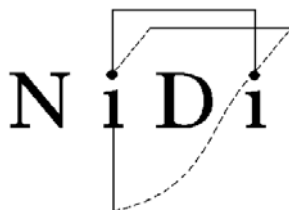


**DEMOGRAPHIC PERSPECTIVES AND
IMPLICATIONS FOR VOCATIONAL
EDUCATION AND TRAINING IN
THE EUROPEAN UNION**

FINAL REPORT

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EXECUTIVE SUMMARY

Europe will be the first continent to face population decline and severe population ageing in the next decades. What are the perspectives of these future demographic trends for initial vocational education and training in Europe? This report aims to give insight into the implications of these trends in a few scenarios.

From the point of view of participation in initial vocational education and training the trends in the size of the group of young people in the age group 15-24 are of particular interest, since this is the age group with highest participation in initial vocational education and training. The latest Eurostat population projection 'baseline' variant assumes a slight gradual increase of the total fertility rate, a continuing increase of life expectancy and a surplus net migration in the future. According to the Eurostat 'baseline' variant the population aged 15-24 in the current European Union (EU-27) decreases from 62 million in 2005 to 51 million in 2030, a decline of 17%. In the long term, around 2050, the population aged 15-24 might even further decline to 46 million, almost a quarter lower than in 2005. In the 'high population' variant, with higher future fertility and net migration, the population aged 15-24 decreases to 60 million in 2030 (3% lower than in 2005) and in the 'low population' variant, with lower future fertility and net migration, to 42 million (33% lower than in 2005). Taking the 'baseline' variant as a reference, eleven of the 27 member states are expected to have a (slight) growth of the population aged 15-24 in 2030. Particular the Eastern European and Baltic countries are expected to show a considerable decrease in their populations aged 15-24.

Assuming education participation rates unchanged in future, the number of students will decrease in line with the decline of the population aged 15-24. The total number of students in initial pre-vocational and vocational education and training is expected to decrease from 14.2 million students in 2005 to 11.9 million in 2030 according to the 'baseline' population variant; a decline of 17%. In the 'high population' and the 'low population' variant the numbers of students are expected to decrease to 13.7 and 10.2 million respectively. Within education levels and within the age groups the trends are similar to the overall trends. Particular at upper secondary level, the decrease of the number of students in initial vocational education and training is large in terms of absolute numbers. The number of students in initial vocational education and training at upper secondary level is expected to decrease from 11.5 million in 2005 to 9.6 million in 2030; a decline of 1.9 million students. Particularly the Eastern European and Baltic countries are expected to have a relatively substantial decline of the number of students in initial pre-vocational and vocational education and training. Initial vocational education and training is likely to see a decline of the number of students in the near future at least up to 2030. This might very probably have implications for the future number of students graduating as well as the organisation of institutions and teacher requirements in initial vocational education and training. Keeping the absolute number of students at current levels would require a twenty percent increase of participation rates in initial pre-vocational and vocational

education and training around 2030. This would mean a substantial shift of enrolment from general to pre-vocational and vocational streams.

Assuming graduation rates unchanged in future, the number of graduates is expected to decline in line with the number of students. Also the required number of teaching staff will be much less than nowadays if students-teacher ratios would remain the same. Similar, the decreasing number of students will need less capacity in terms of school buildings etc. Smaller future numbers of students and graduates will mean fewer entrants to the labour market in future. Several other studies already projected implications of the ageing populations for the labour force in future. Up to around 2020 the labour force is expected to increase slightly, mainly because of increasing labour force participation rates compensating the decline of the population at working age, but after that to decline due to the demographic ageing. The strong demographic changes cannot easily be overcome. Increasing labour force participation would need to focus on the younger and the older age groups as well as women and migrants. However, increasing labour force participation rates of younger age groups might decrease education participation rates and thus affecting the enrolment in initial vocational education and training in a negative way. Since policies aiming at increasing labour force participation of women, migrants and elderly may be most effective in curbing the consequences of demographic imbalances, the challenge for vocational education and training in the European Union might be in targeting these groups.

1. INTRODUCTION

Population ageing is one of the most distinctive demographic events of the past several decades (Beets, 2006). Public policy interest in this issue of population ageing, however, is a much more recent phenomenon, particularly since the ageing process is expected to affect the labour market. The next decades Europe will increasingly be confronted with an ageing population. In the 27 countries of the European Union for example, according to the most recent Eurostat baseline population projections (Eurostat, 2006; Lanzieri, 2006) the number of elderly aged 65 and over will increase from 81 million (around 17% of the total population) in 2005 to 112 million (23%) around 2025 and to 141 million (30%) around the year 2050. The large size differences between the older and younger cohorts will change the future age structure of the European Union labour force to a large extent. Population ageing will particularly affect the future supply of labour both in the sense of high numbers of older workers leaving the labour force and decreasing numbers of new (young) entrants to the labour force. Due to the fertility decline younger cohorts of entrants will be much smaller. However, relatively little consideration is given to the impact of this population ageing process on training and education, usually the life course stage preceding entrance to the labour market. Vocational education and training (VET) are of particular relevance in this stage.

1.1 Aim of the study

This study aims to give insight into the implications of current and future demographic trends, that is population ageing, for initial vocational education and training in the European Union. The study primarily seeks to provide answers to the following questions:

- How will demographic trends affect future numbers of initial vocational education and training (IVET) participants in the European Union?
- What are the implications for teaching staff in vocational education and training in the European Union?
- To what extent is a contraction or expansion of the vocational education and training system capacity in the European Union likely to take place?

Secondly, the study can serve as a background document to explore questions like:

- To what extent may migration compensate for the decreasing number of initial vocational education and training students/graduates in the European Union?
- What impact will the number of future initial vocational education and training participants have on European vocational education and training infrastructure and programmes which were developed in a very different demographic context?

- How will the decreasing number of future young cohorts with vocational education and training qualifications affect the European Union labour force?

1.2 Approach

The study consists of four parts:

1. A description and country comparison of future demographic trends in the European Union particularly focussing on the younger cohorts.
2. A description and country comparison of the present situation in Europe with respect to participation rates and characteristics of students in vocational education and training.
3. A projection of future numbers of students and graduates in initial vocational education and training in Europe.
4. An examination of the implications of the projection results for several aspects of (initial) vocational education and training in Europe.

Sub 1.) The first part of the study focuses on the current and future demographic trends in the European Union. In this part, results of the latest Eurostat population projections (Eurostat, 2006) will be presented, particularly focussing on the younger cohorts. We will present the latest baseline projections for all European countries, that is for the European Union as a whole and for all 27 current member states separately. Additionally we will show the main differences between variants of the latest Eurostat population projections for the European Union as a whole.

Sub 2.) The second part of the study examines the current situation in vocational education and training in the European Union. In this part current characteristics of pupils and students in initial vocational education and training will be presented; that is, the composition of the vocational education and training student population. Also current participation rates in initial vocational education and training will be specified at all educational levels relevant to vocational education and training, that is International Standard Classification of Education (ISCED) levels 2 to 5 (see *Annex A*).

Sub 3.) In the third part of the study a baseline projection of future numbers of students and graduates in initial vocational education and training will be presented for all 27 European Union member states. This projection will be based on the latest Eurostat population projections. To project numbers of students and graduates in initial vocational education and training, current patterns of participation and graduation in initial vocational education and training will be combined with the latest Eurostat population baseline projection. Projection results of the baseline projection will be compared both with the current situation and the outcomes of three alternative projection scenarios. Consequences of the baseline projection results for the labour force will also be explored. The study will present projections for the period up to 2050. However, presentation of the results will focus on the period up to 2025/2030.

Sub 4.) The final part of the study presents the main conclusions of projections results and examines the implications of the projection results for several aspects of (initial) vocational education and training. In this part of the study we will, using the results of the previous parts, identify and qualitatively examine:

- implications for the future labour force;
- potential opportunities provided by demographic change;
- challenges that initial vocational education and training is likely to face for instance with respect to changes in organisation of institutions and teacher recruitment.

2. DEMOGRAPHIC TRENDS

Europe will most likely face population decline and severe population ageing in the near future. As a result of fertility decline and postponement and a further rise in life expectancy, the population size of the European Union will come to a maximum around 2020-2025 and then decline. This process started, roughly spoken, in the northern part of Europe, ‘travelled’ to the western, and than to the southern part. After the fall of the Berlin wall also eastern parts ‘adopted’ this pattern although the change to a free market economy had there effect as well. (Beets, 2006)

Currently, the European Union is characterized by low and late fertility, as well as low and late mortality. Although Europe will be more heavily affected by population ageing in the coming decades than other continents there is much variation in the ageing process within Europe. With respect to initial vocational education and training the population trends in the age group 15-24 are of particular interest. The large majority of pupils and students in initial vocational education and training are enrolled in upper secondary education, that is International Standard Classification of Education (ISCED) level 3, of which most students are in this age group (see *Table 2.1*). Therefore, the remainder of this chapter will deal with future population trends in the European Union, particularly focusing on the age group 15-24. Also some comparison will be made with countries outside the European Union.

Table 2.1. Students in vocational education and training by ISCED level, educational stream and age group, in the European Union (EU-27), 2004

ISCED level	educational stream			age distribution			
	total	pre-vocational	vocational	10-14	15-19	20-24	25-29
	numbers x mln.			percentages			
2	0.7	0.4	0.3	78.7	19.8	0.3	0.2
3	15.5	1.2	14.3	6.4	68.5	8.7	2.9
4	1.2	-	1.2	0.0	30.4	51.4	3.7
5	2.5	-	2.5	0.0	20.8	42.6	11.4

Source: NIDI calculations based on Eurostat.

2.1 General trends

Based on past trends, an analysis of driving forces and expert opinion, Eurostat has produced population projections for each current member state of the European Union (EU-27). The set of population projections comprise seven variants: ‘baseline’, ‘high population’, ‘low population’, ‘younger age profile population’, ‘older age profile population’, ‘high fertility and ‘zero migration’ starting from the base year 2004. All these variants must be interpreted as possible alternative developments in population except the latter, a reference scenario, which helps in understanding the role played by

migration in the evolution of population size and structure. For a more detailed discussion see Lanzieri, 2006.

The ‘baseline’ variant assumes a gradual rise of the total fertility rate, a continuing increase of life expectancy and a surplus net migration in the future. In the ‘high population’ and the ‘low population’ variants the assumptions all work together in the same direction for the increase or decrease of the population, that is either a higher increase of the total fertility rate combined with a higher increase in life expectancy and higher net migration or a total fertility rate decrease combined with a lower increase of life expectancy and a lower net migration (see *Table 2.2*). All other Eurostat population projection variants fall in between. Most of the variants show a decline in population of the European Union in the first half of the new century. For the ‘baseline’, ‘high population’ and ‘low population’ variant, summary country-specific assumptions with respect to the future trends in the total fertility rates, life expectancy and net-migration are available in *Table B.1* to *B.3* in *Annex B*.

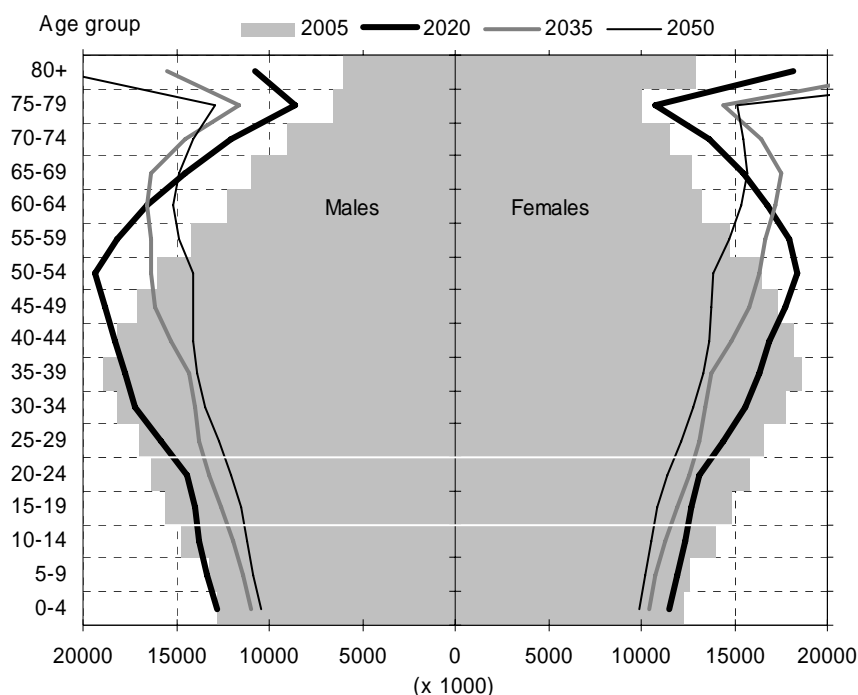
Table 2.2. Assumptions for the variants of the Eurostat Long-term population projections

Scenario	Total fertility rate	Life expectancy	Net migration
Baseline	base	base	base
Low population	low	low	low
High population	high	high	high
Young population	high	low	high
Old population	low	high	low
High fertility	high	base	base
Zero migration	base	base	zero

Source: Lanzieri (2006)

In the ‘baseline’ variant the total population in the current 27 countries of the European Union will gradually increase from 488 to a maximum of 496 million persons in the year 2022. After that the population is expected to decline to 472 million persons around the year 2050; slightly below the current population size. The ageing of the population in the European Union is reflected in the age pyramids presented in *Figure 2.1*. As can be seen from the figure, compared to the situation in 2005, in future the population in the bottom half of the pyramid (the younger age groups) will decrease whereas the population in the upper half of the pyramid (the older age groups) will increase. Thus the situation of the younger cohorts is quite different from the older ones.

Figure 2.1. Projected population by sex and age groups in 2005, 2020, 2035 and 2050, Eurostat baseline population variant, European Union (EU-27)



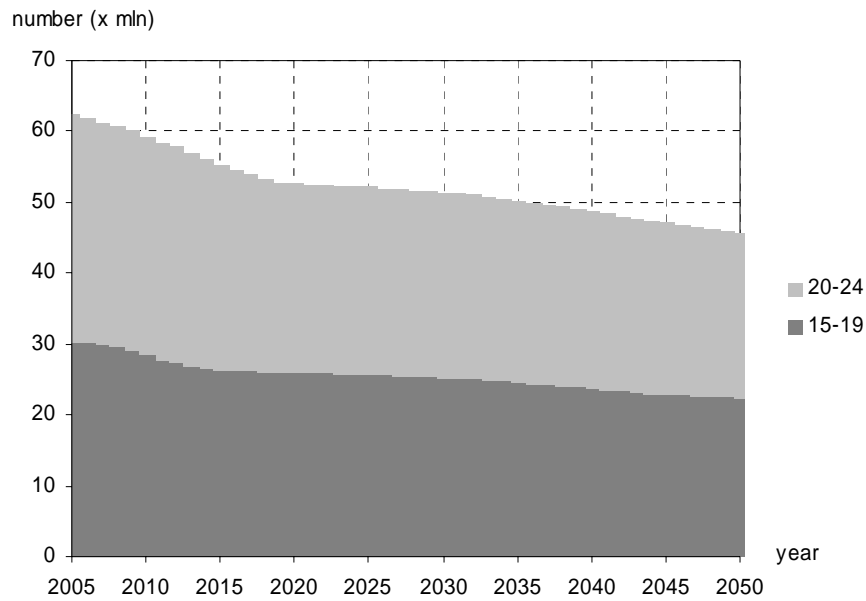
Source: Eurostat (2006).

2.2 Age-specific trends

From the point of view of participation in initial vocational education the trends in the size of the age groups between age 15 and age 24 are of particular interest, since these are the age groups with the highest initial education participation in vocational streams. According to the Eurostat 'baseline' variant the population in age group 15-24 in the European Union (EU-27) decreases from 62 million in 2005 to 51 million in 2030, a decline of 17%. In 2050 the population aged 15-24 might even further decline to 46 million, more than a quarter lower than in 2005 (See *Figures 2.2 and 2.3*).

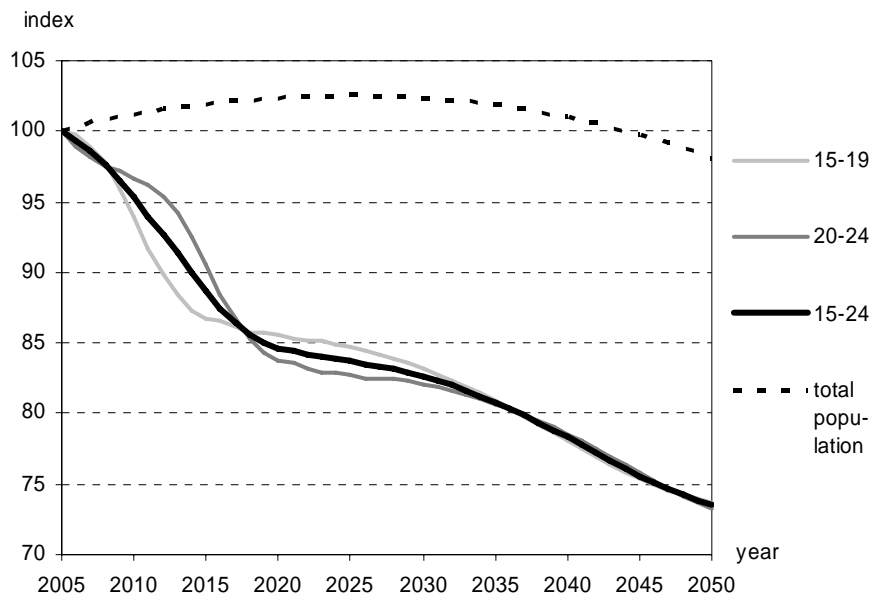
The projection results of the 'low population' variant show a larger decrease of the age group 15-24 than the 'baseline' variant: a decline to 42 million in 2030 (33% lower than in 2005) and even further to 36 million in 2050 (42% lower than in 2005). The 'high population' variant shows a lesser decrease to 54 million in 2020 and a recovery to 59 million at the end of the projection period in 2050 (See *Table 2.3 and 2.4*). Due to the similar assumptions on fertility the 'old population' and 'young population' variants produce more or less the same outcomes with respect to the age group 15-24 as the 'low population' and 'high population' variants respectively. The 'high fertility' and 'zero migration' variants end up in between: the outcomes of the 'high fertility' variant seek the direction of the 'high population' variant, whereas the the outcomes of the 'zero migration' variant move in the direction of the 'low population' variant.

Figure 2.2. Projected population in age group 15-24, Eurostat baseline population variant, European Union (EU-27), 2005-2050



Source: Eurostat (2006).

Figure 2.3. Index of the projected population in age group 15-24 (year 2005 = 100), Eurostat baseline population variant, European Union (EU-27), 2005-2050



Source: NIDI calculations based on Eurostat (2006).

Table 2.3. Projected population in age group 15-24 by Eurostat population projection variant, European Union (EU-27), 2005-2050

Scenario	2005	2010	2015	2020	2030	2050
x 1000						
Baseline	62268	59364	55229	52694	51446	45761
low population		58878	54496	51578	41858	35946
high population		59856	56042	53961	60360	59270
young population		59849	56028	53939	60265	59123
old population		58885	54509	51599	41924	36036
high fertility		59364	55229	52851	57379	54596
zero migration		58045	53325	50316	45655	39334

Source: Eurostat (2006).

Table 2.4. Index of the projected population in age group 15-24 by Eurostat population projection variant, European Union (EU-27), 2005-2050

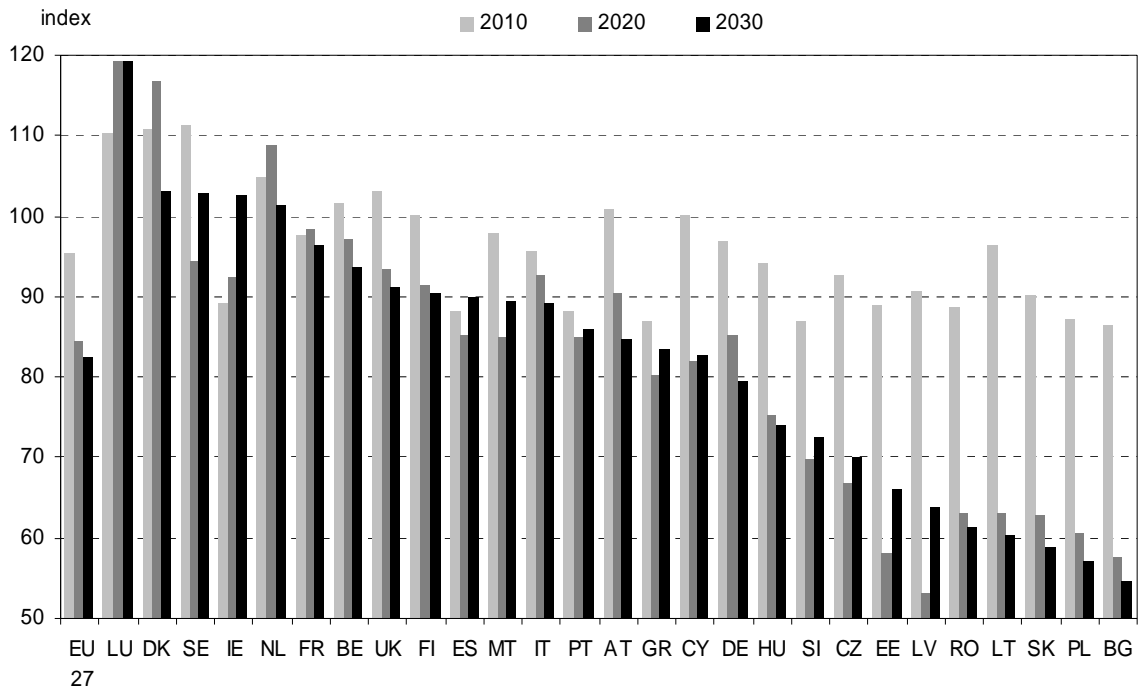
Scenario	2005	2010	2015	2020	2030	2050
index 2005=100						
Baseline	100	95	89	85	83	73
low population		95	88	83	67	58
high population		96	90	87	97	95
young population		96	90	87	97	95
old population		95	88	83	67	58
high fertility		95	89	85	92	88
zero migration		93	86	81	73	63

Source: NIDI calculations based on Eurostat (2006).

Taking the ‘baseline’ variant as a reference, in the long-term eleven¹ of the 27 current European Union member states are expected to have growth of the total population at the end of the projection period (that is, 2050). Eastern and Baltic countries are expected instead to show a considerable decrease in their populations. Mediterranean countries are expected to face the major challenges of an ageing population, especially in the second half of the projection period, while other countries, such as Luxembourg and the Netherlands, will observe a much less significant change. Similar patterns can be observed from the country-specific population projection results for the age group 15-24 (See *Tables 2.5 and 2.6* and *Figures 2.4 and 2.5*). For instance, only five of the 27 European Union member states are expected to have a (slight) growth of the population aged 15-24 in 2030: Denmark, Ireland, Luxemburg, the Netherlands, and Sweden. Particular the Eastern European and Baltic countries are expected to show a considerable decrease in their populations aged 15-24. In Bulgaria, Poland and Slovakia the population in age group 15-24 is expected to decrease by over 40% in 2030.

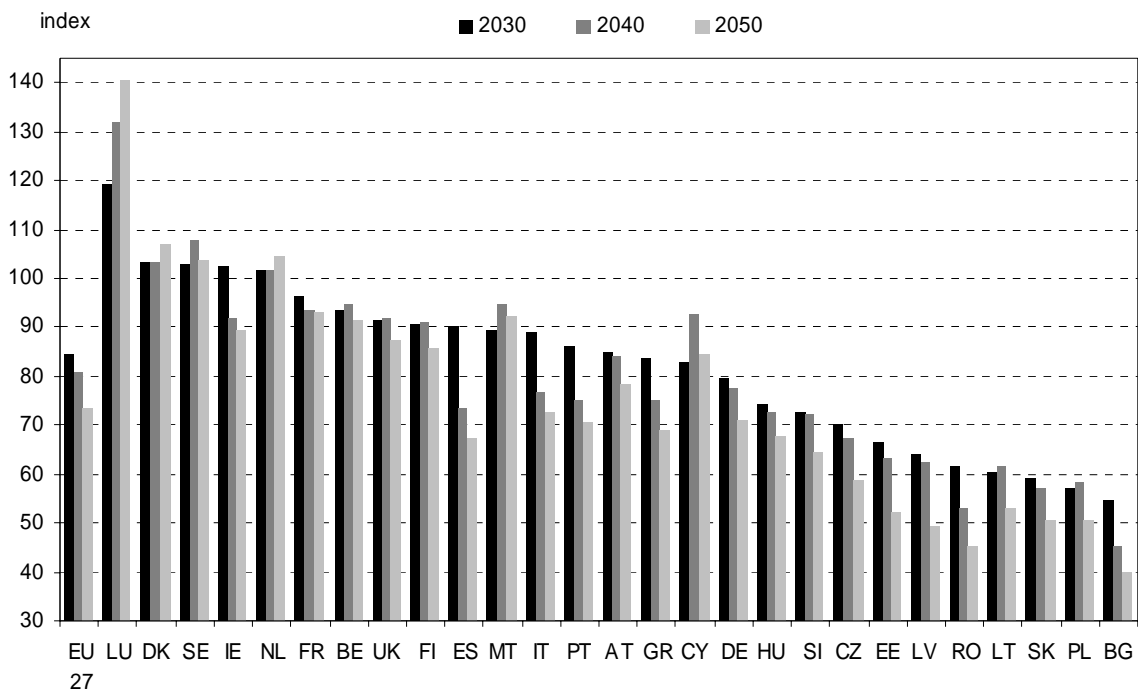
¹ Austria, Belgium, Cyprus, Denmark, France, Ireland, Luxemburg, Malta, the Netherlands, Sweden, and the United Kingdom

Figure 2.4. Index of the projected population in age group 15-24 (year 2005 = 100) in 2010, 2020 and 2030 by country of the European Union (EU-27), Eurostat baseline population variant



Source: NIDI calculations based on Eurostat (2006).

Figure 2.5. Index of the projected population in age group 15-24 (year 2005 = 100) in 2030, 2040 and 2050 by country of the European Union (EU-27), Eurostat baseline population variant



Source: NIDI calculations based on Eurostat (2006).

Table 2.5. Projected population in age group 15-24 by country of the European Union (EU-27), 2005-2050, Eurostat baseline population variant

Region	2005	2010	2015	2020	2030	2050
	x 1000					
EU-27	62268	59364	55229	52694	51446	45761
Austria	997	1005	978	903	846	781
Belgium	1259	1279	1265	1222	1178	1153
Bulgaria	1055	913	709	609	577	420
Cyprus	116	116	109	95	96	98
Czech Republic	1363	1265	1058	913	955	798
Denmark	596	660	707	695	615	638
Estonia	210	187	140	122	139	109
Finland	651	652	638	595	589	558
France	7804	7612	7468	7676	7521	7251
Germany	9680	9382	8757	8262	7688	6879
Greece	1377	1199	1132	1107	1149	949
Hungary	1321	1246	1119	994	980	893
Ireland	626	558	544	578	642	559
Italy	6110	5846	5703	5663	5444	4440
Latvia	360	326	235	191	230	177
Lithuania	529	510	420	334	320	280
Luxemburg	53	58	62	63	63	74
Malta	59	57	54	50	53	54
Netherlands	1951	2045	2092	2123	1979	2034
Poland	6285	5489	4542	3809	3595	3172
Portugal	1327	1171	1119	1127	1142	935
Romania	3360	2981	2345	2126	2062	1523
Slovakia	868	783	655	547	511	438
Slovenia	269	234	201	188	195	173
Spain	5236	4616	4359	4462	4715	3517
Sweden	1097	1222	1148	1036	1130	1138
United Kingdom	7709	7953	7670	7205	7033	6720
EU-27 total population	487881	492838	495353	496408	494784	472050

Source: Eurostat (2006)

Table 2.6. Index of the projected population in age group 15-24 by country of the European Union (EU-27), 2010-2050, Eurostat baseline population variant

Region	2005	2010	2015	2020	2030	2050
index 2005=100						
EU-27	100	95	89	85	83	73
Austria	100	101	98	90	85	78
Belgium	100	102	100	97	94	92
Bulgaria	100	87	67	58	55	40
Cyprus	100	100	94	82	83	84
Czech Republic	100	93	78	67	70	59
Denmark	100	111	119	117	103	107
Estonia	100	89	67	58	66	52
Finland	100	100	98	91	90	86
France	100	98	96	98	96	93
Germany	100	97	90	85	79	71
Greece	100	87	82	80	83	69
Hungary	100	94	85	75	74	68
Ireland	100	89	87	92	103	89
Italy	100	96	93	93	89	73
Latvia	100	91	66	53	64	49
Lithuania	100	96	79	63	60	53
Luxemburg	100	110	118	119	119	141
Malta	100	98	93	85	90	92
Netherlands	100	105	107	109	101	104
Poland	100	87	72	61	57	50
Portugal	100	88	84	85	86	70
Romania	100	89	70	63	61	45
Slovakia	100	90	76	63	59	50
Slovenia	100	87	75	70	72	64
Spain	100	88	83	85	90	67
Sweden	100	111	105	94	103	104
United Kingdom	100	103	99	93	91	87
EU-27 total population	100	101	102	102	101	97

Source: NIDI calculations based on Eurostat (2006)

2.3 The European Union compared to other countries

From a worldwide perspective demographic trends in Europe are rather unique, since Europe will be the first continent to face a population decline and severe population ageing in the near future as compared to other continents (Beets, 2006). The previous section showed the consequences of the demographic trends for the age group of interest to initial vocational education and training. This will probably affect the position of the European Union in a global context, for instance with respect to labour market developments and global competition. Tables 2.7 and 2.8 present population projection outcomes for some other countries compared to the European Union, with respect to age group 15-24 as presented in the previous sections. The population projections for the other countries originate from the latest available medium

population variant of the 2006 revision of the United Nations world population projections (United Nations, 2007). In the medium population variant of the United Nations total fertility in all countries is assumed to converge eventually towards a level of 1.85 children per woman. However, not all countries, reach this level during the projection period, that is, by 2045-2050 (in particular the very low fertility countries like Japan, the Russian Federation and South Korea). Mortality in these United Nations projections is projected by selection of models of change of life expectancy for each country on the basis of recent trends in life expectancy by sex. These models produce smaller gains the higher the life expectancy already reached. The future path of international migration is set on the basis of past international migration estimates and an assessment of the policy stance of countries with regard to future international migration flows.

Tables 2.7 and 2.8 show large differences between countries. The demographic trends with respect to age group 15-24 in China and Japan are more or less in line with the trends in the European Union. In both countries the size of the age group 15-24 is expected to decline with about 20% in 2020 compared to 2005. After 2020 the decline in Japan is stronger than in the European Union. Both the Russian Federation and South Korea are expected to have a stronger decline of the age group 15-24 in 2030 than the European Union as a whole, due to the very low fertility rates, much more in line with the trends in the Eastern European and Baltic countries within the European Union. On the other end, Australia, India and the United States of America are all expected to see an increase of the population in age group 15-24 in 2030. In the long-term, up to 2050, only Australia, Canada and the USA, the traditional immigration countries, are expected to see an increase of the size of this group.

Table 2.7. Projected population in age group 15-24 in the European Union (EU-27) and some other countries, 2005-2050, Eurostat baseline population variant and UN medium population variant

Region	2005	2010	2015	2020	2030	2050
x million						
European Union (EU-27)	62.3	59.4	55.2	52.7	51.4	45.8
Australia	2.8	2.9	2.9	2.9	3.0	3.2
Brazil	35.3	33.7	33.6	34.9	35.0	31.4
Canada	4.3	4.5	4.4	4.1	4.2	4.6
China	217.4	219.0	197.0	178.8	170.8	153.2
India	218.7	235.1	244.1	245.6	245.4	210.6
Japan	14.1	12.6	12.2	11.9	10.2	8.4
Russian Federation	24.5	20.2	14.7	13.6	14.6	10.9
South Korea	7.0	6.6	6.5	5.5	4.3	3.4
Turkey	13.6	13.7	13.9	13.6	13.3	12.0
United States of America	42.8	45.1	45.1	45.0	47.8	48.3

Source: Eurostat (2006), United Nations (2007)

Table 2.8. Index of the projected population in age group 15-24 in the European Union (EU-27) and some other countries, 2005-2050, Eurostat baseline population variant and UN medium population variant

Region	2005	2010	2015	2020	2030	2050
index 2005=100						
European Union (EU-27)	100	95	89	85	83	73
Australia	100	104	104	102	105	114
Brazil	100	95	95	99	99	89
Canada	100	104	101	95	96	106
China	100	101	91	82	79	70
India	100	107	112	112	112	96
Japan	100	90	86	84	72	60
Russian Federation	100	82	60	55	60	44
South Korea	100	95	93	79	62	49
Turkey	100	100	102	100	98	88
United States of America	100	106	106	105	112	113

Source: NIDI calculations based on Eurostat (2006) and United Nations (2007)

The differences between the countries are mainly explained by the differences in fertility and net migration trends both in the past and assumed in the future (for summary assumptions of the medium population variant of the United Nations see *Table B.4* in *Annex B*). Though fertility rates in countries like India and Turkey are, in the long-term, expected to converge to the same level as in the other countries (below replacement level), their current fertility rates are much higher than in the other countries, therefore still resulting in larger younger cohorts. Fertility rates in Australia and Canada are more comparable to the European Union, but immigration (relative to their population size) is much higher in these countries: 4.0 net immigrants per 1000 inhabitants in Australia, 5.1 per 1000 in Canada and 1.7 per 1000 in the European Union around the year 2030. In the USA both fertility (converging from around replacement level to 1.85) and net migration (from 4.3 to 3.0 per 1000 inhabitants) are higher than in the European Union.

3. KEY FIGURES ON INITIAL VOCATIONAL EDUCATION AND TRAINING

The International Standard classification of Education (ISCED) distinguishes seven levels of education, ranging from 0 to 6: pre-primary level of education (0), primary level of education (1), lower secondary level of education (2), upper secondary level of education (3), post secondary, non-tertiary education (4), first stage of tertiary education (5), and second stage of tertiary education (6). Education levels can be subdivided by programme orientation into three categories based on the degree to which a programme is specifically oriented towards a specific class of occupations or trades and leads to a labour-market relevant qualification. General programmes cover education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Pre-vocational programmes cover education that is mainly designed to introduce participants to the world of work and to prepare them for entry into further vocational education programmes; however, successful completion of such programmes does not lead to a labour-market relevant vocational qualification. Vocational programmes cover education that prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification. See for a more detailed description of ISCED levels and programme orientation *Annex A* and UNESCO-UIS/OECD/Eurostat (2004).

From the perspective of initial vocational education and training, education at ISCED levels 2-5, that is education from the second stage of basis education to the first stage of tertiary education, is most relevant. This chapter presents some key figures on vocational education and training in the European Union. The following aspects are dealt with: the distribution of students over general, pre-vocational and vocational streams, gender differences, education participation rates, fields of education, type of institutions (VET providers) and teaching staff.

3.1 General and vocational education and training

In the current 27 countries of the European Union the total number of pupils and students at ISCED levels 2-5 was around 68 million in 2004. This is an increase of around 4.1 million students, 6.3%, since 2000. The majority of the students in 2004 were in general educational streams: around 71% in general, 2% in pre-vocational and 27% in vocational education. Since 2000 the percentage in vocational education slightly decreased by 0.3 percent points. Of all the students in vocational education and training 78%, that is 14.3 million persons, are in upper secondary education (ISCED level 3).

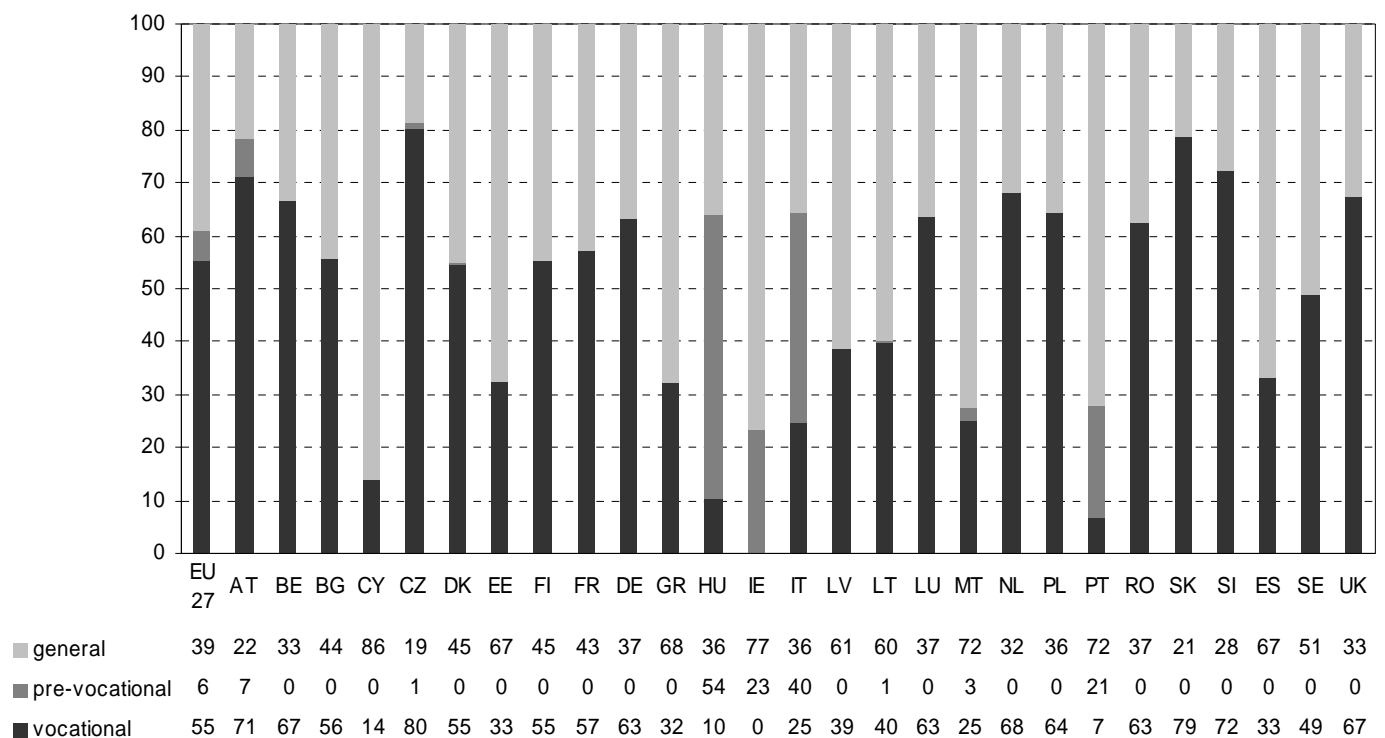
In general, distributing students between vocational and general streams at upper secondary level (ISCED 3) is not geared towards technical or vocational specialisation. Rather, the aim is to create classes with more homogeneous

competences within different general education structures (Cedefop, 2003). In general, a larger proportion of pupils enrol in the pre-vocational and vocational streams than in general upper secondary education. In the European Union as a whole in 2004 around 61% of the students enrolled in pre-vocational and vocational streams against 39% in general streams. These proportions remained stable since 2000. (See *Figures 3.1* and *3.2*)

The distribution over general, pre-vocational and vocational streams is rather diversified between the countries. More than two thirds of the students, in both 2000 and 2004, are in pre-vocational and vocational streams in Austria, Belgium, the Czech Republic, the Netherlands, Slovakia, Slovenia and the United Kingdom. On the other hand, more than two thirds of the students, in both 2000 and 2004, are in general streams in Cyprus, Estonia, Hungary and Ireland. Particularly, Denmark, Lithuania and Poland showed relatively large decreases in the proportion of students in pre-vocational and vocational streams in that period.

