

## QUALITY AND RELEVANCE OF EDUCATION AND TRAINING

The quality and relevance of education and training is a critical factor for generating **smart growth** — training the staff needed for research, development and innovation and providing a highly productive and adaptable workforce. It is also instrumental for **sustainable growth** to offset the impact of demographic ageing on the workforce by increasing employability and reducing skills mismatches. Facilitating the access to quality education and training is crucial to achieving **inclusive growth** by breaking the transmission of poverty from one generation to the next through higher employability. This requires, in particular, tackling the problem that almost 20% of young people and a vast number of adults lack the most **basic skills**, which renders them effectively non-employable.

To boost **growth and jobs** and to prevent skills bottlenecks and shortages, education and training systems have to **deliver quality**; they have to equip people with skills that pave the way for a **smooth transition to the labour market**; and, what's more, a more pro-active management of **skills supply** can drive innovation, create new markets and induce the emergence of dynamic growth sectors.<sup>1</sup>

### 1. Key statistical indicators

In addition to the Europe 2020 headline target for educational achievement, the following key indicators can help to assess the **quality and relevance of education and training** in the Europe 2020 context: the share of low achievers in basic skills, adult participation in lifelong learning and the share of those completing education and training who are in employment. These indicators correspond to three benchmarks that have been established under the Strategic Framework for European cooperation in education and training ('ET 2020').<sup>2</sup>

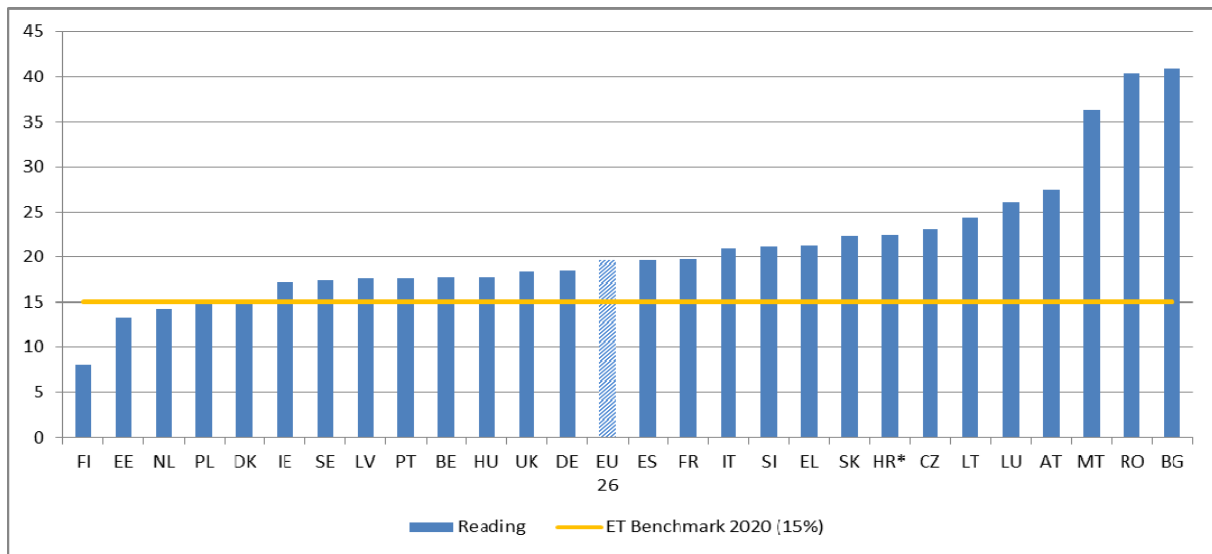
(1) A key indicator for the quality of an education and training system is its capacity to equip all citizens with basic skills. In view of the long-term trend towards increasingly higher skills requirements on the labour market, the risk of unemployment is bound to increase further for persons lacking even basic skills. Failing to reach a minimum level of basic skills often also leads to social exclusion and limits the ability to continue learning and updating skills over a lifetime. In a large share of EU countries, there is still a very high proportion of "**low achievers**" in basic skills, and only three Member States have reached the benchmark of no more than 15% low achievers in reading, mathematical and scientific literacy (see graph below).

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<sup>1</sup> See also "Re-thinking Education - Investing in skills for better socio-economic outcomes", COM(2012)669 final

<sup>2</sup> OJ C 119 of 28.5.2009. The benchmark on the employment rate of graduates from education and training has been set up by the Council in May 2012.

### Percentage of low achievers in reading (15 year olds, %), 2009



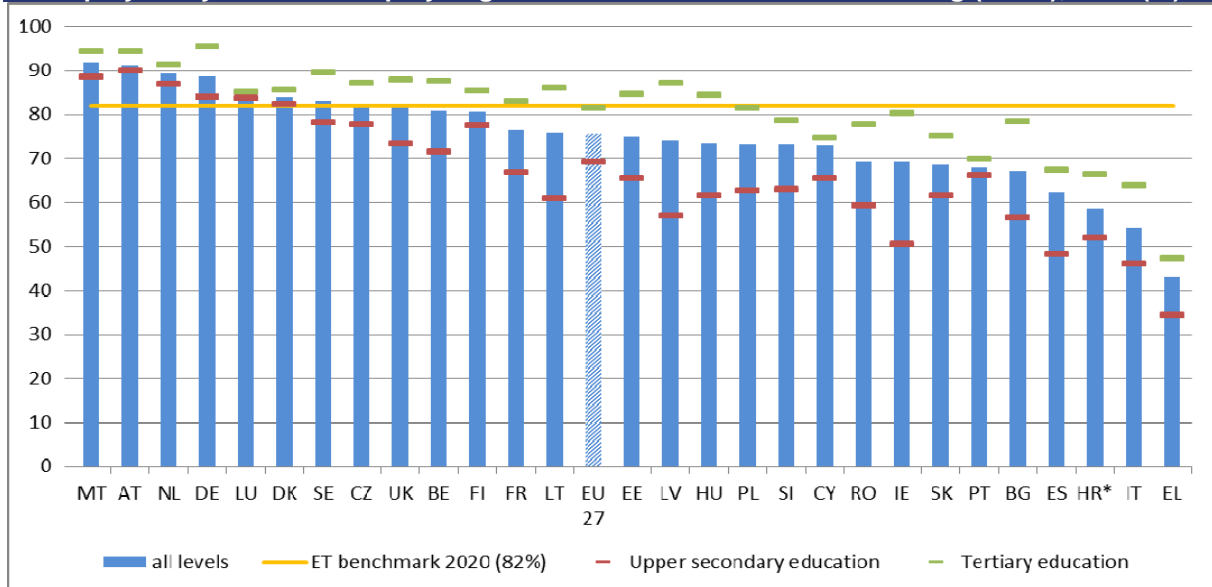
Data source: OECD (PISA).

