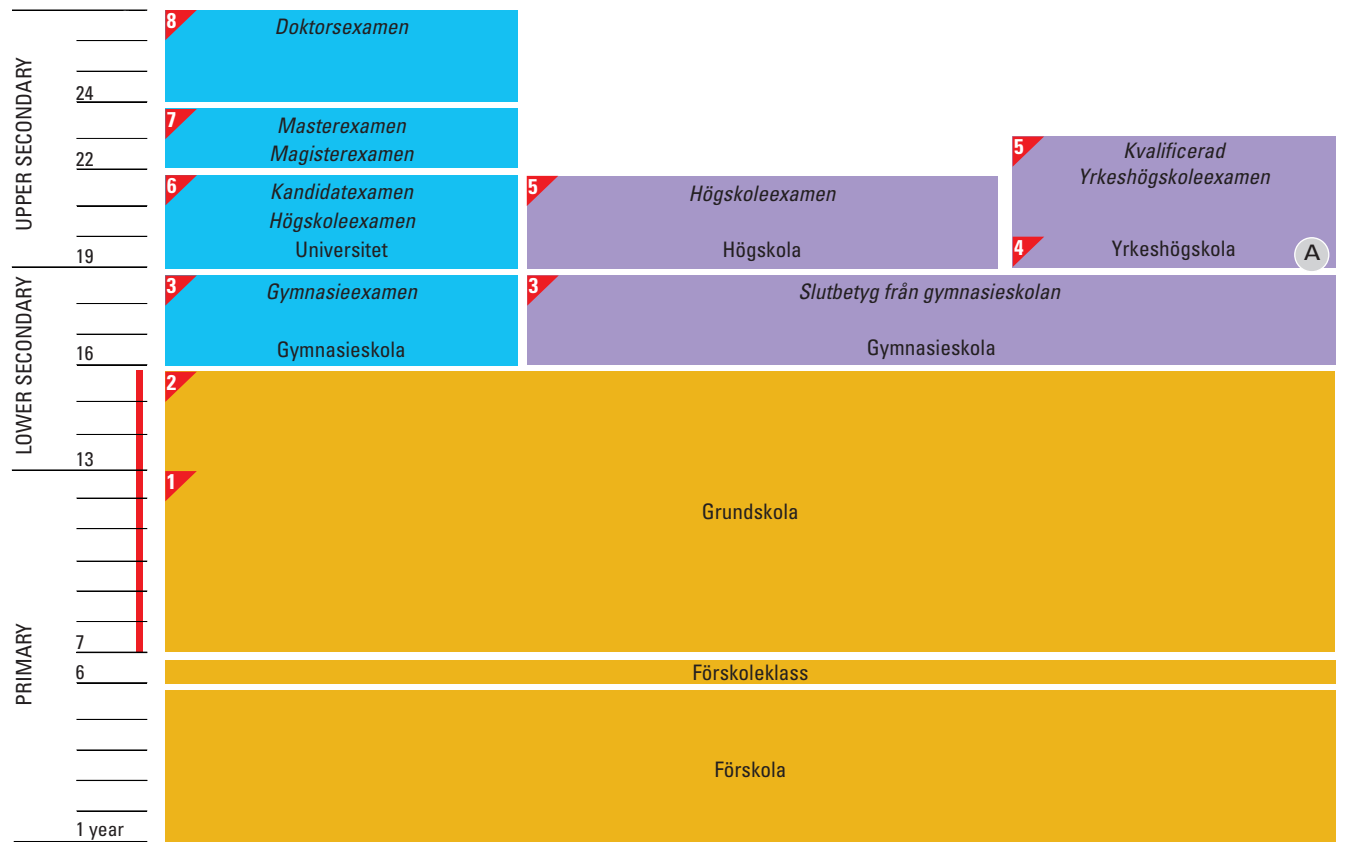


- Full-time compulsory education
- Common core curriculum
- ▴ ISCED
- Part-time compulsory education
- General stream
- A Apprenticeship available
- Vocational stream