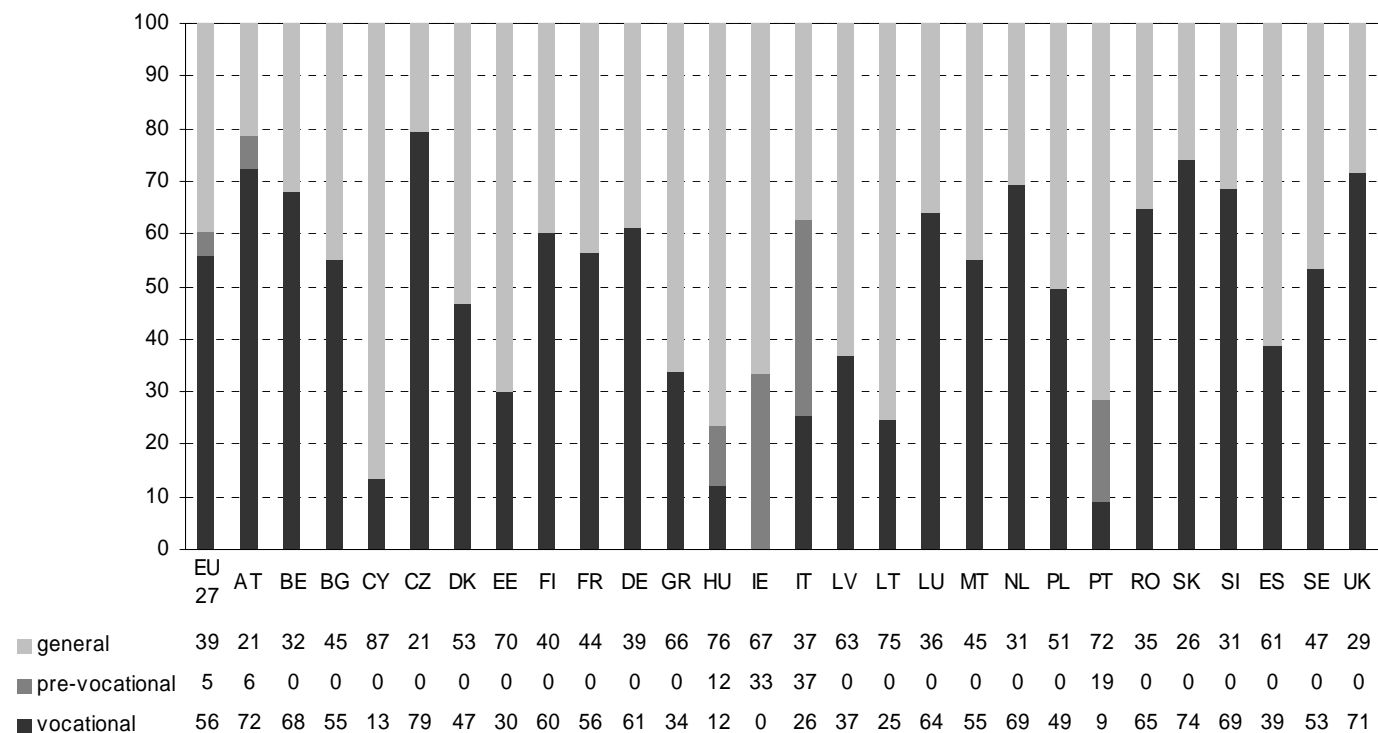
In the period 1999-2004 the percentage of students in vocational education and training of all the students at the various ISCED levels appears to range from rather stable to just slightly decreasing in the EU-27 (and thus rather stable and slightly increasing in general streams) see *Figure 3.3*.

Figure 3.1. Distribution of ISCED level 3 students in general, pre-vocational and vocational streams in the European Union (EU-27) in 2000 (%)



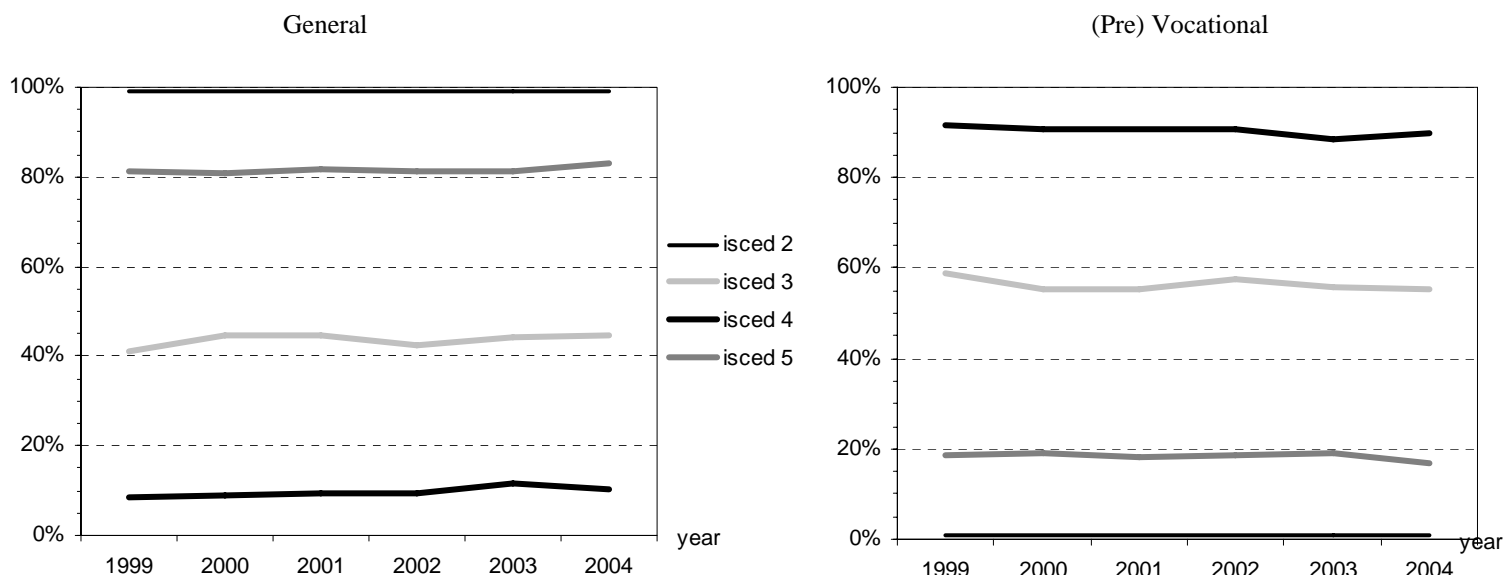
Source: NIDI calculations based on Eurostat.

Figure 3.2. Distribution of ISCED level 3 students in general, pre-vocational and vocational streams in the European Union (EU-27) in 2004 (%)



Source: NIDI calculations based on Eurostat

Figure 3.3. Percentage of students in general and vocational education and training respectively by ISCED level and stream, European Union (EU-27), 1999-2004



Source: NIDI calculations based on Eurostat

3.2 Gender

In the European Union as a whole the proportions of males and females in vocational education and training are exactly the same: females caught up from 48% in 2000 to 50% in 2004. However, in most countries still slightly more males than females are in the pre-vocational and vocational streams. The only exceptions are Belgium, Estonia, Lithuania, Sweden, and the United Kingdom. Actually, differences between 2000 and 2004 are rather small. (See *Tables 3.1-3.2* and *Figures 3.4-3.5*)

At tertiary level (ISCED 5), females in general outweigh males, except for Cyprus, Denmark, Finland, Greece and Sweden.

Table 3.1. Distribution of students in pre-vocational and vocational education and training by ISCED level and gender in the European Union (EU-27), 2000 (%)

Region	ISCED 2		ISCED 3		ISCED 4		ISCED 5	
	male	female	male	female	male	female	male	female
EU-27	59	41	53	47	47	53	43	57
Austria	-	-	56	44	44	56	35	65
Belgium	44	56	50	50	45	55	44	56
Bulgaria	72	28	63	37	44	56	35	65
Cyprus	-	-	84	16	-	-	50	50
Czech Republic	44	56	53	47	57	43	31	69
Denmark	-	-	54	46	78	22	36	64
Estonia	-	-	65	35	36	64	28	72
Finland	-	-	52	48	52	48	42	58
France	70	30	56	44	32	68	47	53
Germany	62	38	57	43	52	48	36	64
Greece	-	-	57	43	51	49	51	49
Hungary	-	-	55	45	45	55	38	62
Ireland	-	-	45	55	43	57	47	53
Italy	-	-	60	40	51	49	42	58
Latvia	82	18	60	40	35	65	50	50
Lithuania	83	17	60	40	32	68	35	65
Luxemburg	-	-	51	49	80	20	-	-
Malta	96	4	56	44	79	21	43	57
Netherlands	61	39	54	46	59	41	46	54
Poland	-	-	59	41	37	63	19	81
Portugal	67	33	59	41	-	-	37	63
Romania	-	-	57	43	36	64	42	58
Slovakia	-	-	51	49	35	65	22	78
Slovenia	-	-	53	47	47	53	47	53
Spain	-	-	48	52	51	49	50	50
Sweden	-	-	43	57	50	50	52	48
United Kingdom	-	-	44	56	-	-	42	58

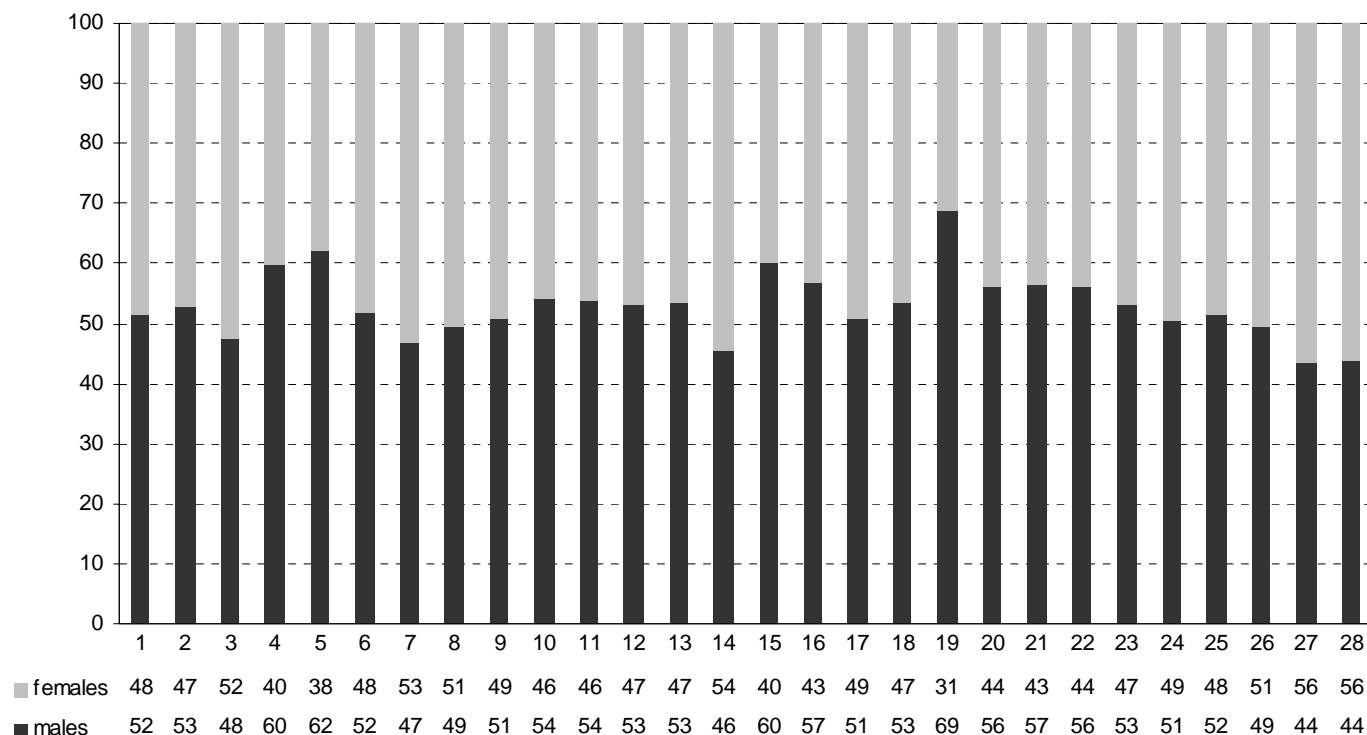
Source: NIDI calculations based on Eurostat.

Table 3.2. Distribution of students in pre-vocational and vocational education and training by ISCED level and gender in the European Union (EU-27), 2004 (%)

Region	ISCED 2		ISCED 3		ISCED 4		ISCED 5	
	male	female	male	female	male	female	male	female
EU-27	55	45	51	49	48	52	42	58
Austria	-	-	57	43	39	61	34	66
Belgium	43	57	51	49	49	51	43	57
Bulgaria	64	36	62	38	62	38	43	57
Cyprus	-	-	82	18	-	-	59	41
Czech Republic	47	53	53	47	58	42	34	66
Denmark	-	-	55	45	-	-	52	48
Estonia	-	-	67	33	38	62	37	63
Finland	-	-	50	50	52	48	55	45
France	69	31	55	45	33	67	44	56
Germany	61	39	58	42	51	49	39	61
Greece	-	-	61	39	46	54	51	49
Hungary	57	43	62	38	49	51	38	62
Ireland	-	-	45	55	62	38	48	52
Italy	-	-	60	40	45	55	34	66
Latvia	78	22	61	39	29	71	45	55
Lithuania	77	23	61	39	42	58	38	62
Luxemburg	-	-	52	48	78	22	-	-
Malta	-	-	73	27	56	44	40	60
Netherlands	56	44	52	48	77	23	-	-
Poland	-	-	61	39	43	57	19	81
Portugal	69	31	55	45	68	32	46	54
Romania	-	-	56	44	38	62	43	57
Slovakia	70	30	53	47	45	55	22	78
Slovenia	-	-	56	44	36	64	47	53
Spain	60	40	52	48	-	-	49	51
Sweden	-	-	42	58	48	52	52	48
United Kingdom	-	-	42	58	-	-	33	67

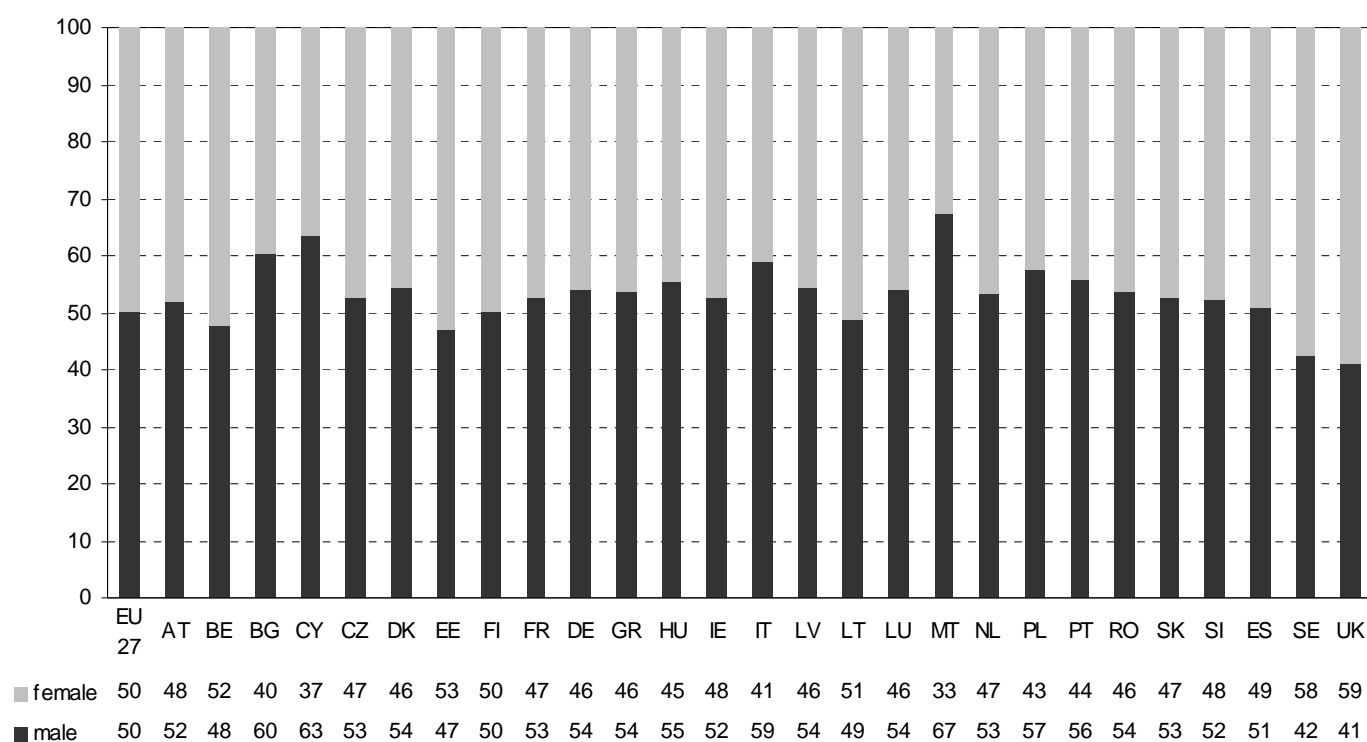
Source: NIDI calculations based on Eurostat.

Figure 3.4. Distribution of ISCED level 2-5 level students in pre-vocational and vocational education and training by gender in the European Union (EU-27) in 2000 (%)



Source: NIDI calculations based on Eurostat.

Figure 3.5. Distribution of ISCED level 2-5 level students in pre-vocational and vocational education and training by gender in the European Union (EU-27) in 2004 (%)



Source: NIDI calculations based on Eurostat.

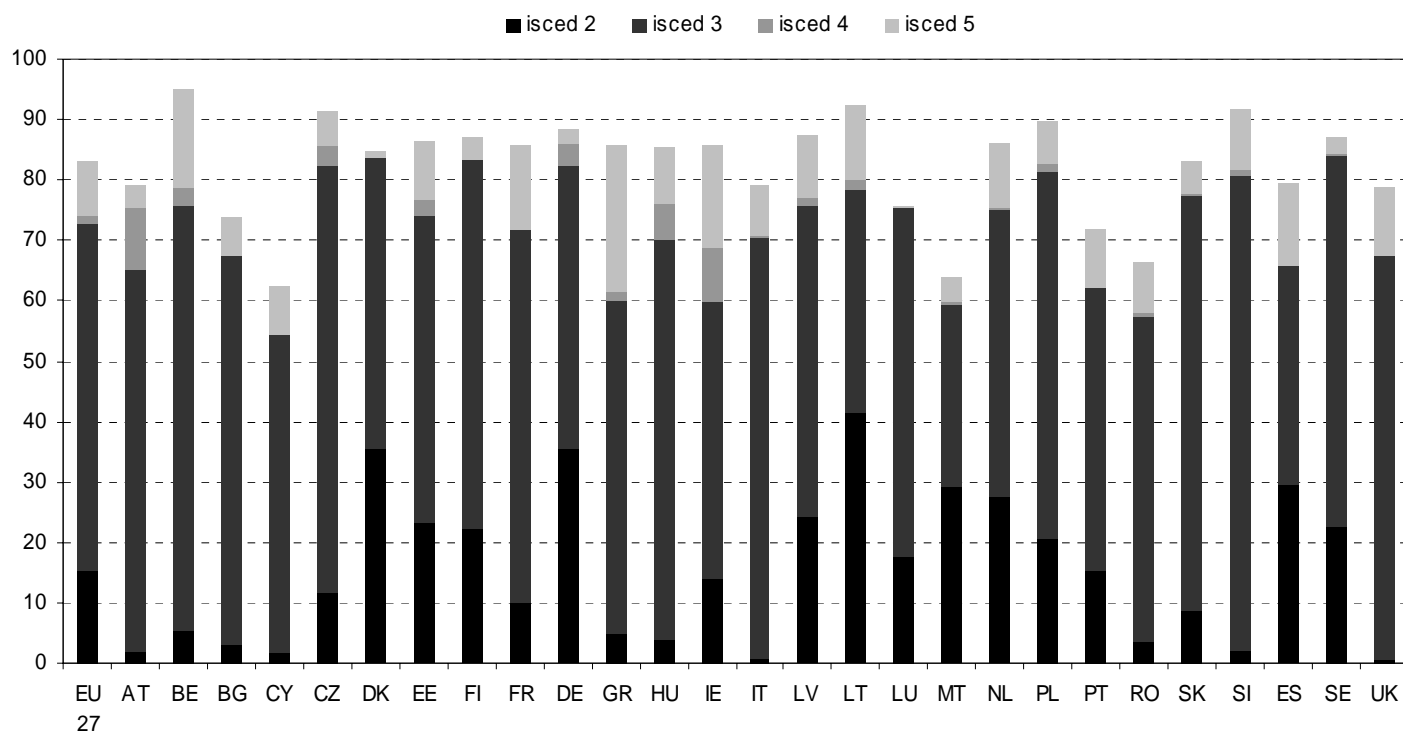
3.3 Educational participation

In 2004, of all persons in age group 15-19 in the European Union, around 83% is participating in initial education at ISCED levels 2-5. Participation is highest in Belgium, the Czech Republic, Lithuania and Slovenia (all above 90%) and lowest in Cyprus, Malta and Romania (all below 70%). In age group 20-24 around 37% is participating in initial education at these levels. The highest levels can be observed in Denmark, Finland, Poland and Slovenia (all above 45%); the lowest in Bulgaria, Cyprus, Luxemburg, Malta and Slovakia (all below 25%). See *Figures 3.6 and 3.7*.

As could be observed from *Figure 3.2*, the distribution of students in general and pre-vocational and vocational streams shows large differences between the countries in the European Union. Therefore, participation of students in age groups 15-19 and 20-24 in pre-vocational and vocational streams show similar differences. In 2004, of all persons in age group 15-19 in the European Union, around 37% is participating in initial pre-vocational and vocational education at ISCED levels 2-5. Participation is highest in Austria, Belgium and the Czech Republic (all above 60%) and lowest in Cyprus, Lithuania, Malta, Portugal and Spain (all below 20%). In age group 20-24 around 10% is participating in initial pre-vocational and vocational education at these levels. The highest levels in 2004 can be observed in Belgium and Slovenia (both above 20%); the lowest in Bulgaria, Italy, Portugal and Slovakia (all below 5%). See *Figures 3.8 and 3.9*.

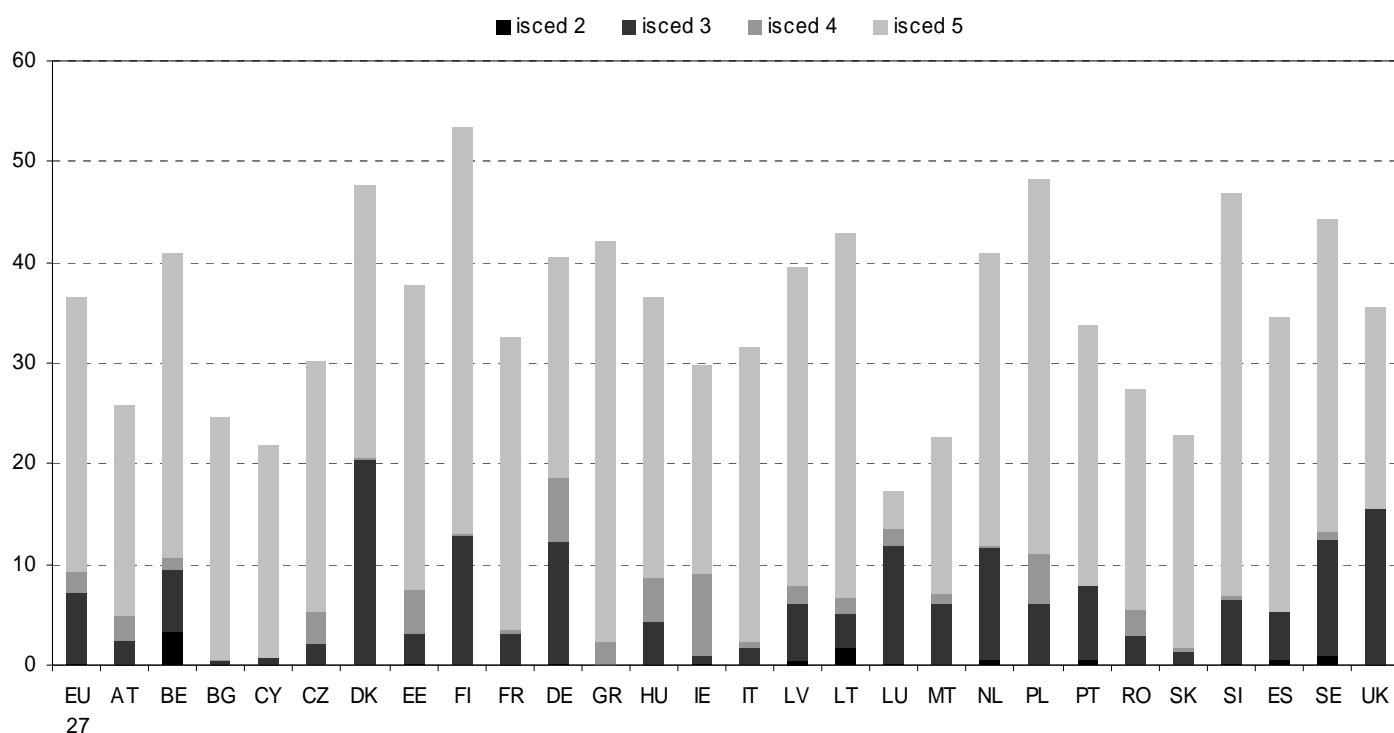
To give some idea of the educational participation at single ages *Figure 3.10* shows an illustrative selection of current educational participation rates in the European Union by ISCED level for some selected single ages, ISCED levels and streams over the period 1998-2004 (the most recent data available). Looking at single ages, current participation rates in initial (vocational) education and training in the European Union are the highest at ages 16-19 for ISCED level 3, at ages 19-22 for ISCED level 4, and at ages 18-21 for ISCED level 5B. Particularly for vocational education and training the relative short time series do not show clear patterns. At ISCED level 3 single age participation rates of students in general education show a slightly upward trend since in the second half of the observation period, whereas the participation rates in pre-vocational and vocational education show a more or less stable pattern in the the same period. At ISCED level 4 in general single age participation rates were declining since 1998, but slightly recovering as from around the year 2002. At ISCED level 5B single age participation rates were increasing since 1998, but declining in the last year of observation.

Figure 3.6. Educational participation in age group 15-19 by ISCED levels 2-5 in the European Union (EU-27) in 2004 (%)



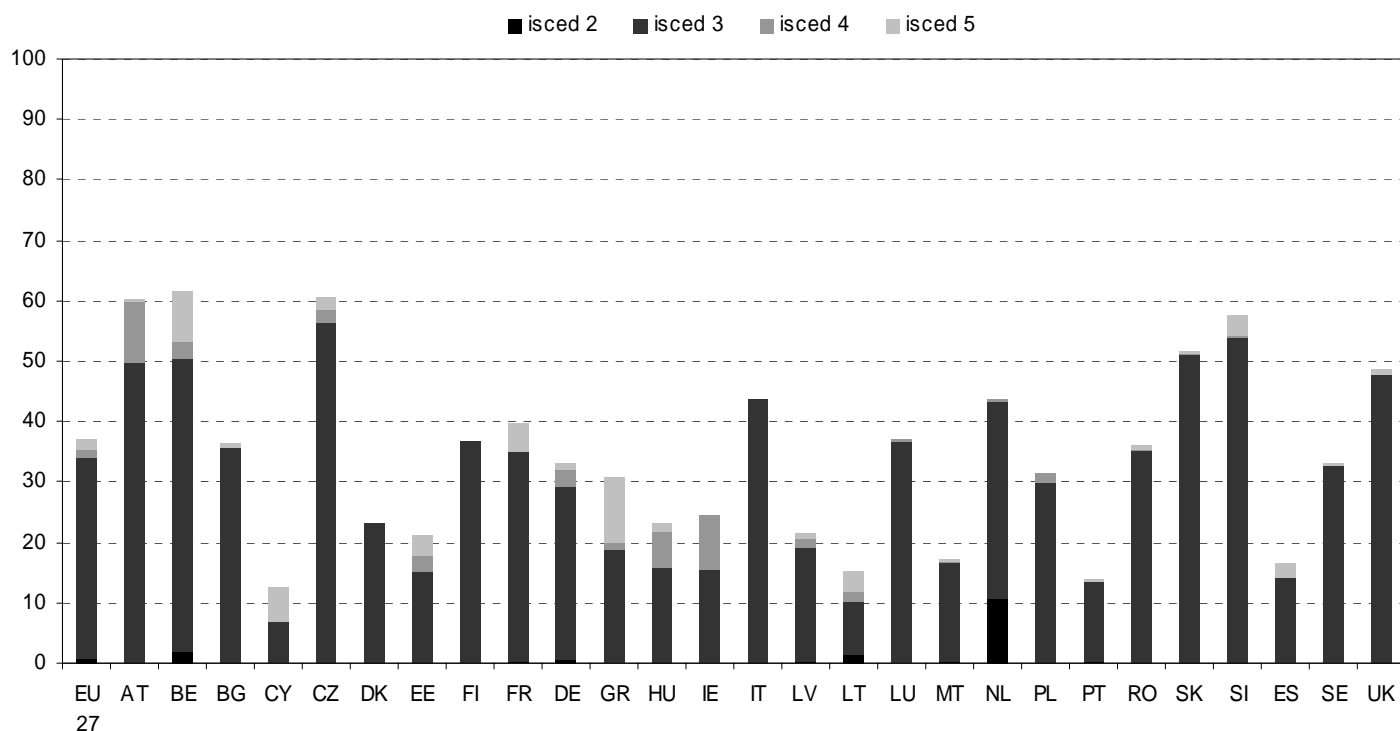
Source: NIDI calculations based on Eurostat.

Figure 3.7. Educational participation in age group 20-24 by ISCED levels 2-5 in the European Union (EU-27) in 2004 (%)



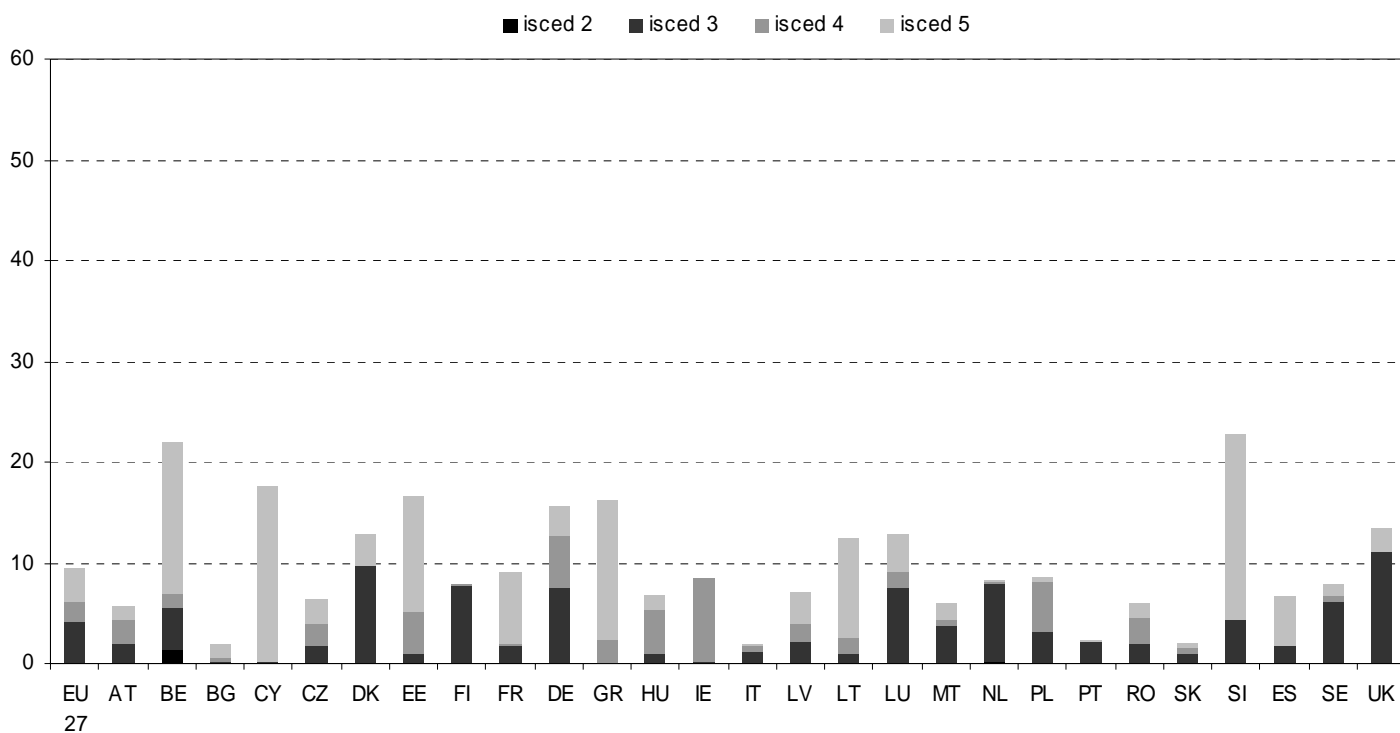
Source: NIDI calculations based on Eurostat.

Figure 3.8. Educational participation in vocational education and training in age group 15-19 by ISCED levels 2-5 in the European Union (EU-27) in 2004 (%)



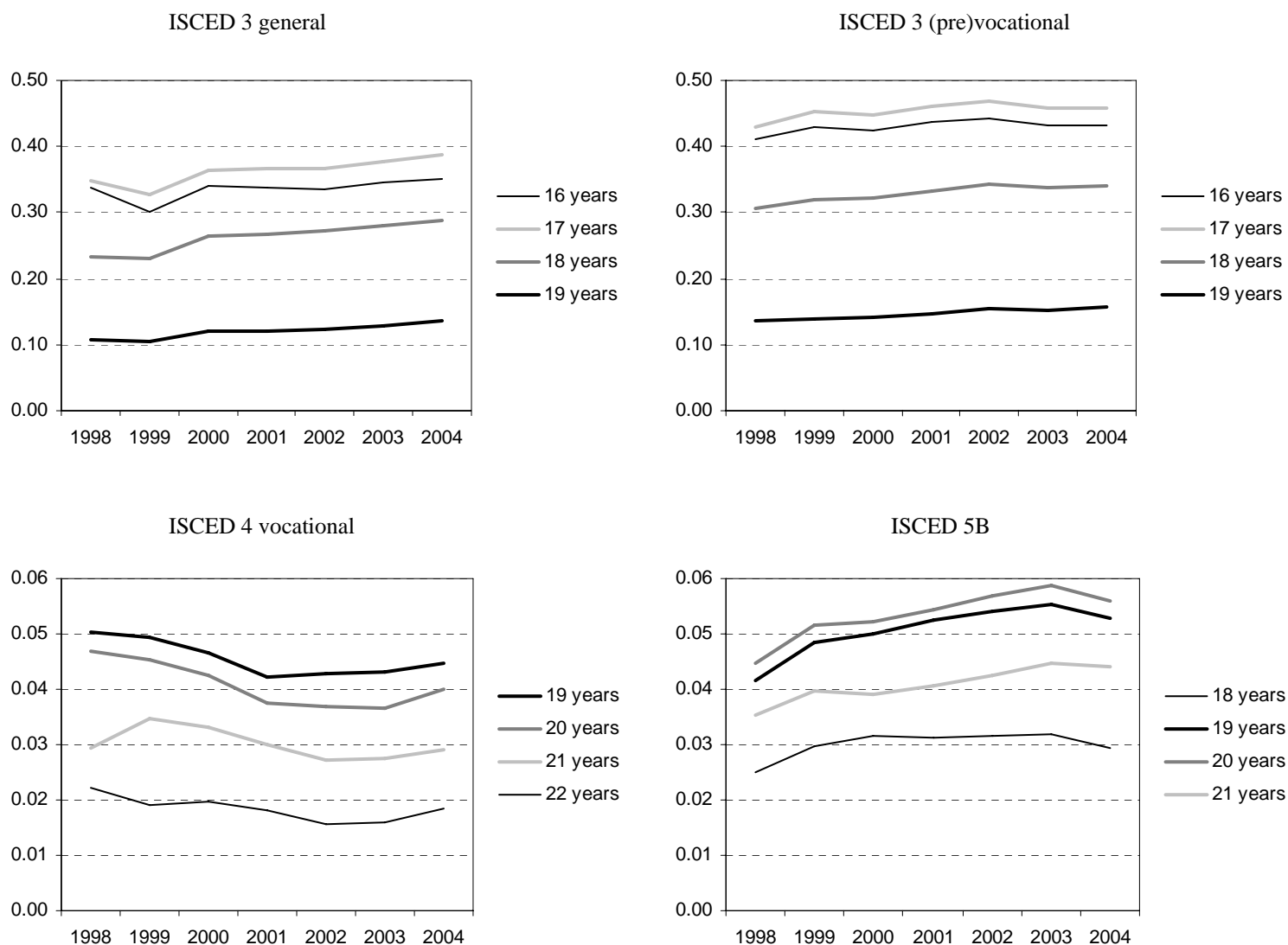
Source: NIDI calculations based on Eurostat.