\* Accessing country – Not included in the EU average

Under the open method of coordination in the field of Education and Training ('ET 2020'), Member States agreed on a benchmark where the share of low-achieving 15-years old in reading, mathematics and science should be less than 15% by 2020. Currently the share of low achievers (data for 26 EU countries) amounts to 19.6% in reading, 22.2% in mathematics and 17.7% in science.

2) Another key question is whether education and training systems are in tune with labour market conditions and skills needs, and equip people with relevant skills that ensure their **employability**. While many factors influencing employability lie beyond the scope of education and training policy (labour market regulations, trends in the overall economic situation, etc.), education and training policies prepare the ground for a smooth transition from education to employment by equipping young people with relevant knowledge, skills and attitudes.

### Employability: Share of employed graduates from education and training (20-34), 2012 (%)



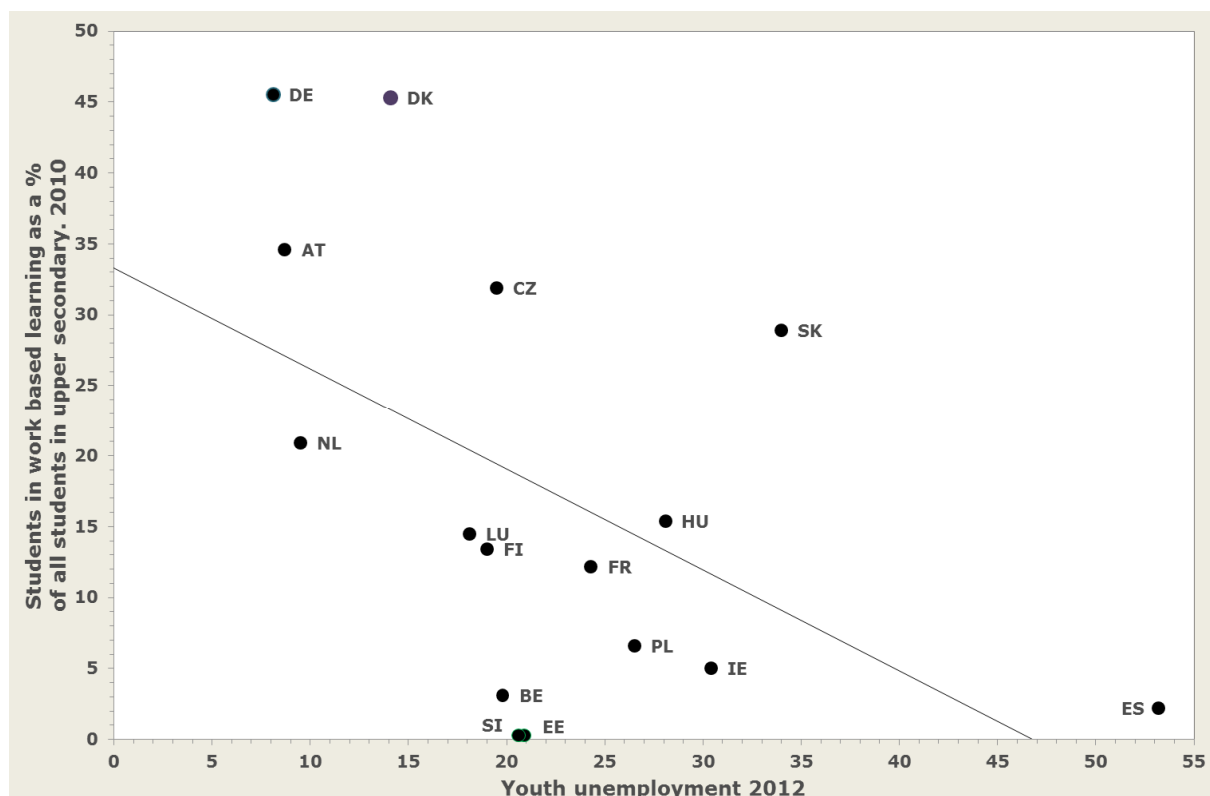
Data source: CRELL, based on Eurostat (LFS)

\* Accessing country

The benchmark indicated in the chart has been adopted by the Council in May 2012. The benchmark of 82 % is to be achieved by 2020. In 2012, the EU27 average amounted to 75.6%.<sup>3</sup>

A particular potential to facilitate transitions from school to work is demonstrated by **vocational education and training (VET)**, notably when it comprises work-based elements. Across the EU there is a positive correlation between participation in work-based learning and youth employment.

### Participation in upper-secondary work-based learning and youth unemployment



Data source: UOE data collection and Eurostat LFS

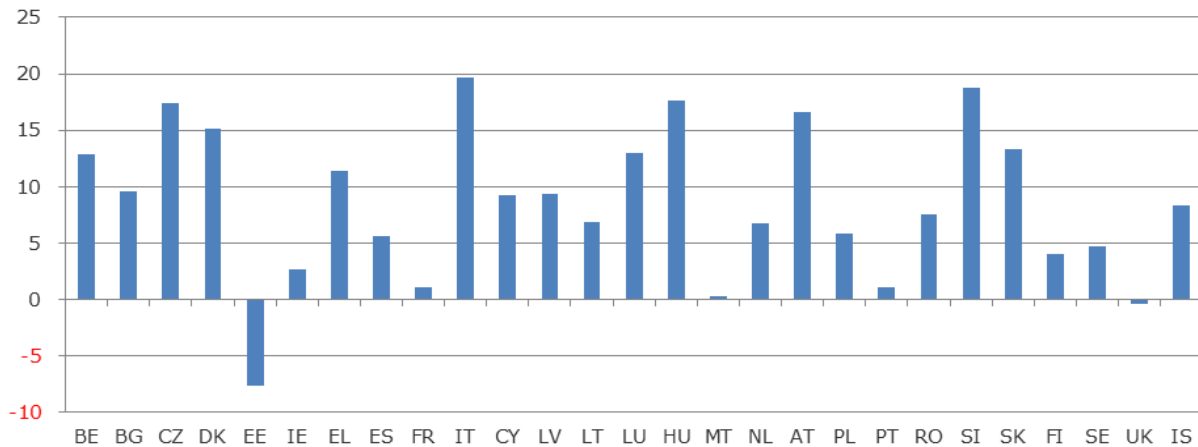
In the UOE data collection, a VET programme is classified as "combined work- and school-based" if 25% or more of the curriculum is presented outside the school environment. Programmes where the work-based component accounts for 90% or more of the curriculum are excluded from the UOE data collection.

Based on the UOE meta-data, the category "Combined work- and school-based VET" is not applicable to the educational systems of Bulgaria, Greece, Italy and Portugal. Figures on the category "Combined work- and school-based VET" are very low in Slovenia and Estonia (less than 1%); they are not available in Malta, Romania and the UK. Cyprus reported real zero values. "Combined work and school based VET" has been retrieved elsewhere for the following countries: Sweden (OECD, EAG 2012): negligible; Lithuania (Eurostat, EU\_LFS AHM 2009): important'

The high relevance of VET for the employability of young people is also becoming visible when comparing employment rates of medium-level graduates from VET and from general education. For the vast majority of countries, employment rates of young VET graduates (25-34) are significantly higher than those of their peers and continue to be higher after the first year of professional experience.