2.2.3 The Finnish education system

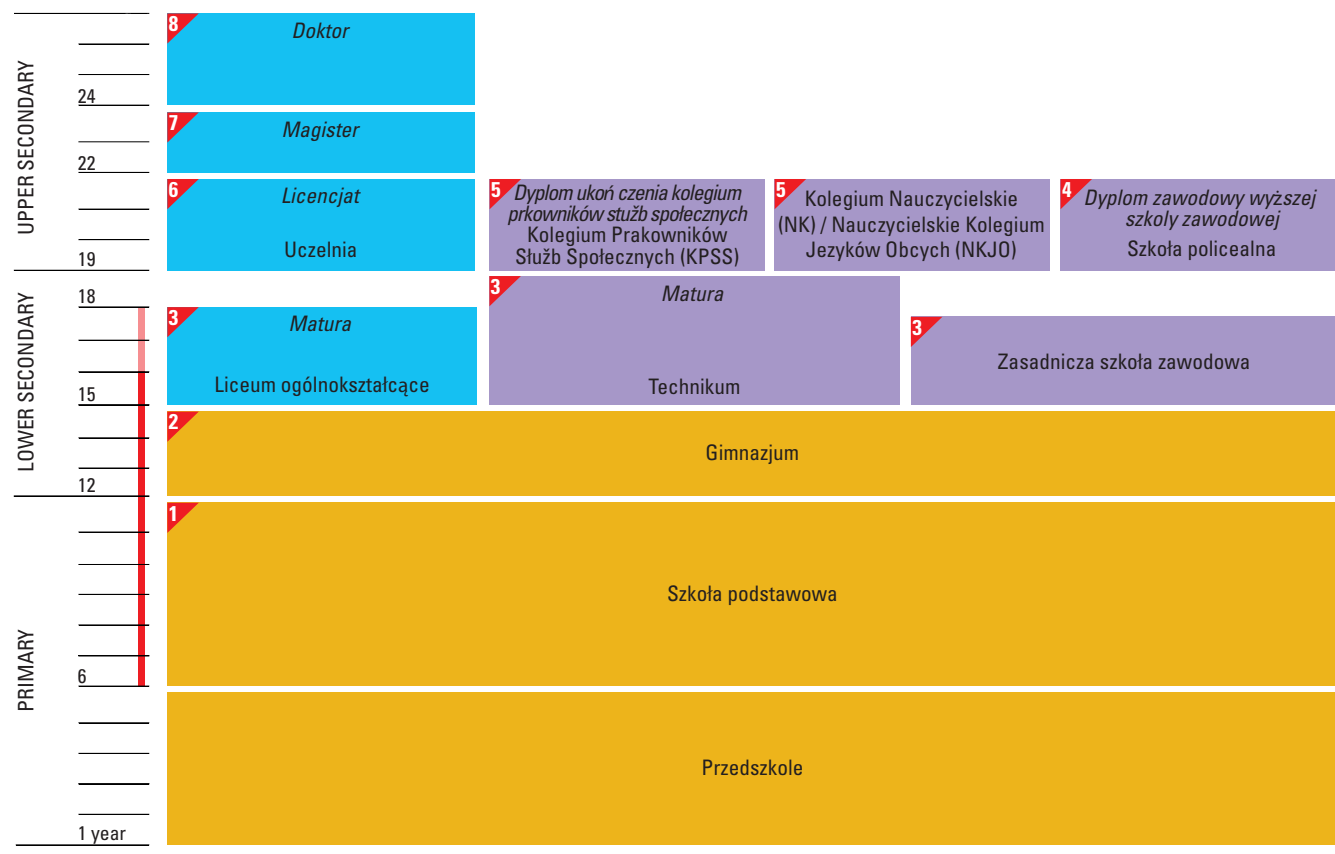


2.2.4 The Swedish education system

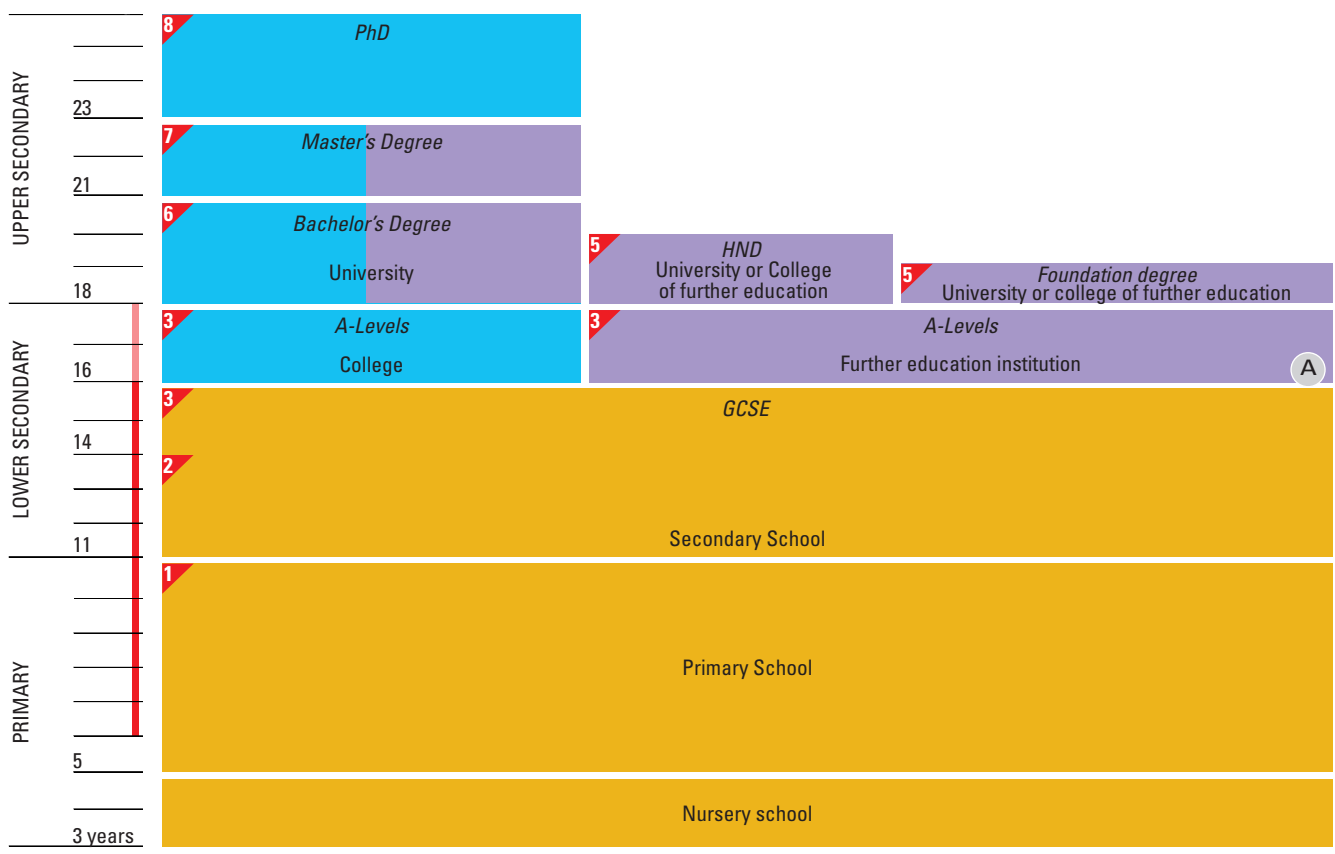


- ▬ Full-time compulsory education
- ▬ Part-time compulsory education
- A Apprenticeship available
- Common core curriculum
- General stream
- Vocational stream
- ▴ ISCED

2.2.5 The Polish education system

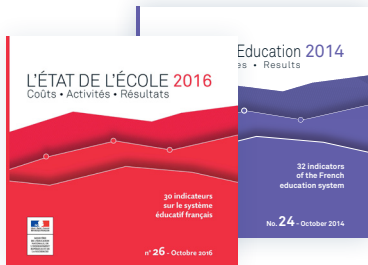


2.2.6 The English education system



- Full-time compulsory education
- Part-time compulsory education
- A Apprenticeship available
- Common core curriculum
- General stream
- Vocational stream
- ▲ ISCED

The French Ministry of National Education, Higher Education and Research takes part in the public debate on the French education and training systems. It insures access to the statistical information it publishes. It provides analysis reports. It issues publications that provide up-to-date data in order to improve the understanding of the how the education system works and its results.



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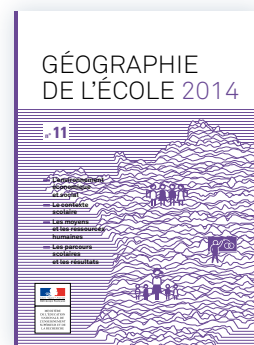
BILAN SOCIAL (2014) This publication gives a broad look of all teaching and non-teaching staff in the Ministry of national Education, Higher Education and Research, and provides a wide range of indicators that are useful for steering policies in human resources of the ministry.

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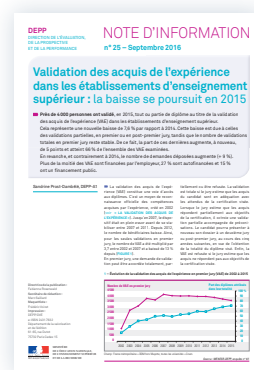
NOTE D'INFORMATION

Take stock of one of the recurrent or isolated aspects of the education system and gives essential data of the latest surveys and studies in synthetic and clear form.

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📅 40 to 50 notes per year.