Figure 3.9. Educational participation in vocational education and training in age group 20-24 by ISCED levels 2-5 in the European Union (EU-27) in 2004 (%)



Source: NIDI calculations based on Eurostat.

Figure 3.10. Education participation rates by some selected ages, ISCED levels and streams², European Union (EU-27)³, 1998-2004



Source: NIDI calculations based on Eurostat

3.4 Fields of education

The distribution of graduates by fields of education⁴ in initial pre-vocational and vocational education and training showed only slight changes in the recent past. *Figure 3.11* presents the distribution of graduates initial pre-vocational and vocational education and training at ISCED level 3. Most graduates can be found in the education fields ‘social sciences, business and law’ and ‘engineering, manufacturing and construction’. These two fields are dominated by business and manufacturing programmes respectively. Since 2001, the share of graduates in ‘science, mathematics and computing’ (increasingly dominated by computing programmes) is growing,

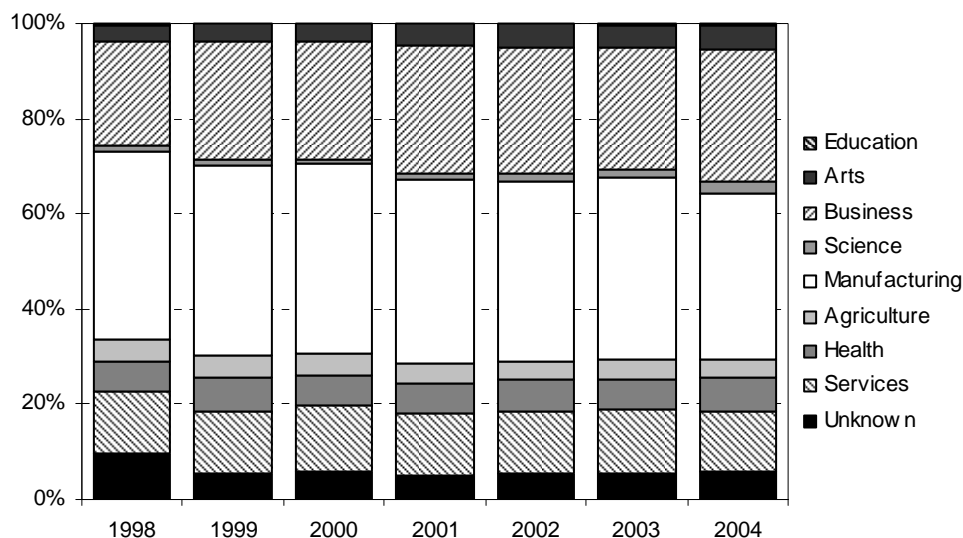
² ISCED level 4 is in fact almost entirely vocational education and level 5B vocational education only.

³ 1998 EU-27 except Belgium, Cyprus, Malta and Slovakia, 1999 except Slovakia, 2004 except Malta.

⁴ For explanation see *Annex A*

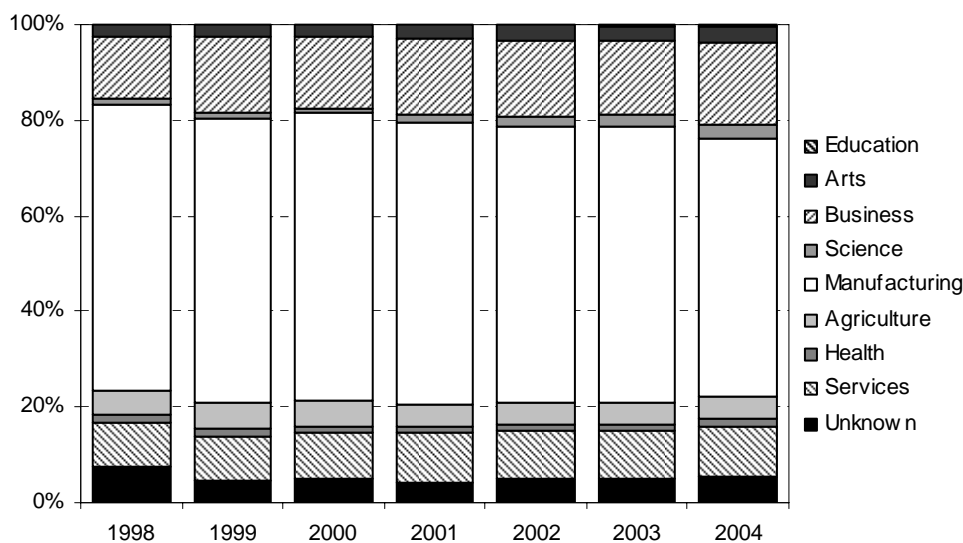
whereas the share of 'engineering, manufacturing and construction' is declining. Though this applies to both male and female graduates, the distributions are rather different between the sexes. (See Figures 3.12 and 3.13) Male students are dominantly graduating in 'engineering, manufacturing and construction'. Female students are more likely to graduate in 'social sciences, business and law' programmes.

Figure 3.11. Distribution of graduates in pre-vocational and vocational education at ISCED level 3 by field of education, European Union⁵, 1998-2004



Source: NIDI calculations based on Eurostat.

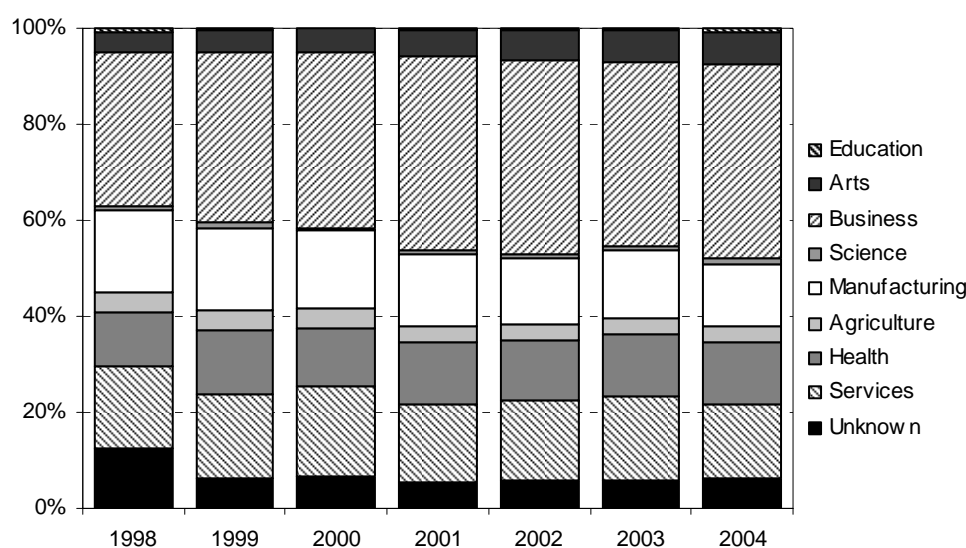
Figure 3.12. Distribution of male graduates in pre-vocational and vocational education at ISCED level 3 by field of education, European Union⁵, 1998-2004



Source: NIDI calculations based on Eurostat.

⁵ EU27 except Austria, France, Greece, Ireland, Malta, Portugal and UK (no or incomplete time series)

Figure 3.13. Distribution of female graduates in pre-vocational and vocational education at ISCED level 3 by field of education, European Union⁵, 1998-2004



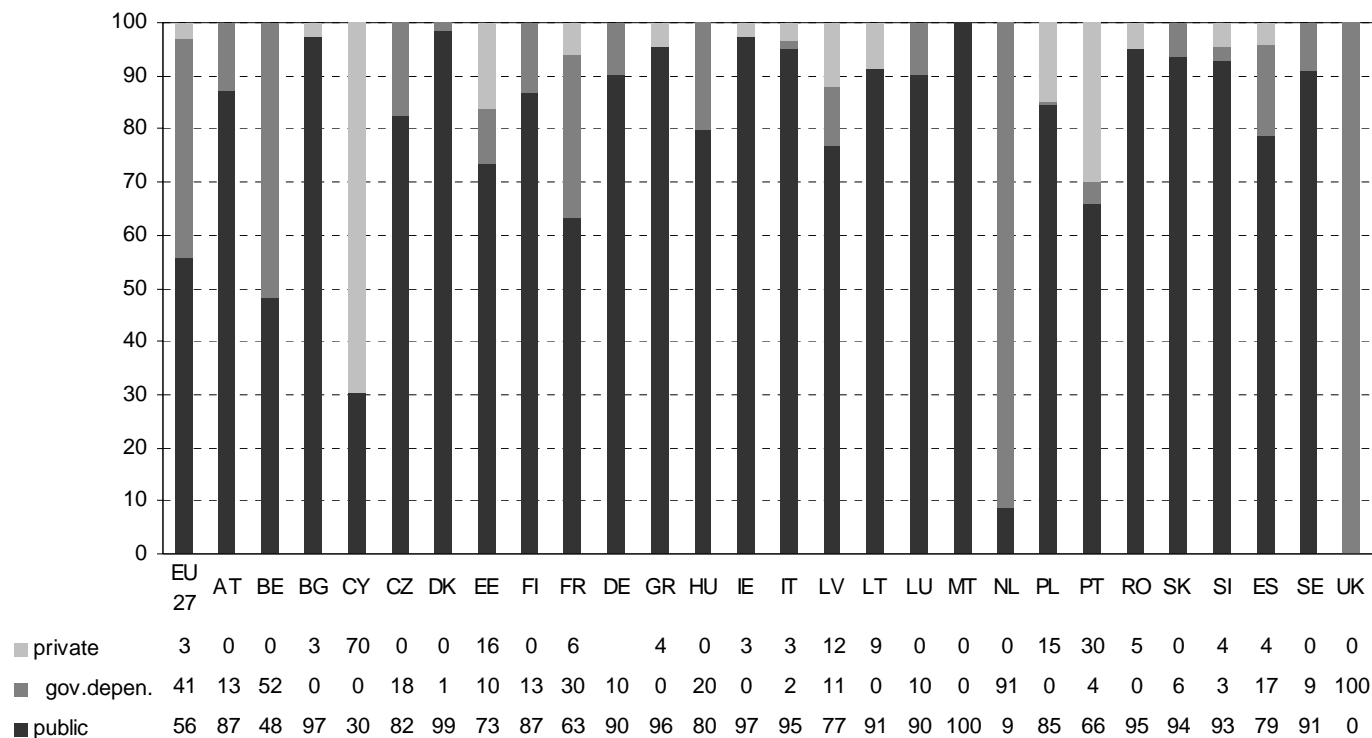
Source: NIDI calculations based on Eurostat.

3.5 Type of institutions

Educational institutions are classified as either public or private. Private institutions are further classified between government dependent private and independent private institutions. The classification between public and private is made according to whether a public agency or a private entity has the ultimate control over the institution. An institution is classified as public if it is controlled and managed directly by a public education authority or agency. A government-dependent private institution receives 50 per cent or more of its core funding from government agencies or its teaching personnel are paid by a government agency. An independent private institution receives less than 50 per cent of its core funding from government agencies and its teaching personnel are not paid by a government agency. (See UNESCO-UIS/OECD/Eurostat, 2004)

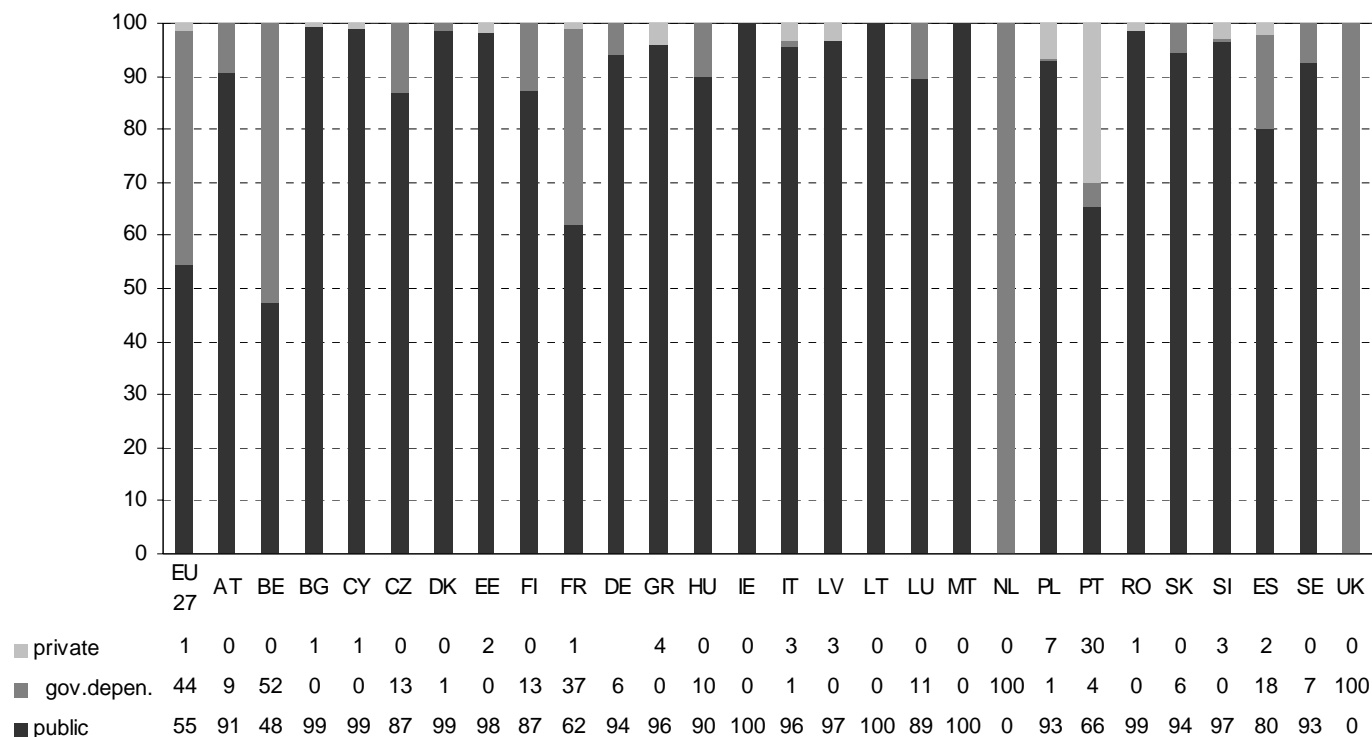
Figure 3.14 shows that 56% of all students in vocational education and training in the European Union are in public institutions. Another 41% of the students are in government-dependent private institutions. In as much as 20 of the European Union member states more than 75% of all students in vocational education and training are in public institutions. Exceptions are Belgium, the Netherlands and the UK with more than 50% of the students in government-dependent private institutions and Cyprus with 70% of the students in independent private institutions. Figure 3.15 shows a fairly similar picture for vocational education and training at ISCED level 3 only. The exception is Cyprus where, contrary to the aggregate picture of that country in Figure 3.14, all vocational education and training at ISCED level 3 is in public institutions.

Figure 3.14. Distribution of students in pre-vocational and vocational education and training at ISCED levels 2-5 by type of institution, European Union (EU-27) in 2004 (%)



Source: NIDI calculations based on Eurostat.

Figure 3.15. Distribution of students in pre-vocational and vocational education and training at ISCED level 3 by type of institution, European Union (EU-27) in 2004 (%)



Source: NIDI calculations based on Eurostat.

3.6 Teaching staff

Unfortunately, no consistent data are available from the Eurostat database or the UNESCO/OECD/Eurostat (UOE) database on the number of teaching staff by educational stream, that is general, pre-vocational and vocational streams. Therefore, it is not possible to calculate student-teacher ratios by ISCED level for pre-vocational and vocational streams separately. *Table 3.3* presents student-teacher ratios by ISCED level for all streams together (average number of students per teacher) as far as possible. Under the assumption that no large differences exist between general and vocational streams with respect to student-teacher ratios, one might consider these data applicable to pre-vocational and vocational streams as well. The table shows substantial differences between the countries, which are rather difficult to interpret, probably due to incomparable differences in educational systems between the countries.

Table 3.3. Average number of students per teacher (student-teacher ratio) by ISCED level in the European Union (EU-27), 2004

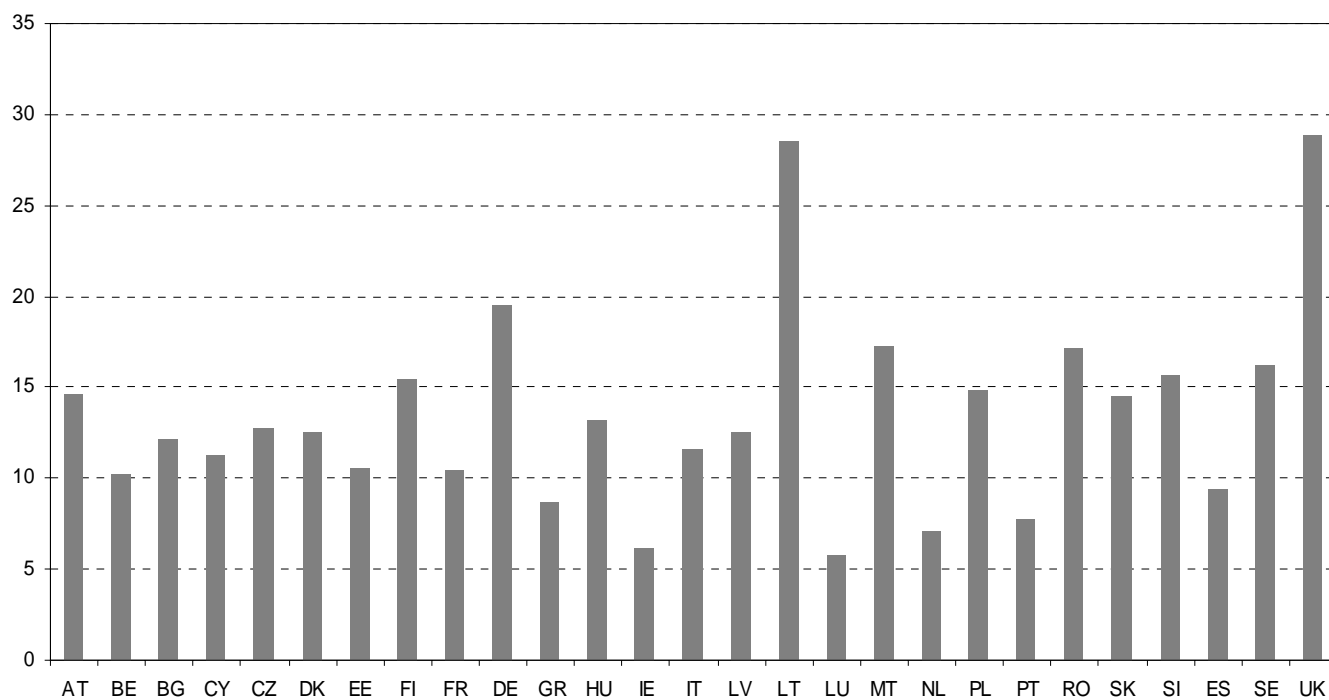
Country	isced 2	isced 3	isced 4	isced 5/6
Austria	10.4	14.6	12.8	15.6
Belgium	12.6	10.2	:	21.5
Bulgaria	12.9	12.1	35.1	15.0
Cyprus	12.1	11.3	-	16.6
Czech Republic	13.6	12.7	35.3	20.0
Denmark	4.2	12.6 ^{xx}	8.1 ^{**}	66.5 [*]
Estonia	11.2 ^x	10.6 ^x	10.4 ^x	14.6
Finland	10.0	15.5	:	16.8
France	14.1	10.4	4.5 ^{***}	16.9
Germany	15.6	19.5	28.8	13.0
Greece	8.2	8.6	7.0	29.0
Hungary	10.2	13.2	15.7	20.3
Ireland	7.0 ^{xx}	6.1	:	15.2
Italy	10.4	11.6	:	21.6
Latvia	12.9	12.6	13.2	29.5
Lithuania	7.0	28.5 ^x	12.2	17.9
Luxembourg	5.3 ^{xx}	5.8	-	-
Malta	10.2	17.2	:	17.3
Netherlands	15.5 [*]	7.2	:	15.3
Poland	12.6 ^{xx}	14.9 ^{xx}	26.5 ^{xx}	22.0 ^{xx}
Portugal	10.6	7.7	:	13.8
Romania	13.4	17.1	52.8	22.8
Slovakia	13.9	14.5	14.5	14.9
Slovenia	12.0	15.6	29.5	32.2
Spain	13.6	9.4	-	15.2
Sweden	12.1	16.2	21.9	12.9
United Kingdom	17.2	28.8	-	23.9

Student-teacher ratio = number of students / number of teachers (or academic staff at ISCED level 5/6)

* 1998, ** 1999, *** 2000, ^{xx} 2001, ^{xx} 2003, : unknown

Source: NIDI calculations based on Eurostat.

Figure 3.16. Average number of students per teacher in upper secondary education (ISCED level 3) in the European Union (EU-27), 2004⁶



Source: NID calculations based on Eurostat.

⁶ Estonian and Lithuanian data from 2001; Danish and Polish data from 2003

4. PROJECTION METHODOLOGY

The projections of initial vocational education and training carried out in this study will be in line with the latest Eurostat population projections (Eurostat, 2006; Lanzieri, 2006). To project future numbers of students and graduates in initial vocational education and training the outcomes of the Eurostat population projections have to be combined with future education level specific participation and graduation rates of students in initial vocational education and training. A well established way to do so is using the so-called participation ratio method (George *et al.*, 2004; Siegel, 2002). The results of such an exercise can be extended relatively easily, again using the participation ratio method, with graduation rates and teacher/pupil ratios.

4.1 Participation ratio method

The idea of the participation ratio method is to develop assumptions on future participation rates (like educational participation and graduation rates) in population categories defined by a certain combination of age, gender and potential other characteristics. An independent projection of the population by age and gender (like the Eurostat population projections) facilitates a projection of the future number of participants, broken down by the demographic characteristics defined.

The participation ratio method for the projection of future numbers of students and graduates in initial vocational education and training has several attractive characteristic features: it is a relatively simple and practical method, the necessary data are usually available and projections can be updated easily.

The participation ratio method is also known as the participation rate method, the prevalence ratio method and the incidence rate method. In this approach socioeconomic characteristics are related to demographic characteristics through the use of ratios (Siegel, 2002). Current and historical data are used to construct participation ratios, that is proportions of the population (stratified by age, gender and possibly other demographic characteristics) for the geographic area(s) under consideration to obtain a set of socioeconomic projections (see George *et al.*, 2004).

The steps used in this approach can be summarised as follows:

1. Starting year participation ratio $p_{dt}^c = P_{dt}^c / P_{dt}$
2. Projected participation ratio $p_{dt+i}^c = P_{dt+i}^c / P_{dt+i}$
3. Independently projected population = P_{dt+i}
4. Projected population with the characteristic $P_{dt+i}^c = p_{dt+i}^c * P_{dt+i}$

where

P = population

p = participation rate

- c = characteristic (e.g. education level and/or educational field)
 d = demographic data (e.g. age-gender)
 t = starting data
 $t+i$ = target date

The way to project educational participation is to multiply age (and gender) specific participation rates (e.g. proportions of the population at school at each age) by the age (and gender) specific projected population (e.g. the Eurostat projections). The assumptions relating to future age-specific participation rates p^c_{dt+i} may be quite straight forward. Past trends in the rates may be assumed to remain stable, continue as observed or to continue in a modified fashion. One may assume, for example, that current age-specific participation rates p^c_{dt} will remain unchanged in the future. One could also use more complex extrapolation methods to project age-specific participation rates, like (non) linear estimation techniques. However, in the latter case long historical time series of educational and other explanatory variables are needed as well as clear observed trends in the data.

To extend the model with graduation rates or teacher/student ratios, the result of the previous exercise has to be multiplied in a similar way with the graduation rates (or teacher/student ratios). Graduation rates are calculated as the number of graduates by age, gender, ISCED level and programme divided by the number of students by age, gender, ISCED level and programme.

The steps used in this follow-up approach can be summarised as follows:

1. Starting year graduation ratio

$$g^c_{dt} = G^c_{dt} / P^c_{dt} \text{ (or staff-student ratio } s^c_{dt} = S^c_{dt} / P^c_{dt})$$

2. Projected graduation ratio

$$g^c_{dt+i} = G^c_{dt+i} / P^c_{dt+i} \text{ (or staff-student ratio } s^c_{dt+i} = S^c_{dt+i} / P^c_{dt+i})$$

3. Projected number of graduates with the characteristic

$$G^c_{dt+i} = g^c_{dt+i} * p^c_{dt+i} * P^c_{dt+i} = g^c_{dt+i} * P^c_{dt+i}$$

$$\text{(or number of staff } S^c_{dt+i} = s^c_{dt+i} * p^c_{dt+i} * P^c_{dt+i} = s^c_{dt+i} * P^c_{dt+i})$$

where

- G = number of graduates
 g = graduation rate
 S = number of teachers (staff)
 s = staff-student ration

Again past trends in the rates by age, gender and ISCED level may be assumed to remain stable, to continue as observed or to continue in a modified fashion.

4.2 Data

This study uses the most recent data available at the time of the study. Data on vocational education and training are primarily based on harmonised data from the Eurostat database (*Population and social conditions - Education and Training* section), since this data source proved to be the most complete and covering all the 27 member states of the European Union⁷. Data needed for the projections by country are historical time series of:

- both number of students in vocational education and training and total number of students by gender, age, educational level and EU member state
- both number of students in vocational education and training and total number of students by gender, age, educational level, educational field and EU member state
- population by gender, age and EU member state

The Eurostat database (*Population and social conditions - Education and Training* section) contains the following harmonised data on (vocational) education and training for the period 1998-2004:

- number of students by gender, age, educational level (ISCED; see *Annex A*) and EU member state
- number of students in vocational education and training and total number of students by educational level (ISCED), educational stream (general, pre-vocational and vocational), educational field and EU member state (see *Annex A*)
- population by gender, age and EU member state

Eurostat population projections are also directly available from the Eurostat database (*Population and social conditions- Population* section) for all of the 27 current member states:

- future population by gender, age (single year age groups), EU member state and population variant for the period 2005-2050 (base year 2004)

The data mentioned are available for all current European Union member states (EU-27) only. Though some of the Eurostat (educational) datasets contain data for European candidate countries and other non-EU countries, for none of these countries the necessary full dataset was available, neither was any of these countries included in any of the variants of the Eurostat population projections. All educational projections are therefore restricted to the 27 member states of the European Union. The historical time series with respect to education participation are limited to the period 1998-2004. For some (EU-15) countries older time series do exist, however these time series are

⁷ At the time of the research the UNESCO/OECD/EUROSTAT (UOE) database on education statistics, for instance, did not include eight of the 27 EU member states (viz. Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Romania, and Slovenia).

neither publicly available nor harmonised with the 1998-2004 data, because of the fundamental ISCED revision in 1997.

4.3 Assumptions and scenarios

From the purely demographic projection point of view the projection assumptions will be fully consistent with the latest Eurostat population projections. That is, the future population numbers in the age groups of interest are exactly the same as in the Eurostat population projections. With respect to the future participation and graduation of students in initial vocational education and training the projections start from a straight forward baseline variant, that is keeping participation and graduation rates by age, sex and education level at their current levels. The reasoning behind this is both conceptual and pragmatic. This baseline assumption with constant participation and graduation rates will gain clear insight in the implications of the pure demographic trends for the future numbers of students and graduates in initial vocational education and training without being disturbed by deviating assumptions on participation and graduation. Consistent historical time series available on education data are relatively short, only covering the period 1998-2004 and often even missing several years within this period. The time series did not show clear trends, either upwards or downwards and therefore did not allow extrapolating historical trends other than keeping rates constant.

The observed education participation rates (averaged over the period 1998-2004) by (single) age, gender, ISCED level and programme orientation (pre-vocational and vocational) were kept constant over the whole projection period from 2005 up to 2050. That is for instance, the education participation rate of boys aged 16 at ISCED level 3 is the same in 2050 as it is in 2005. Similarly, the graduation rates were kept constant. However, as could be observed from the previous chapter, there are some slight shifts in the distribution of graduates by fields of education: the most important shift is the one from *'engineering, manufacturing and construction'* (especially engineering and manufacturing) to *'science, mathematics and computing'* (especially computing). This trend in the period 1998-2004 has been incorporated for several countries as a linear trend up to the year 2025 in the scenarios (See *Annex B – Tables B.5 to B.7*); after 2025 the distribution remains constant⁸. The distribution within the remaining fields of education is assumed to remain constant throughout the whole projection period. In some of the countries there was no data at all available on the

⁸ The target year 2025 is an arbitrary choice based on both the time horizon and pragmatic considerations. From the perspective of making projections a projection interval of twenty years is a very long one; usually historical based trends are assumed to converge after a certain point in time and than to remain stable. More pragmatic is the fact that continuation of the observed trends after 2025 results in unrealistic values (below zero) in some cases.

distribution of graduates by field of education at ISCED level 3. In these countries⁹ all graduates were classified as “unknown”.

In a second stage other assumptions are included in three alternative scenarios. The first two alternative scenarios are meant to improve insight in the implications of demographic trends. In these scenarios the ‘high population’ and ‘low population’ variants of the Eurostat population projections are combined with the constant initial vocational education and training future participation and graduation rates. That is, the demographic assumptions are different from the baseline scenario and the assumptions on participation and graduation are the same as in the baseline. The third alternative scenario is in line with the Eurostat ‘baseline population’ variant again, but the assumptions on initial vocational education and training future participation are different. The assumptions with respect to education participation are of a more normative nature: in this scenario it is assumed that the total number of students in initial vocational education and training will remain unchanged in future. That is, this scenario will give an indication to what extent initial vocational education and training participation needs to be increased to prevent contraction of the initial vocational education and training system. By keeping the graduation rates constant in this scenario, the number of graduates will then, due to the increased participation rates, remain at the same level as well. The majority of students in vocational education and training are participating in upper secondary level (ISCED level 3). Most of them are in age group 15-19 where total participation rates (of all ISCED levels aggregated) are very high. Increasing of participation in vocational education and training then, is hardly possible by increasing participation rates, since there is not much to gain. Another way of increasing participation in vocational education and training is to shift participation from general to vocational streams. This alternative scenario explores to what extent education participation needs to be shifted in favour of vocational education and training and thus assessing the sense of reality of such a scenario.

Summarising, the following scenarios will be explored:

- Baseline scenario: ‘baseline population’ variant combined with constant initial vocational education and training participation and graduation rates
- High population scenario: ‘high population’ variant combined with constant initial vocational education and training participation and graduation rates
- Low population scenario: ‘low population’ variant combined with constant initial vocational education and training participation and graduation rates
- Constant number of VET participants scenario: ‘baseline population’ variant combined with increased initial vocational education and training participation rates, and constant initial vocational education and training graduation rates;

⁹ France, Ireland, Malta, Portugal and the UK. In the case of Malta and the UK the numbers of graduates were neither available; therefore, EU-average graduation rates were used instead.

this scenario will be referred to as the ‘increased participation (rates)’ variant.¹⁰

The first scenario is applied to all 27 European Union countries separately. The three alternative scenarios are applied to the European Union (EU-27) as a whole. In the remainder of the report results of the projections are presented.

¹⁰ To assess the sensitivity of this scenario, as a reference also two extra variants of this scenario are calculated: increased initial vocational education and training participation rates combined with the ‘high population’ and the ‘low population’ variant respectively (instead of the ‘baseline population’ variant).

5. PROJECTION RESULTS

This chapter presents the results of the projections of the future numbers of students, the numbers of graduates and the numbers of teaching staff in initial vocational education and training according to the scenario assumptions presented in the previous chapter. The final section explores consequences of the projection results for the future labour force. To project future numbers of students and graduates in initial vocational education and training in the European Union the outcomes of the Eurostat population projections were combined with constant participation rates of students in initial vocational education and training. All projection results refer to the current European Union, that is EU-27. The starting (base) year of the projections is 2005. Projections were initially carried out for the population in age group 10-24. However, as mentioned previously, the report focuses on the age group 15-24. Detailed outcomes of the projections in tables and figures are available in *Annex C*.

5.1 The baseline scenario

5.1.1 The number of students in initial vocational education and training

According to the Eurostat ‘baseline’ variant the population aged 15-24 decreases with about 17% from 62 million in 2005 to 51 million in 2030 (see *Chapter 2*). In the long-term the population aged 15-24 might even further decline to 46 million in 2050, more than a quarter lower than in 2005. Keeping education participation rates unchanged in future will cause the number of students to decrease in line with the decline of the population aged 15-24. See *Tables 5.1* and *5.2*.

The total number of students in initial pre-vocational and vocational education and training from lower secondary education up to the first stage of tertiary education, that is ISCED levels 2-5, is expected to decrease from 14.2 million students in 2005 to 11.9 million in 2030 according to the ‘baseline’ population variant. Particular at ISCED level 3 the decrease of the number of students in initial pre-vocational and vocational education and training is large in terms of absolute numbers. The number of students in initial pre-vocational and vocational education and training at ISCED level 3 decreases from 11.5 million in 2005 to 9.6 million in 2030; a decline of almost 2 million students. As can be observed from *Figures 5.1* and *5.2*, particularly in the period 2009-2015 the decline is relatively steep.

Up to 2020 the number of students in initial pre-vocational and vocational education and training at ISCED level 2 remains rather stable. This category is dominated by the Netherlands: two thirds of the pupils in this category are from the Netherlands, one of the few European Union countries where the population in age group 15-24 is not expected to decline in the future. On the other hand, the number of students in initial pre-vocational and vocational education and training at ISCED level 4 is expected to decline above average. This category is dominated by the Germany, Poland and Romania. These countries all show above average future decline of the population in age group 15-24.

Table 5.1. Projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, baseline population variant / constant education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	x 1000							
population	15-19	30333	28498	26298	25955	25695	25232	22368
	20-24	31935	30866	28931	26739	26429	26214	23393
	total	62268	59364	55229	52694	52124	51446	45761
ISCED 2-5	15-19	11229	10628	9807	9668	9508	9356	8403
	20-24	3018	2995	2769	2628	2555	2534	2318
	total	14247	13623	12576	12295	12063	11890	10721
ISCED 2	15-19	161	160	161	159	151	149	148
	20-24	11	11	12	11	11	11	11
	total	173	171	173	171	162	159	159
ISCED 3	15-19	10182	9593	8863	8728	8593	8450	7576
	20-24	1343	1370	1291	1227	1177	1164	1088
	total	11526	10963	10154	9955	9771	9614	8664
ISCED 4	15-19	370	369	316	307	296	296	262
	20-24	623	606	524	486	459	458	407
	total	992	975	841	793	755	753	669
ISCED 5	15-19	516	505	466	473	468	462	417
	20-24	1041	1008	943	903	908	902	812
	total	1556	1514	1409	1376	1375	1364	1229

Table 5.2. Index of the projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, baseline population variant / constant education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	Index 2005=100							
population	15-19	100	94	87	86	85	83	74
	20-24	100	97	91	84	83	82	73
	total	100	95	89	85	84	83	73
ISCED 2-5	15-19	100	95	87	86	85	83	75
	20-24	100	99	92	87	85	84	77
	total	100	96	88	86	85	83	75
ISCED 2	15-19	100	99	100	99	94	92	92
	20-24	100	100	103	99	98	94	93
	total	100	99	100	99	94	92	92
ISCED 3	15-19	100	94	87	86	84	83	74
	20-24	100	102	96	91	88	87	81
	total	100	95	88	86	85	83	75
ISCED 4	15-19	100	100	86	83	80	80	71
	20-24	100	97	84	78	74	74	65
	total	100	98	85	80	76	76	67
ISCED 5	15-19	100	98	90	92	91	90	81
	20-24	100	97	91	87	87	87	78
	total	100	97	91	88	88	88	79

Figure 5.1. Projected number of students aged 15-24 in initial pre-vocational and vocational education and training by ISCED level in the European Union (EU-27), 2005-2030, Eurostat baseline population variant / constant education participation

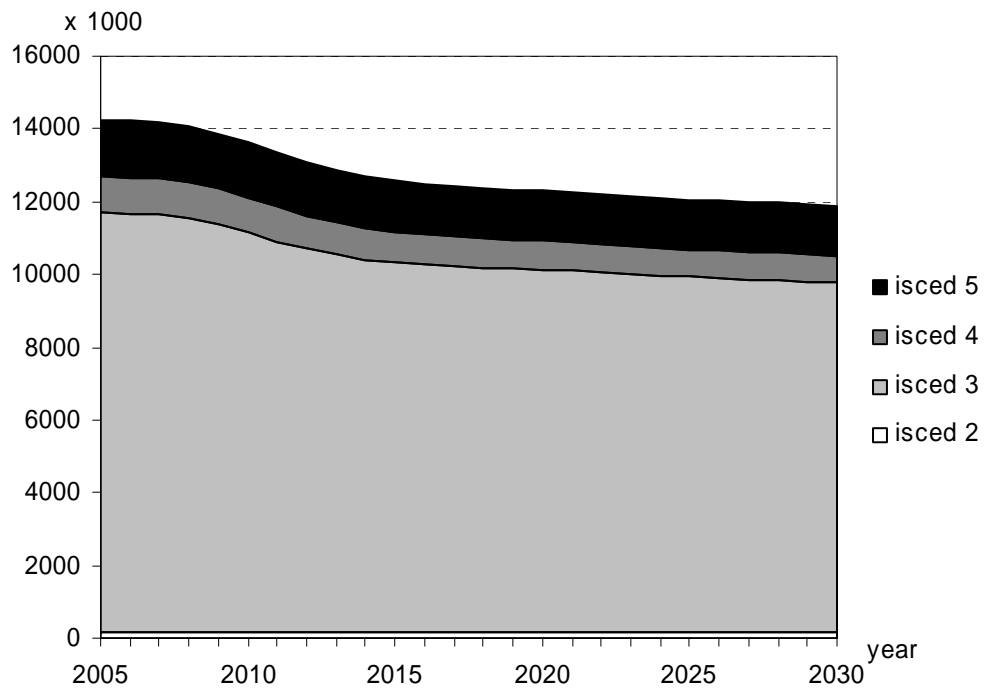
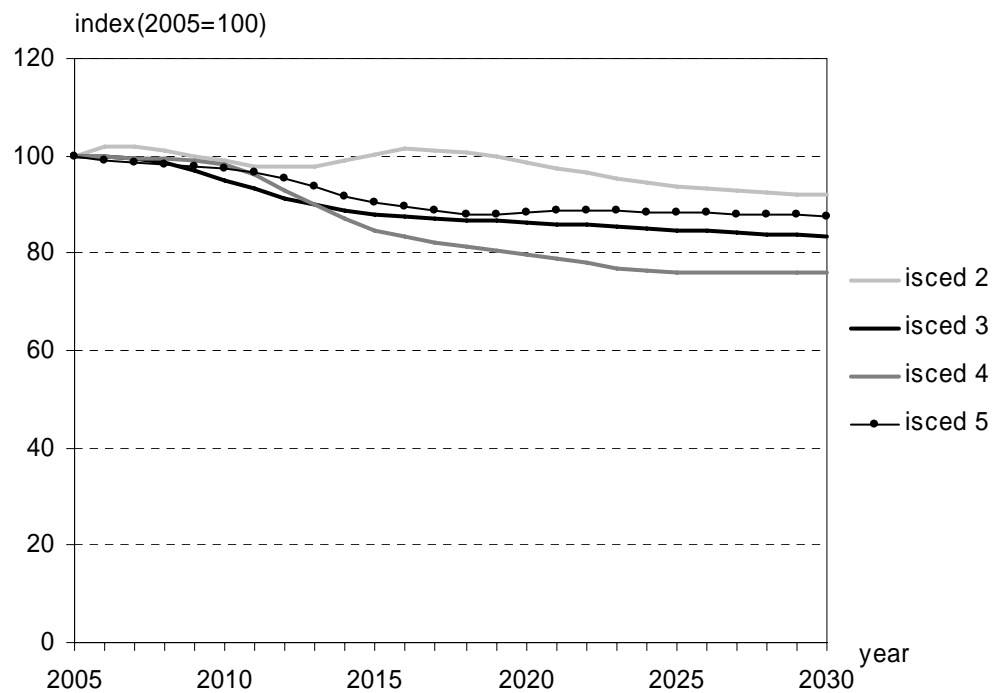


Figure 5.2. Index of the projected number of students aged 15-24 in initial pre-vocational and vocational education and training by ISCED level in the European Union (EU-27), 2005-2030, Eurostat baseline population variant / constant education participation



Differences with respect to numbers of students in pre-vocational and vocational education and training between countries are similar to the differences with respect to the population in age group 15-24 as presented in *Chapter 2. Tables 5.3 and 5.4* show the projected numbers of students in pre-vocational and vocational education and training at all ISCED levels and at ISCED level 3 in particular, respectively. Germany, the Eastern European and the Baltic countries are expected to have a relatively substantial decline of the number of students in pre-vocational and vocational education and training. These countries together account for a decrease of 1.7 million students at ISCED levels 2-5 in 2030; around 73% of the total decline in the European Union in 2030. In absolute numbers Germany and Poland are expected to have the largest decrease: 478 and 500 million respectively.