<sup>3</sup> The indicator on which the benchmark is based is defined as the share of all young people (aged 20 – 34) who graduated from at least upper secondary education in the last three years who are in employment and who are not currently enrolled in any further education or training activity.

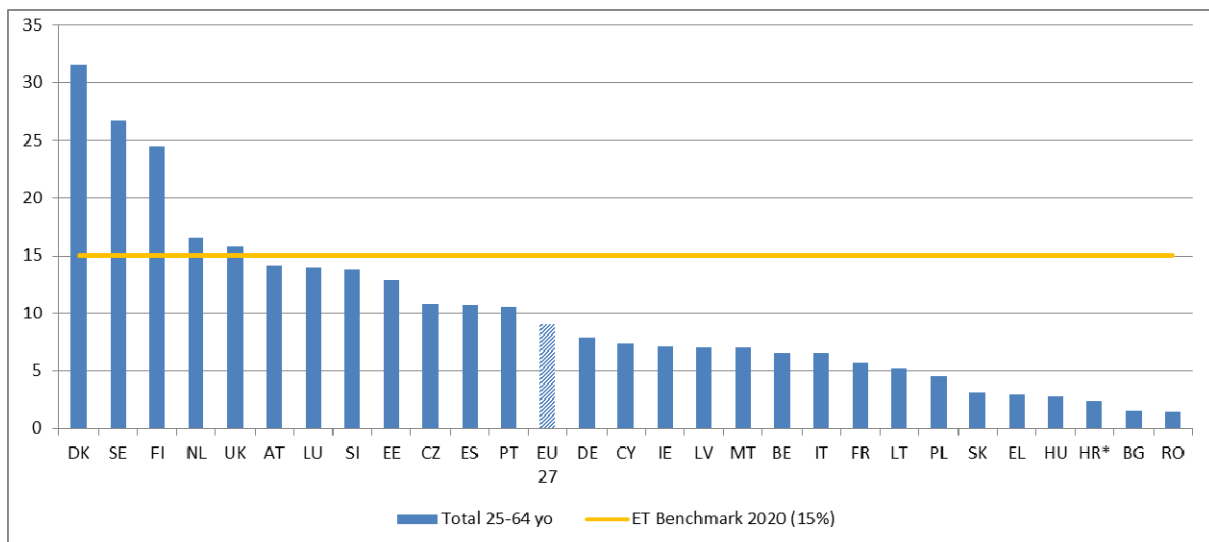
### Employment rates for medium-level graduates from VET as compared to employment rates for graduates from general education, 25-39 year-olds (2009)



Data source: Cedefop, Eurostat (LFS ad-hoc module 2009). Germany, Norway and Switzerland have been excluded from the sample. Positive values mean higher employment rates for VET versus general education, and negative values mean higher employment rates for general education versus VET.

(3) In order to assess the quality of an education and training system, information on basic and initial education and training needs to be complemented by data on the capacity to provide **continuing learning opportunities across working life**. Extensive participation by adults in lifelong learning activities indicates a high commitment to invest in skills upgrading and competence-development throughout the life-cycle. This can be seen as an effective response to challenges such as rapid technological progress, change of professional requirements in the light of globalised markets, more highly skilled work and a shrinking workforce, and is crucial to maintain a productive workforce equipped with relevant skills.

### Participation in adult lifelong learning (population aged 25-64, %), 2012



Data source: Eurostat (LFS)

Under the open method of coordination in the field of Education and Training ('ET 2020'), Member States agreed on a benchmark of 15% to be reached by 2020 (the average performance in 2012 was 9.0%).

## 2. Assessment of the main challenges in the Member States

The PISA results for **low achievers** reveal that about one fifth of the tested 15 year olds cannot read for understanding and an even higher share has insufficient mathematical competence (for details, see annex, tables 1.1 to 1.4). Twice as many boys (26.6%) are poor readers than girls (13.4%). The performance of **Bulgaria, Romania and Malta** — with **more than 35%** of low achievers — is particularly poor; however, the first two are improving. Only the Netherlands, Estonia and Finland meet the benchmark of 15%. While the share of people with migrant background in education systems has increased and is bound to increase further, education systems are not yet adapted to make the most out of diversity. There is a persistent **achievement gap** across the EU between people with migrant background and natives (compare also table 1.4. in the annex).

The failure of European education and training systems to impart the most basic skills to **20% of pupils** creates high opportunity costs. This highlights not only the **size of the challenge** to improve the performance of Education and Training institutions but also the huge potential **gains** in terms of increased growth, employment and financial sustainability, if this share of barely-employable persons could be reduced. More than 73 million adults still suffered from the consequences of low levels of basic skills (ISCED 2 or less) in 2011.

In terms of relevance of education and training to the **employability of graduates**, data suggest that **Greece, Bulgaria, Ireland, Italy, Portugal, Romania, Spain, and Slovakia** face a serious challenge as their employment rates for young people (20-34 year old) not in education and training amount to **less than 70%**. Latvia, Cyprus, Hungary, Estonia, Poland and Slovenia are **below the European average of 76%**. The great difference between the employment rates of young graduates emerging from upper secondary education and tertiary education is also noticeable. In countries such as Bulgaria, Ireland, Spain, Lithuania, Latvia and Romania, the difference is more than 20 percentage points, indicating a substantially greater risk of low employment opportunities for upper-secondary graduates.

The **average employment rate** of graduates for EU 27 has been decreasing since 2008 (when it stood at exactly 82%); this is a development that is certainly affected by the crisis. Against this background, it is positive that Austria, Germany, Estonia, France, Latvia and Sweden show increasing rates.

The demonstrated positive correlation between work-based learning and youth employment suggests that many countries with high youth unemployment (notably ES, FR, HU, IE, PL, IT, EL, PT) and at the same time low participation rates in work-based learning may have important potential to improve the availability of such forms of learning. To show impact, this will, however, require careful quality assurance. In the case of Slovakia and the Czech Republic the high participation in work-based learning and at the same time the high rate of youth unemployment may suggest that the skills acquired by VET graduates are not considered sufficiently relevant by employers.

In terms of **participation by adults in lifelong learning**, **Bulgaria, Romania, Hungary, Greece** and **Slovakia** show alarmingly low levels: **below 4%** (compared to the benchmark of 15%). Poland, Latvia, France, Italy, Lithuania, Malta, Ireland, Belgium, Cyprus and Germany also face a challenge as they are **below the European average of 9.0%**. It is incommensurate that the **EU average** has been stagnating for years and has even decreased slightly since 2008 when it stood at 9.4%<sup>4</sup>.

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<sup>4</sup> A slight decrease is even visible when taking into account breaks in time series in several countries, which lead to lower, even though more realistic figures.