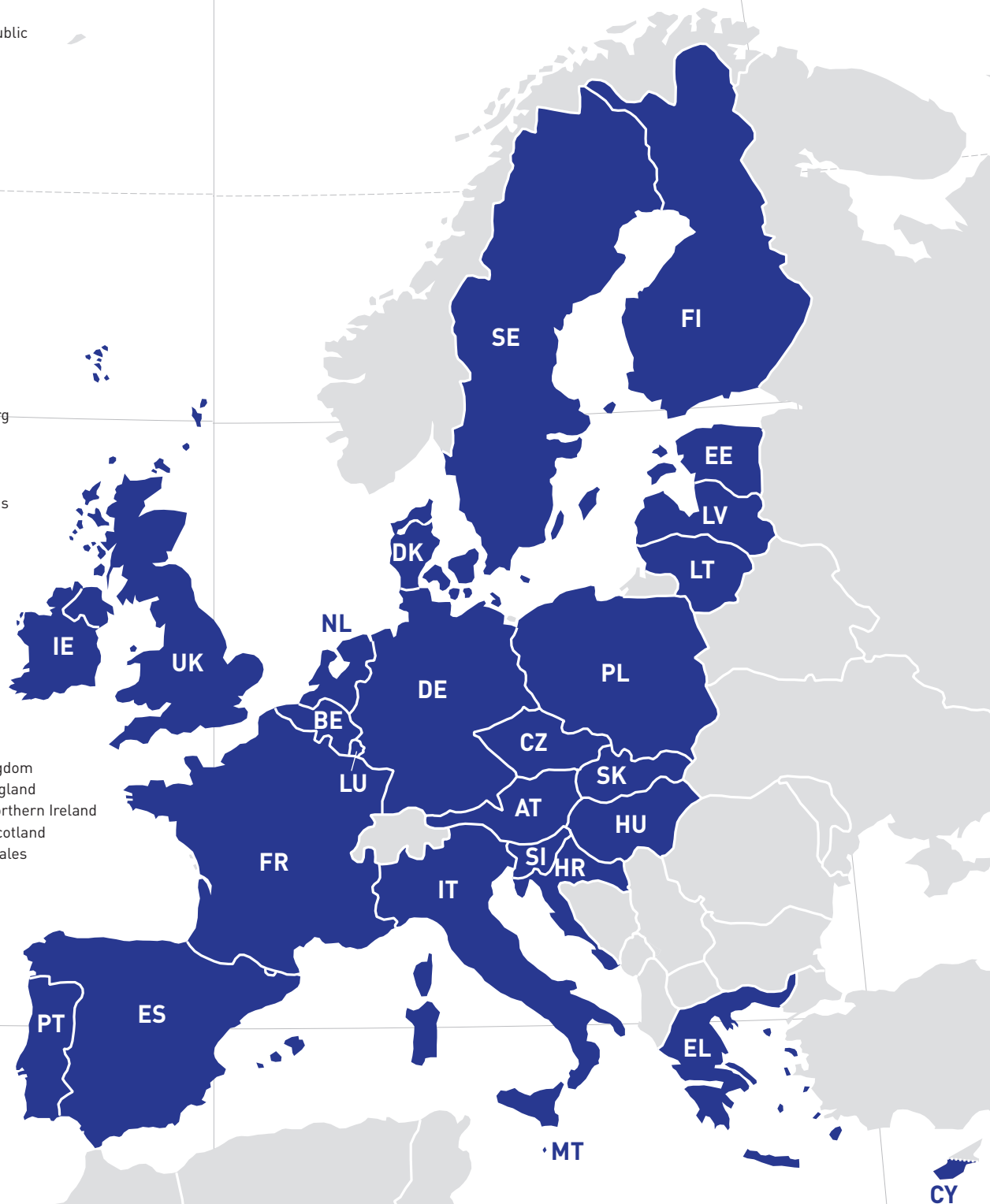
ATLAS DES RISQUES SOCIAUX D'ÉCHEC SCOLAIRE : L'EXEMPLE DU DÉCROCHAGE This publication provides an analysis of the factors that have an influence academic success as well as school leaving, with a closer look on each *académie*. The publication starts with a methodological guide, and is illustrated with maps and charts.

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EDUCATION IN EUROPE: KEY FIGURES

2016

Education in Europe: Key figures targets a large audience that provides around sixty statistical indicators that have been gathered for the first time by the DEPP. Through 30 factsheets including texts, methodological focuses, graphs, tables and maps, the publication puts data forward on

- 1 demographic, economic and social contexts surrounding students and their families;
 - 2 European education systems' diversity;
 - 3 education expenses, the cost of a student or even registration fees in higher education;
 - 4 European teaching staff' characteristics;
 - 5 comparative results of education systems, in terms of performance or equity;
 - 6 the influence of the education or training level on careers, income or even the individuals' health itself.
- An annex gathers definitions and sources. The publication is also available in French.

Florence Lefresne, Head of the European and International Relations Unit (MIREI) at the DEPP.

Yann Fournier, research analyst in the European and International Relations Unit (MIREI) at the DEPP.

The MIREI (European and International Relations Unit) is in charge of the coordination of the European and international activities of the DEPP. It manages comparative studies on education systems and policies in education. It also fully takes part in many comities of the OECD, the European Commission and the UNESCO. It finally is the French correspondent of Eurydice, a European network that provides information on education in Europe.



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