Table 5.3. Projected number of students aged 15-24 in pre-vocational and vocational education and training, ISCED levels 2-5, European Union (EU-27), 2005-2050, Eurostat baseline population variant / constant education participation

Region	2005	2010	2015	2020	2025	2030	2050
	x 1000						
EU-27	14247	13623	12576	12295	12063	11890	10721
Austria	320	330	302	283	275	273	247
Belgium	522	535	516	504	491	489	475
Bulgaria	199	157	122	120	115	108	81
Cyprus	18	17	16	14	13	14	14
Czech Republic	441	411	310	307	312	318	259
Denmark	108	123	130	126	120	111	117
Estonia	40	35	25	23	25	26	20
Finland	144	149	139	132	131	133	124
France	1907	1846	1831	1921	1880	1836	1787
Germany	2344	2287	2086	2000	1882	1866	1657
Greece	312	278	264	259	269	270	222
Hungary	194	185	160	146	147	146	132
Ireland	100	91	91	99	106	107	94
Italy	1331	1319	1274	1309	1284	1186	1002
Latvia	53	45	29	27	30	33	25
Lithuania	74	70	55	45	42	43	38
Luxemburg	13	15	15	15	15	16	18
Malta	7	7	6	5	6	6	6
Netherlands	510	535	538	552	521	501	522
Poland	1220	1042	846	723	694	720	612
Portugal	100	93	90	93	95	91	76
Romania	725	550	472	446	445	430	321
Slovakia	224	198	157	138	137	137	114
Slovenia	105	90	79	75	75	79	68
Spain	585	534	506	533	568	552	414
Sweden	233	261	218	214	228	233	232
United Kingdom	2420	2420	2297	2184	2155	2165	2042

Table 5.4. Projected number of students aged 15-24 in pre-vocational and vocational education and training, ISCED level 3, European Union (EU-27), 2005-2050, Eurostat baseline population variant / constant education participation

Region	2005	2010	2015	2020	2025	2030	2050
	x 1000						
EU-27	11526	10963	10154	9955	9771	9614	8664
Austria	249	256	232	219	213	212	191
Belgium	325	330	317	310	302	303	292
Bulgaria	186	145	113	113	108	101	75
Cyprus	4	4	3	3	3	4	3
Czech Republic	381	354	263	268	271	275	224
Denmark	99	113	119	115	109	101	106
Estonia	17	13	10	10	11	11	9
Finland	143	149	139	131	131	133	124
France	1429	1369	1375	1445	1400	1371	1339
Germany	1734	1656	1535	1456	1379	1372	1212
Greece	114	108	102	105	109	107	88
Hungary	107	102	85	82	83	81	74
Ireland	46	43	45	50	52	51	46
Italy	1304	1294	1249	1285	1258	1161	983
Latvia	39	31	20	20	23	25	18
Lithuania	27	25	19	15	15	16	13
Luxemburg	12	13	14	14	13	14	16
Malta	6	6	5	5	5	5	5
Netherlands	397	418	418	432	409	392	408
Poland	998	853	689	594	577	602	505
Portugal	95	88	85	89	90	87	72
Romania	637	458	408	385	388	372	278
Slovakia	218	192	152	134	133	133	111
Slovenia	74	62	56	54	54	58	49
Spain	378	355	338	364	385	366	279
Sweden	221	247	204	202	216	220	219
United Kingdom	2286	2280	2160	2057	2031	2042	1923

5.1.2 The number of graduates in initial vocational education and training

In line with the decline of the projected number of students in pre-vocational and vocational education and training, the number of graduates is expected to decline as well. Under the fairly moderate assumption of unchanged graduation rates the general pattern is similar. The number of annual graduates in pre-vocational and vocational education and training at ISCED levels 3-5 in the European Union is expected to decrease from 3.7 million in 2005 to 3.1 million in 2030. (See *Tables 5.5 and 5.6 and Figure 5.3*) The majority of graduates are at ISCED level 3, showing a similar decline of 2.9 million in 2005 to 2.4 million in 2030. The distribution of graduates by field of education at this educational level is only changing slightly. (*Figure 5.4*) The most important one is a shift from graduates in the field of ‘*engineering, manufacturing and construction*’ (mainly manufacturing) to ‘*science, mathematics and computing*’ (mainly computing), however still hardly visible from the graph.

Table 5.5. Projected number of graduates in pre-vocational and vocational education and training by ISCED level 3-5 and age group, European Union (EU-27), 2005-2050, baseline population variant / constant education participation

age group		2005	2010	2015	2020	2025	2030	2050
x 1000								
ISCED 3-5	15-19	2726	2598	2394	2364	2326	2292	2069
	20-24	936	920	840	794	770	762	693
	total	3661	3518	3234	3157	3096	3054	2762
ISCED 3	15-19	2486	2359	2179	2148	2114	2083	1880
	20-24	444	441	407	386	370	364	336
	total	2929	2800	2586	2535	2484	2447	2216
ISCED 4	15-19	123	125	108	105	102	102	91
	20-24	225	218	188	172	161	161	143
	total	349	344	297	277	263	262	234
ISCED 5	15-19	117	114	107	110	109	108	98
	20-24	267	260	244	236	239	237	214
	total	383	374	351	346	348	345	312

Table 5.6. Projected number of graduates aged 15-24 in pre-vocational and vocational education and training, ISCED levels 3-5, European Union (EU-27), 2005-2050, Eurostat baseline population variant / constant education participation

Region	2005	2010	2015	2020	2025	2030	2050
x 1000							
EU-27	3661	3518	3234	3157	3096	3054	2762
Austria	91	94	86	80	78	78	70
Belgium	100	105	100	98	95	94	92
Bulgaria	37	31	23	22	21	20	15
Cyprus	4	4	4	3	3	3	3
Czech Republic	113	105	80	78	80	81	66
Denmark	23	25	28	28	26	25	25
Estonia	9	8	5	5	5	6	4
Finland	30	31	30	28	27	28	26
France	687	664	659	692	677	661	643
Germany	639	630	571	549	515	511	454
Greece	48	44	41	41	42	42	35
Hungary	64	62	54	48	48	48	43
Ireland	32	29	30	33	35	34	31
Italy	246	248	234	237	240	225	185
Latvia	12	10	7	6	7	8	6
Lithuania	18	18	14	11	10	11	9
Luxemburg	2	3	3	3	3	3	4
Malta	2	2	2	1	2	2	2
Netherlands	114	120	120	124	118	113	117
Poland	344	292	239	200	185	190	167
Portugal	15	14	14	14	14	14	12
Romania	202	162	132	124	124	121	90
Slovakia	59	53	42	36	35	35	30
Slovenia	18	15	14	13	13	14	12
Spain	177	162	153	161	171	167	125
Sweden	45	53	43	41	45	46	46
United Kingdom	532	537	509	481	476	477	451

Figure 5.3. Projected number of graduates aged 15-24 in initial pre-vocational and vocational education and training by ISCED level in the European Union (EU-27), 2005-2030, Eurostat baseline population variant / constant education participation

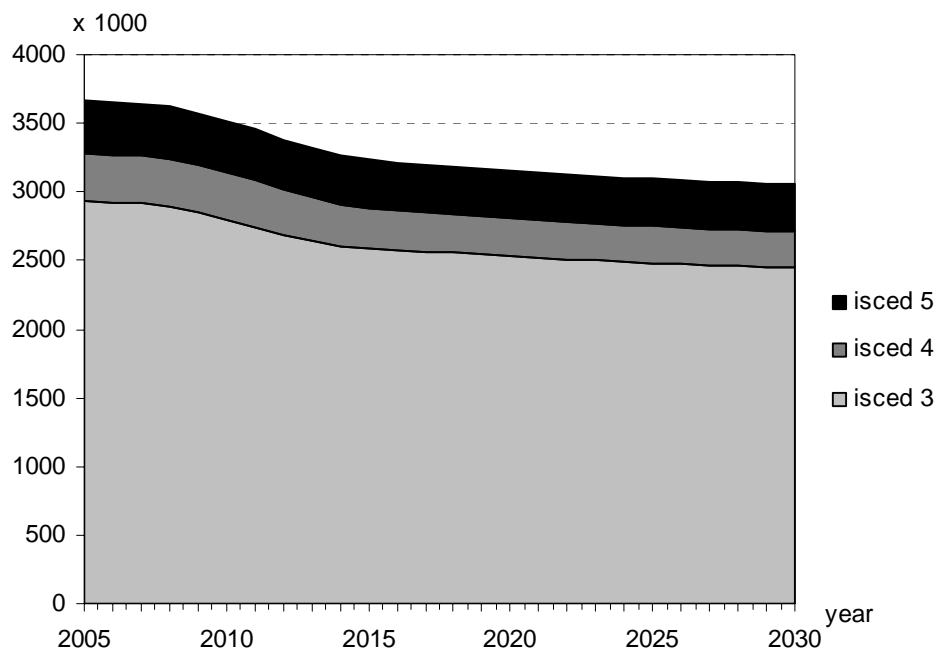
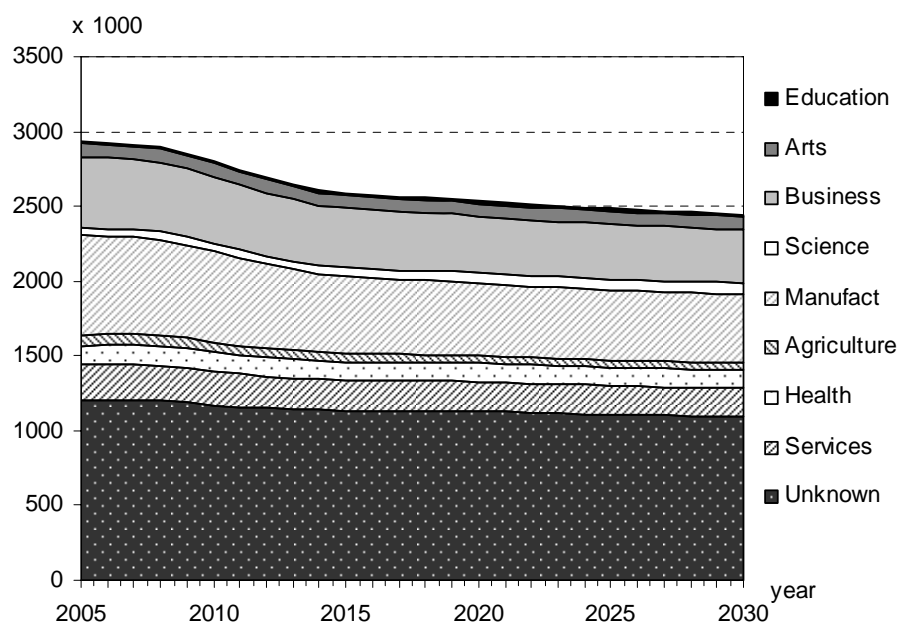


Figure 5.4. Projected number of graduates aged 15-24 in initial pre-vocational and vocational education and training, ISCED level 3, by field of education¹¹ in the European Union (EU-27), 2005-2030, Eurostat baseline population variant / constant education participation



¹¹ Distribution unknown in France, Ireland, Malta, Portugal and the United Kingdom

5.1.3 Teaching staff in initial vocational education and training

The expected future decline of the number of students in initial pre-vocational and vocational education and training will affect the number of teaching staff needed in future. Though data do not allow allocating teaching staff to initial pre-vocational and vocational education and training specifically, some assumptions are possible. Assuming the average student/teacher ratios presented earlier in *Table 3.3* are similar for both general and pre-vocational and vocational streams within ISCED level 3 and keeping the student/teacher ratios constant, the number of teachers (in fulltime units) can be estimated and projected for the whole projection interval. Of course, since the student teacher/ratios are kept constant the future trends are similar to the trends in the future numbers of students. According to the projection almost 150 thousands less teaching staff (in fulltime units) is needed around the year 2030. (see *Table 5.7*)

Table 5.7. Projected number of teachers in initial pre-vocational and vocational education and training at ISCED level 3, European Union (EU-27), 2005-2050

Region	2005	2010	2015	2020	2030	2050
fulltime units x 1000						
European Union	1003	972	918	882	858	779
Austria	20	20	20	18	17	16
Belgium	48	49	48	47	45	44
Bulgaria	17	15	11	10	9	7
Cyprus	0.4	0.4	0.4	0.3	0.3	0.3
Czech Republic	31	29	24	21	22	18
Denmark	8	9	10	10	9	9
Estonia	2	1	1	1	1	1
Finland	12	12	12	11	11	10
France	141	137	135	138	136	131
Germany	88	85	79	75	70	62
Greece	14	13	12	12	12	10
Hungary	10	9	8	7	7	7
Ireland	8	7	7	8	8	7
Italy	146	140	137	136	131	106
Latvia	3	3	2	2	2	2
Lithuania	0.9	0.8	0.7	0.6	0.5	0.5
Luxembourg	2	2	2	2	2	3
Malta	0.4	0.4	0.4	0.3	0.3	0.4
Netherlands	62	65	67	68	63	65
Poland	72	63	52	44	41	36
Portugal	14	12	12	12	12	10
Romania	39	35	27	25	24	18
Slovakia	16	14	12	10	9	8
Slovenia	5	5	4	4	4	3
Spain	44	39	37	38	40	30
Sweden	17	19	18	16	18	18
United Kingdom	181	186	180	169	165	158

5.2 Alternative scenarios

This section of the report presents the outcomes of three alternative scenarios with respect to the future number of students in initial pre-vocational and vocational education and training. The three scenarios comprise the ‘high population’ variant, the ‘low population’ variant and the ‘increased participation’ variant, as described in *Chapter 4*. The ‘high population’ and the ‘low population’ variant assess the impact of different demographic assumptions, that is high population growth and low population growth, under the same education participation assumptions as the baseline scenario. The ‘increased participation’ variant assesses the extent to which participation rates with respect to initial pre-vocational and vocational education and training have to be increased to maintain the current level of number of students and graduates in initial pre-vocational and vocational education and training.

Table 5.8. Differences of the projected number of students in pre-vocational and vocational education and training to the baseline scenario by ISCED level 2-5, age group and alternative scenario, European Union (EU-27), 2005-2050

scenario	ISCED	age group	2010	2015	2020	2025	2030	2050
			x 1000					
high population	ISCED 2	15-24	-12	-21	-18	1	10	9
	ISCED 3	15-24	-45	23	125	927	1560	2452
	ISCED 4	15-24	1	51	67	124	182	274
	ISCED 5	15-24	13	-4	-31	-3	94	246
	ISCED 2-5	15-19	-17	59	168	978	1575	2440
	ISCED 2-5	20-24	-26	-11	-23	70	270	541
	ISCED 2-5	15-24	-43	49	145	1049	1846	2981
low population	ISCED 2	15-24	-14	-25	-27	-31	-38	-60
	ISCED 3	15-24	-192	-217	-302	-904	-1428	-2027
	ISCED 4	15-24	-16	26	34	35	-33	-92
	ISCED 5	15-24	-13	-45	-84	-137	-234	-325
	ISCED 2-5	15-19	-153	-166	-248	-912	-1410	-1946
	ISCED 2-5	20-24	-81	-95	-132	-125	-322	-558
	ISCED 2-5	15-24	-234	-261	-380	-1037	-1733	-2504
increased participation	ISCED 2	15-24	7	3	9	14	15	19
	ISCED 3	15-24	597	1370	1549	1740	1900	2840
	ISCED 4	15-24	17	152	199	237	239	323
	ISCED 5	15-24	43	147	180	181	192	327
	ISCED 2-5	15-19	546	1297	1494	1688	1839	2738
	ISCED 2-5	20-24	117	375	443	485	509	772
	ISCED 2-5	15-24	663	1672	1937	2173	2347	3510

Table 5.8 shows the differences in numbers of students according to the alternative scenarios compared to the baseline scenario. The number of students in initial pre-vocational and vocational education and training turns out to be around 16% higher in the ‘high population’ scenario, around 15% lower in the ‘low population scenario’, and around 20% higher in the ‘increased participation’ scenario.

Even in the ‘high population’ scenario, with high fertility rates, high life expectancy and high net immigration, the number of students in initial pre-vocational and vocational education and training is expected to decline in the near future. (See *Tables 5.9* and *5.10*) Until around 2020 the numbers decline, but thereafter the number of students is expected to recover. However, the level in 2030 is still 4% lower than in 2005.

In the ‘low population’ scenario, fertility rates, life expectancy and net immigration are assumed to lag behind the baseline scenario. Consequently the numbers of students in initial pre-vocational and vocational education and training are expected to be much lower than in the ‘baseline population’ scenario. (See *Tables 5.11* and *5.12*) In 2030 the number of students is around 30% lower than in 2005.

The third scenario, the ‘increased participation’ scenario, is a normative scenario, which assumes participation in initial pre-vocational and vocational education and training can be increased in such a way that the total numbers of students in initial pre-vocational and vocational education and training will remain more or less at their current levels. As can be observed from *Table 5.13* the numbers of students remain stable indeed¹². However, to what extent do participation rates have to be increased to keep the numbers constant? *Table 5.14* presents the participation rates in initial pre-vocational and vocational education and training by ISCED level and age group. Participation rates in initial pre-vocational and vocational education and training will have to be increased by around 20% in 2030 to maintain the current number of students. At ISCED level 3 this particularly means a substantial shift from general streams to pre-vocational and vocational streams, since participation is already very high at this educational level (especially in age group 15-19). As a reference to this specific scenario two extra variants were calculated, that is a combination of the ‘increased participation’ target combined with the high and low population variants respectively. To keep the future number of students at their current levels in these variants, the required participation increase is more or less in line with the ‘baseline population’ variant (*Table 5.14*) up to 2020: slightly lower in the high population variant and slightly higher in the low population variant (*Tables 5.15* and *5.16*). However, in 2030 participation rates will have to be increased on average by around 5% in the high population variant and by around 40% in the low population variant compared to the current participation rates.

¹² The initial projections include age group 10-14 as well. The number of students was kept stable for the whole age group 10-24. This affects ISCED levels 2 and 3, since part of the students at these levels are below the age of 15. Due to changes of the age distribution within the age group 10-24 the total number of students at ISCED levels 2 and 3 in age group 15-24 are not exactly stable.

Table 5.9. Projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, high population variant / constant education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	x 1000							
population	15-19	30372	28692	26628	26585	28254	29466	29241
	20-24	31990	31164	29414	27376	27414	29180	30029
	total	62362	59856	56042	53961	55668	58647	59270
ISCED 2-5	15-19	11244	10611	9866	9835	10487	10931	10843
	20-24	3023	2969	2759	2605	2625	2804	2859
	total	14267	13580	12625	12440	13112	13736	13702
ISCED 2	15-19	162	148	141	143	153	158	157
	20-24	11	11	10	10	10	10	11
	total	173	159	152	153	163	169	168
ISCED 3	15-19	10195	9593	8944	8918	9526	9923	9839
	20-24	1346	1324	1232	1162	1171	1251	1276
	total	11541	10918	10177	10080	10697	11174	11116
ISCED 4	15-19	370	364	326	324	337	355	354
	20-24	624	613	566	537	542	580	590
	total	994	976	892	861	879	935	943
ISCED 5	15-19	516	506	454	450	470	495	493
	20-24	1042	1021	950	896	902	963	983
	total	1559	1527	1404	1346	1372	1458	1475

Table 5.10. Index of the projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, high population variant / constant education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	index 2005=100							
population	15-19	100	94	88	88	93	97	96
	20-24	100	97	92	86	86	91	94
	total	100	96	90	87	89	94	95
ISCED 2-5	15-19	100	94	88	87	93	97	96
	20-24	100	98	91	86	87	93	95
	total	100	95	88	87	92	96	96
ISCED 2	15-19	100	92	87	89	95	98	97
	20-24	100	97	92	86	86	91	94
	total	100	92	88	88	94	98	97
ISCED 3	15-19	100	94	88	87	93	97	97
	20-24	100	98	92	86	87	93	95
	total	100	95	88	87	93	97	96
ISCED 4	15-19	100	98	88	87	91	96	95
	20-24	100	98	91	86	87	93	95
	total	100	98	90	87	88	94	95
ISCED 5	15-19	100	98	88	87	91	96	95
	20-24	100	98	91	86	87	92	94
	total	100	98	90	86	88	94	95

Table 5.11. Projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, low population variant / constant education participation

	age group	2005	2010	2015	2020	2025	2030	2050
		x 1000						
population	15-19	30295	28321	26017	25402	23220	21454	17426
	20-24	31875	30557	28479	26176	25567	23398	18519
	total	62170	58878	54496	51578	48787	44852	35946
ISCED 2-5	15-19	11216	10474	9641	9420	8596	7946	6457
	20-24	3012	2914	2675	2496	2430	2212	1760
	total	14228	13389	12316	11916	11026	10158	8218
ISCED 2	15-19	161	146	138	134	122	113	92
	20-24	11	11	10	9	9	8	7
	total	173	157	148	143	131	121	99
ISCED 3	15-19	10170	9471	8742	8539	7782	7198	5852
	20-24	1341	1300	1195	1114	1084	988	786
	total	11511	10771	9937	9653	8866	8186	6638
ISCED 4	15-19	369	358	318	312	289	265	215
	20-24	621	601	549	515	501	455	363
	total	991	960	867	827	790	720	577
ISCED 5	15-19	515	499	443	434	403	369	299
	20-24	1039	1002	921	858	836	761	605
	total	1554	1501	1364	1292	1238	1130	904

Table 5.12. Index of the projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, low population variant / constant education participation

	age group	2005	2010	2015	2020	2025	2030	2050
		index 2005=100						
population	15-19	100	93	86	84	77	71	58
	20-24	100	96	89	82	80	73	58
	total	100	95	88	83	78	72	58
ISCED 2-5	15-19	100	93	86	84	77	71	58
	20-24	100	97	89	83	81	73	58
	total	100	94	87	84	77	71	58
ISCED 2	15-19	100	91	86	83	75	70	57
	20-24	100	96	89	82	80	73	58
	total	100	91	86	83	76	70	57
ISCED 3	15-19	100	93	86	84	77	71	58
	20-24	100	97	89	83	81	74	59
	total	100	94	86	84	77	71	58
ISCED 4	15-19	100	97	86	84	78	72	58
	20-24	100	97	88	83	81	73	58
	total	100	97	87	83	80	73	58
ISCED 5	15-19	100	97	86	84	78	72	58
	20-24	100	96	89	83	80	73	58
	total	100	97	88	83	80	73	58

Table 5.13. Projected population and number of students in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, baseline population variant / increased education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	x 1000							
population	15-19	30333	28498	26298	25955	25695	25232	22368
	20-24	31935	30866	28931	26739	26429	26214	23393
	total	62268	59364	55229	52694	52124	51446	45761
ISCED 2-5	15-19	11229	11174	11104	11161	11196	11195	11141
	20-24	3018	3112	3144	3071	3039	3042	3090
	total	14247	14286	14248	14232	14236	14237	14231
ISCED 2	15-19	161	166	163	168	164	163	166
	20-24	11	12	12	12	12	12	12
	total	173	178	175	180	176	175	178
ISCED 3	15-19	10182	10113	10052	10075	10113	10115	10059
	20-24	1343	1447	1472	1429	1397	1399	1446
	total	11526	11559	11524	11504	11511	11514	11505
ISCED 4	15-19	370	376	373	384	390	389	389
	20-24	623	617	619	608	603	603	604
	total	992	992	992	992	992	992	992
ISCED 5	15-19	516	520	515	535	529	528	528
	20-24	1041	1037	1041	1022	1027	1029	1029
	total	1556	1556	1556	1556	1556	1556	1556

Table 5.14. Projected student participation rates in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, baseline population variant / increased education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	percentages							
ISCED 2-5	15-19	37.0	39.2	42.2	43.0	43.6	44.4	49.8
	20-24	9.5	10.1	10.9	11.5	11.5	11.6	13.2
	total	22.9	24.1	25.8	27.0	27.3	27.7	31.1
ISCED 2	15-19	0.5	0.6	0.6	0.6	0.6	0.6	0.7
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	total	0.3	0.3	0.3	0.3	0.3	0.3	0.4
ISCED 3	15-19	33.6	35.5	38.2	38.8	39.4	40.1	45.0
	20-24	4.2	4.7	5.1	5.3	5.3	5.3	6.2
	total	18.5	19.5	20.9	21.8	22.1	22.4	25.1
ISCED 4	15-19	1.2	1.3	1.4	1.5	1.5	1.5	1.7
	20-24	1.9	2.0	2.1	2.3	2.3	2.3	2.6
	total	1.6	1.7	1.8	1.9	1.9	1.9	2.2
ISCED 5	15-19	1.7	1.8	2.0	2.1	2.1	2.1	2.4
	20-24	3.3	3.4	3.6	3.8	3.9	3.9	4.4
	total	2.5	2.6	2.8	3.0	3.0	3.0	3.4

Table 5.15. Projected student participation rates in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, high population variant / increased education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	percentages							
ISCED 2-5	15-19	37.0	39.2	41.9	42.2	40.0	38.3	38.4
	20-24	9.4	9.9	10.5	10.9	10.6	10.1	10.0
	total	22.9	23.9	25.4	26.3	25.5	24.3	24.0
ISCED 2	15-19	0.5	0.6	0.6	0.6	0.6	0.5	0.5
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	total	0.3	0.3	0.3	0.3	0.3	0.3	0.3
ISCED 3	15-19	33.6	35.5	38.0	38.2	36.2	34.7	34.8
	20-24	4.2	4.5	4.7	4.8	4.6	4.4	4.4
	total	18.5	19.4	20.6	21.3	20.6	19.6	19.4
ISCED 4	15-19	1.2	1.3	1.4	1.4	1.3	1.3	1.3
	20-24	1.9	2.0	2.1	2.3	2.2	2.1	2.1
	total	1.6	1.7	1.8	1.8	1.8	1.7	1.7
ISCED 5	15-19	1.7	1.8	1.9	2.0	1.9	1.8	1.8
	20-24	3.3	3.3	3.6	3.8	3.7	3.5	3.5
	total	2.5	2.6	2.8	2.9	2.8	2.7	2.6

Table 5.16. Projected student participation rates in pre-vocational and vocational education and training by ISCED level 2-5 and age group, European Union (EU-27), 2005-2050, low population variant / increased education participation

	age group	2005	2010	2015	2020	2025	2030	2050
	percentages							
ISCED 2-5	15-19	37.0	39.6	42.8	44.4	48.1	52.1	61.4
	20-24	9.5	10.0	10.8	11.4	12.1	13.1	16.0
	total	22.9	24.2	26.1	27.6	29.2	31.8	38.0
ISCED 2	15-19	0.5	0.6	0.6	0.6	0.7	0.7	0.9
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	total	0.3	0.3	0.3	0.3	0.4	0.4	0.5
ISCED 3	15-19	33.6	35.9	38.9	40.2	43.6	47.3	55.4
	20-24	4.2	4.6	4.9	5.1	5.5	5.9	6.9
	total	18.5	19.6	21.1	22.4	23.7	25.7	30.4
ISCED 4	15-19	1.2	1.3	1.4	1.5	1.6	1.7	2.1
	20-24	1.9	2.0	2.2	2.4	2.5	2.7	3.4
	total	1.6	1.7	1.8	1.9	2.0	2.2	2.8
ISCED 5	15-19	1.7	1.8	1.9	2.1	2.2	2.4	2.9
	20-24	3.3	3.4	3.7	3.9	4.1	4.5	5.6
	total	2.5	2.6	2.9	3.0	3.2	3.5	4.3

5.3 Labour market consequences

Smaller numbers of students in future and consequently smaller future numbers of graduates will mean fewer entrants into the labour market in future. Although it appears rather impossible to make reliable projections of the demand side of the labour market in the long term¹³, this section will cautiously explore consequences of the previous educational projections for the future labour market.

Whether and to what extent labour market shortages or mismatches will come true in future is difficult to foresee. Since long-term labour demand projections by for instance occupational and educational level are not available at all, it is difficult to answer the questions to what extent for instance supply of numbers of graduates from vocational education and training will match labour market demands in future and whether the qualifications of those students match the future demands. However, a usable set of long-term labour force projections was produced by the European Commission Directorate-General for Economic and Financial Affairs.

In 2005 the European Commission Directorate-General for Economic and Financial Affairs carried out long-term labour force projections for each of the European Union member states at that time (EU-25) for the period up to 2050 in line with the Eurostat ‘baseline population’ variant. These labour force projections are broken down by age (group), gender and European Union member state. The projections were undertaken in order to provide the background technical inputs for the assessment of the potential economic and fiscal impact of an ageing population. The study of Carone (2005) presents methodology and results of these labour force projections. The report of the Economic Policy Committee and the European Commission DG ECFIN (2006) presents additional projections on age-related expenditure covering pensions, health care, long-term care, education and unemployment transfers for the EU-25 Member States for the period up to 2050. The baseline projections reflect the assumption of “no policy change” and are neither forecasts nor predictions in that they are not based on any assessment of more or less likely future changes in working patterns or economic conditions (Carone, 2005). The baseline projections take into account both the trend in lifetime profiles of employment in different generations (cohorts) and the impact of recent pension reforms¹⁴.

The labour force projections baseline scenario indicates that, notwithstanding a projected increase in the employment rates and a reduction in unemployment rates, the pace of labour force and employment growth in the EU-25 will be slightly positive over the next 15 years and will turn negative after that up to 2050 (Carone, 2005). This is mainly the result of the combination of the decline of the working-age population and a shift in the age structure of the population towards older, less participating groups due to the baby-boom generation approaching retirement and the

¹³ Reliable projections of the demand side of the labour market in the long term depend largely on the accumulation of several uncertain business cycle effects. Outcomes will be far too volatile to produce any serious projections with horizons longer than 2-3 years (Berkhout *et al.*, 2007).

¹⁴ See Carone (2005) for a comprehensive discussion of the labour force projections assumptions.

succeeding smaller cohorts reaching working-age (Carone, 2005). *Table 5.17* presents future employment in age group 15-24 specifically, based on the age specific employment rates from the study of Carone (see *Table B.8* in *Annex B*). At the European Union level, employment in age group 15-24 is (also) expected to decline. Exceptions to this general trend are Denmark, France, Luxemburg, the Netherlands, and Sweden.

To explore labour market consequences, the projected employment trends from *Table 5.17* are compared to the projected future supply of graduates from vocational education and training from the aforementioned *Table 5.6*. In *Figures 5.5* and *5.6* trends in employment and numbers of graduates are compared by using indexed numbers (relative to the year 2005) for both trends in 2020 and 2030. Values above 100 denote increasing trends and values below 100 denote decreasing trends.

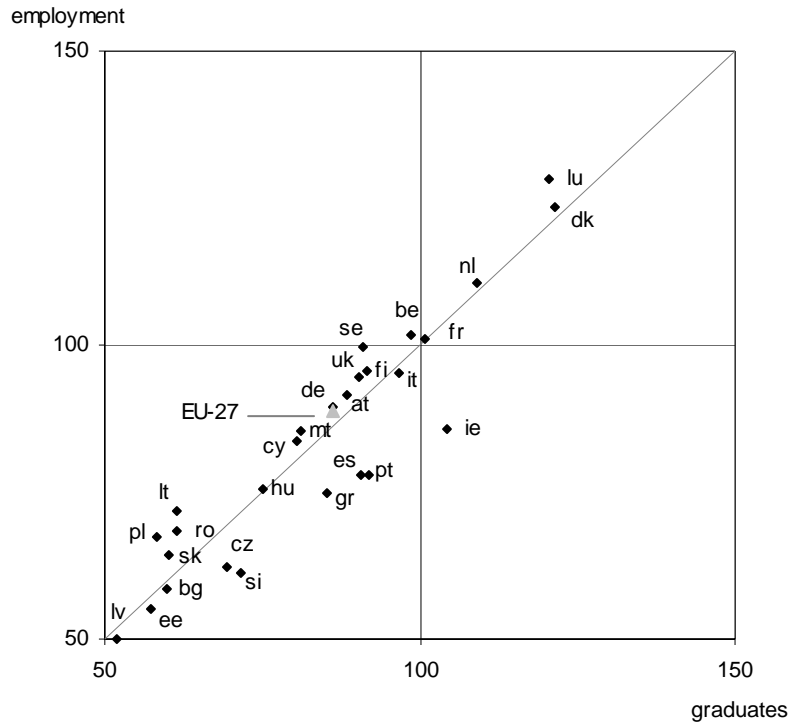
Table 5.17. Projected employment in age group 15-24, European Union (EU-27), 2005-2050, Carone (2005) labour force baseline scenario

Region	2005	2010	2015	2020	2025	2030	2050
x 1000							
EU-27*	23318	23243	22126	20731	20679	20512	18625
Austria	529	535	531	484	458	449	419
Belgium	360	373	389	366	361	350	349
Bulgaria*	270	256	203	158	168	167	124
Cyprus	48	48	47	40	35	37	40
Czech Republic	395	377	339	246	258	269	234
Denmark	361	413	452	446	423	394	409
Estonia	65	67	49	36	39	43	34
Finland	274	281	287	261	252	256	245
France	2473	2474	2468	2496	2613	2512	2388
Germany	4379	4454	4146	3918	3674	3582	3257
Greece	368	294	293	275	281	298	245
Hungary	356	346	325	269	259	263	245
Ireland	311	276	256	267	294	310	263
Italy	1653	1611	1634	1575	1631	1592	1261
Latvia	124	131	96	62	68	78	63
Lithuania	125	140	124	90	75	78	74
Luxemburg	13	14	16	16	16	16	19
Malta	28	27	27	24	23	25	26
Netherlands	1338	1420	1457	1479	1466	1383	1420
Poland	1494	1389	1185	1007	1004	999	968
Portugal	526	447	415	410	429	434	349
Romania*	831	868	648	568	583	593	452
Slovakia	249	223	194	161	161	162	147
Slovenia	73	62	50	45	44	46	43
Spain	1833	1522	1457	1429	1584	1648	1172
Sweden	475	566	567	473	495	523	532
United Kingdom	4369	4628	4470	4129	3986	4007	3848

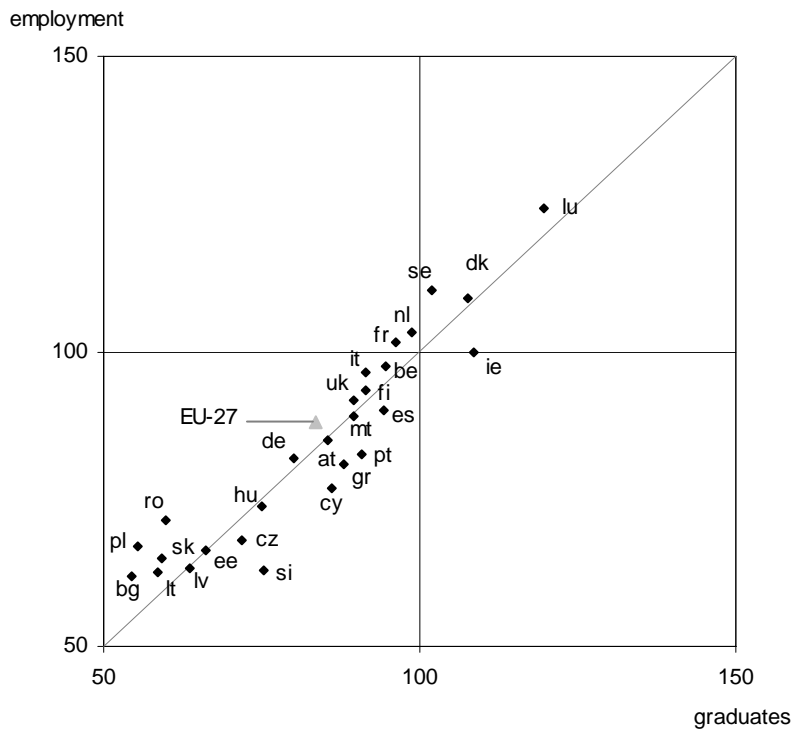
* Bulgaria and Romania: estimations using Carone's (2005) average NMS-10 employment rates
Source: NIDI calculations based on Carone (2005)

Figure 5.5. Indexes of the projected number of graduates in initial pre-vocational and vocational education and training (ISCED levels 3-5) and projected employment in age group 15-24, by country in 2020 and 2030 (index 2005 = 100)

2020



2030



The majority of the countries (and the European Union average) are positioned in the third (lower left) quadrant, characterised by both decreasing numbers of graduates and employment. In countries positioned on the diagonal the relative decline (or growth) of both the numbers of graduates and employment compared to the year 2005 are similar (for example France and Hungary in 2020 and Estonia and Latvia in 2030). In countries positioned above the diagonal the numbers of graduates are declining relative to employment (like in Poland and Sweden as well as in the European Union as a whole in both 2020 and 2030)¹⁵. This might indicate potential labour market shortages with respect to graduates in vocational education and training. However, a positive effect of future labour demand shortages from the perspective of young graduates in vocational education and training entering the labour market, might be a favourable competitive position of those relatively scarce young graduates. On the other hand, in countries positioned below the diagonal the numbers of graduates are increasing relative to employment (like Greece, Ireland, Portugal and Slovenia in both 2020 and 2030)¹⁶. This might indicate a relatively increasing labour force supply of graduates in vocational education and training.