### 3. Horizontal issues

Bringing down the share of '**low achievers**' requires early diagnosis and intervention, starting in the phase of early childhood. This implies providing up-scaling support for tackling learning difficulties and an ambition to get everyone up to standard in basic skills from the first years in school. This requires a more holistic approach to the learning process (in- and outside of school) addressing all the needs of the children (cognitive, emotional; social and physical) and consequently a renewal of the school environment, the teaching methods and teacher competences around more personalised learning, including through ICT.

Increasing the level of **participation in lifelong-learning** activities requires tackling obstacles such as financing, incentives and reconciling work and training. Member States should review the use of incentives, rights and obligations in order to facilitate and encourage participation. Effective measures can consist of financial support to priority target groups (e.g. low skilled or older people, SMEs, etc.), better services in the areas of guidance and validation of non-formal and informal learning, measures to promote learning at the workplace, such as provisions in labour law that ease access to training, more flexible modes of lifelong-learning delivery and work organisation to make participation possible.

With a view to boosting **employability**, Education and Training systems should be adapted to reflect labour-market conditions and skills demand. This requires gathering, processing and disseminating information about evolving patterns of skills needs, so as to anticipate them. The responsiveness and reaction speed of Education and Training systems to labour market developments can be increased through closer cooperation with the social partners and business (e.g. sector skills alliances, knowledge alliances and Sector Skills Councils), in particular with a view to keeping curricula in tune with labour-market needs. Boosting work-based elements in learning programmes can have high impact on the employability of young graduates and is essential to enhance the relevance of acquired skills. Improving the professionalism of teachers and trainers, particularly in the field of vocational education and training and adult learning, is another way of achieving more relevant skills acquisition.

In conclusion, **improving the quality** of education and training requires a comprehensive approach: it entails tackling the most blatant shortcomings (cf. also the thematic fiches on early school-leaving and on tertiary or equivalent attainment), but this is not enough. Education and training systems need to be modernised and be more flexible in how they operate in order to provide the skills for future growth and to increase their responsiveness to labour market needs. Achieving better results in times of tight public finance is challenging and requires above all more efforts to improve the **efficiency of education and training systems**, i.e. investing the money where it is expected to show the greatest returns in terms of learning outcomes. The Commission explores this issue in greater depth in its policy initiative on "Re-thinking Education - Investing in skills for better socio-economic outcomes".<sup>5</sup>

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<sup>5</sup> COM (2012) 669 final

## ANNEX: Additional statistical indicators

### 1.1: Low achievers: PISA results in reading

#### Low achievers in reading and average score

	Low achievers in reading. %						Average score
	All				Boys	Girls	All
	2000	2003	2006	2009	2009	2009	2009
<b>EU 18 countries</b>	<b>21.3</b>	:	<b>24.1</b>	<b>20.0</b>	<b>26.6</b>	<b>13.4</b>	<b>493</b>
<b>EU 25 countries</b>	:	:	<b>23.1</b>	<b>19.6</b>	<b>25.9</b>	<b>13.3</b>	
Belgium	19.0	17.9	19.4	17.7	21.5	13.8	506
Bulgaria	40.3	:	51.1	41.0	52.0	29.1	429
Czech Republic	17.5	19.4	24.8	23.1	30.8	14.3	478
Denmark	17.9	16.5	16.0	15.2	19.0	11.5	495
Germany	22.6	22.3	20.0	18.5	24.0	12.6	497
Estonia	:	:	13.6	13.3	18.9	7.3	501
Ireland	11.0	11.0	12.1	17.2	23.1	11.3	496
Greece	24.4	25.2	27.7	21.3	29.7	13.2	483
Spain	16.3	21.1	25.7	19.6	24.4	14.6	481
France	15.2	17.5	21.7	19.8	25.7	14.2	496
Croatia *	:	:	21.5	22.5	31.2	12.6	476
Italy	18.9	23.9	26.4	21.0	28.9	12.7	486
Cyprus	:	:	:	:	:	:	:
Latvia	30.1	18.0	21.2	17.6	26.6	8.7	484
Lithuania	:	:	25.7	24.3	35.5	13.0	468
Luxembourg	(35.1)	22.7	22.9	26.0	32.9	19.1	472
Malta	:	:	:	36.3	48.4	24.3	442
Hungary	19.0	17.9	19.4	17.7	23.6	11.4	494
Netherlands	(9.5)	11.5	15.1	14.3	17.9	10.7	508
Austria	19.3	20.7	21.5	27.5	35.2	20.3	470
Poland	23.2	16.8	16.2	15.0	22.6	7.5	500
Portugal	26.3	22.0	24.9	17.6	24.7	10.8	489
Romania	41.3	:	53.5	40.4	50.7	30.4	424
Slovenia	:	:	16.5	21.2	31.3	10.7	483
Slovakia	:	24.9	27.8	22.3	32.0	12.5	477
Finland	7.0	5.7	4.8	8.1	13.0	3.2	536
Sweden	12.6	13.3	15.3	17.4	24.2	10.5	497
United Kingdom	(12.8)	:	19.0	18.4	23.1	14.0	494
Iceland	14.5	18.5	20.5	16.8	23.8	9.9	500
Turkey	:	36.8	32.2	24.5	33.4	15.0	464
Liechtenstein	22.1	10.4	14.3	15.6	21.2	9.4	499
Norway	17.5	18.2	22.4	14.9	21.4	8.4	503
USA	17.9	19.4	:	17.7	21.4	13.6	500
Japan	10.1	19.0	18.4	13.6	18.9	7.9	520
Korea	5.8	6.8	5.7	5.8	8.8	2.5	539
Shanghai (China)	:	:	:	4.1	6.6	1.5	556

Source: OECD (PISA).

\* Acceding country – Not included in the EU average

#### Overall situation, general trends:

After a decline in performance between 2000 and 2006, EU-level results have considerably improved. In general, countries with an above-average share of low achievers have succeeded in improving their performance more than countries with a low share of low achievers. The performance gap has thus in general narrowed. It remains, however, large. There is also a very big performance gap between boys and girls, with boys showing twice as high a share of low achievers than girls. The low achievers share for girls is already below the 15% benchmark.

#### Selected trends in performance:

Countries that have improved their performance most since 2006 (> 5 percentage points) include Portugal, Greece, Spain, Italy, Slovakia, Romania and Bulgaria.