¹⁵ That is, in the third quadrant decrease of the number of graduates is stronger than the decrease of employment and in the first quadrant increase of the number of graduates is smaller than the increase of employment.

¹⁶ That is, in the third quadrant decrease of employment is stronger than the decrease of the number of graduates and in the first quadrant increase of employment is smaller than the increase of the number of graduates.

6. CONCLUSIONS AND FUTURE IMPLICATIONS

This last chapter presents the main conclusions from the initial vocational education and training projection results and a qualitative examination of implications of these projection results for several aspects of vocational education and training in Europe.

6.1 Conclusions

The next decades Europe will be inevitably confronted with an ageing population. The age structure of the population of the European Union is dominated by the large post-war birth cohorts born in the period 1946-1965. Due to the expected fertility decline younger cohorts will be much smaller. The large size differences between the older and younger cohorts will change the future age structure of the European Union potential labour force and the population in education to a large extent. Though the decrease of the number of births did not happen at the same time and the same speed in all countries, the general trend is more or less the same throughout all the member countries.

The Eurostat population projection variants and the projections of numbers of students in initial vocational education and training show a decline of both the number of potential students and the number of students in initial pre-vocational and vocational education and training at least up to the year 2020. The number of persons in age group 15-24 is most likely to decline in the period from 2005 to 2020 according to all Eurostat population projection variants. If education participation rates do not change significantly in future, the numbers of students in initial pre-vocational and vocational education and training are expected to decrease similarly. Initial vocational education and training is likely to see a decline of the number of students in the near future at least up to 2030; from 14.2 million in 2005 to 11.9 million in 2030, a decline of 17%. This will very probably have implications for the future number of students graduating as well as the organisation of institutions and teacher requirements in initial pre-vocational and vocational education and training. The number of graduates is expected to decline in line with the number of students. Also the required number of teaching staff will be much less than nowadays if students-teacher ratios remain the same. Similar, the decreasing number of students will need less capacity in terms of school buildings etc., thus affecting the organisation of institutions. Particularly the Eastern European and Baltic countries are expected to have a relatively substantial decline of the number of students in initial pre-vocational and vocational education and training (up to 45% in 2030 in Bulgaria). Even according to the high population variant the number of students is expected to decline by more than ten percent up to the year 2020. A low population scenario will worsen the situation: more than 4 million students less in initial pre-vocational and vocational education and training than currently. Trying to keep the absolute number of students at current levels requires a twenty percent increase of participation rates in initial pre-vocational and vocational education and training around 2030. Since education participation rates are

already rather high, particularly in age group 15-19, this would mean a substantial shift of enrolment from general to pre-vocational and vocational streams.

6.2 Implications

Smaller future numbers of students and graduates will mean fewer entrants to the labour market in future. Several other studies already projected implications of the ageing populations for the labour force in future. Up to around 2020 the labour force is expected to increase slightly, mainly because of increasing labour force participation rates compensating the decline of the population at working age, but after that to decline due to the demographic ageing (Carone, 2005). The strong demographic changes cannot easily, if at all, be overcome. Essentially there are a few options only: increasing fertility, increasing immigration and increasing labour force participation. Increasing fertility doesn't seem very likely regarding current demographic trends and its causes. Increasing migration would certainly not be much of a remedy for ageing: migration flows would need to be extremely large to keep the current age structure. However, migration could serve as a policy option aiming at balancing short-term shortages on the labour markets through the means of selective migration (Bijak *et al.*, 2005). Migration within the Europe Union would only shift problems spatially: attractive regions might be able to solve problems, whereas less attractive regions would be worse off because of losing (prospective) favourable workers. Migration from the eastern (and other) parts of Europe outside the European Union, like Russia, would put a lot of pressure on these countries, since these regions face similar demographic prospects as the European Union. Migrants therefore would need to come from outside Europe. However, nowadays, the major reason for migrants to migrate is family reunification in a lot of countries, like in Austria, Finland, France, Germany, Italy, the Netherlands and Sweden; exceptions are Denmark, Portugal and the United Kingdom where migration is heavily work-based (Berkhout *et al.*, 2007). Generally immigrants are found to have clearly lower employment and higher unemployment rates than the native population (Berkhout *et al.*, 2007). This does not necessarily mean immigrants can be identified as a single group with similar characteristics. In fact, in most countries at least two different migrant groups can be characterized: one relatively low skilled and one relatively high skilled. Even when looking at migrants from non-Western-countries only, they turn out to be on average high skilled in the one country and on average low skilled in the other (Berkhout *et al.*, 2007; Kahn, 2004). In the Czech Republic, France and Sweden, for instance, immigrants are overrepresented among both the low-skilled and the high-skilled; Ireland, Portugal and the United Kingdom show substantive overrepresentation of high-skilled immigrants, whereas in countries like Belgium, Germany and the Netherlands the low-skilled are overrepresented (Berkhout *et al.*, 2007). Of course it is uncertain, and outside the scope of this study, how the position and characteristics of migrants will develop in future and to what extent attracting migrants will be helpful in solving labour market shortages. From the point of view of vocational education and training immigrants can neither be treated as a single group.

Low skilled migrants on the one hand would certainly be eligible for additional (vocational) education and training. High skilled migrants on the other hand might rather be over overqualified for vocational education and training. However if unemployment rates within this group would remain above average, high skilled migrants could be eligible for retraining options, possibly in the field of vocational education and training as well.

Whether and to what extent labour market shortages will come true in future is difficult to foresee. It appears rather impossible to make reliable forecasts of the demand side of the labour market in the long term, because such projections depend largely on the accumulation of several uncertain business cycle effects. Therefore, outcomes will be far too volatile to produce any serious projections with horizons longer than a few years (Berkhout *et al.*, 2007). Since reliable long-term labour demand forecasts by occupational and educational characteristics are not available at all, it is difficult to answer the questions to what extent for instance supply of numbers of graduates from vocational education and training will match labour market demands in future and whether the qualifications of those students match the future demands. However, European Union policy aims, according to the Lisbon strategy objectives, at becoming the most competitive and dynamic knowledge-based economy in the world, which will require improving educational levels, skills, labour force participation and labour productivity in future. Increasing labour force participation would need to focus on those groups with currently lower labour force participation, especially young people, women, migrants and elderly. However, increasing labour force participation rates of young people might decrease education participation rates and thus affecting the enrolment in initial (vocational) education and training in a negative way. A positive effect of future labour demand shortages from the perspective of young graduates in vocational education and training entering the labour market, would be a favourable competitive position of those relatively scarce young graduates compared to other (older) workers.

The nature of the future demographic changes in the European Union is quite clear and will certainly affect the labour force. How to deal with both the demographic and labour force consequences however is another issue. Europe will be in the rather unique position of being the first continent to face population decline and severe population ageing; two processes without precedent in this magnitude and thus no simple solutions are available that could be learned and copied from others. The demographic changes might yield some new opportunities. Falling numbers of students could on one hand reduce (public) education expenditure directly related to those students numbers (ECFIN, 2006) and on the other hand provide budgetary options to improve the quality and effectiveness of European Union education and training systems. However, education expenditures have to be seen in the broader context of total public expenditures. Potential savings in education expenditure can not be expected to offset the rise in old-age-related expenditure, like pensions, health care and long-term care (ECFIN, 2006).

Since vocational education and training in the European Union is expected to see a substantial decline of the number of students in initial education in the near future the educational infrastructure in the European Union might be affected as well. Fewer students in initial vocational education and training would require either less teaching and training staff (assuming no significant changes in student-teacher ratios) or smaller classes if the number of teaching staff would not decrease in line with the number of students. This will certainly have consequences for type, size and number of educational facilities (buildings, classrooms etc.).

Future education policy in the European Union will be affected by both the future demographic trends and the Lisbon objectives. Targeting higher education participation and on average higher education levels will force policy makers and institutions in vocational education and training to reflect on the implications for vocational education and training. What balance is for instance needed between general streams and vocational streams? As could be seen from the 'increased participation' scenario, increasing participation at the upper secondary level is nearly only possible at the cost of the participation in general streams. Increasing the average educational level might have consequences for vocational education and training as well, particular in the sense of preparing students for direct access to higher advanced education levels in stead of direct entry into the labour market only. As mentioned previously, the future labour market situation probably requires targeting the before mentioned groups characterised by lower labour force participation rates today (migrants, women and elderly). These groups will then also be of particular interest to vocational education and training. However, these groups might have different needs. More flexible arrangements might be necessary in the sense of shorter courses, refreshing courses, more on the job training and better arrangements to combine (part-time) jobs, education and childcare for instance. Since the age dimension of education might become less pronounced, there might be a need for a more substantial shift from initial vocational education and training to continuing education programmes and lifelong learning programmes. Specific groups like low skilled migrants might be insufficiently qualified and needing additional vocational education and training to meet future labour market competence demands. The challenge for vocational education and training in the European Union will be to target all these diversified groups in particular in an appropriate manner.

This study aimed to give insight into the implications of future demographic trends for initial vocational education in the European Union. The scope of this study was limited to outline a more general picture without particular attention to country-specific circumstances. Further research would be necessary to address country-specific problems, particularly with respect to countries with above average ageing of their populations like the eastern European member states. Another issue would be to explore further the question to what extent qualifications of graduates in vocational education and training will match future labour demand. However, since it appears to be hardly possible to make reliable long-term labour demand projections, research

needs to focus more on exploring and continuously monitoring short-term labour demand forecasts with respect to qualifications and competences of graduates in vocational education and training.

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ANNEX A : CLASSIFICATIONS

Country/region codes

AT	-	Austria
BE	-	Belgium
BG	-	Bulgaria
CY	-	Cyprus
CZ	-	Czech Republic
DE	-	Germany
DK	-	Denmark
EE	-	Estonia
ES	-	Spain
FI	-	Finland
FR	-	France
GR	-	Greece
HU	-	Hungary
IE	-	Ireland
IT	-	Italy
LT	-	Lithuania
LU	-	Luxembourg
LV	-	Latvia
MT	-	Malta
NL	-	Netherlands
PL	-	Poland
PT	-	Portugal
RO	-	Romania
SE	-	Sweden
SI	-	Slovenia
SK	-	Slovakia
UK	-	United Kingdom
EU-27	-	European Union (27 countries)
EU-25	-	European Union (up to 2006; 25 countries)
EU-15	-	European Union (up to 2003; 15 countries)
NMS-10	-	(Former) New Member States (i.e. Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia, and Slovakia)

Symbols in tables

-	nil
:	not available
0	negligible

International Standard Classification of Education

Educational data are classified according to the *International Standard Classification of Education* (ISCED), revised in 1997 (UNESCO, 2006; UNESCO-UIS/OECD/Eurostat, 2004). The classification distinguishes seven levels of education: pre-primary level of education (ISCED 0), primary level of education (ISCED 1), lower secondary level of education (ISCED 2), upper secondary level of education (ISCED 3), post secondary, non-tertiary education (ISCED 4), first stage of tertiary education (not leading directly to an advanced research qualification) (ISCED 5), and second stage of tertiary education ((leading to an advanced research qualification) (ISCED 6). In this report analyses are restricted to ISCED levels 2 to 5:

ISCED 2 – Lower secondary education or second stage of basic education

The lower secondary level of education generally pursues the basic programmes of the primary level, although teaching is typically more subject-focused, often employing more specialised teachers who conduct classes in their field of specialisation. Lower secondary education may be either “terminal” (i.e. preparing students for direct entry into working life) and / or “preparatory” (i.e. preparing students for upper secondary education). This level can range from 2 to 6 years of schooling. ISCED level 2 programmes are sub-classified according to the destination for which the programmes have been designed to prepare students:

- ISCED 2A: programmes designed to prepare students for direct access to level 3 in a sequence which would ultimately prepare students to attend tertiary education, that is, entrance to ISCED 3A or 3B;
- ISCED 2B: programmes designed to prepare students for direct access to programmes at level 3C;
- ISCED 2C: programmes primarily designed for direct access to the labour market at the end of this level (sometimes referred to as ‘terminal’ programmes).

Programmes at level 2 can also be subdivided into three categories based on the degree to which a programme is specifically oriented towards a specific class of occupations or trades and leads to a labour-market relevant qualification:

- General: Covers education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational or technical education programmes. Less than 25 percent of the programme content is vocational or technical.
- Pre-vocational (or pre-technical): Covers education that is mainly designed to introduce participants to the world of work and to prepare them for entry into further vocational or technical education programmes. Successful completion of such programmes does not lead to a labour-market relevant vocational or technical qualification. For a programme to be considered as pre-vocational or

pre-technical education, it should comprise at least 25 per cent of vocational or technical content.

- Vocational (or technical): Covers education that prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour-market relevant vocational qualification.

ISCED 3 – Upper secondary education

This level generally begins at the end of compulsory education. The entrance age is typically 15 or 16. Entrance qualifications (end of compulsory education) and other minimum entry requirements are usually needed. Instruction is often more subject-oriented than at ISCED level 2. The typical duration of ISCED level 3 varies from two to five years. ISCED level 3 programmes are sub-classified according to the destination for which the programmes have been designed to prepare students:

- ISCED 3A: programmes at level 3 designed to provide direct access to ISCED 5A;
- ISCED 3B: programmes at level 3 designed to provide direct access to ISCED 5B;
- ISCED 3C: programmes at level 3 designed to prepare students for direct entry into the labour market, although they also provide access to ISCED 4 programmes or other ISCED 3 programmes. Upper secondary apprenticeship programmes would fall into this category unless the programme was primarily designed to prepare students to enter ISCED 5.

Programmes at level 3 can again, like ISCED level 2 programmes, also be subdivided into three categories (or streams) based on the degree to which they are specifically oriented towards a specific class of occupations or trades and lead to a labour-market relevant qualification:

- General
- Pre-vocational (or pre-technical)
- Vocational (or technical)

ISCED 4 – Post-secondary non-tertiary education

This level was introduced in ISCED-97 to cover programmes that straddle the boundary between upper secondary and tertiary education. They serve to broaden the knowledge of ISCED level 3 graduates. They are often not significantly more advanced than programmes at ISCED 3 level but they serve to broaden the knowledge of participants who have already completed a programme at level 3. The students are typically older than those in ISCED 3. ISCED 4 programmes typically have a full-time equivalent duration of between 6 months and 2 years. Typical examples are programmes designed to prepare students for studies at level 5 or programmes designed to prepare students for direct labour market entry. Level 4 programmes are

sub-classified according to the destination for which the programmes have been designed to prepare students:

- ISCED 4A: programmes at level 4, designed to provide direct access to ISCED 5A;
- ISCED 4B: programmes at level 4, designed to provide direct access to ISCED 5B;
- ISCED 4C: programmes at level 4 designed to prepare students for direct entry into the labour market, although they also provide access to other ISCED 4 programmes. Apprenticeships that are designed for students who have already completed an ISCED 3 (Upper secondary programme) would fall into this category unless the programme was primarily designed to prepare students to enter ISCED 5.

Programmes at level 4 can again, like ISCED level 2 and 3 programmes, also be subdivided into three categories (or streams) based on the degree to which they are specifically oriented towards a specific class of occupations or trades and lead to a labour-market relevant qualification:

- General
- Pre-vocational (or pre-technical)
- Vocational (or technical)

ISCED 5 – First stage of tertiary education

ISCED 5 programmes have an educational content more advanced than those offered at levels 3 and 4. Entry to these programmes normally requires the successful completion of ISCED levels 3 or 4. Programmes at level 5 must have a cumulative theoretical duration of at least 2 years from the beginning of level 5 and do not lead directly to the award of an advanced research qualification. This level includes the following tertiary programmes:

- ISCED 5A: tertiary programmes with academic orientation which are largely theoretically based;
- ISCED 5B: tertiary programmes with occupation orientation which are typically shorter than type A programmes and geared for entry into the labour market.

Data classified by ISCED level and category (or stream) are available from the Eurostat harmonised dataset on education and training. Theoretically, pre-vocational education and training do exist at ISCED level 4 as well, however in practice it is not available in the statistics of any of the EU-27 member states. Vocational education and training at ISCED level 5 is considered to be similar to ISCED level 5B.

Summarizing, the ISCED classification comprises the following three streams of education relevant to the study at hand:

- General - general education and training at ISCED levels 2, 3, 4 and 5
- Pre-vocational - pre-vocational education and training at ISCED levels 2 and 3
- Vocational - vocational education and training at ISCED levels 2, 3, 4 and 5

Additionally, the ISCED classification comprises 25 fields of education (at two-digit level) which can be further refined into three-digit level. The following broad groups (at one-digit level) can be distinguished:

- 0 General - General programmes
- 1 Education - Teacher training and education science
- 2 Arts - Humanities and arts
- 3 Business - Social sciences, business and law
- 4 Science - Science, mathematics and computing
- 5 Manufacturing - Engineering, manufacturing and construction
- 6 Agriculture - Agriculture and veterinary
- 7 Health - Health and welfare
- 8 Services - Services
- 9 Unknown - Unknown or not specified

ANNEX B : METHODOLOGICAL DETAILS

Table B.1. Total fertility rate assumptions in 2030 of the Eurostat Long-term population projections for the baseline, high population and low population variants

Country	2004	2030		
		base	high	low
Austria	1.40	1.45	1.75	1.25
Belgium	1.62	1.70	1.95	1.50
Bulgaria	1.20	1.44	1.81	1.23
Cyprus	1.47	1.50	1.90	1.30
Czech Republic	1.15	1.50	1.90	1.30
Denmark	1.76	1.79	2.00	1.50
Estonia	1.39	1.60	1.99	1.40
Finland	1.76	1.80	2.00	1.50
France	1.89	1.85	2.10	1.60
Germany	1.35	1.45	1.75	1.25
Greece	1.29	1.50	1.75	1.20
Hungary	1.30	1.59	1.99	1.39
Ireland	1.97	1.80	2.00	1.60
Italy	1.31	1.40	1.70	1.20
Latvia	1.30	1.59	1.99	1.39
Lithuania	1.29	1.55	1.94	1.35
Luxembourg	1.65	1.79	2.00	1.49
Malta	1.66	1.60	2.00	1.40
Netherlands	1.75	1.75	2.00	1.50
Poland	1.21	1.58	1.98	1.38
Portugal	1.45	1.60	1.80	1.30
Romania	1.29	1.47	1.86	1.25
Slovakia	1.19	1.52	1.91	1.30
Slovenia	1.18	1.50	1.90	1.30
Spain	1.30	1.40	1.70	1.20
Sweden	1.74	1.85	2.09	1.60
United Kingdom	1.72	1.75	2.00	1.50
European Union (EU-27)	1.47	1.59	1.88	1.36

Source: Eurostat (2006).

Table B.2. Life expectancy assumptions in 2030 of the Eurostat Long-term population projections for the baseline, low population and high population variants

Country	Males				Females			
	2004	2030			2004	2030		
		base	high	low		base	high	low
Austria	76.2	81.0	82.1	80.1	82.1	86.1	87.1	85.3
Belgium	75.5	80.4	81.6	79.4	81.6	86.5	87.5	85.6
Bulgaria	69.1	75.5	77.1	73.9	75.8	80.7	82.1	79.2
Cyprus	76.3	80.2	82.5	77.9	80.8	83.7	85.5	81.8
Czech Republic	72.4	77.8	79.3	76.3	78.8	82.7	83.9	81.4
Denmark	75.2	79.3	80.4	78.2	79.6	82.5	83.7	81.5
Estonia	65.5	71.6	72.9	70.2	76.9	81.2	82.5	79.8
Finland	75.3	80.2	81.4	79.1	81.9	85.3	86.3	84.4
France	76.2	80.8	82.1	79.8	83.4	87.5	88.5	86.6
Germany	76.1	80.2	81.5	79.1	81.7	85.4	86.5	84.5
Greece	76.4	78.9	80.2	77.9	81.4	84.0	85.0	83.2
Hungary	68.5	75.2	77.0	73.3	76.8	81.5	83.0	79.9
Ireland	75.5	80.2	81.6	79.0	80.7	84.9	86.2	83.8
Italy	77.3	81.5	82.9	80.8	83.2	86.8	88.1	86.3
Latvia	64.9	70.9	72.2	69.5	76.2	80.4	81.6	79.1
Lithuania	66.5	72.3	73.5	71.1	77.6	81.8	83.0	80.5
Luxembourg	75.0	79.9	81.1	78.8	81.4	85.1	86.3	84.1
Malta	76.3	80.1	82.6	77.7	80.7	83.7	85.9	81.7
Netherlands	76.2	79.0	80.1	78.1	80.9	82.8	83.9	81.8
Poland	70.5	76.8	78.4	75.2	78.5	82.8	84.3	81.4
Portugal	74.2	78.5	80.0	77.3	81.0	85.1	86.4	84.1
Romania	68.2	74.8	76.3	73.2	75.3	80.0	81.4	78.5
Slovakia	69.7	75.3	76.9	73.7	77.8	81.8	83.0	80.5
Slovenia	72.6	77.9	79.6	76.2	80.2	83.8	85.6	82.1
Spain	76.6	80.2	81.5	79.0	83.4	86.9	87.9	86.0
Sweden	78.1	81.9	82.9	81.0	82.4	85.4	86.4	84.6
United Kingdom	76.4	81.0	82.9	80.0	80.9	85.0	86.8	84.0
European Union (EU-27)	74.9	79.6	81.0	78.5	81.2	85.1	86.3	84.2

Source: Eurostat (2006).

Table B.3. Net migration assumptions in 2030 of the Eurostat Long-term population projections for the baseline, low population and high population variants

Country	2004	2030		
		baseline	high	low
	numbers x 1000			
Austria	25.0	19.1	27.9	8.0
Belgium	23.7	18.5	25.8	9.0
Bulgaria	-15.9	1.7	13.4	-8.0
Cyprus	6.1	4.6	8.0	2.0
Czech Republic	4.3	21.6	42.4	4.4
Denmark	7.8	6.6	10.9	3.5
Estonia	0.8	1.8	4.4	-0.3
Finland	6.3	6.0	9.1	4.4
France	63.9	58.9	104.7	48.6
Germany	210.6	181.0	309.6	88.4
Greece	42.9	34.8	45.3	18.3
Hungary	14.8	21.2	41.3	4.3
Ireland	16.4	12.9	19.4	5.5
Italy	330.0	113.8	154.3	82.8
Latvia	-2.1	3.0	7.2	-0.5
Lithuania	-5.6	4.6	11.0	-0.8
Luxembourg	2.9	2.8	3.4	1.8
Malta	2.6	2.4	4.1	1.1
Netherlands	21.0	31.6	51.1	18.2
Poland	-27.9	35.9	109.6	-25.6
Portugal	41.8	15.0	31.6	0.6
Romania	0.0	0.0	0.0	0.0
Slovakia	-2.3	5.1	15.4	-3.6
Slovenia	6.1	7.0	12.5	2.7
Spain	507.5	105.3	142.1	57.5
Sweden	28.2	21.8	26.0	11.0
United Kingdom	139.5	99.2	164.9	40.2
European Union (EU-27)	1448.1	836.4	1395.2	373.6

Source: Eurostat (2006).

*Table B.4. Assumptions of the medium population variant of the United Nations 2006 revision of world population prospects in 2030**

	Total fertility rate		Life expectancy				Net migration		Total population	
	2005	2030	males		females		2005	2030	2005	2030
			2005	2030	2005	2030				
							x 1000		x mln	
Australia	1.76	1.85	77.9	82.0	82.9	85.9	119	100	20.3	25.3
Brazil	2.35	1.92	67.3	73.1	74.9	80.1	-46	-38	186.8	236.5
Canada	1.52	1.65	77.3	81.0	82.3	85.3	208	200	32.3	39.1
China	1.70	1.85	70.5	74.8	73.7	78.6	-380	-320	1313.0	1458.4
India	3.11	1.97	61.7	69.3	64.2	73.6	-270	-240	1134.4	1505.7
Japan	1.29	1.40	78.3	81.5	85.2	88.9	54	54	127.9	118.3
Russian Federation	1.30	1.51	58.5	64.0	71.8	75.3	183	50	144.0	123.9
South Korea	1.24	1.34	73.5	77.8	80.6	85.0	-16	-6	47.9	48.4
Turkey	2.23	1.86	68.5	73.2	73.3	78.0	-6	-10	73.0	92.5
United States of America	2.04	1.85	74.7	77.9	80.0	83.3	1299	1100	299.8	366.2
<i>European Union*</i>	<i>1.48</i>	<i>1.59</i>	<i>75.1</i>	<i>79.6</i>	<i>81.3</i>	<i>85.1</i>	<i>1237</i>	<i>836</i>	<i>487.9</i>	<i>494.8</i>

* European Union: assumption of the Eurostat baseline population variant in 2005 and 2030
Source: United Nations (2007); Eurostat (2006).

Table B.5. Assumptions on the distribution of graduates by field of education (science, mathematics and computing / engineering, manufacturing and construction) at vocational education and training ISCED level 3, starting value in 2005** and target value in 2025****

Country	Males				Females			
	science		manufacturing		science		manufacturing	
	2005	2025	2005	2025	2005	2025	2005	2025
	share							
Austria	0.0045	-	0.0317	-	0.0010	-	0.0140	-
Belgium	0.0483	0.1183	0.4073	0.3236	0.0082	0.0085	0.0311	0.0266
Bulgaria	0.0082	0.0208	0.7056	0.6332	0.0110	0.0177	0.4610	0.4435
Cyprus	0.0000	-	0.7580	0.6241	0.0000	-	0.1792	0.1103
Czech Republic	0.0000	-	0.7046	0.6978	0.0000	-	0.1539	0.1388
Denmark	0.2180	-	0.3833	-	0.2292	-	0.0423	-
Estonia	0.0596	0.1272	0.8476	0.7643	0.0473	0.1158	0.4921	0.4567
Finland	0.0651	0.1668	0.6022	0.5579	0.0437	0.0991	0.0890	0.0817
France	:		:		:		:	
Germany	0.0595	0.1287	0.4776	0.4050	0.0135	0.0298	0.0717	0.0506
Greece	0.1752	-	0.7009	-	0.1709	-	0.0564	-
Hungary	0.0134	-	0.6948	-	0.0115	-	0.2234	-
Ireland	:		:		:		:	
Italy	0.0000	-	0.4561		0.0000	-	0.1316	-
Latvia	0.0592	0.1155	0.6479	0.5999	0.0152	0.0323	0.1878	0.1628
Lithuania	0.0000	-	0.7255	0.6338	0.0000	-	0.3163	0.2849
Luxembourg	0.0537	-	0.5255	--	0.0039	-	0.0563	-
Malta	:		:		:		:	
Netherlands	0.1291	0.2993	0.4105	0.2498	0.0100	0.0139	0.0218	0.0183
Poland	0.0051	0.0137	0.6831	0.6236	0.0075	0.0256	0.1622	0.1550
Portugal	:		:		:		:	
Romania	0.0000	-	0.5553	-	0.0000	-	0.4693	-
Slovakia	0.0343	0.0202	0.6168	0.6256	0.0484	0.0472	0.1265	0.1233
Slovenia	0.0286	0.0440	0.5438	0.4856	0.0014	0.0015	0.0909	0.0814
Spain	0.0005	-	0.6052	-	0.0000	-	0.0665	-
Sweden	0.0003	-	0.6368	0.6368	0.0011	-	0.0697	-
United Kingdom	:		:		:		:	

* Distribution within all other fields of education remains unchanged

** Starting value in 2005 is average of observed values in 2002-2004 (source: Eurostat)

*** Target value is based on extrapolation of linear trend in the observed data in the period 1998-2004

- No trend (target value = starting value)

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Table B.6. Assumptions on distribution of graduates by field of education (science, mathematics and computing / engineering, manufacturing and construction) at vocational education and training ISCED level 4, starting value in 2005** and target value in 2025****

Country	Males				Females			
	science		manufacturing		science		manufacturing	
	2005	2025	2005	2025	2005	2025	2005	2025
	share							
Austria	0.0473	-	0.5287	-	0.0028	-	0.0539	-
Belgium	0.0258	0.0222	0.4793	0.4611	0.0037	0.0038	0.0442	0.0457
Bulgaria	0.0000	-	0.0314	-	0.0000	-	0.0269	0.0265
Cyprus	:		:		:		:	
Czech Republic	0.0000	-	0.2371	-	0.0000	-	0.0241	-
Denmark	0.0243	-	0.9757	-	0.3389	-	0.6611	-
Estonia	0.1240	0.1070	0.4238	0.4577	0.0545	0.0475	0.1015	0.0885
Finland	0.0197	0.0193	0.2505	0.2446	0.0077	-	0.0328	-
France	0.1100	-	0.0000	-	0.0292	-	0.0000	-
Germany	0.0547	0.1299	0.5544	0.4853	0.0142	0.0355	0.0555	0.0241
Greece	0.3183	-	0.2685	-	0.2005	-	0.0359	-
Hungary	0.1889	-	0.3765	-	0.0893	-	0.0568	-
Ireland	0.0219	-	0.5606	-	0.0214	-	0.0062	-
Italy	:		:		:		:	
Latvia	0.0278	0.0757	0.3933	0.3739	0.0093	0.0173	0.0836	0.0829
Lithuania	0.0000	-	0.3626	0.3893	0.0000	-	0.1588	0.0794
Luxembourg	0.0000	-	0.7538	-	0.0000	-	0.0172	-
Malta	0.0000	-	0.1699	-	0.0000	-	0.0000	-
Netherlands	0.0236	-	0.6278	-	0.0027	-	0.0194	-
Poland	0.3429	0.2635	0.0548	0.0421	0.0871	-	0.0251	-
Portugal	:		:		:		:	
Romania	0.0789	0.1153	0.3403	0.2907	0.0238	0.0162	0.0499	0.0339
Slovakia	0.0220	-	0.0670	-	0.0177	-	0.0269	0.0169
Slovenia	0.0000	-	0.8676	-	0.0000	-	0.1545	-
Spain	0.0511	-	0.5818	-	0.0390	-	0.2073	-
Sweden	0.0318	-	0.4538	-	0.0163	-	0.0569	-
United Kingdom	:		:		:		:	

* Distribution within all other fields of education remains unchanged

** Starting value in 2005 is average of observed values in 2002-2004 (source: Eurostat)

*** Target value is based on extrapolation of linear trend in the observed data in the period 1998-2004

- No trend (target value = starting value)

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Table B.7. Assumptions on distribution of graduates by field of education (science, mathematics and computing / engineering, manufacturing and construction) at vocational education and training ISCED level 5B, starting value in 2005** and target value in 2025****

Country	Males				Females			
	science		manufacturing		science		manufacturing	
	2005	2025	2005	2025	2005	2025	2005	2025
	share							
Austria	0.0000	-	0.6359	-	0.0000	-	0.1040	-
Belgium	0.1463	0.2248	0.1809	0.1119	0.0200	0.0307	0.0239	0.0217
Bulgaria	0.0000	-	0.4302	-	0.0000	-	0.1199	-
Cyprus	0.1244	0.2291	0.0846	0.0744	0.0320	0.0481	0.0182	0.0179
Czech Republic	0.1527	0.2276	0.1295	0.0709	0.0304	0.0302	0.0203	0.0177
Denmark	0.1885	-	0.1113	-	0.0505	-	0.1386	-
Estonia	0.1404	-	0.1789	-	0.0230	-	0.0272	-
Finland	0.0022	-	0.1435	-	0.0301	-	0.0663	-
France	0.0961	-	0.4875	-	0.0230	-	0.0780	-
Germany	0.0181	0.0499	0.4235	0.4162	0.0017	0.0044	0.0182	0.0233
Greece	0.0337	-	0.3999	-	0.0178	-	0.1386	-
Hungary	0.1007	0.1705	0.3529	0.3029	0.0466	0.0730	0.0452	0.0439
Ireland	0.1735	0.1572	0.3890	0.4410	0.1366	0.1337	0.0412	0.0404
Italy	:		:		:		:	
Latvia	0.0618	0.1175	0.1904	0.1700	0.0120	-	0.0146	-
Lithuania	0.0487	0.0975	0.3991	0.3787	0.0065	0.0046	0.0707	0.0500
Luxembourg	0.1484	-	0.3419	-	0.0046	-	0.0046	-
Malta	0.0455	-	0.0341	-	0.0165	-	0.0000	-
Netherlands	0.1523	-	0.0700	-	0.0136	-	0.0000	-
Poland	:		:		:		:	
Portugal	0.0954	-	0.2485	-	0.0351	-	0.0947	-
Romania	0.0728	0.1054	0.4949	0.4374	0.0221	0.0200	0.1174	0.1063
Slovakia	0.0283	0.0780	0.0273	0.0265	0.0000	-	0.0112	0.0099
Slovenia	0.0263	0.0590	0.3645	0.3330	0.0037	0.0072	0.0534	0.0474
Spain	0.2179	0.2156	0.3829	0.3788	0.0606	0.0606	0.0703	0.0703
Sweden	0.2230	0.2136	0.3059	0.2930	0.0644	0.0619	0.0886	0.0851
United Kingdom	0.2049	0.1982	0.1467	0.1125	0.0514	0.0387	0.0142	0.0139

* Distribution within all other fields of education remains unchanged

** Starting value in 2005 is average of observed values in 2002-2004 (source: Eurostat)

*** Target value is based on extrapolation of linear trend in the observed data in the period 1998-2004

- No trend (target value = starting value)

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Table B.8. Employment rates in age group 15-24, European Union (EU-27), 2005-2050, Carone (2005) labour force baseline scenario

Region	2005	2010	2015	2020	2025	2030	2050
EU-27*	0.374	0.392	0.401	0.393	0.397	0.399	0.407
Austria	0.531	0.533	0.543	0.537	0.532	0.531	0.536
Belgium	0.286	0.292	0.308	0.300	0.302	0.297	0.303
Bulgaria*	0.256	0.281	0.286	0.260	0.282	0.289	0.296
Cyprus	0.413	0.413	0.431	0.420	0.390	0.383	0.413
Czech Republic	0.290	0.298	0.321	0.270	0.275	0.282	0.293
Denmark	0.606	0.625	0.640	0.642	0.643	0.640	0.640
Estonia	0.308	0.358	0.350	0.291	0.297	0.308	0.313
Finland	0.420	0.432	0.450	0.439	0.433	0.434	0.439
France	0.317	0.325	0.330	0.325	0.338	0.334	0.329
Germany	0.452	0.475	0.473	0.474	0.468	0.466	0.474
Greece	0.267	0.246	0.259	0.248	0.248	0.259	0.258
Hungary	0.270	0.278	0.290	0.271	0.264	0.268	0.275
Ireland	0.497	0.495	0.471	0.462	0.470	0.484	0.470
Italy	0.270	0.276	0.287	0.278	0.286	0.292	0.284
Latvia	0.344	0.400	0.408	0.324	0.325	0.340	0.354
Lithuania	0.236	0.274	0.296	0.269	0.244	0.244	0.264
Luxemburg	0.239	0.242	0.251	0.257	0.255	0.249	0.253
Malta	0.470	0.476	0.493	0.472	0.455	0.467	0.474
Netherlands	0.686	0.694	0.697	0.697	0.702	0.699	0.698
Poland	0.238	0.253	0.261	0.264	0.283	0.278	0.305
Portugal	0.397	0.382	0.371	0.364	0.371	0.380	0.373
Romania*	0.247	0.291	0.276	0.267	0.280	0.288	0.297
Slovakia	0.287	0.284	0.297	0.294	0.315	0.317	0.335
Slovenia	0.271	0.267	0.250	0.237	0.236	0.235	0.249
Spain	0.350	0.330	0.334	0.320	0.333	0.350	0.333
Sweden	0.433	0.463	0.494	0.456	0.456	0.463	0.468
United Kingdom	0.567	0.582	0.583	0.573	0.568	0.570	0.573

* Bulgaria and Romania: calculated using weighted average of Carone's (2005) NMS-10 5 year age group employment rates

Source: NIDI calculations based on Carone (2005)

ANNEX C : PROJECTION RESULTS – DETAILED TABLES

European Union (EU-27)

Figure 1.1. Projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, baseline population variant / constant educational participation

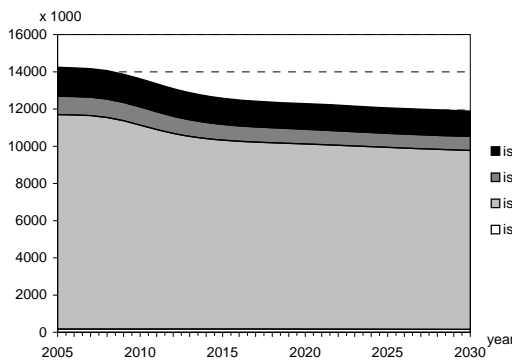


Figure 1.2. Index of the projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, baseline population variant / constant educational participation