## 1.2: Low achievers: PISA results in mathematics

### Low achievers in mathematics and average scores

	% low achievers in mathematics				Average scores	
	All		Boys	Girls	All	
	2006	2009	2009	2009	2006	2009
<b>EU 25 countries</b>	<b>24.0</b>	<b>22.2</b>	<b>21.0</b>	<b>23.5</b>	497	497
Belgium	17.3	19.1	16.8	21.4	520	515
Bulgaria	53.3	47.1	48.2	45.9	413	428
Czech Republic	19.2	22.3	21.7	23.1	510	493
Denmark	13.6	17.1	14.7	19.4	513	503
Germany	19.9	18.6	17.2	20.2	504	513
Estonia	12.1	12.7	11.9	13.5	515	512
Ireland	16.4	20.8	20.6	21.0	501	487
Greece	32.3	30.3	28.4	32.1	459	466
Spain	24.7	23.7	21.4	26.1	480	483
France	22.3	22.5	21.6	23.4	496	497
Croatia *	28.6	33.2	31.8	34.6	493	460
Italy	32.8	24.9	23.5	26.4	462	483
Cyprus	:	:	:	:	:	:
Latvia	20.7	22.6	23.2	22.0	486	482
Lithuania	23.0	26.2	28.1	24.4	486	477
Luxembourg	22.8	23.9	22.2	25.7	490	489
Hungary	21.2	22.3	21.7	22.9	491	490
Malta	:	33.7	37.4	30.1	:	463:
Netherlands	11.5	13.4	11.2	15.6	531	514
Austria	20.0	23.2	21.3	25.1	505	496
Poland	19.8	20.5	21.2	19.9	495	495
Portugal	30.7	23.7	22.6	24.7	466	487
Romania	52.7	47.0	46.9	47.2	415	427
Slovenia	17.7	20.3	20.9	19.7	504	501
Slovakia	20.9	21.0	21.4	20.7	492	497
Finland	6.0	7.8	8.1	7.5	548	541
Sweden	18.3	21.1	21.4	20.8	502	494
United Kingdom	19.8	20.2	17.5	22.8	495	492
Iceland	16.8	17.0	17.9	16.1	506	507
Turkey	52.1	42.1	40.4	44.1	424	445
Liechtenstein	13.2	9.5	7.7	11.5	525	536
Norway	22.2	18.2	18.0	18.3	487	498
USA	28.1	23.4	20.6	26.3	489	487
Canada	10.8	11.5	10.9	12.1	527	527
Japan	13.0	12.5	12.9	12.0	531	529
Korea	8.8	8.1	9.1	7.0	547	546
Shanghai (China)	:	4.9	5.5	4.3	:	600

Source: OECD (PISA); average scores for 16 EU countries.

\* Acceding country – Not included in the EU average

#### Overall situation, general trends:

There was a small improvement in performance in the period 2006-2009. However, average scores have remained stable. Boys do slightly better than girls. In general, countries with an above-average share of low achievers have succeeded in improving their performance more than countries with a low share of low achievers. The performance gap has thus in general narrowed. It remains, however, large.

#### Selected trends in performance:

Countries that have improved their performance most since 2006 include Portugal, Italy, Bulgaria and Romania.

In Bulgaria, Latvia, Lithuania, Poland, Malta, Slovakia, Finland Sweden and Slovenia, girls outperform boys.



### 1.3: Low achievers: PISA results in science

#### Low achievers in science and average scores

	Share of low achievers				Average scores	
	All		Boys	Girls	All	
	2006	2009	2009	2009	2006	2009
<b>EU 25 countries</b>	<b>20.3</b>	<b>17.7</b>	<b>18.6</b>	<b>16.8</b>	<b>498</b>	<b>502</b>
Belgium	17.0	18.0	17.9	18.2	510	507
Bulgaria	42.6	38.8	43.3	34.0	434	439
Czech Republic	15.5	17.3	17.9	16.5	513	500
Denmark	18.4	16.6	15.2	17.9	496	499
Germany	15.4	14.8	15.0	14.5	516	520
Estonia	7.7	8.3	8.6	8.1	531	528
Ireland	15.5	15.2	16.0	14.3	508	508
Greece	24.0	25.3	28.2	22.4	473	470
Spain	19.6	18.2	18.3	18.2	488	488
France	21.2	19.3	20.5	18.0	495	498
Croatia *	17.0	18.5	20.5	16.3	493	486
Italy	25.3	20.6	22.3	18.9	475	489
Cyprus	:	:	:	:	:	:
Latvia	17.4	14.7	16.8	12.6	490	494
Lithuania	20.3	17.0	20.0	14.0	488	491
Luxembourg	22.1	23.7	24.0	23.4	486	484
Hungary	15.0	14.1	15.3	12.9	504	503
Malta	:	32.5	38.7	26.3	:	461
Netherlands	13.0	13.2	12.3	14.0	525	522
Austria	16.3	:	21.6	20.3	511	494
Poland	17.0	13.1	15.5	10.8	498	508
Portugal	24.5	16.5	18.4	14.7	474	493
Romania	46.9	41.4	44.7	38.2	418	428
Slovenia	13.9	14.8	17.8	11.6	519	512
Slovakia	20.2	19.3	20.4	18.2	488	490
Finland	4.1	6.0	7.5	4.5	563	554
Sweden	16.4	19.1	20.3	17.9	503	495
United Kingdom	16.7	15.0	14.6	15.5	515	514
Iceland	20.6	17.9	19.3	16.6	508	496
Turkey	46.6	30.0	33.3	26.5	424	454
Liechtenstein	12.9	11.3	9.2	13.7	522	
Norway	21.1	15.8	16.9	14.5	487	500
USA	24.4	18.1	17.0	19.3	489	502
Canada	10.0	9.6	9.9	9.2	534	529
Japan	12.0	10.7	13.1	8.1	531	539
Korea	11.2	6.3	7.5	5.0	522	538
Shanghai (China)	:	3.1	3.8	2.5	:	575

Source: OECD (PISA)

\* Acceding country – Not included in the EU average

#### Overall situation, general trends:

There was an improvement in performance in the period 2006-2009. However, average scores have only slightly improved. Girls do slightly better than boys. In general, countries with an above-average share of low achievers have succeeded in improving their performance more than countries with a low share of low achievers. The performance gap has thus in general narrowed. It remains, however, large.

#### Selected trends in performance:

In Belgium, Denmark, the Netherlands and the UK, boys outperform girls. Bulgaria and Malta show the biggest performance gap in favour of girls.

## 1.4: Low achievers: PISA results in reading, by migration background

Overall reading — comparison between native and migrant students

	% of students with an immigrant background		Average scores			
			Students with an immigrant background		Difference in performance between native students and migrant students	
	2000	2009	2000	2009	2000	2009
<b>EU (14 countries)</b>	<b>8.1</b>	<b>11.0</b>	<b>449</b>	<b>445</b>	<b>53</b>	<b>56</b>
Belgium	12.0	14.8	417	451	106	68
Bulgaria	0.4	0.5	:	:	:	:
Czech Republic	1.1	2.3	463	457	38	22
Denmark	6.2	8.6	424	438	80	63
Germany	15.2	17.6	423	455	84	56
Estonia	:	:	:	:	:	:
Ireland	2.3	8.3	552	473	-24	29
Greece	4.8	9.0	413	432	65	57
Spain	2.0	9.5	457	430	37	58
France	12.0	13.1	464	444	48	60
Croatia *	:	:	:	:	:	:
Italy	0.9	5.5	450	418	39	72
Latvia	22.1	4.5	452	474	11	11
Lithuania	:	:	:	:	:	:
Luxembourg	:	40.2	:	442	:	52
Hungary	1.7	2.1	489	507	-7	-12
Netherlands	:	12.1	:	470	:	46
Austria	11.0	:	409	:	93	:
Poland	0.3	0.0	:	:	:	:
Portugal	3.1	5.5	457	466	14	26
Romania	0.2	0.3	:	:	:	:
Slovenia	:	:	:	:	:	:
Slovakia	:	:	:	:	:	:
Finland	1.3	2.6	476	468	71	70
Sweden	10.5	11.7	465	442	58	66
United Kingdom	:	10.6	:	476	:	23
Iceland	0.8	2.4	:	423	:	81
Liechtenstein	20.6	30.3	419	479	81	31
Norway	4.6	6.8	454	456	56	52
USA	13.6	19.5	472	484	39	22
Canada	20.5	24.4	526	521	12	7
Japan	0.1	0.3	:	:	:	:
Korea	:	0.0	:	:	:	:

Source: OECD (PISA), average scores for 14 EU countries with comparable data

\* Acceding country – Not included in the EU average

### Overall situation, general trends:

Native students outperform migrants by more than 50 score points (that corresponds to more than one year of schooling), with the gap remaining stable since 2000. The average score of students with an immigrant background has slightly declined since 2000. At the same time, the share of students with an immigrant background is tending to increase.

### Selected trends in performance:

Countries with a relatively small performance gap between migrant students and native students include the UK, the Czech Republic, Latvia, Portugal and Ireland. In Hungary, migrants outperform native students.

Countries with a large performance gap between natives and migrants include Belgium, France, Italy and the Nordic countries.

## 2.1: Adult lifelong learning (25-64): Overall results

	25-64 year olds						55-64 old	Difference in PP	Difference in %
	2007	2008	2009	2010	2011	2012	2012	2012	2012
EU 27	9.3	9.4	9.3	9.1	8.9	9.0	4.5	-4.5	-50.0%
Belgium	7.2	6.8	6.8	7.2	7.1	6.6	3.5	-3.1	-47.0%
Bulgaria	1.3	1.4	1.4	1.2	1.3	1.5	u	u	u
Czech Republic	5.7	7.8	6.8	7.5	11.4 b	10.8	4.8	-6.0	-55.6%
Denmark	29.0	29.9	31.2	32.5	32.3	31.6	23.9	-7.7	-24.4%
Germany	7.8	7.9	7.8	7.7	7.8	7.9	2.9	-5.0	-63.3%
Estonia	7.0	9.8	10.5	10.9	12.0	12.9	5.6	-7.3	-56.6%
Ireland	7.6	7.1	6.3	6.8	6.8	7.1	3.2	-3.9	-54.9%
Greece	2.1	2.9	3.3	3.0	2.4	2.9	0.7	-2.2	-75.9%
Spain	10.4	10.4	10.4	10.8	10.8	10.7	5.2	-5.5	-51.4%
France	6.1	6.0	5.7	5.0	5.5	5.7	2.6	-3.1	-54.4%
Croatia*	2.4	2.2	2.3	2.2	2.3	2.4	0.3	-2.1	-87.5%
Italy	6.2	6.3	6.0	6.2	5.7	6.6	3.0	-3.6	-54.5%
Cyprus	8.4	8.5	7.8	7.7	7.5	7.4	3.1	-4.3	-58.1%
Latvia	7.1	6.8	5.3	5.0	5.1 b	7.0	4.2	-2.8	-40.0%
Lithuania	5.3	4.9	4.5	4.0	5.7	5.2	1.9 u	-3.3	-63.5%
Luxembourg	7.0	8.5	13.4 b	13.4	13.6	13.9	5.9	-8.0	-57.6%
Hungary	3.6	3.1	2.7	2.8	2.7	2.8	0.5	-2.3	-82.1%
Malta	6.0	6.3	6.1	6.2	6.5	7.0	2.8	-4.2	-60.0%
Netherlands	16.6	17.0	17.0	16.6 b	16.7	16.5 p	8.6 p	-7.9	-47.9%
Austria	12.8	13.2	13.8	13.7	13.4	14.1	6.8	-7.3	-51.8%
Poland	5.1	4.7	4.7	5.3	4.5	4.5 p	0.8 p	-3.7	-82.2%
Portugal	4.4	5.3	6.5	5.8	11.6 b	10.6	4.1	-6.5	-61.3%
Romania	1.3	1.5	1.5	1.3	1.6	1.4	u	u	u
Slovenia	14.8	13.9	14.6	16.2	15.9	13.8	6.0	-7.8	-56.5%
Slovakia	3.9	3.3	2.8	2.8	3.9	3.1	1.1	-2.0	-64.5%
Finland	23.4	23.1	22.1	23.0	23.8	24.5	14.1	-10.4	-42.4%
Sweden	18.6 p	22.2 b	22.2 p	24.4	24.9	26.7	18.6	-8.1	-30.3%
United Kingdom	20.0 b	19.9	20.1	19.4	15.8	15.8	10.2	-5.6	-35.4%

Source: Eurostat (LFS), p= provisional; u= unreliable, b= break

\* Acceding country

### Overall situation, general trends:

The indicator shows the percentage of adults (25-64 years old) participating in formal or non-formal education and training in the 4 weeks prior to the survey. There are major differences between countries, with the Nordic countries showing the highest participation rates and south-eastern European countries the lowest. Since 2006, there has been a slight downward trend in adult lifelong learning<sup>6</sup> (LLL). Adult LLL tends to decline with age but to increase with the education level attained. It is four to five times higher for those with tertiary attainment compared to those with only lower-secondary education. The age structure (within the 25-64 years cohort) and the educational attainment of the population of a country accordingly have an impact on results.

<sup>6</sup> See footnote 3

### Selected trends in performance:

Countries with a high overall LLL participation like Denmark or The Netherlands tend to also have high participation rates for older workers (55-64), while countries with low participation rates tend to show bigger differences between age groups and tend to show very low rates for the population aged 55 and older.