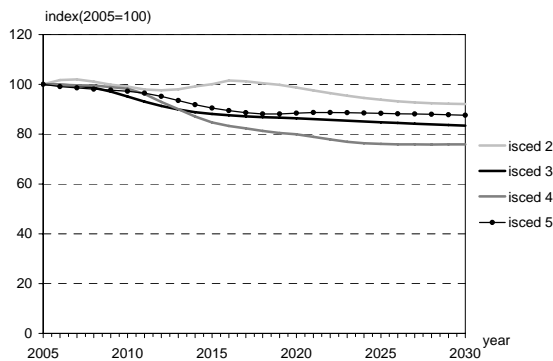


Figure 1.2. Projected number of graduates in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, baseline population variant / constant educational participation

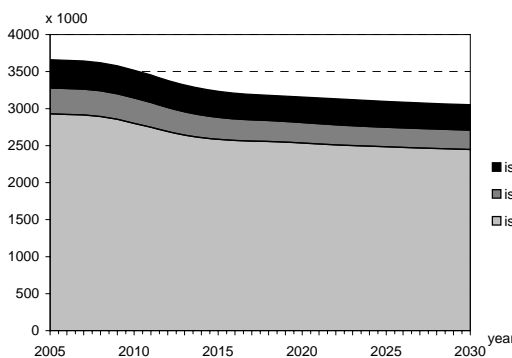


Figure 1.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the European Union (EU-27), 2005-2050, baseline population variant / constant educational participation

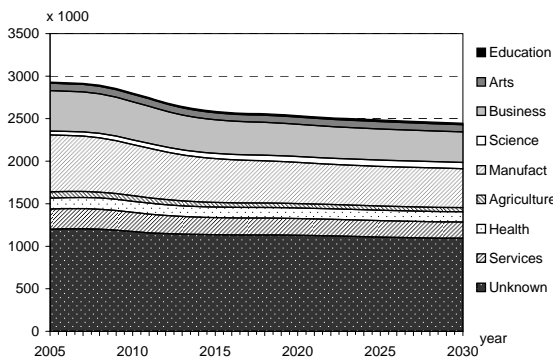


Table 1.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the European Union (EU-27), 2005-2050, baseline population variant / constant graduation rates

		Age group		2005	2010	2015	2020	2025	2030	index (2005=100)						
				x 1000												
students	males	15-19		114.5	115.6	108.7	110.4	111.7	105.4	89.0	100	101	95	96	98	78
ISCED		20-24		13.6	13.0	12.5	12.3	12.7	12.2	9.9	100	96	92	91	93	73
level 3 pre	total			128.1	128.5	121.2	122.7	124.4	117.7	99.0	100	95	96	97	92	77
vocational	females	15-19		86.3	86.5	81.8	84.0	84.5	79.7	67.4	100	100	95	97	98	78
		20-24		6.0	5.6	5.4	5.3	5.4	5.3	4.3	100	93	90	88	90	71
	total			92.3	92.1	87.2	89.3	89.9	84.9	71.7	100	100	94	97	97	78
	total	15-19		200.8	202.1	190.5	194.4	196.2	185.1	156.4	100	101	95	97	98	78
		20-24		19.6	18.6	17.9	17.6	18.1	17.5	14.2	100	95	91	90	92	89
	total			220.4	220.7	208.4	212.0	214.3	202.6	170.7	100	100	95	96	97	72
students	males	15-19		1234.1	1163.4	1069.9	1051.1	1034.4	1024.3	931.3	100	94	87	85	84	75
ISCED		20-24		252.2	251.4	229.9	216.9	206.7	204.3	189.4	100	100	91	86	82	75
level 3	total			1486.3	1414.8	1299.8	1268.1	1241.1	1228.6	1120.8	100	95	87	85	83	75
vocational	females	15-19		1050.7	993.7	918.6	902.9	883.4	873.1	792.4	100	95	87	86	84	75
		20-24		171.8	171.2	159.2	151.7	145.2	142.6	132.3	100	100	93	88	84	77
	total			1222.5	1164.9	1077.8	1054.6	1028.6	1015.7	924.8	100	95	88	86	84	76
	total	15-19		2284.8	2157.1	1988.5	1954.0	1917.9	1897.4	1723.8	100	94	87	86	84	75
		20-24		424.0	422.6	389.1	368.6	351.8	346.9	321.7	100	100	92	87	83	76
	total			2708.8	2579.8	2377.6	2322.6	2269.7	2244.3	2045.5	100	95	88	86	84	76
students	males	15-19		59.9	60.9	52.6	51.4	50.0	49.9	44.7	100	102	88	86	84	75
ISCED		20-24		105.8	103.3	89.8	82.5	77.8	77.5	69.2	100	98	85	78	74	65
level 4	total			165.7	164.3	142.4	134.0	127.8	127.4	113.8	100	99	86	81	77	69
vocational	females	15-19		63.5	64.2	55.8	53.8	52.0	51.8	46.2	100	101	88	85	82	73
		20-24		119.6	115.1	98.5	89.2	83.6	83.3	73.4	100	96	82	75	70	61
	total			183.1	179.3	154.3	142.9	135.6	135.1	119.7	100	98	84	78	74	65
	total	15-19		123.4	125.1	108.4	105.2	102.1	101.7	90.9	100	101	88	85	83	74
		20-24		225.4	218.4	188.3	171.7	161.4	160.8	142.6	100	97	84	76	72	63
	total			348.8	343.5	296.7	276.9	263.5	262.5	233.5	100	98	85	79	76	67
students	males	15-19		51.5	50.6	47.6	49.3	49.1	48.3	44.2	100	98	93	96	95	86
ISCED		20-24		110.6	107.9	102.0	98.8	100.7	100.1	90.4	100	98	92	89	91	82
level 5b	total			162.1	158.5	149.6	148.1	149.8	148.4	134.6	100	98	92	91	92	83
vocational	females	15-19		65.2	63.6	59.5	61.0	60.3	59.4	53.8	100	98	91	94	93	83
		20-24		156.1	152.2	142.4	136.9	138.3	136.8	123.7	100	98	91	88	89	79
	total			221.2	215.8	201.9	197.8	198.6	196.2	177.6	100	98	91	89	90	80
	total	15-19		116.6	114.2	107.1	110.3	109.4	107.6	98.1	100	98	92	95	94	84
		20-24		266.7	260.1	244.3	235.7	239.0	236.9	214.1	100	98	92	88	90	80
	total			383.3	374.3	351.5	346.0	348.4	344.5	312.2	100	98	92	90	90	81

Austria

Figure 2.1. Projected number of students in (pre) vocational education by ISCED level in Austria, 2005-2050, baseline population variant / constant educational participation

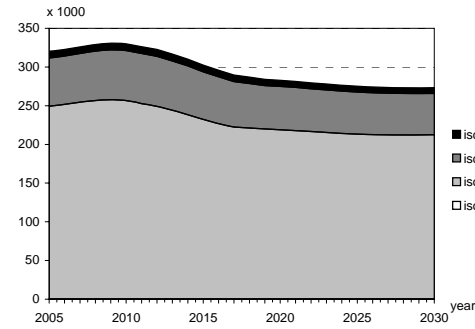


Figure 2.2. Index of the projected number of students in (pre) vocational education by ISCED level in Austria, 2005-2050, baseline population variant / constant educational participation

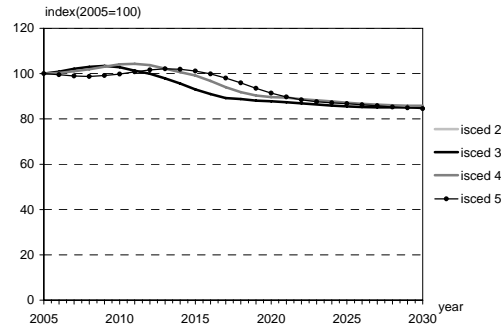


Figure 2.2. Projected number of graduates in (pre) vocational education by ISCED level in Austria, 2005-2050, baseline population variant / constant educational participation

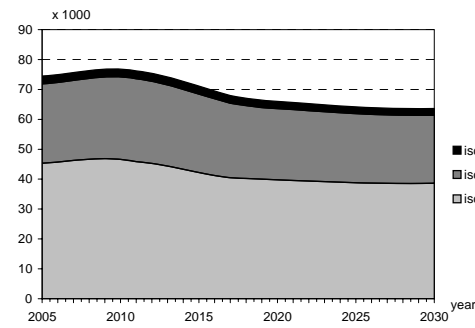


Figure 2.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Austria, 2005-2050, baseline population variant / constant educational participation

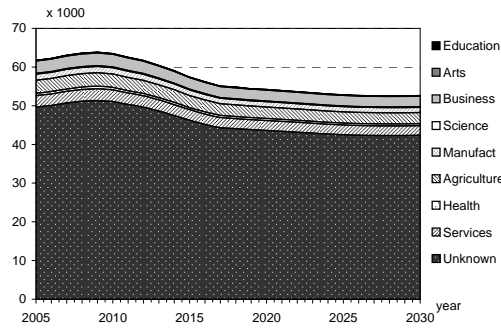


Table 2.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Austria, 2005-2050, baseline population variant / constant graduation rates

		Age group		index (2005=100)												
		2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	10.2	10.5	9.4	8.9	8.7	8.7	7.8	100	103	93	88	86	85	77
		20-24	0.4	0.4	0.4	0.4	0.4	0.4	0.3	100	100	101	90	87	85	80
	level 3 pre	total	10.6	10.9	9.9	9.3	9.1	9.1	8.2	100	103	93	88	86	85	77
		total	5.6	5.8	5.2	4.9	4.8	4.7	4.2	100	103	93	88	85	85	76
	vocational females	15-19	5.6	5.8	5.2	4.9	4.8	4.7	4.2	100	103	93	88	85	85	76
		20-24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	99	101	91	86	84	78
	total	total	5.8	6.0	5.4	5.1	5.0	4.9	4.4	100	103	93	88	85	85	76
		15-19	15.8	16.2	14.6	13.8	13.5	13.4	12.1	100	103	93	88	85	85	77
	total	20-24	0.7	0.6	0.7	0.6	0.6	0.6	0.5	100	100	101	90	87	85	79
		total	16.4	16.9	15.3	14.4	14.0	14.0	12.6	100	103	93	88	86	85	77
students	males	15-19	27.5	28.3	25.5	24.1	23.5	23.5	21.2	100	103	93	88	86	85	77
		20-24	1.2	1.2	1.2	1.1	1.0	1.0	0.9	100	100	101	90	87	85	80
	level 3	total	28.7	29.5	26.7	25.2	24.6	24.5	22.1	100	103	93	88	86	85	77
		total	16.0	16.5	14.8	14.1	13.7	13.6	12.1	100	103	93	88	85	85	76
	vocational females	15-19	16.0	16.5	14.8	14.1	13.7	13.6	12.1	100	103	93	88	85	85	76
		20-24	0.6	0.6	0.6	0.6	0.5	0.5	0.5	100	99	101	91	86	84	78
	total	total	16.6	17.1	15.5	14.6	14.2	14.1	12.6	100	103	93	88	85	85	76
		15-19	43.5	44.8	40.3	38.2	37.2	37.1	33.3	100	103	93	88	85	85	76
	total	20-24	1.8	1.8	1.8	1.6	1.6	1.5	1.4	100	100	101	90	87	85	79
		total	45.3	46.6	42.1	39.8	38.8	38.6	34.7	100	103	93	88	86	85	77
students	males	15-19	7.8	8.2	7.7	7.0	6.8	6.8	6.2	100	105	98	89	87	86	79
		20-24	2.7	2.7	2.8	2.5	2.4	2.3	2.2	100	99	101	91	87	85	80
	level 4	total	10.6	10.9	10.4	9.5	9.2	9.1	8.4	100	103	99	90	87	86	79
		total	13.2	14.0	13.1	11.8	11.6	11.4	10.3	100	106	99	89	87	86	78
	vocational females	15-19	13.2	14.0	13.1	11.8	11.6	11.4	10.3	100	106	99	89	87	86	78
		20-24	2.7	2.7	2.8	2.5	2.4	2.3	2.1	100	99	101	91	86	84	78
	total	total	16.0	16.7	15.9	14.3	13.9	13.7	12.4	100	105	99	90	87	86	78
		15-19	21.1	22.2	20.8	18.8	18.4	18.2	16.5	100	105	99	89	87	86	78
	total	20-24	5.5	5.4	5.5	5.0	4.7	4.6	4.3	100	99	101	91	87	84	79
		total	26.5	27.6	26.3	23.8	23.1	22.8	20.8	100	104	99	90	87	86	78
students	males	15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.1	100	104	98	89	87	86	79
		20-24	1.3	1.3	1.3	1.2	1.1	1.1	1.0	100	99	102	92	87	85	80
	level 5b	total	1.5	1.4	1.5	1.3	1.3	1.2	1.2	100	99	101	92	87	85	80
		total	0.3	0.3	0.3	0.2	0.2	0.2	0.2	100	105	100	90	88	86	79
	vocational females	15-19	0.3	0.3	0.3	0.2	0.2	0.2	0.2	100	105	100	90	88	86	79
		20-24	0.9	0.9	0.9	0.8	0.8	0.7	0.7	100	99	101	91	86	84	78
	total	total	1.2	1.2	1.2	1.1	1.0	1.0	0.9	100	100	101	91	87	84	78
		15-19	0.4	0.5	0.4	0.4	0.4	0.4	0.4	100	105	100	90	88	86	79
	total	20-24	2.2	2.1	2.2	2.0	1.9	1.8	1.7	100	99	101	92	86	84	79
		total	2.6	2.6	2.6	2.4	2.3	2.2	2.1	100	100	101	92	87	85	79

Belgium

Figure 3.1. Projected number of students in (pre) vocational education by ISCED level in Belgium, 2005-2050, baseline population variant / constant educational participation

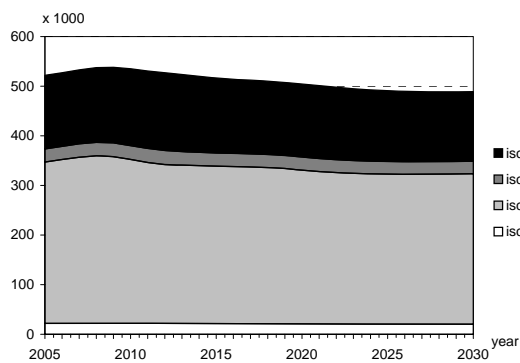


Figure 3.2. Index of the projected number of students in (pre) vocational education by ISCED level in Belgium, 2005-2050, baseline population variant / constant educational participation

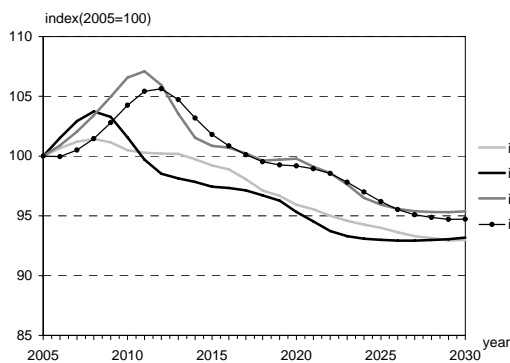


Figure 3.2. Projected number of graduates in (pre) vocational education by ISCED level in Belgium, 2005-2050, baseline population variant / constant educational participation

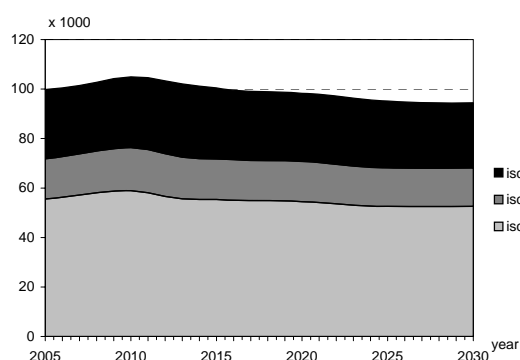


Figure 3.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Belgium, 2005-2050, baseline population variant / constant educational participation

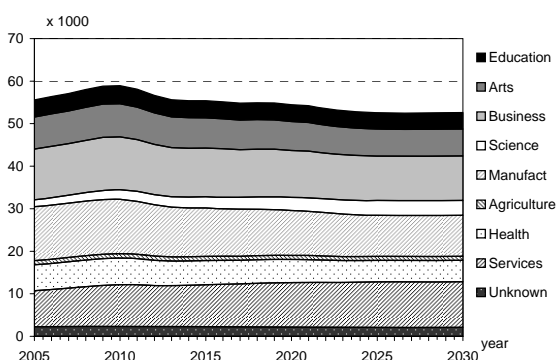


Table 3.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Belgium, 2005-2050, baseline population variant / constant graduation rates

			x 1000							index (2005=100)								
Age group			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
		females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	total		15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		students	males	15-19	25.7	27.4	25.5	25.3	24.5	24.6	23.8	100	106	99	98	95	95	93
				20-24	3.4	3.5	3.5	3.3	3.3	3.2	3.2	100	104	103	99	98	96	95
				total	29.1	30.9	29.0	28.6	27.8	27.8	27.0	100	106	100	98	95	96	93
females	15-19			23.6	25.2	23.5	23.1	22.1	22.2	21.5	100	107	99	98	94	94	91	
	20-24			2.8	2.9	2.9	2.8	2.7	2.6	2.6	100	101	102	98	95	93	92	
	total			26.5	28.1	26.4	25.9	24.8	24.8	24.1	100	106	100	98	94	94	91	
	total		15-19	49.4	52.6	49.0	48.3	46.6	46.7	45.3	100	107	99	98	94	95	92	
			20-24	6.2	6.4	6.3	6.1	6.0	5.9	5.8	100	102	102	99	97	95	93	
			total	55.6	59.0	55.4	54.5	52.6	52.6	51.1	100	106	100	98	95	95	92	
students			males	15-19	5.7	6.1	5.7	5.7	5.5	5.5	5.3	100	108	100	100	96	96	94
				20-24	2.1	2.3	2.2	2.1	2.1	2.1	2.0	100	105	103	100	98	97	96
				total	7.8	8.4	7.9	7.8	7.6	7.5	7.4	100	107	101	100	97	97	94
	females	15-19		6.3	6.8	6.3	6.3	6.0	6.0	5.8	100	108	100	100	95	95	92	
		20-24		2.1	2.2	2.2	2.1	2.1	2.0	2.0	100	103	101	99	96	94	92	
		total		8.4	9.0	8.5	8.4	8.0	8.0	7.8	100	107	101	100	95	95	92	
		total	15-19	12.0	12.9	12.0	12.0	11.4	11.4	11.1	100	108	100	100	96	96	93	
			20-24	4.3	4.5	4.4	4.3	4.2	4.1	4.0	100	104	102	99	97	95	94	
			total	16.2	17.4	16.4	16.2	15.6	15.5	15.2	100	107	101	100	96	96	93	
	students		males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	109	101	102	98	98	96
				20-24	10.3	10.6	10.7	10.2	10.1	9.9	9.8	100	102	104	99	98	95	94
				total	10.4	10.6	10.7	10.3	10.1	9.9	9.8	100	102	104	99	98	95	94
females		15-19		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	108	100	101	95	95	93	
		20-24		17.5	17.9	17.9	17.2	16.8	16.3	16.1	100	102	102	98	96	93	92	
		total		17.6	18.0	18.0	17.3	16.9	16.4	16.2	100	102	102	98	96	93	92	
		total	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	109	101	101	96	96	93	
			20-24	27.9	28.5	28.6	27.5	26.9	26.2	25.9	100	102	103	98	96	94	93	
			total	28.0	28.6	28.7	27.6	27.0	26.3	26.0	100	102	103	99	96	94	93	

Bulgaria

Figure 4.1. Projected number of students in (pre) vocational education by ISCED level in Bulgaria, 2005-2050, baseline population variant / constant educational participation

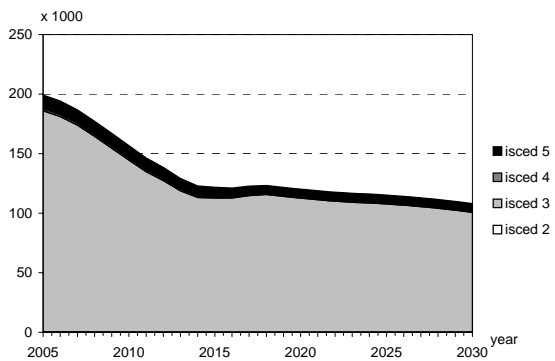


Figure 4.2. Index of the projected number of students in (pre) vocational education by ISCED level in Bulgaria, 2005-2050, baseline population variant / constant educational participation

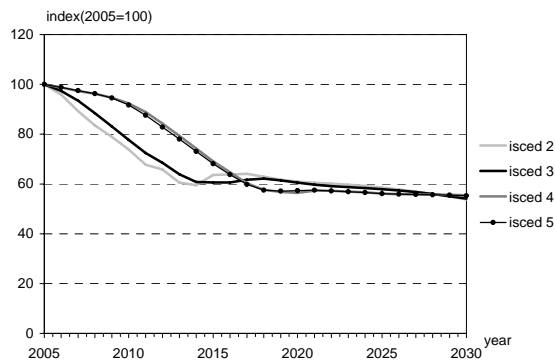


Figure 4.2. Projected number of graduates in (pre) vocational education by ISCED level in Bulgaria, 2005-2050, baseline population variant / constant educational participation

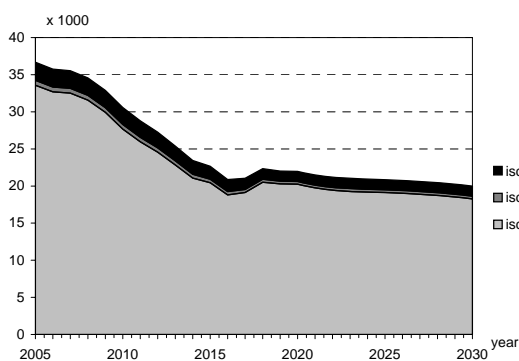


Figure 4.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Bulgaria, 2005-2050, baseline population variant / constant educational participation

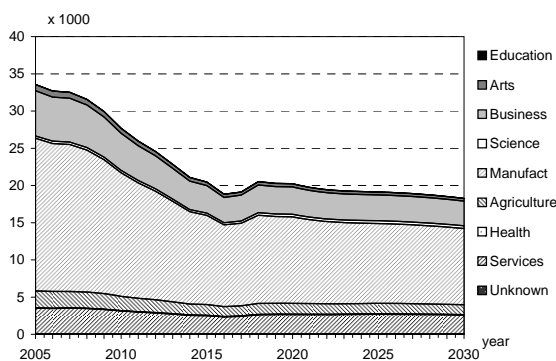


Table 4.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Bulgaria, 2005-2050, baseline population variant / constant graduation rates

			x 1000							index (2005=100)						
Age group			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
students	males	15-19	19.7	16.3	12.0	12.0	11.3	10.8	7.9	100	83	61	61	57	55	40
ISCED		20-24	0.9	0.8	0.6	0.5	0.5	0.5	0.4	100	93	69	58	56	55	39
level 3	total		20.6	17.2	12.7	12.5	11.8	11.3	8.2	100	83	61	61	57	55	40
vocational	females	15-19	12.7	10.3	7.6	7.6	7.2	6.8	5.0	100	81	60	60	56	54	39
		20-24	0.2	0.2	0.2	0.1	0.1	0.1	0.1	100	94	71	57	56	55	39
	total	15-19	12.9	10.5	7.8	7.7	7.3	7.0	5.1	100	81	60	60	56	54	39
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total		32.4	26.6	19.7	19.6	18.5	17.6	12.8	100	82	61	60	57	54	40
		20-24	1.1	1.1	0.8	0.7	0.6	0.6	0.4	100	93	69	58	56	55	39
	total		33.6	27.7	20.4	20.2	19.1	18.3	13.3	100	82	61	60	57	54	40
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	89	62	61	58	56	40
ISCED		20-24	0.5	0.4	0.3	0.3	0.3	0.3	0.2	100	93	72	54	56	55	39
level 4	total		0.5	0.4	0.3	0.3	0.3	0.3	0.2	100	93	72	54	56	55	39
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	62	60	57	55	40
		20-24	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	94	73	55	55	55	39
	total	15-19	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	93	72	56	55	55	39
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	62	60	57	56	40
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	62	60	57	56	40
		20-24	0.6	0.6	0.5	0.3	0.4	0.4	0.3	100	93	72	54	56	55	39
	total		0.7	0.6	0.5	0.4	0.4	0.4	0.3	100	93	72	55	56	55	39
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	62	61	58	56	40
ISCED		20-24	0.8	0.7	0.6	0.4	0.4	0.4	0.3	100	93	73	55	56	55	39
level 5b	total		0.8	0.8	0.6	0.4	0.5	0.4	0.3	100	93	72	55	56	55	39
vocational	females	15-19	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	90	62	60	57	55	40
		20-24	1.6	1.5	1.1	0.9	0.9	0.9	0.6	100	94	71	55	55	55	39
	total	15-19	1.6	1.5	1.2	0.9	0.9	0.9	0.6	100	94	71	55	55	55	39
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	90	62	60	57	56	40
	total	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	90	62	60	57	56	40
		20-24	2.3	2.2	1.7	1.3	1.3	1.3	0.9	100	94	72	55	56	55	39
	total		2.4	2.3	1.7	1.4	1.4	1.4	1.0	100	93	71	55	56	55	39

Cyprus

Figure 5.1. Projected number of students in (pre) vocational education by ISCED level in Cyprus, 2005-2050, baseline population variant / constant educational participation

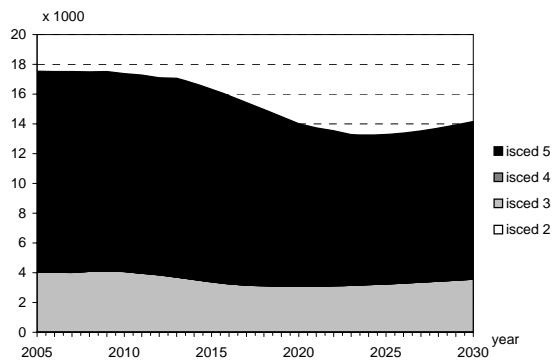


Figure 5.2. Index of the projected number of students in (pre) vocational education by ISCED level in Cyprus, 2005-2050, baseline population variant / constant educational participation

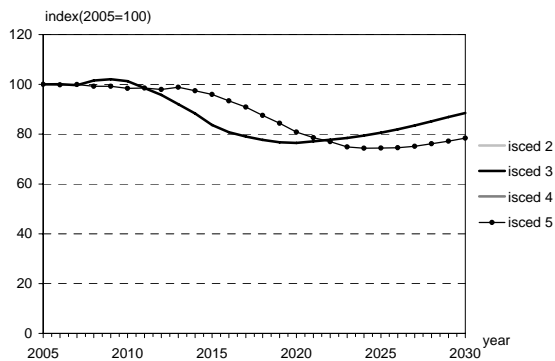


Figure 5.2. Projected number of graduates in (pre) vocational education by ISCED level in Cyprus, 2005-2050, baseline population variant / constant educational participation

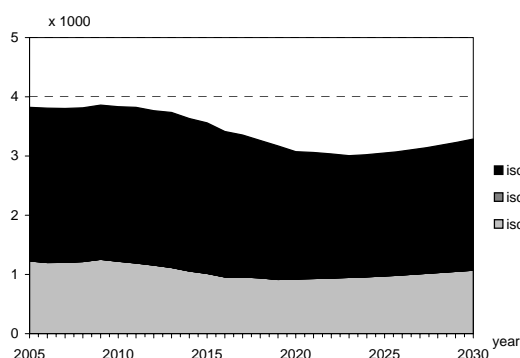


Figure 5.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Cyprus, 2005-2050, baseline population variant / constant educational participation

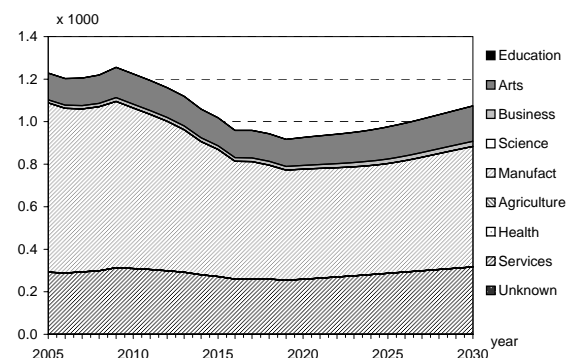


Table 5.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Cyprus, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3 pre	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
		total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	1.0	1.0	0.8	0.8	0.8	0.9	0.8	100	100	83	76	80	88	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3	total	1.0	1.0	0.8	0.8	0.8	0.9	0.8	100	100	83	76	80	88	
		total	1.0	1.0	0.8	0.8	0.8	0.9	0.8	100	100	83	76	80	88	
	vocational	females	15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	100	83	74	78	86
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	96	80	75	80
		total	15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	100	84	74	78	86
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	96	80	75	80
		total	1.2	1.2	1.0	0.9	1.0	1.1	1.0	100	100	83	75	79	87	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	96	80	75	80	
total	1.2	1.2	1.0	0.9	1.0	1.1	1.0	100	100	83	75	79	87			
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 4	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	
		total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-		
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-		
students	males	15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	106	104	93	99	108	
		20-24	1.0	1.0	1.0	0.8	0.7	0.8	0.8	100	99	100	84	75	78	
	level 5b	total	1.1	1.1	1.1	1.0	0.9	0.9	1.0	100	100	101	85	79	83	
		total	1.1	1.1	1.1	1.0	0.9	0.9	1.0	100	100	101	85	79	83	
	vocational	females	15-19	0.8	0.8	0.7	0.6	0.6	0.7	0.7	100	106	94	78	85	94
			20-24	0.7	0.7	0.7	0.6	0.5	0.6	0.6	100	95	98	84	76	80
		total	15-19	1.5	1.5	1.4	1.2	1.2	1.3	1.3	100	101	96	81	81	87
			20-24	0.9	1.0	0.9	0.8	0.8	0.9	0.8	100	106	96	81	88	96
		total	1.7	1.6	1.7	1.4	1.3	1.3	1.4	100	98	99	84	76	79	
		total	2.6	2.6	2.5	2.1	2.1	2.2	2.3	100	101	98	83	80	85	

Czech Republic

Figure 6.1. Projected number of students in (pre) vocational education by ISCED level in the Czech Republic, 2005-2050, baseline population variant / constant educational participation

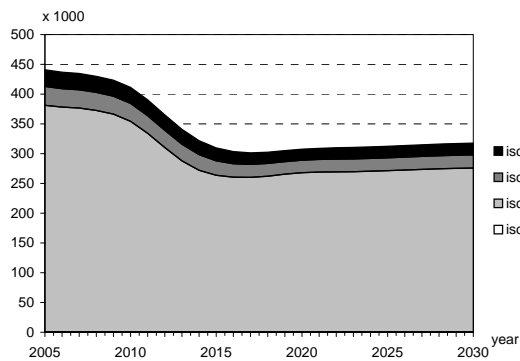


Figure 6.2. Index of the projected number of students in (pre) vocational education by ISCED level in the Czech Republic, 2005-2050, baseline population variant / constant educational participation

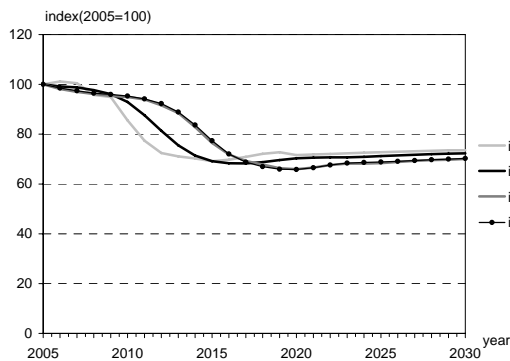


Figure 6.2. Projected number of graduates in (pre) vocational education by ISCED level in the Czech Republic, 2005-2050, baseline population variant / constant educational participation

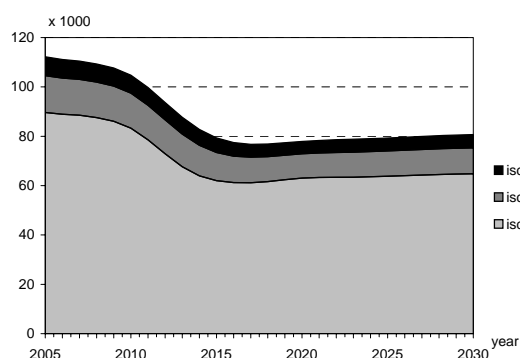


Figure 6.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the Czech Republic, 2005-2050, baseline population variant / constant educational participation

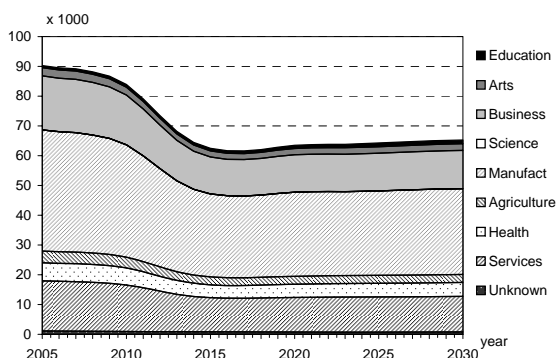


Table 6.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the Czech Republic, 2005-2050, baseline population variant / constant graduation rates

		x 1000							index (2005=100)							
		2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	0.3	0.3	0.2	0.2	0.2	0.2	100	93	69	71	72	73	59	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	94	82	65	68	70	59	
	level 3 pre	total	0.3	0.3	0.2	0.2	0.2	0.2	100	93	69	71	72	73	59	
		vocational	0.4	0.3	0.2	0.2	0.3	0.3	100	92	69	70	71	72	58	
	females	15-19	0.4	0.3	0.3	0.3	0.3	0.3	100	93	69	70	71	72	58	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	94	82	65	68	70	58	
total	15-19	0.6	0.6	0.4	0.4	0.4	0.5	100	93	69	70	71	72	59		
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	94	82	65	68	70	59		
total		0.6	0.6	0.4	0.5	0.5	0.5	100	93	69	70	71	72	59		
students	males	15-19	46.7	43.5	32.2	33.1	33.4	34.0	27.6	100	93	69	71	72	73	59
		20-24	1.7	1.6	1.4	1.1	1.2	1.2	1.0	100	94	82	65	68	70	59
	level 3	total	48.4	45.2	33.6	34.2	34.6	35.2	28.6	100	93	69	71	72	73	59
		vocational	40.1	37.1	27.5	28.1	28.4	28.9	23.4	100	92	69	70	71	72	58
	females	15-19	1.1	1.0	0.9	0.7	0.8	0.8	0.6	100	94	82	65	68	70	58
		20-24	41.2	38.1	28.4	28.8	29.2	29.6	24.1	100	93	69	70	71	72	58
total	15-19	86.8	80.6	59.7	61.2	61.9	62.8	51.1	100	93	69	71	71	72	59	
	20-24	2.8	2.7	2.3	1.8	1.9	2.0	1.7	100	94	82	65	68	70	59	
total		89.6	83.3	62.0	63.0	63.8	64.8	52.7	100	93	69	70	71	72	59	
students	males	15-19	4.4	4.2	3.1	3.0	3.1	3.1	2.6	100	97	70	68	70	71	59
		20-24	4.5	4.2	3.7	2.9	3.0	3.1	2.6	100	93	83	65	67	69	58
	level 4	total	8.8	8.4	6.8	5.8	6.1	6.2	5.2	100	95	77	66	69	70	58
		vocational	3.0	2.9	2.1	2.0	2.1	2.1	1.7	100	97	70	67	69	71	58
	females	15-19	3.1	2.9	2.6	2.0	2.1	2.1	1.8	100	93	83	64	66	69	58
		20-24	6.1	5.8	4.7	4.0	4.2	4.3	3.6	100	95	76	65	68	70	58
total	15-19	7.4	7.1	5.2	5.0	5.1	5.3	4.3	100	97	70	67	70	71	58	
	20-24	7.6	7.1	6.3	4.9	5.1	5.2	4.4	100	93	83	65	67	69	58	
total		15.0	14.2	11.4	9.9	10.2	10.5	8.7	100	95	77	66	68	70	58	
students	males	15-19	0.8	0.8	0.6	0.6	0.6	0.6	0.5	100	97	70	68	70	71	59
		20-24	1.5	1.4	1.2	0.9	1.0	1.0	0.9	100	94	84	65	68	70	59
	level 5b	total	2.3	2.2	1.8	1.5	1.6	1.6	1.3	100	95	79	66	69	70	59
		vocational	2.4	2.3	1.7	1.6	1.7	1.7	1.4	100	97	70	67	70	71	58
	females	15-19	2.9	2.8	2.4	1.9	2.0	2.0	1.7	100	95	83	65	68	70	58
		20-24	5.3	5.1	4.1	3.5	3.7	3.7	3.1	100	95	77	66	69	70	58
total	15-19	3.3	3.1	2.3	2.2	2.3	2.3	1.9	100	97	70	67	70	71	58	
	20-24	4.4	4.1	3.6	2.8	3.0	3.0	2.6	100	94	83	65	68	70	59	
total		7.6	7.3	5.9	5.0	5.2	5.4	4.5	100	95	77	66	69	70	58	

Denmark

Figure 7.1. Projected number of students in (pre) vocational education by ISCED level in Denmark, 2005-2050, baseline population variant / constant educational participation

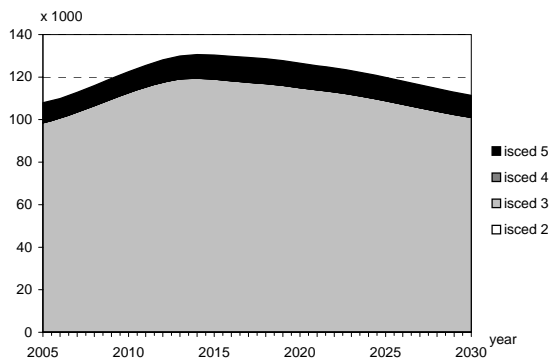


Figure 7.2. Index of the projected number of students in (pre) vocational education by ISCED level in Denmark, 2005-2050, baseline population variant / constant educational participation

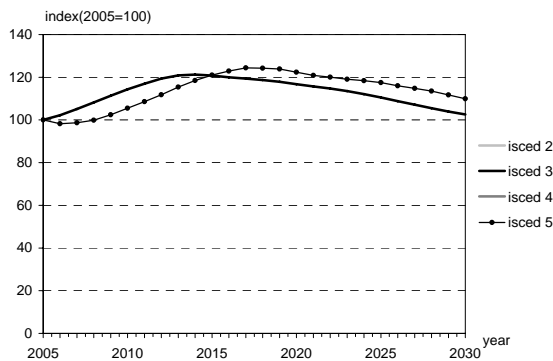


Figure 7.2. Projected number of graduates in (pre) vocational education by ISCED level in Denmark, 2005-2050, baseline population variant / constant educational participation