### 2.2: Adult lifelong learning (25-64), by gender and gender differences

	females				males				Diff F/M in pp 2012	Diff F/M in % 2012
	2009	2010	2011	2012	2009	2010	2011	2012		
<b>EU 27</b>	10.2	10.0	9.6	9.7	8.4	8.3	8.2	8.4	1.3	15.5%
Belgium	7.2	7.4	7.4	6.9	6.4	7.0	6.7	6.2	0.7	11.3%
Bulgaria	1.5	1.3	1.4	1.5	1.3	1.1	1.3	1.4	0.1	7.1%
Czech Republic	7.0	7.7	11.6 b	11.1	6.5	7.3	11.2 b	10.5	0.6	5.7%
Denmark	37.2	39.1	39.0	37.8	25.3	26.0	25.6	25.4	12.4	48.8%
Germany	7.7	7.6	7.7	7.8	7.8	7.7	7.9	8.0	-0.2	-2.5%
Estonia	13.2	13.0	14.5	14.9	7.6	8.6	9.2	10.6	4.3	40.6%
Ireland	7.0	7.2	7.2	7.4	5.7	6.3	6.4	6.7	0.7	10.4%
Greece	3.3	2.9	2.3	2.7	3.2	3.1	2.6	3.1	-0.4	-12.9%
Spain	11.3	11.6	11.6	11.6	9.6	10.0	10.0	9.9	1.7	17.2%
France	6.1	5.4	5.9	6.0	5.3	4.6	5.2	5.4	0.6	11.1%
Croatia*	??	??	??	2.6	??	??	??	2.3	0.3	13.0%
Italy	6.4	6.5	6.0	7.0	5.6	5.9	5.3	6.1	0.9	14.8%
Cyprus	7.8	7.9	7.7	7.8	7.7	7.4	7.3	7.0	0.8	11.4%
Latvia	6.9	6.5	6.2 b	7.9	3.6	3.4	3.8 b	6.0	1.9	31.7%
Lithuania	5.4	4.8	6.9	5.9	3.6	3.2	4.4	4.3	1.6	37.2%
Luxembourg	13.5 b	14.0	13.0	13.8	13.4 b	12.8	14.2	14.0	-0.2	-1.4%
Hungary	3.0	2.9	2.9	3.0	2.5	2.6	2.6	2.6	0.4	15.4%
Malta	6.3	6.4	6.8	7.4	5.9	6.0	6.2	6.7	0.7	10.4%
Netherlands	17.5	17.2 b	16.9	17.0 p	16.5	16.0 b	16.5	16.0 p	1.0	6.3%
Austria	14.7	14.7	14.5	15.2	12.8	12.7	12.2	13.0	2.2	16.9%
Poland	5.1	5.9	5.0	5.1 p	4.3	4.8	4.0	3.8 p	1.3	34.2%
Portugal	6.8	5.7	12.1 b	10.9	6.2	5.8	11.1 b	10.3	0.6	5.8%
Romania	1.6	1.4	1.5	1.3	1.3	1.2	1.6	1.4	-0.1	-7.1%
Slovenia	16.4	18.3	18.2	16.1	12.9	14.1	13.7	11.5	4.6	40.0%
Slovakia	3.3	3.3	4.4	3.5	2.2	2.2	3.4	2.7	0.8	29.6%
Finland	25.9	27.1	27.7	28.4	18.5	18.9	19.9	20.7	7.7	37.2%
Sweden	28.5 p	30.9	31.6	33.5	16.1	18.0	18.5	20.0	13.5	67.5%
United Kingdom	23.3	22.4	17.5	17.4	16.8	16.4	14.0	14.3	3.1	21.7%

Source: Eurostat (LFS), p= provisional, b= break

\* Acceding country

### Overall situation, general trends:

In most countries, females show slightly but not always significantly higher LLL participation rates than males.

### Selected trends in performance:

Countries that show (probably statistically not significant) higher participation rates for men include Germany, Luxembourg, Romania and Greece. Many of the countries with high LLL participation rates, e.g. Sweden, Finland, Denmark, show big gender differences in LLL participation in favour of females.

### **2.3: Adult lifelong learning (25-64): by migrant status**

	2007			2012		
	Total	Born abroad	Natives	Total	Born abroad	Natives
<b>EU 27</b>	9.3	11.5	9.2	9.0	10.7	8.9
Belgium	7.2	8.5	7.0	6.6	8.7	6.1
Bulgaria	1.3	0.0	1.3	1.5	0.0	1.5
Czech Republic	5.7	4.7	5.7	10.8	7.9	10.9
Denmark	29.0	27.2	29.2	31.6	31.5	31.6
Germany	7.8	:	8.1	7.9	:	8.2
Estonia	7.0	3.9	7.7	12.9	7.0	13.8
Ireland	7.6	9.8	7.0	7.1	8.5	6.7
Greece	2.1	1.2	2.2	2.9	1.6	3.1
Spain	10.4	8.1	10.8	10.7	8.6	11.2
France	6.1	5.6	6.2	5.7	5.0	5.8
Croatia*	2.4	(1.9)	2.5	2.4	(2.3)	2.4
Italy	6.2	3.8	6.5	6.6	3.5	7.0
Cyprus	8.4	7.5	8.6	7.4	5.4	8.1
Latvia	7.1	3.6	7.7	7.0	5.2	7.3
Lithuania	5.3	0.0	5.3	5.2	0.0	5.2
Luxembourg	7.0	6.8	7.1	13.9	12.4	15.6
Hungary	3.6	5.2	3.6	2.8	4.2	2.8
Malta	6.0	(7.8)	5.9	7.0	6.1	7.1
Netherlands	16.6	19.2	16.2	16.5	17.9	16.2
Austria	12.8	10.3	13.4	14.1	11.7	14.7
Poland	5.1	(5.1)	5.1	4.5	0.0	4.4
Portugal	4.4	6.0	4.3	10.6	14.1	10.2
Romania	1.3	0.0	1.3	1.4	0.0	1.4
Slovenia	14.8	8.8	15.4	13.8	5.9	14.6
Slovakia	3.9	0.0	3.9	3.1	0.0	3.0
Finland	23.4	27.3	23.2	24.5	28.0	24.3
Sweden	:	:	:	26.7	26.5	26.7
United Kingdom	20.0	23.2	19.5	15.8	18.7	15.3

Source: Eurostat (LFS), figures in brackets not reliable because of small sample size  
\* Acceding country

#### **Overall situation, general trends:**

In the EU as a whole LLL participation rates for migrants are slightly higher than for natives. Possible reasons are the age structure of migrants — they are on average younger than natives and younger people participate more in adult LLL, the need for some migrants to attend language courses, the fact that in some countries migrants include a high share of mobile tertiary students and the impact of training for unemployed, as unemployment rates are in many countries higher among those born abroad.

#### **Selected trends in performance:**

There is no clear correlation visible between the overall level of participation and which group participates more in LLL. Countries where natives' participation has been persistently higher since 2006 are Germany, Spain, Italy, Greece, France, Cyprus, Luxembourg and Austria, which lie both below and above average in total participation.