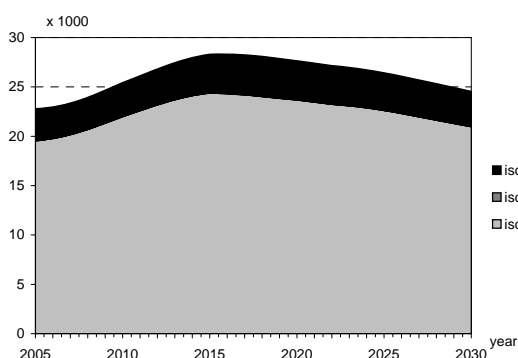


Figure 7.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Denmark, 2005-2050, baseline population variant / constant educational participation

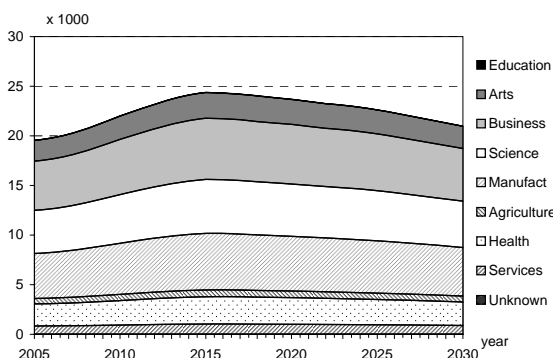


Table 7.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Denmark, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	4.7	5.5	5.9	5.6	5.3	4.9	5.2	100	117	125	119	112	104	110
ISCED		20-24	6.1	6.9	7.8	7.6	7.3	6.8	7.0	100	112	127	124	120	112	115
level 3	total		10.9	12.4	13.7	13.2	12.7	11.7	12.2	100	114	126	122	117	108	113
vocational	females	15-19	2.9	3.3	3.5	3.4	3.1	2.9	3.1	100	116	122	117	109	101	107
		20-24	5.8	6.3	7.2	7.1	6.8	6.3	6.5	100	108	123	122	117	109	111
	total		8.7	9.6	10.7	10.5	10.0	9.2	9.5	100	110	123	120	114	106	110
	total	15-19	7.6	8.9	9.4	9.0	8.5	7.8	8.3	100	116	124	118	111	102	109
		20-24	11.9	13.1	15.0	14.7	14.2	13.2	13.5	100	110	125	123	119	110	113
	total		19.5	22.0	24.4	23.7	22.6	21.0	21.8	100	113	125	121	116	107	111
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
level 4	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	117	127	121	114	105	111
ISCED		20-24	1.7	1.8	2.1	2.1	2.1	1.9	2.0	100	107	123	124	119	112	114
level 5b	total		1.8	1.9	2.2	2.2	2.1	2.0	2.0	100	107	123	124	119	112	113
vocational	females	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	116	124	119	111	102	108
		20-24	1.4	1.5	1.7	1.7	1.7	1.6	1.6	100	104	120	121	116	108	110
	total		1.5	1.6	1.8	1.8	1.7	1.6	1.6	100	105	120	121	116	108	110
	total	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	116	125	120	112	103	109
		20-24	3.2	3.3	3.8	3.9	3.7	3.5	3.5	100	106	122	123	118	110	112
	total		3.2	3.4	3.9	4.0	3.8	3.6	3.6	100	106	122	123	118	110	112

Table 7.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Denmark, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050		
			index (2005=100)															
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
		Humanities	0.7	0.8	0.9	0.9	0.8	0.8	0.8	100	114	126	122	117	108	113		
	females	Business	2.5	2.8	3.1	3.0	2.9	2.7	2.8	100	114	126	122	117	108	113		
		Science	2.4	2.7	3.0	2.9	2.8	2.6	2.7	100	114	126	122	117	108	113		
		Engineering	4.2	4.7	5.3	5.1	4.9	4.5	4.7	100	114	126	122	117	108	113		
		Agriculture	0.4	0.5	0.6	0.5	0.5	0.5	0.5	100	114	126	122	117	108	113		
		Health	0.2	0.2	0.3	0.3	0.3	0.2	0.2	100	114	126	122	117	108	113		
		Services	0.5	0.6	0.6	0.6	0.6	0.5	0.5	100	114	126	122	117	108	113		
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		total	10.9	12.4	13.7	13.2	12.7	11.7	12.2	100	114	126	122	117	108	113		
		total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
			Humanities	1.4	1.5	1.7	1.7	1.6	1.5	1.5	100	110	123	120	114	106	110	
			Business	2.5	2.7	3.0	3.0	2.8	2.6	2.7	100	110	123	120	114	106	110	
			Science	2.0	2.2	2.4	2.4	2.3	2.1	2.2	100	110	123	120	114	106	110	
Engineering	0.4		0.4	0.5	0.4	0.4	0.4	0.4	100	110	123	120	114	106	110			
Agriculture	0.1		0.1	0.1	0.1	0.1	0.1	0.1	100	110	123	120	114	106	110			
Health	2.0		2.2	2.5	2.4	2.3	2.1	2.2	100	110	123	120	114	106	110			
Services	0.3		0.4	0.4	0.4	0.4	0.4	0.4	100	110	123	120	114	106	110			
Unknown	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
total	8.7		9.6	10.7	10.5	10.0	9.2	9.5	100	110	123	120	114	106	110			
total	Education		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Humanities		2.1	2.3	2.6	2.5	2.4	2.2	2.3	100	112	124	121	115	107	111		
	Business		4.9	5.6	6.2	6.0	5.7	5.3	5.5	100	112	124	121	116	107	111		
	Science		4.4	4.9	5.4	5.3	5.0	4.7	4.9	100	112	125	121	116	107	111		
	Engineering	4.5	5.2	5.7	5.5	5.3	4.9	5.1	100	114	126	122	117	108	113			
	Agriculture	0.6	0.6	0.7	0.7	0.6	0.6	0.6	100	113	126	122	116	108	112			
	Health	2.2	2.5	2.7	2.7	2.6	2.4	2.5	100	111	123	120	115	106	110			
	Services	0.8	0.9	1.0	1.0	1.0	0.9	0.9	100	113	125	121	116	107	112			
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	total	19.5	22.0	24.4	23.7	22.6	21.0	21.8	100	113	125	121	116	107	111			
	students ISCED level 4 vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		females	Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
Engineering			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Agriculture			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Health			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Services			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Unknown			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
total			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
total			Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	students ISCED level 5b vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Humanities	0.0	0.0	0.1	0.1	0.0	0.0	0.0	100	107	123	124	119	112	113	
		females	Business	0.7	0.7	0.9	0.9	0.8	0.8	0.8	100	107	123	124	119	112	113	
			Science	0.3	0.4	0.4	0.4	0.4	0.4	0.4	100	107	123	124	119	112	113	
Engineering			0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	107	123	124	119	112	113		
Agriculture			0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	107	123	124	119	112	113		
Health			0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	107	123	124	119	112	113		
Services			0.3	0.3	0.4	0.4	0.3	0.3	0.3	100	107	123	124	119	112	113		
Unknown			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
total			1.8	1.9	2.2	2.2	2.1	2.0	2.0	100	107	123	124	119	112	113		
total			Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
			Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	105	120	121	116	108	110	
			Business	1.0	1.0	1.1	1.2	1.1	1.0	1.0	100	105	120	121	116	108	110	
			Science	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	105	120	121	116	108	110	
	Engineering	0.2	0.2	0.2	0.3	0.2	0.2	0.2	100	105	120	121	116	108	110			
	Agriculture	0.0	0.0	0.1	0.1	0.1	0.0	0.0	100	105	120	121	116	108	110			
	Health	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	105	120	121	116	108	110			
	Services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	105	120	121	116	108	110			
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	total	1.5	1.6	1.8	1.8	1.7	1.6	1.6	100	105	120	121	116	108	110			
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
		Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	106	121	122	117	109	111		
		Business	1.7	1.8	2.0	2.0	1.9	1.8	1.8	100	106	121	122	117	110	111		
		Science	0.4	0.4	0.5	0.5	0.5	0.5	0.5	100	107	122	124	119	111	113		
Engineering		0.4	0.4	0.5	0.5	0.5	0.4	0.4	100	106	121	122	118	110	111			
Agriculture		0.2	0.3	0.3	0.3	0.3	0.3	0.3	100	107	122	124	119	111	113			
Health		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	105	120	121	116	108	110			
Services		0.4	0.4	0.4	0.4	0.4	0.4	0.4	100	107	122	124	119	111	113			
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
total		3.2	3.4	3.9	4.0	3.8	3.6	3.6	100	106	122	123	118	110	112			

Estonia

Figure 8.1. Projected number of students in (pre) vocational education by ISCED level in Estonia, 2005-2050, baseline population variant / constant educational participation

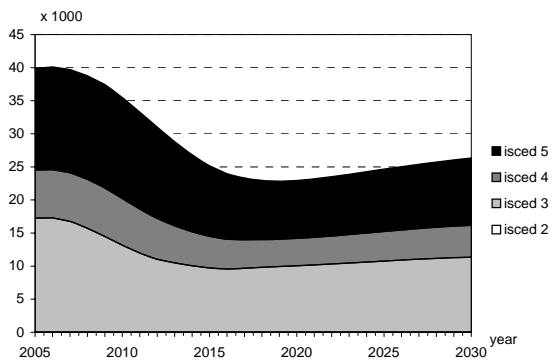


Figure 8.2. Index of the projected number of students in (pre) vocational education by ISCED level in Estonia, 2005-2050, baseline population variant / constant educational participation

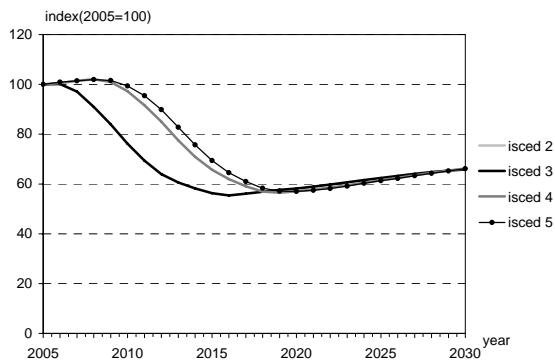


Figure 8.2. Projected number of graduates in (pre) vocational education by ISCED level in Estonia, 2005-2050, baseline population variant / constant educational participation

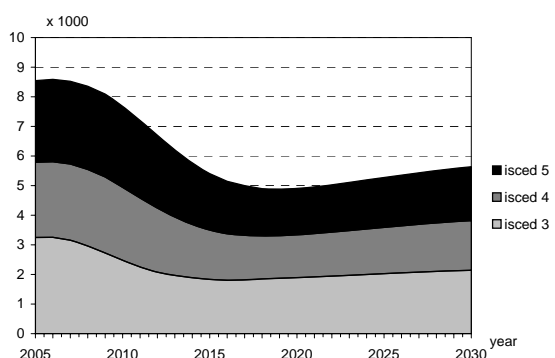


Figure 8.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Estonia, 2005-2050, baseline population variant / constant educational participation

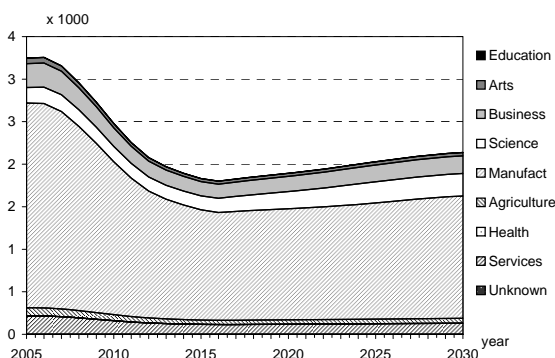


Table 8.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Estonia, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3 pre	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
total		15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
total		15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	2.1	1.6	1.2	1.3	1.3	1.4	1.1	100	75	56	58	63	66	
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	102	70	57	62	66	
	level 3	total	2.3	1.7	1.3	1.3	1.4	1.5	1.1	100	77	57	58	63	66	
		total	0.9	0.7	0.5	0.5	0.6	0.6	0.5	100	74	55	58	62	65	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	101	71	56	60	65
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	101	71	56	60	65
total		15-19	1.0	0.7	0.5	0.6	0.6	0.6	0.5	100	75	56	58	62	65	
		20-24	3.1	2.3	1.7	1.8	1.9	2.0	1.5	100	75	56	58	63	66	
total		15-19	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	102	70	56	61	66	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	0.3	0.3	0.2	0.2	0.2	0.2	0.2	100	92	60	61	64	68	
		20-24	0.6	0.7	0.5	0.4	0.4	0.4	0.3	100	102	70	57	61	66	
	level 4	total	1.0	1.0	0.7	0.6	0.6	0.7	0.5	100	99	67	58	62	67	
		total	0.6	0.6	0.4	0.4	0.4	0.4	0.3	100	90	60	58	62	67	
	vocational	females	15-19	0.6	0.6	0.4	0.4	0.4	0.4	0.3	100	90	60	58	62	67
			20-24	0.9	0.9	0.6	0.5	0.5	0.6	0.5	100	101	69	55	60	65
total		15-19	1.5	1.5	1.0	0.9	0.9	1.0	0.8	100	96	65	56	61	66	
		20-24	1.0	0.9	0.6	0.6	0.6	0.7	0.5	100	91	60	59	63	67	
total		15-19	1.6	1.6	1.1	0.9	0.9	1.0	0.8	100	101	69	56	61	66	
		20-24	2.5	2.5	1.7	1.4	1.6	1.7	1.3	100	97	66	57	62	66	
students	males	15-19	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	92	60	61	64	68	
		20-24	0.6	0.7	0.5	0.4	0.4	0.4	0.3	100	103	74	57	62	67	
	level 5b	total	0.8	0.8	0.6	0.5	0.5	0.5	0.4	100	101	71	58	62	67	
		total	0.5	0.4	0.3	0.3	0.3	0.3	0.2	100	90	60	58	62	67	
	vocational	females	15-19	1.5	1.5	1.0	0.8	0.9	1.0	0.8	100	101	71	56	60	65
			20-24	1.9	1.9	1.3	1.1	1.2	1.3	1.0	100	98	68	56	61	66
total		15-19	0.7	0.6	0.4	0.4	0.4	0.4	0.3	100	91	60	59	63	67	
		20-24	2.1	2.1	1.5	1.2	1.3	1.4	1.1	100	102	72	56	61	66	
total		15-19	2.8	2.7	1.9	1.6	1.7	1.8	1.4	100	99	69	57	61	66	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	

Finland

Figure 9.1. Projected number of students in (pre) vocational education by ISCED level in Finland, 2005-2050, baseline population variant / constant educational participation

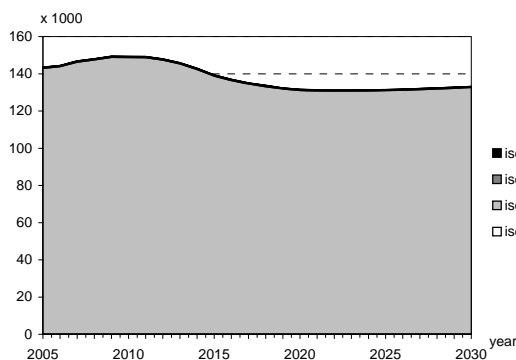


Figure 9.2. Index of the projected number of students in (pre) vocational education by ISCED level in Finland, 2005-2050, baseline population variant / constant educational participation

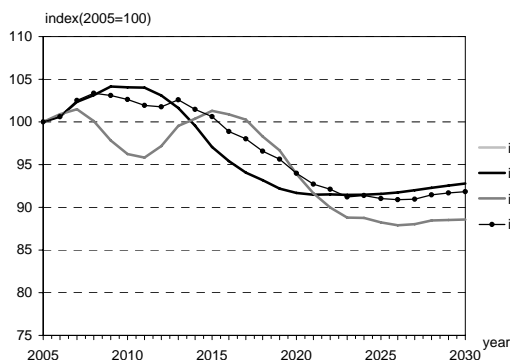


Figure 9.2. Projected number of graduates in (pre) vocational education by ISCED level in Finland, 2005-2050, baseline population variant / constant educational participation

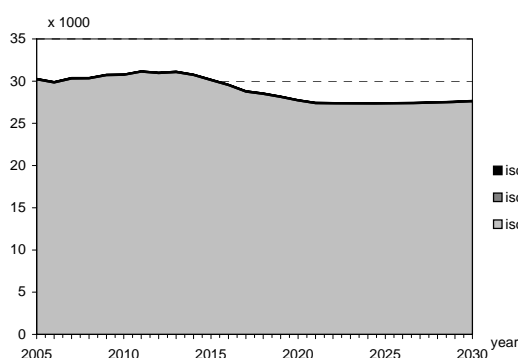


Figure 9.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Finland, 2005-2050, baseline population variant / constant educational participation

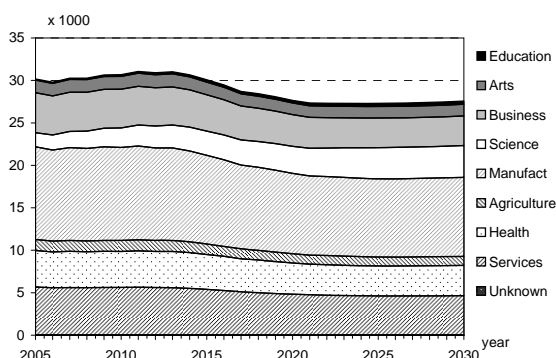


Table 9.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Finland, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	11.2	11.8	11.1	10.3	10.4	10.5	9.8	100	106	99	92	93	94	88
ISCED		20-24	4.9	4.6	4.9	4.4	4.2	4.3	4.2	100	95	100	91	87	88	85
level 3	total		16.0	16.4	16.0	14.7	14.6	14.8	14.0	100	103	100	92	91	92	87
vocational	females	15-19	6.9	7.4	6.9	6.4	6.4	6.5	6.0	100	106	100	92	92	93	87
		20-24	7.2	6.9	7.2	6.5	6.3	6.1	100	95	100	91	87	87	84	
	total		14.1	14.3	14.1	12.9	12.7	12.8	12.1	100	101	100	91	89	90	86
	total	15-19	18.1	19.1	18.0	16.7	16.7	17.0	15.9	100	106	100	92	93	94	88
		20-24	12.1	11.5	12.1	11.0	10.5	10.6	10.3	100	95	100	91	87	88	85
	total		30.2	30.7	30.1	27.7	27.3	26.1	100	102	100	92	90	91	87	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
ISCED		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	96	101	94	88	89	87
level 4	total		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	96	101	94	88	89	87
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	100	90	90	91	85
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	96	102	94	88	88	86
	total		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	97	102	94	88	88	86
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	100	90	90	91	85
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	96	101	94	88	88	87
	total		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	96	101	94	88	88	87
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	102	96	89	89	88
level 5b	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	102	96	89	89	88
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	100	90	90	91	85
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	98	103	97	89	89	88
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	99	102	96	89	89	87
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	100	90	90	91	85
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	98	102	97	89	89	88
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	98	102	96	89	89	88

France

Figure 10.1. Projected number of students in (pre) vocational education by ISCED level in France, 2005-2050, baseline population variant / constant educational participation

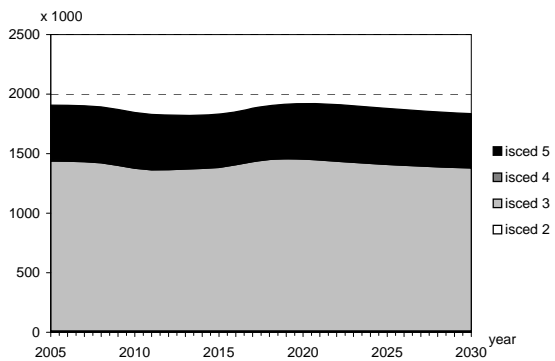


Figure 10.2. Index of the projected number of students in (pre) vocational education by ISCED level in France, 2005-2050, baseline population variant / constant educational participation

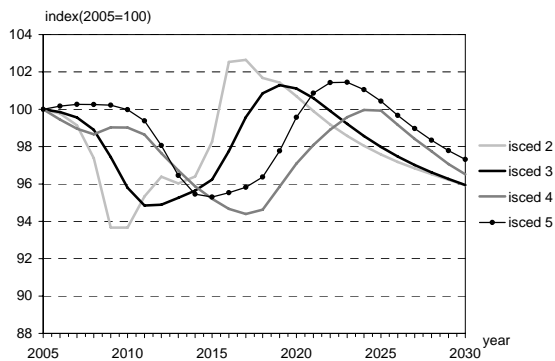


Figure 10.2. Projected number of graduates in (pre) vocational education by ISCED level in France, 2005-2050, baseline population variant / constant educational participation

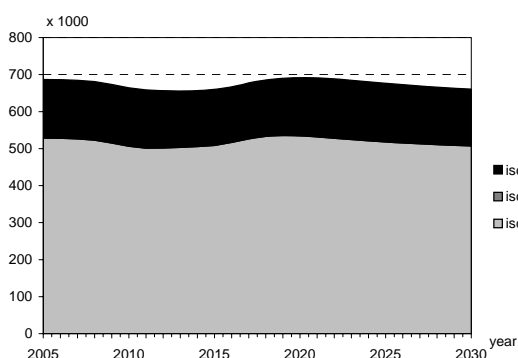


Figure 10.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in France, 2005-2050, baseline population variant / constant educational participation

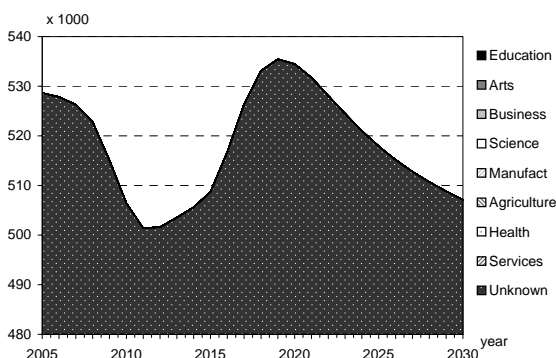


Table 10.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, France, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3 pre	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	275.3	263.7	265.7	279.5	271.3	266.0	260.3	100	96	97	102	99	97	
		20-24	14.6	14.8	13.9	14.5	15.0	14.5	14.0	100	101	95	99	102	99	
	level 3	total	289.9	278.5	279.6	294.0	286.3	280.5	274.2	100	96	96	101	99	97	
		total	226.6	215.7	217.6	228.7	219.4	214.8	209.8	100	95	96	101	97	95	
	vocational	females	15-19	12.1	12.2	11.5	11.8	12.2	11.8	11.3	100	101	95	98	101	97
			20-24	238.7	228.0	229.1	240.5	231.6	226.6	221.1	100	95	96	101	97	95
		total	238.7	228.0	229.1	240.5	231.6	226.6	221.1	100	95	96	101	97	95	
total	15-19	501.9	479.4	483.3	508.2	490.7	480.8	470.1	100	96	96	101	98	96		
	20-24	26.8	27.0	25.4	26.3	27.2	26.3	25.3	100	101	95	98	102	98		
	total	528.6	506.4	508.7	534.5	517.9	507.1	495.3	100	96	96	101	98	96		
students	males	15-19	0.1	0.1	0.1	0.1	0.1	0.1	100	99	96	103	100	97	95	
		20-24	0.6	0.6	0.6	0.6	0.6	0.6	0.5	100	99	95	95	101	98	
	level 4	total	0.7	0.7	0.7	0.7	0.7	0.7	0.7	100	99	95	97	100	98	
		total	0.7	0.7	0.7	0.7	0.7	0.7	0.7	100	99	95	97	100	98	
	vocational	females	15-19	0.5	0.5	0.5	0.6	0.5	0.5	100	99	95	102	98	95	
			20-24	1.5	1.5	1.4	1.4	1.5	1.5	1.4	100	99	95	95	100	
		total	2.0	2.0	1.9	2.0	2.0	2.0	1.9	100	99	95	97	100		
total	15-19	0.7	0.7	0.7	0.7	0.7	0.7	0.6	100	99	95	102	98	96		
	20-24	2.1	2.1	2.0	2.0	2.1	2.0	1.9	100	99	95	95	100	97		
	total	2.8	2.8	2.6	2.7	2.8	2.7	2.6	100	99	95	97	100	96		
students	males	15-19	29.3	29.1	28.1	30.2	29.2	28.5	27.7	100	99	96	103	100	97	
		20-24	40.3	40.5	38.3	39.4	41.1	39.8	38.3	100	101	95	98	102	99	
	level 5b	total	69.6	69.6	66.4	69.6	70.3	68.4	66.0	100	100	95	100	101	98	
		total	32.5	32.2	31.0	33.3	31.9	31.1	30.1	100	99	96	103	98	96	
	vocational	females	15-19	53.1	53.4	50.5	51.6	53.7	51.6	49.4	100	101	95	97	101	
			20-24	85.6	85.6	81.5	84.9	85.6	82.7	79.5	100	100	95	99	100	
		total	85.6	85.6	81.5	84.9	85.6	82.7	79.5	100	100	95	99	100		
total	15-19	61.8	61.3	59.1	63.5	61.1	59.6	57.9	100	99	96	103	99	96		
	20-24	93.4	93.9	88.8	91.0	94.7	91.5	87.6	100	101	95	97	101	98		
	total	155.2	155.2	147.9	154.5	155.9	151.0	145.5	100	100	95	100	100	97		

Germany

Figure 11.1. Projected number of students in (pre) vocational education by ISCED level in Germany, 2005-2050, baseline population variant / constant educational participation

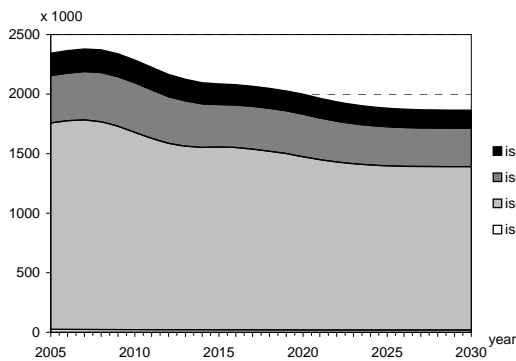


Figure 11.2. Index of the projected number of students in (pre) vocational education by ISCED level in Germany, 2005-2050, baseline population variant / constant educational participation

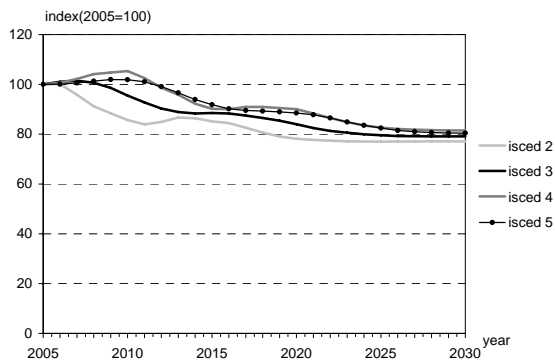


Figure 11.2. Projected number of graduates in (pre) vocational education by ISCED level in Germany, 2005-2050, baseline population variant / constant educational participation

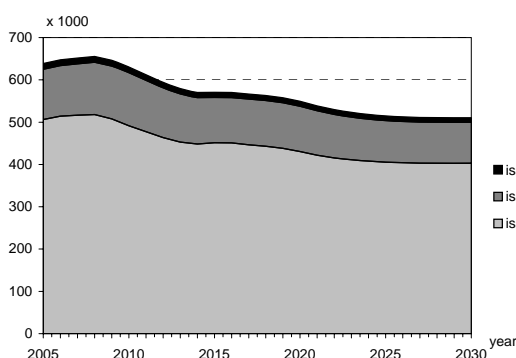


Figure 11.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Germany, 2005-2050, baseline population variant / constant educational participation

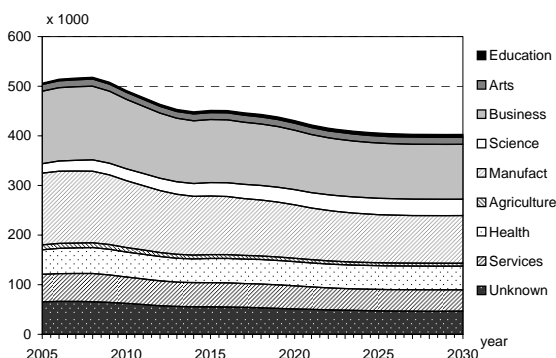


Table 11.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Germany, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	males	15-19	198.2	188.3	175.4	165.3	157.6	157.5	138.4	100	95	89	83	80	79
			20-24	68.5	71.4	62.6	62.1	56.8	55.7	50.7	100	104	91	91	83	81
		females	15-19	185.6	176.0	164.2	154.9	146.6	146.5	128.7	100	95	88	83	79	79
			20-24	53.9	55.7	49.0	48.4	44.3	43.2	39.3	100	103	91	90	82	80
		total	15-19	239.5	231.7	213.2	203.2	191.0	189.7	168.0	100	97	89	85	80	79
20-24			383.8	364.3	339.6	320.2	304.3	304.0	267.1	100	95	88	83	79	70	
total		122.4	127.1	111.6	110.5	101.1	98.9	90.0	104	91	90	83	81	74		
total		506.1	491.4	451.2	430.7	405.4	402.9	357.1	100	97	89	85	80	71		
students		males	15-19	23.3	24.9	20.6	20.9	19.3	19.2	17.1	100	107	89	90	83	82
			20-24	41.7	43.7	38.1	37.8	34.7	34.1	30.9	100	105	91	91	83	82
		females	15-19	18.7	19.9	16.6	16.8	15.3	15.3	13.6	100	107	89	90	82	82
			20-24	35.3	36.7	31.9	31.7	29.0	28.4	25.8	100	104	91	90	82	81
	total	15-19	53.9	56.7	48.5	48.5	44.4	43.7	39.4	100	105	90	90	82	81	
		20-24	42.0	44.8	37.2	37.7	34.6	34.5	30.6	100	107	89	90	83	82	
	total		77.0	80.5	70.1	69.5	63.7	62.5	56.7	100	105	91	90	83	81	
	total		119.0	125.3	107.3	107.1	98.3	97.0	87.4	100	105	90	90	83	82	
	vocational	males	15-19	0.6	0.6	0.5	0.5	0.5	0.5	0.4	100	93	88	82	79	79
			20-24	2.7	2.8	2.5	2.4	2.2	2.2	2.0	100	103	94	90	84	81
		females	15-19	3.3	3.3	3.1	2.9	2.7	2.7	2.4	100	101	93	89	83	81
			20-24	6.3	5.8	5.5	5.2	4.9	4.9	4.3	100	93	88	83	79	79
total		15-19	3.9	4.0	3.6	3.5	3.2	3.1	2.8	100	103	92	89	83	80	
		20-24	10.1	9.8	9.1	8.6	8.1	8.0	7.2	100	97	90	85	80	79	
total		15-19	6.9	6.4	6.1	5.7	5.4	5.4	4.7	100	93	88	83	79	79	
		20-24	6.6	6.8	6.1	5.9	5.4	5.3	4.8	100	103	93	90	83	80	
total		13.4	13.2	12.2	11.6	10.9	10.7	9.6	100	98	91	86	81	79		

Greece

Figure 12.1. Projected number of students in (pre) vocational education by ISCED level in Greece, 2005-2050, baseline population variant / constant educational participation

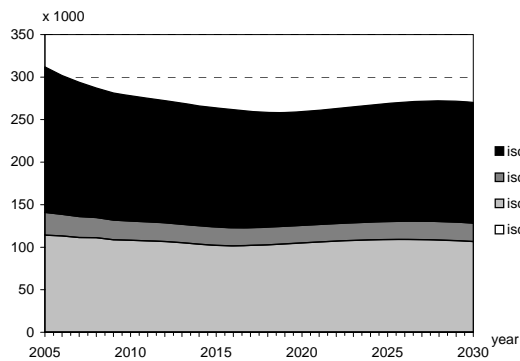


Figure 12.2. Index of the projected number of students in (pre) vocational education by ISCED level in Greece, 2005-2050, baseline population variant / constant educational participation

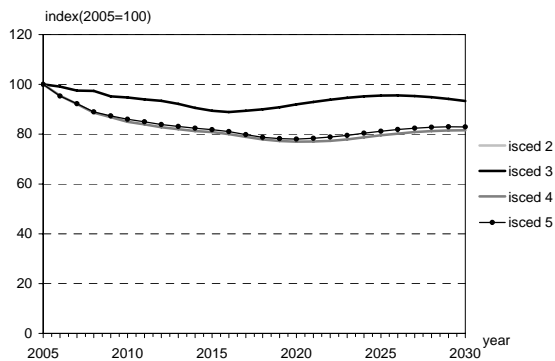


Figure 12.2. Projected number of graduates in (pre) vocational education by ISCED level in Greece, 2005-2050, baseline population variant / constant educational participation

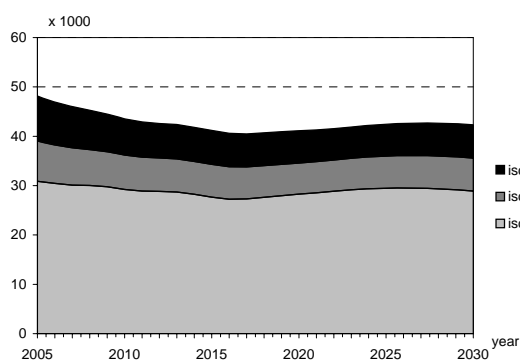


Figure 12.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Greece, 2005-2050, baseline population variant / constant educational participation

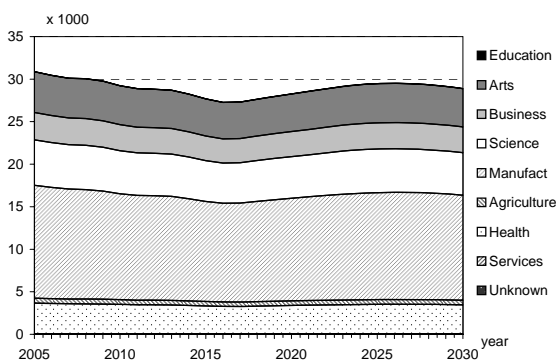


Table 12.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Greece, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3 pre	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	17.9	16.8	15.8	16.2	16.9	16.6	13.7	100	94	89	91	95	93	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3	total	17.9	16.8	15.8	16.2	16.9	16.6	13.7	100	94	89	91	95	93	
		total	17.9	16.8	15.8	16.2	16.9	16.6	13.7	100	94	89	91	95	93	
	vocational	females	15-19	13.0	12.5	11.8	12.0	12.5	12.3	10.1	100	96	91	92	96	94
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
		total	13.0	12.5	11.8	12.0	12.5	12.3	10.1	100	96	91	92	96	94	
total	15-19	30.9	29.2	27.7	28.3	29.5	28.9	23.9	100	95	90	92	95	94		
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	30.9	29.2	27.7	28.3	29.5	28.9	23.9	100	95	90	92	95	94		
students	males	15-19	0.8	0.7	0.7	0.7	0.7	0.7	0.6	100	91	86	84	88	88	
		20-24	2.0	1.6	1.5	1.4	1.5	1.5	1.3	100	82	77	72	75	77	
	level 4	total	2.8	2.4	2.2	2.1	2.2	2.3	1.9	100	84	80	76	79	81	
		total	2.8	2.4	2.2	2.1	2.2	2.3	1.9	100	84	80	76	79	81	
	vocational	females	15-19	1.6	1.5	1.4	1.3	1.4	1.4	1.2	100	93	88	85	89	90
			20-24	3.8	3.1	3.0	2.9	2.9	3.0	2.5	100	82	79	75	77	79
		total	5.4	4.6	4.4	4.2	4.3	4.4	3.6	100	85	82	78	80	82	
total	15-19	2.4	2.2	2.1	2.0	2.1	2.1	1.7	100	92	88	84	89	89		
	20-24	5.8	4.8	4.5	4.3	4.4	4.6	3.7	100	82	78	74	76	79		
	total	8.2	7.0	6.6	6.3	6.5	6.7	5.5	100	85	81	77	80	82		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	3.6	2.9	2.7	2.5	2.5	2.6	2.2	100	80	74	70	70	73	
	level 5b	total	3.6	2.9	2.7	2.5	2.5	2.6	2.2	100	80	74	70	70	73	
		total	3.6	2.9	2.7	2.5	2.5	2.6	2.2	100	80	74	70	70	73	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			20-24	5.5	4.5	4.2	4.0	4.0	4.1	3.4	100	81	76	73	72	75
		total	5.5	4.5	4.2	4.0	4.0	4.1	3.4	100	81	76	73	72	75	
total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	20-24	9.1	7.3	6.9	6.5	6.5	6.8	5.6	100	80	75	72	71	74		
	total	9.1	7.3	6.9	6.5	6.5	6.8	5.6	100	80	75	72	71	74		

Hungary

Figure 13.1. Projected number of students in (pre) vocational education by ISCED level in Hungary, 2005-2050, baseline population variant / constant educational participation

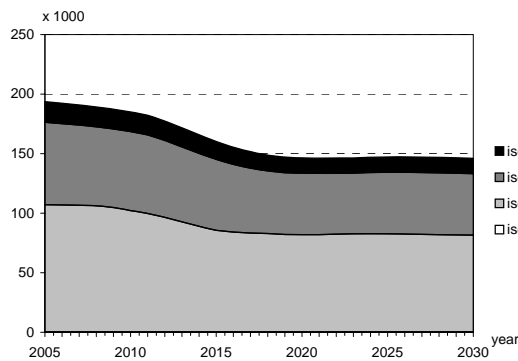


Figure 13.2. Index of the projected number of students in (pre) vocational education by ISCED level in Hungary, 2005-2050, baseline population variant / constant educational participation

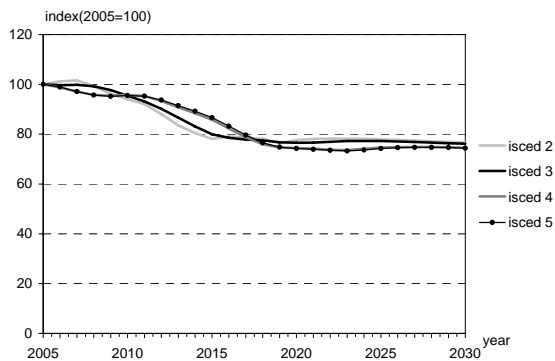


Figure 13.2. Projected number of graduates in (pre) vocational education by ISCED level in Hungary, 2005-2050, baseline population variant / constant educational participation