### **3.1: Employment rate (20-34 year olds): overall rate**

Employment rate of 20-34 year olds who graduated from at least upper secondary education, 1, 2 or 3 years before (and are not attending any education or training)

	All education levels					Upper secondary	Tertiary
	2008	2009	2010	2011	2012	2012	2012
<b>EU 27</b>	82.0	78.1	77.2	77.1	75.6	69.1	81.5
Belgium	83.9	81.0	81.3	80.8	80.9	71.4	87.6
Bulgaria	79.6	73.6	68.7	59.2	67.3	56.6	78.5
Czech Republic	87.9	84.5	81.3	80.3	82.3	77.8	87.1
Denmark	90.6	87.9	83.5	83.0	84.1	82.4	85.5
Germany	86.6	85.5	86.0	89.0	88.6	84.1	95.5
Estonia	82.3	67.6	64.3	75.1	75.1	65.6	84.7
Ireland	85.7	75.5	71.0	70.9	69.3	50.6	80.2
Greece	68.0	64.8	58.5	50.2	42.9	34.4	47.4
Spain	81.9	72.6	70.4	66.4	62.4	48.1	67.4
France	83.3	77.2	77.5	77.6	76.5	67.0	83.0
Croatia*	77.8	77.0	70.3	63.4	58.7	52.0	66.5
Italy	65.2	60.6	57.7	57.7	54.3	46.2	64.0
Cyprus	85.8	81.1	78.4	72.5	73.0	65.4	74.7
Latvia	83.1	71.4	64.6	71.6	74.2	56.9	87.1
Lithuania	79.3	72.9	73.6	69.9	76.0	60.9	86.0
Luxembourg	86.9	85.5	89.5	86.1	84.6	83.8	85.1
Hungary	80.1	75.6	74.4	73.5	73.4	61.5	84.4
Malta	95.7	94.1	93.6	91.2	91.9	88.5	94.3
Netherlands	93.6	92.9	92.6	92.2	89.4	87.0	91.3
Austria	90.6	88.6	88.7	91.0	91.2	90.1	94.2
Poland	79.3	78.4	76.5	75.4	73.3	62.7	81.5
Portugal	82.7	82.6	80.7	76.1	67.9	66.1	69.8
Romania	84.8	77.6	71.2	70.4	69.4	59.3	77.7
Slovenia	83.4	82.3	80.7	76.0	73.2	63.0	78.6
Slovakia	81.4	74.4	69.4	70.3	68.6	61.6	75.2
Finland	82.3	77.8	79.7	78.4	80.7	77.4	85.4
Sweden	85.8	81.6	83.0	84.6	83.2	78.1	89.6
United Kingdom	83.8	79.9	81.6	81.2	81.5	73.3	87.8

Source: Eurostat (LFS)/CRELL — figures in brackets not reliable because of small sample size

\* Acceding country

#### **Overall situation, general trends:**

The employment rate in the first years following graduation is a powerful indicator of the labour market's perception of the quality of degrees produced by education and training institutions.

The employment rate in the years after graduation is strongly affected by business cycles. As a result of the economic crisis, employment rates in EU 27 decreased in the period 2008-2011, with a 4 percentage point decrease for the ISCED 5-6 graduates, as against a 6 percentage point decrease for the ISCED 3-4 graduates.

#### **Selected trends in performance:**

Italy, Bulgaria and Greece show the lowest employment rate of graduates, especially on the tertiary level. This might indicate that the labour market has reservations about the pertinence (quality) of the knowledge and skills acquired through education and training. Malta, Germany, Austria and the Netherlands show the highest employment rate of graduates 1-3 years after graduation.

### 3.2: Employment rate (20-34 year olds), by gender

Employment rate of (20-34 years old) who graduated from at least upper secondary education 1, 2 or 3 years before (and are not attending any education or training)

	females				males				Diff F/M in pp 2012	Diff F/M in % 2012
	2008	2010	2011	2012	2008	2010	2011	2012		
<b>EU 27</b>	79.6	75.3	75.0	75.1	84.4	79.3	79.2	77.7	2.6	3.5%
Belgium	82.1	80.6	81.4	79.7	85.6	82.2	80.2	82.1	2.4	3.1%
Bulgaria	76.0	71.3	60.6	67.3	82.5	66.4	57.9	67.2	-0.1	-0.1%
Czech Republic	82.4	76.7	73.9	77.2	93.0	85.5	86.1	87.2	10.0	12.9%
Denmark	89.1	82.3	78.3	80.6	92.2	84.6	87.7	87.5	6.9	8.6%
Germany	85.0	84.7	89.4	87.9	88.1	87.3	88.7	89.3	1.4	1.6%
Estonia	75.7	57.2	68.6	67.2	89.7	72.4	82.2	81.6	14.4	21.3%
Ireland	85.4	72.1	71.4	69.8	86.0	69.6	70.2	68.6	-1.2	-1.8%
Greece	66.3	56.9	48.8	40.5	70.3	60.6	52.2	45.9	5.4	13.4%
Spain	81.2	70.0	65.5	63.7	82.7	71.0	67.4	60.9	-2.8	-4.4%
France	83.3	76.0	75.7	76.4	83.3	79.2	79.7	76.6	0.2	0.3%
Croatia*	76.3	70.2	67.2	57.7	79.2	70.4	60.1	59.4	1.7	3.0%
Italy	61.5	55.4	55.0	50.9	69.1	60.1	60.4	58.0	7.1	13.9%
Cyprus	86.0	78.7	72.0	71.6	85.6	78.0	73.1	74.7	3.1	4.4%
Latvia	76.4	64.4	71.6	73.9	90.9	64.9	71.7	74.7	0.8	1.1%
Lithuania	75.1	76.7	68.8	79.4	84.1	69.8	70.9	72.6	-6.8	-8.6%
Luxembourg	84.5	84.4	83.2	80.6	89.6	93.8	89.7	88.9	8.3	10.4%
Hungary	76.1	74.7	71.4	72.2	84.3	74.1	76.0	74.8	2.6	3.7%
Malta	95.9	93.8	89.7	90.4	95.5	93.5	92.6	93.3	2.9	3.3%
Netherlands	92.0	91.4	92.0	88.8	95.5	93.9	92.4	90.2	1.4	1.6%
Austria	89.9	87.7	89.9	90.6	91.1	89.4	92.0	91.8	1.2	1.3%
Poland	75.6	73.4	70.8	68.2	84.1	79.9	80.3	78.7	10.5	15.3%
Portugal	79.9	79.4	73.9	64.9	87.1	82.2	78.7	71.5	6.6	10.3%
Romania	82.3	70.5	68.6	66.9	87.2	71.9	72.4	72.0	5.1	7.6%
Slovenia	79.7	77.2	73.4	68.5	86.6	84.0	78.4	78.3	9.8	14.3%
Slovakia	74.2	69.6	66.6	65.3	88.0	69.3	73.8	72.1	6.8	10.3%
Finland	77.2	76.6	75.3	79.6	89.0	82.9	81.4	81.7	2.1	2.6%
Sweden	83.9	81.5	83.3	82.4	87.5	84.3	85.9	84.0	1.6	1.9%
United Kingdom	82.4	78.6	78.6	79.7	85.2	84.9	84.2	83.6	3.9	4.9%

Source: Eurostat/CRELL — figures in brackets not reliable because of small sample size – calculations of difference between females and males based on rounded values

\* Acceding country

#### Overall situation, general trends:

Overall, in the period 2006-2011 there was a persistent gap in the employment rate of new graduates in favour of men.

#### Selected trends in performance:

In Bulgaria, females have a higher employment rate compared to males. Countries with a good gender balance in employment rates after graduation include Belgium, Germany, Ireland, Latvia and the Netherlands.