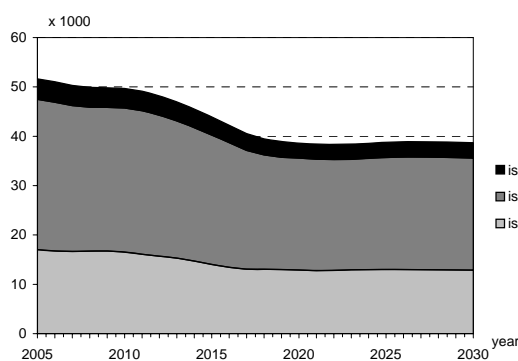


Figure 13.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Hungary, 2005-2050, baseline population variant / constant educational participation

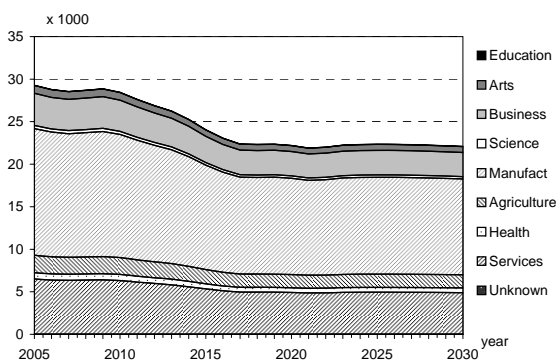


Table 13.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Hungary, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	6.6	6.4	5.4	5.0	5.1	5.0	4.5	100	98	82	76	77	76	69
ISCED		20-24	0.5	0.5	0.5	0.4	0.4	0.4	0.4	100	95	90	75	75	75	69
level 3 pre	total		7.1	6.9	5.9	5.4	5.4	5.4	4.9	100	98	82	76	77	76	69
vocational	females	15-19	4.8	4.6	3.8	3.6	3.6	3.6	3.2	100	97	80	75	76	75	67
		20-24	0.4	0.3	0.3	0.3	0.3	0.3	0.2	100	95	89	74	74	75	68
	total		5.1	5.0	4.2	3.9	3.9	3.8	3.5	100	97	81	75	76	75	67
	total	15-19	11.4	11.1	9.2	8.6	8.7	8.6	7.7	100	97	81	76	76	75	68
		20-24	0.9	0.8	0.8	0.7	0.7	0.7	0.6	100	95	90	74	74	75	69
	total		12.3	11.9	10.0	9.3	9.3	9.2	8.3	100	97	82	76	76	75	68
students	males	15-19	9.1	8.9	7.4	7.0	7.0	6.9	6.2	100	97	82	76	77	76	69
ISCED		20-24	1.5	1.4	1.3	1.1	1.1	1.1	1.0	100	96	90	75	75	76	70
level 3	total		10.6	10.3	8.8	8.1	8.1	8.0	7.3	100	97	83	76	77	76	69
vocational	females	15-19	5.6	5.4	4.5	4.2	4.2	4.2	3.7	100	97	80	76	76	75	67
		20-24	0.9	0.8	0.8	0.6	0.6	0.7	0.6	100	95	89	74	74	75	68
	total		6.4	6.2	5.2	4.8	4.9	4.8	4.3	100	97	82	75	76	75	67
	total	15-19	14.7	14.3	11.9	11.2	11.2	11.1	10.0	100	97	81	76	77	75	68
		20-24	2.4	2.3	2.1	1.8	1.8	1.8	1.6	100	96	90	75	75	76	69
	total		17.0	16.5	14.0	12.9	13.0	12.9	11.6	100	97	82	76	76	76	68
students	males	15-19	7.6	7.3	6.3	5.7	5.7	5.6	5.1	100	96	84	75	75	74	67
ISCED		20-24	7.7	7.5	7.0	5.8	5.8	5.9	5.4	100	96	90	75	75	76	70
level 4	total		15.3	14.7	13.3	11.5	11.5	11.5	10.5	100	96	87	75	75	75	68
vocational	females	15-19	8.6	8.3	7.1	6.4	6.4	6.3	5.7	100	96	82	74	74	73	66
		20-24	6.5	6.2	5.8	4.8	4.9	4.9	4.5	100	95	89	74	75	75	68
	total		15.2	14.5	12.9	11.2	11.2	11.2	10.1	100	95	85	74	74	74	67
	total	15-19	16.2	15.6	13.4	12.1	12.0	11.9	10.7	100	96	83	74	74	73	66
		20-24	14.3	13.6	12.8	10.6	10.7	10.8	9.8	100	96	90	74	75	76	69
	total		30.5	29.2	26.3	22.7	22.7	22.7	20.6	100	96	86	74	75	75	68
students	males	15-19	0.3	0.2	0.2	0.2	0.2	0.2	0.2	100	95	84	74	74	73	67
ISCED		20-24	1.3	1.2	1.1	0.9	0.9	0.9	0.9	100	96	90	75	75	76	69
level 5b	total		1.5	1.4	1.3	1.1	1.1	1.1	1.0	100	96	89	75	75	75	69
vocational	females	15-19	0.7	0.6	0.6	0.5	0.5	0.5	0.4	100	95	83	74	73	72	65
		20-24	2.0	1.9	1.8	1.5	1.5	1.5	1.4	100	95	89	74	74	75	68
	total		2.6	2.5	2.3	2.0	2.0	2.0	1.8	100	95	88	74	74	75	68
	total	15-19	0.9	0.9	0.8	0.7	0.7	0.7	0.6	100	95	84	74	73	73	66
		20-24	3.2	3.1	2.9	2.4	2.4	2.4	2.2	100	95	90	74	74	76	69
	total		4.2	4.0	3.7	3.1	3.1	3.1	2.8	100	95	88	74	74	75	68

Table 13.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Hungary, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			index (2005=100)													
x 1000																
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		Humanities	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	97	83	76	77	76	69
level 3 (pre)		Business	0.5	0.5	0.4	0.4	0.4	0.4	0.3	100	97	83	76	77	76	69
vocational		Science	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	97	83	76	77	76	69
		Engineering	7.4	7.2	6.1	5.6	5.6	5.6	5.1	100	97	83	76	77	76	69
		Agriculture	0.9	0.9	0.7	0.7	0.7	0.7	0.6	100	97	83	76	77	76	69
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	83	76	77	76	69
		Services	1.5	1.5	1.3	1.2	1.2	1.2	1.0	100	97	83	76	77	76	69
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	10.6	10.3	8.8	8.1	8.1	8.0	7.3	100	97	83	76	77	76	69
	females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	82	75	76	75	67
		Humanities	0.4	0.4	0.3	0.3	0.3	0.3	0.3	100	97	82	75	76	75	67
		Business	1.6	1.6	1.3	1.2	1.3	1.2	1.1	100	97	82	75	76	75	67
		Science	0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	97	82	75	76	75	67
		Engineering	1.4	1.4	1.2	1.1	1.1	1.1	1.0	100	97	82	75	76	75	67
		Agriculture	0.3	0.3	0.3	0.2	0.2	0.2	0.2	100	97	82	75	76	75	67
		Health	0.4	0.4	0.3	0.3	0.3	0.3	0.2	100	97	82	75	76	75	67
		Services	2.2	2.1	1.8	1.7	1.7	1.6	1.5	100	97	82	75	76	75	67
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	6.4	6.2	5.2	4.8	4.9	4.8	4.3	100	97	82	75	76	75	67
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	82	75	76	75	67
		Humanities	0.5	0.5	0.4	0.4	0.4	0.4	0.4	100	97	82	76	76	75	68
		Business	2.1	2.1	1.7	1.6	1.6	1.6	1.4	100	97	82	76	76	75	68
		Science	0.2	0.2	0.2	0.2	0.2	0.2	0.1	100	97	82	76	76	76	68
		Engineering	8.8	8.6	7.3	6.7	6.7	6.7	6.0	100	97	83	76	76	76	69
		Agriculture	1.2	1.2	1.0	0.9	0.9	0.9	0.8	100	97	83	76	76	76	68
		Health	0.4	0.4	0.3	0.3	0.3	0.3	0.3	100	97	82	76	76	75	68
		Services	3.7	3.6	3.1	2.8	2.8	2.8	2.5	100	97	82	76	76	75	68
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	17.0	16.5	14.0	12.9	13.0	12.9	11.6	100	97	82	76	76	76	68
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	96	87	75	75	75	68
ISCED		Humanities	0.8	0.8	0.7	0.6	0.6	0.6	0.5	100	96	87	75	75	75	68
level 4		Business	2.1	2.0	1.8	1.6	1.6	1.6	1.4	100	96	87	75	75	75	68
vocational		Science	2.9	2.8	2.5	2.2	2.2	2.2	2.0	100	96	87	75	75	75	68
		Engineering	5.8	5.6	5.0	4.3	4.3	4.3	3.9	100	96	87	75	75	75	68
		Agriculture	0.5	0.5	0.4	0.4	0.4	0.4	0.3	100	96	87	75	75	75	68
		Health	0.2	0.2	0.2	0.2	0.2	0.2	0.1	100	96	87	75	75	75	68
		Services	3.0	2.9	2.6	2.2	2.2	2.2	2.0	100	96	87	75	75	75	68
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	15.3	14.7	13.3	11.5	11.5	11.5	10.5	100	96	87	75	75	75	68
	females	Education	0.3	0.3	0.2	0.2	0.2	0.2	0.2	100	95	85	74	74	74	67
		Humanities	0.8	0.8	0.7	0.6	0.6	0.6	0.5	100	95	85	74	74	74	67
		Business	5.5	5.3	4.7	4.1	4.1	4.1	3.7	100	95	85	74	74	74	67
		Science	1.4	1.3	1.2	1.0	1.0	1.0	0.9	100	95	85	74	74	74	67
		Engineering	0.9	0.8	0.7	0.6	0.6	0.6	0.6	100	95	85	74	74	74	67
		Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	95	85	74	74	74	67
		Health	3.1	2.9	2.6	2.3	2.3	2.3	2.1	100	95	85	74	74	74	67
		Services	3.2	3.0	2.7	2.4	2.4	2.4	2.1	100	95	85	74	74	74	67
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	15.2	14.5	12.9	11.2	11.2	11.2	10.1	100	95	85	74	74	74	67
	total	Education	0.3	0.3	0.3	0.2	0.2	0.2	0.2	100	96	86	74	74	74	67
		Humanities	1.6	1.5	1.4	1.2	1.2	1.2	1.1	100	96	86	74	75	75	68
		Business	7.6	7.3	6.5	5.7	5.7	5.7	5.1	100	96	86	74	74	74	67
		Science	4.2	4.1	3.7	3.2	3.2	3.2	2.9	100	96	87	75	75	75	68
		Engineering	6.6	6.4	5.8	4.9	5.0	5.0	4.5	100	96	87	75	75	75	68
		Agriculture	0.6	0.6	0.5	0.4	0.4	0.4	0.4	100	96	87	75	75	75	68
		Health	3.3	3.1	2.8	2.4	2.4	2.4	2.2	100	95	85	74	74	74	67
		Services	6.2	5.9	5.3	4.6	4.6	4.6	4.2	100	96	86	74	75	75	68
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	30.5	29.2	26.3	22.7	22.7	22.7	20.6	100	96	86	74	75	75	68
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	83	67	64	65	59
level 5b		Business	0.6	0.6	0.5	0.5	0.5	0.5	0.4	100	96	89	75	75	75	69
vocational		Science	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	112	120	114	126	128	117
		Engineering	0.5	0.5	0.4	0.4	0.3	0.3	0.3	100	92	83	67	64	65	59
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	83	67	64	65	59
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	83	67	64	65	59
		Services	0.2	0.2	0.2	0.1	0.1	0.1	0.1	100	92	83	67	64	65	59
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	1.5	1.4	1.3	1.1	1.1	1.1	1.0	100	96	89	75	75	75	69
	females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	87	72	72	73	66
		Business	1.8	1.7	1.6	1.3	1.3	1.3	1.2	100	94	87	72	72	73	66
		Science	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	108	113	106	116	117	106
		Engineering	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	94	87	72	72	73	66
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	87	72	72	73	66
		Health	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	94	87	72	72	73	66
		Services	0.5	0.5	0.4	0.4	0.4	0.4	0.3	100	94	87	72	72	73	66
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	2.6	2.5	2.3	2.0	2.0	2.0	1.8	100	95	88	74	74	75	68
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	85	70	69	70	63
		Business	2.4	2.3	2.1	1.8	1.8	1.8	1.6	100	95	87	73	73	73	66
		Science	0.3	0.3	0.3	0.3	0.3	0.3	0.3	100	111	117	110	122	123	112

Ireland

Table 14.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Ireland, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	151.0	139.2	143.7	156.1	168.0	164.8	147.6	100	92	95	103	111	109	98
		20-24	166.0	144.9	133.4	138.0	150.7	162.7	137.8	100	87	80	83	91	98	83
		total	317.0	284.0	277.0	294.1	318.6	327.5	285.4	100	90	87	93	101	103	90
	females	15-19	144.3	132.5	136.7	149.8	159.7	156.7	140.3	100	92	95	104	111	109	97
		20-24	164.4	141.7	130.0	134.3	147.5	157.5	133.6	100	86	79	82	90	96	81
		total	308.7	274.2	266.7	284.1	307.2	314.2	274.0	100	89	86	92	100	102	89
	total	15-19	295.3	271.7	280.4	305.9	327.7	321.4	287.9	100	92	95	104	111	109	98
		20-24	330.4	286.6	263.3	272.3	298.2	320.2	271.4	100	87	80	82	90	97	82
		total	625.7	558.2	543.8	578.2	625.8	641.6	559.3	100	89	87	92	100	103	89
	students	males	15-19	21.5	20.1	22.0	24.6	25.1	24.1	22.3	100	93	102	114	116	112
20-24			0.3	0.2	0.2	0.2	0.2	0.3	0.2	100	87	81	85	93	99	84
		total	21.8	20.3	22.3	24.9	25.3	24.3	22.5	100	93	102	114	116	112	103
females		15-19	19.3	17.9	19.9	21.9	22.3	21.4	19.8	100	93	103	114	115	111	103
		20-24	0.4	0.3	0.3	0.3	0.4	0.4	0.3	100	87	79	84	92	97	83
		total	19.7	18.2	20.2	22.2	22.6	21.8	20.1	100	93	103	113	115	111	102
total		15-19	40.8	38.0	41.9	46.5	47.5	45.5	42.1	100	93	103	114	116	111	103
		20-24	0.6	0.6	0.5	0.5	0.6	0.6	0.5	100	87	80	84	93	98	83
		total	41.5	38.6	42.5	47.1	48.1	46.1	42.7	100	93	102	114	116	111	103
students		males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
	20-24		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
20-24			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
females		15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
total		15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students		males	15-19	65.4	60.2	64.1	70.1	73.9	72.0	65.1	100	92	98	107	113	110
	20-24		1.0	0.9	0.8	0.8	0.9	1.0	0.8	100	87	81	85	93	99	84
		total	66.4	61.1	64.9	70.9	74.8	73.0	66.0	100	92	98	107	113	110	99
	females	15-19	70.8	64.9	69.3	76.2	79.6	77.6	70.2	100	92	98	108	112	110	99
		20-24	1.4	1.2	1.1	1.1	1.3	1.3	1.1	100	86	79	83	91	96	82
		total	72.2	66.1	70.4	77.3	80.8	78.9	71.3	100	91	97	107	112	109	99
	total	15-19	136.2	125.1	133.4	146.3	153.5	149.6	135.3	100	92	98	107	113	110	99
		20-24	2.4	2.1	1.9	2.0	2.2	2.3	2.0	100	87	80	83	92	98	83
		total	138.6	127.2	135.2	148.2	155.6	151.9	137.2	100	92	98	107	112	110	99
	students	males	15-19	20.8	19.2	20.4	22.3	23.5	22.9	20.8	100	92	98	107	113	110
20-24			0.3	0.3	0.3	0.3	0.3	0.3	0.3	100	87	81	85	93	99	84
		total	21.2	19.5	20.7	22.6	23.8	23.3	21.0	100	92	98	107	113	110	99
females		15-19	24.7	22.7	24.2	26.6	27.8	27.1	24.5	100	92	98	108	112	110	99
		20-24	0.5	0.4	0.4	0.4	0.4	0.5	0.4	100	86	79	83	91	96	82
		total	25.2	23.1	24.6	27.0	28.2	27.6	24.9	100	91	97	107	112	109	99
total		15-19	45.6	41.9	44.6	48.9	51.3	50.0	45.3	100	92	98	107	113	110	99
		20-24	0.8	0.7	0.6	0.7	0.7	0.8	0.7	100	87	80	83	92	97	83
		total	46.4	42.6	45.3	49.6	52.1	50.8	45.9	100	92	98	107	112	110	99
students		males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
	20-24		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	students	males	15-19	13.5	12.4	12.2	13.0	14.6	14.5	12.7	100	92	91	97	108	108
20-24			22.1	19.4	17.8	18.8	20.7	22.0	18.7	100	87	81	85	93	99	84
		total	35.6	31.8	30.0	31.9	35.3	36.5	31.4	100	89	84	90	99	103	88
females		15-19	13.0	11.9	11.8	12.9	14.1	13.9	12.3	100	92	91	99	109	107	95
		20-24	5.3	4.6	4.3	4.6	5.0	5.2	4.5	100	87	80	86	95	99	84
		total	18.3	16.6	16.1	17.4	19.1	19.2	16.8	100	90	88	95	105	105	92
total		15-19	26.4	24.3	24.1	25.9	28.7	28.4	25.1	100	92	91	98	108	107	95
		20-24	27.5	24.0	22.1	23.4	25.7	27.3	23.1	100	87	81	85	94	99	84
		total	53.9	48.3	46.2	49.3	54.4	55.7	48.2	100	90	86	91	101	103	89
students		males	15-19	13.5	12.4	12.2	13.0	14.6	14.5	12.7	100	92	91	97	108	108
	20-24		22.1	19.4	17.8	18.8	20.7	22.0	18.7	100	87	81	85	93	99	84
		total	35.6	31.8	30.0	31.9	35.3	36.5	31.4	100	89	84	90	99	103	88
	females	15-19	13.0	11.9	11.8	12.9	14.1	13.9	12.3	100	92	91	99	109	107	95
		20-24	5.3	4.6	4.3	4.6	5.0	5.2	4.5	100	87	80	86	95	99	84
		total	18.3	16.6	16.1	17.4	19.1	19.2	16.8	100	90	88	95	105	105	92
	total	15-19	26.4	24.3	24.1	25.9	28.7	28.4	25.1	100	92	91	98	108	107	95
		20-24	27.5	24.0	22.1	23.4	25.7	27.3	23.1	100	87	81	85	94	99	84
		total	53.9	48.3	46.2	49.3	54.4	55.7	48.2	100	90	86	91	101	103	89
	students	males	15-19	21.6	19.9	19.3	20.4	23.2	23.1	20.2	100	92	89	94	107	107
20-24			31.5	27.5	25.4	27.1	29.9	31.5	26.7	100	88	81	86	95	100	85
		total	53.1	47.4	44.7	47.5	53.									

Figure 14.1. Projected number of students in (pre) vocational education by ISCED level in Ireland, 2005-2050, baseline population variant / constant educational participation

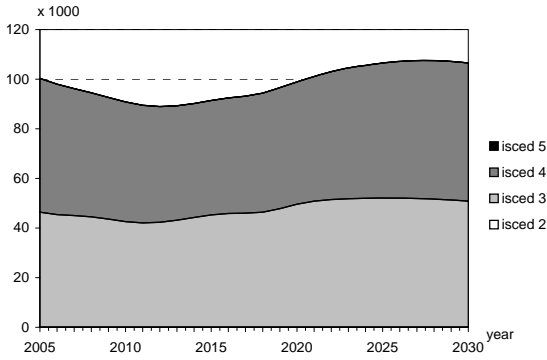


Figure 14.2. Index of the projected number of students in (pre) vocational education by ISCED level in Ireland, 2005-2050, baseline population variant / constant educational participation

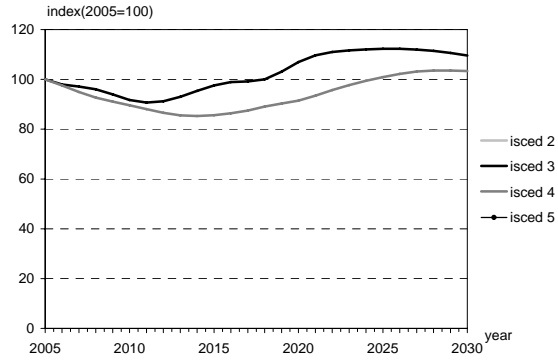


Figure 14.2. Projected number of graduates in (pre) vocational education by ISCED level in Ireland, 2005-2050, baseline population variant / constant educational participation

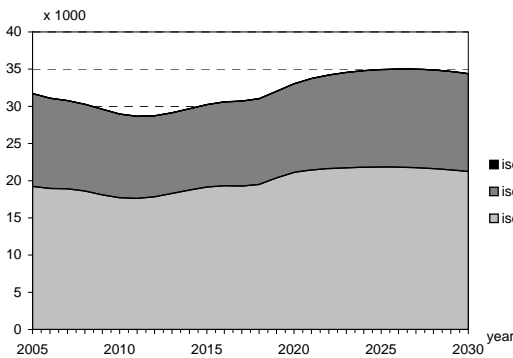


Figure 14.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Ireland, 2005-2050, baseline population variant / constant educational participation

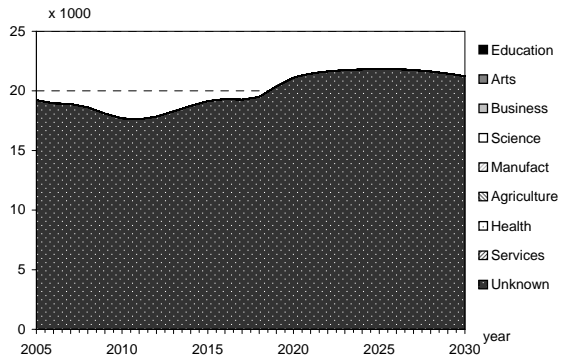


Table 14.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Ireland, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	8.5	7.8	8.5	9.4	9.7	9.4	8.6	100	92	100	110	114	111	101
		20-24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	88	81	87	96	101	85
		total	8.7	8.0	8.6	9.5	9.9	9.6	8.8	100	92	100	110	114	111	101
vocational	females	15-19	10.2	9.4	10.3	11.3	11.7	11.3	10.3	100	92	100	111	114	110	101
		20-24	0.3	0.3	0.2	0.2	0.3	0.3	0.2	100	87	79	83	92	97	82
		total	10.5	9.7	10.5	11.6	11.9	11.6	10.6	100	92	100	110	113	110	100
	total	15-19	18.7	17.3	18.7	20.7	21.4	20.7	18.9	100	92	100	110	114	111	101
		20-24	0.5	0.4	0.4	0.4	0.5	0.5	0.4	100	87	80	85	93	99	84
		total	19.2	17.7	19.1	21.1	21.8	21.2	19.3	100	92	100	110	114	110	100
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	5.2	4.8	4.8	5.2	5.7	5.7	5.0	100	92	92	99	109	108	95
		20-24	2.4	2.1	2.0	2.1	2.3	2.5	2.1	100	87	81	86	95	100	85
		total	7.7	6.9	6.8	7.3	8.0	8.1	7.1	100	90	89	95	105	105	92
vocational	females	15-19	3.7	3.4	3.4	3.7	4.0	4.0	3.5	100	91	92	100	109	108	95
		20-24	1.1	0.9	0.9	0.9	1.0	1.1	0.9	100	87	80	85	94	98	84
		total	4.8	4.3	4.3	4.6	5.1	5.1	4.4	100	90	89	97	106	105	93
	total	15-19	8.9	8.2	8.2	8.9	9.8	9.6	8.5	100	92	92	99	109	108	95
		20-24	3.5	3.1	2.8	3.0	3.3	3.5	3.0	100	87	81	86	95	100	85
		total	12.5	11.3	11.1	11.9	13.1	13.2	11.5	100	90	89	96	105	105	92
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-

Table 14.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Ireland, 2005-2050, baseline population variant / constant graduation rates

Field			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050		
x 1000			index (2005=100)															
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Humanities	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Business	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Science	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Engineering	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Agriculture	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Health	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Services	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Unknown	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
total	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
total	Education		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
	Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	students ISCED level 4 vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
Humanities			0.4	0.3	0.3	0.3	0.4	0.4	0.3	100	90	89	95	105	105	92	92	
Business			0.5	0.4	0.4	0.5	0.5	0.5	0.4	100	90	89	95	105	105	92	92	
Science			0.2	0.2	0.1	0.2	0.2	0.2	0.2	100	90	89	95	105	105	92	92	
Engineering			4.3	3.9	3.8	4.1	4.5	4.5	4.0	100	90	89	95	105	105	92	92	
Agriculture			2.1	1.9	1.9	2.0	2.2	2.2	1.9	100	90	89	95	105	105	92	92	
Health			0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	89	95	105	105	92	92	
Services			0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	90	89	95	105	105	92	92	
Unknown			0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	89	95	105	105	92	92	
total			7.7	6.9	6.8	7.3	8.0	8.1	7.1	100	90	89	95	105	105	92	92	
females			Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
	Humanities	1.8	1.7	1.6	1.8	1.9	1.9	1.7	100	90	89	97	106	105	93	93		
	Business	1.9	1.7	1.7	1.8	2.0	2.0	1.7	100	90	89	97	106	105	93	93		
	Science	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	90	89	97	106	105	93	93		
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	89	97	106	105	93	93		
	Agriculture	0.3	0.2	0.2	0.3	0.3	0.3	0.2	100	90	89	97	106	105	93	93		
	Health	0.3	0.3	0.3	0.3	0.4	0.4	0.3	100	90	89	97	106	105	93	93		
	Services	0.3	0.3	0.3	0.3	0.3	0.3	0.3	100	90	89	97	106	105	93	93		
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	89	97	106	105	93	93		
	total	4.8	4.3	4.3	4.6	5.1	5.1	4.4	100	90	89	97	106	105	93	93		
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Humanities		2.2	2.0	2.0	2.1	2.3	2.3	2.0	100	90	89	97	105	105	93	93		
Business		2.4	2.1	2.1	2.3	2.5	2.5	2.2	100	90	89	97	105	105	93	93		
Science		0.3	0.2	0.2	0.3	0.3	0.3	0.2	100	90	89	96	105	105	92	92		
Engineering		4.3	3.9	3.8	4.1	4.5	4.6	4.0	100	90	89	95	105	105	92	92		
Agriculture		2.4	2.1	2.1	2.2	2.5	2.5	2.2	100	90	89	95	105	105	92	92		
Health		0.4	0.3	0.3	0.4	0.4	0.4	0.3	100	90	89	97	105	105	93	93		
Services		0.5	0.4	0.4	0.5	0.5	0.5	0.5	100	90	89	96	105	105	92	92		
Unknown		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	90	89	96	105	105	92	92		
total		12.5	11.3	11.1	11.9	13.1	13.2	11.5	100	90	89	96	105	105	92	92		
students ISCED level 5b vocational		males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
	Humanities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Business		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Science		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Engineering		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Agriculture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Health		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Services		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	females		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
Humanities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Business		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Science		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Engineering		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Agriculture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Health		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Services		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
total		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
	Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-									

Italy

Table 15.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Italy, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	1484.8	1481.3	1420.8	1461.2	1442.4	1334.0	1123.3	100	100	96	98	97	90	76
		20-24	1636.1	1517.5	1509.0	1449.0	1488.9	1469.5	1164.1	100	93	92	89	91	90	71
		total	3120.8	2998.8	2929.8	2910.2	2931.2	2803.5	2287.4	100	96	94	93	94	90	73
		total	1406.7	1399.0	1337.4	1379.2	1354.0	1251.7	1052.7	100	99	95	98	96	89	75
	females	15-19	1582.9	1448.0	1435.3	1373.8	1415.0	1389.0	1099.7	100	91	91	87	89	88	69
		20-24	2989.6	2847.0	2772.7	2753.0	2769.0	2640.7	2152.4	100	95	93	92	93	88	72
		total	2891.5	2880.3	2758.2	2840.4	2796.3	2585.7	2176.0	100	100	95	98	97	89	75
		total	3219.0	2965.5	2944.3	2822.8	2903.9	2858.5	2263.8	100	92	91	88	90	89	70
total	6110.5	5845.8	5702.5	5663.2	5700.2	5444.2	4439.8	100	96	93	93	93	89	73		
students	males	15-19	14.2	13.6	13.6	14.1	13.4	12.3	10.6	100	96	96	99	95	86	75
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	14.2	13.6	13.6	14.1	13.4	12.3	10.6	100	96	96	99	95	86	75
		total	8.0	7.6	7.6	7.9	7.5	6.9	5.9	100	96	96	98	94	86	74
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	8.0	7.6	7.6	7.9	7.5	6.9	5.9	100	96	96	98	94	86	74
		total	22.2	21.3	21.3	21.9	21.9	19.2	16.6	100	96	96	99	95	86	75
total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
total	22.2	21.3	21.3	21.9	21.9	19.2	16.6	100	96	96	99	95	86	75		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	1021.1	1014.9	980.5	1009.0	989.3	911.9	773.3	100	99	96	99	97	89	76
		20-24	37.8	36.1	35.0	34.6	35.7	34.4	27.5	100	95	93	91	94	91	73
		total	1059.0	1051.0	1015.5	1043.6	1024.9	946.3	800.8	100	99	96	99	97	89	76
		total	996.4	989.2	953.2	983.4	958.5	882.8	748.1	100	99	96	99	96	89	75
	females	15-19	22.5	21.2	20.5	20.3	20.9	20.0	16.0	100	94	91	90	93	89	71
		20-24	1018.8	1010.4	973.7	1003.7	979.3	902.8	764.2	100	99	96	99	96	89	75
		total	2017.5	2004.1	1933.7	1992.4	1947.7	1794.7	1521.4	100	99	96	99	97	89	75
		total	60.3	57.3	55.6	54.9	56.5	54.4	43.5	100	95	92	91	94	90	72
total	2077.8	2061.5	1989.2	2047.2	2004.3	1849.1	1564.9	100	99	96	99	96	89	75		
students	males	15-19	470.7	467.8	451.9	465.1	456.0	420.3	356.4	100	99	96	99	97	89	76
		20-24	17.4	16.6	16.1	16.0	16.4	15.8	12.7	100	95	93	91	94	91	73
		total	488.1	484.5	468.1	481.0	472.4	436.2	369.1	100	99	96	99	97	89	76
		total	279.5	277.5	267.4	275.9	268.9	247.7	209.9	100	99	96	99	96	89	75
	females	15-19	6.3	6.0	5.8	5.7	5.9	5.6	4.5	100	94	91	90	93	89	71
		20-24	285.9	283.5	273.2	281.6	274.8	253.3	214.4	100	99	96	99	96	89	75
		total	750.2	745.3	719.4	741.0	724.9	668.0	566.3	100	99	96	99	97	89	75
		total	23.7	22.6	21.9	21.6	22.3	21.5	17.2	100	95	92	91	94	90	72
total	774.0	767.9	741.3	762.6	747.2	689.5	583.5	100	99	96	99	97	89	75		
students	males	15-19	277.7	276.1	266.7	274.4	269.1	248.0	210.3	100	99	96	99	97	89	76
		20-24	10.3	9.8	9.5	9.4	9.7	9.3	7.5	100	95	93	91	94	91	73
		total	288.0	285.9	276.2	283.9	278.8	257.4	217.8	100	99	96	99	97	89	76
		total	236.5	234.8	226.3	233.4	227.5	209.5	177.6	100	99	96	99	96	89	75
	females	15-19	5.3	5.0	4.9	4.8	5.0	4.8	3.8	100	94	91	90	93	89	71
		20-24	241.8	239.8	231.1	238.2	232.5	214.3	181.4	100	99	96	99	96	89	75
		total	514.2	510.9	492.9	507.9	496.6	457.6	387.9	100	99	96	99	97	89	75
		total	15.6	14.9	14.4	14.2	14.7	14.1	11.3	100	95	92	91	94	90	72
total	529.9	525.7	507.3	522.1	511.2	471.7	399.2	100	99	96	99	96	89	75		
students	males	15-19	1.8	1.8	1.7	1.8	1.8	1.7	1.4	100	100	94	96	97	91	75
		20-24	7.7	7.2	7.2	6.9	7.1	7.0	5.5	100	93	92	89	92	90	72
		total	9.6	9.1	8.9	8.7	8.9	8.6	6.9	100	95	93	91	93	90	72
		total	2.2	2.2	2.1	2.1	2.1	2.0	1.6	100	99	92	95	96	90	73
	females	15-19	9.6	8.8	8.7	8.4	8.6	8.4	6.7	100	92	91	88	90	88	70
		20-24	11.8	11.0	10.7	10.5	10.8	10.4	8.3	100	93	91	89	91	88	71
		total	4.1	4.1	3.8	3.9	3.9	3.7	3.0	100	100	93	96	96	91	74
		total	17.3	16.0	15.8	15.3	15.7	15.4	12.2	100	93	92	88	91	89	71
total	21.4	20.1	19.6	19.2	19.7	19.1	15.2	100	94	92	90	92	89	71		
students	males	15-19	1.8	1.8	1.7	1.8	1.8	1.7	1.4	100	100	94	96	97	91	75
		20-24	7.7	7.2	7.2	6.9	7.1	7.0	5.5	100	93	92	89	92	90	72
		total	9.6	9.1	8.9	8.7	8.9	8.6	6.9	100	95	93	91	93	90	72
		total	2.2	2.2	2.1	2.1	2.1	2.0	1.6	100	99	92	95	96	90	73
	females	15-19	9.6	8.8	8.7	8.4	8.6	8.4	6.7	100	92	91	88	90	88	70
		20-24	11.8	11.0	10.7	10.5	10.8	10.4	8.3	100	93	91	89	91	88	71
		total	4.1	4.1	3.8	3.9	3.9	3.7	3.0	100	100	93	96	96	91	74
		total	17.3	16.0	15.8	15.3	15.7	15.4	12.2	100	93	92	88	91	89	71
total	21.4	20.1	19.6	19.2	19.7	19.1	15.2	100	94	92	90	92	89	71		
students	males	15-19	101.6	102.2	95.6	98.2	99.3	93.1	76.3	100	101	94	97	98	92	75
		20-24	405.5	377.7	374.4	361.0	371.2	364.9	289.6	100	93	92	89	92	90	71
		total	507.2	479.9	470.1	459.2	470.6	458.1	365.9	100	95	93	91	93	90	72
		total	138.9	138.3	128.6	132.4	133.5	125.1	102.3	100	100	93	95	96	90	74

Figure 15.1. Projected number of students in (pre) vocational education by ISCED level in Italy, 2005-2050, baseline population variant / constant educational participation

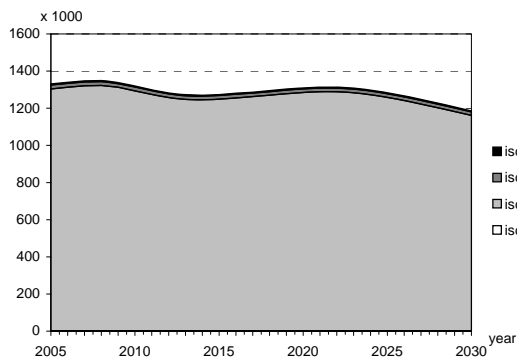


Figure 15.2. Index of the projected number of students in (pre) vocational education by ISCED level in Italy, 2005-2050, baseline population variant / constant educational participation

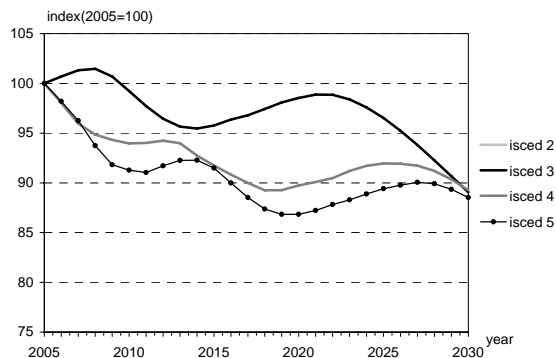


Figure 15.2. Projected number of graduates in (pre) vocational education by ISCED level in Italy, 2005-2050, baseline population variant / constant educational participation

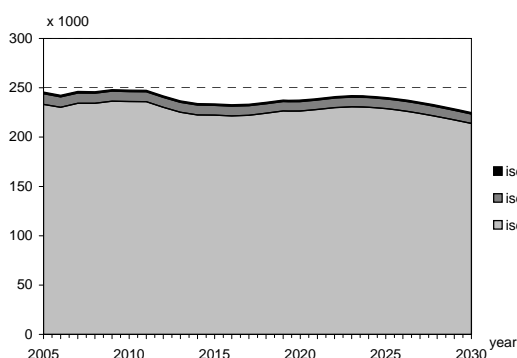


Figure 15.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Italy, 2005-2050, baseline population variant / constant educational participation

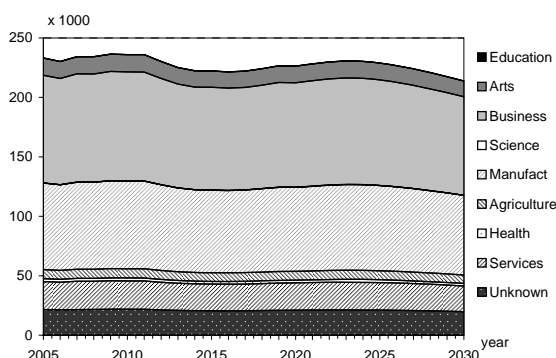


Table 15.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Italy, 2005-2050, baseline population variant / constant graduation rates

Age group			2005	2010	2015	2020	2025	2030	index (2005=100)							
			x 1000													
students	males	15-19	85.6	87.4	82.2	83.7	84.7	79.0	65.3	100	102	96	98	99	92	76
ISCED		20-24	11.8	11.3	10.9	10.9	11.2	10.7	8.6	100	96	93	92	95	91	73
level 3 pre	total		97.4	98.7	93.1	94.5	96.0	89.7	73.9	100	101	96	97	99	92	76
vocational	females	15-19	62.1	63.2	59.3	60.7	61.0	56.7	46.9	100	102	95	98	98	91	76
		20-24	4.5	4.2	4.1	4.1	4.2	4.0	3.2	100	95	91	91	93	89	72
	total		66.6	67.5	63.4	64.8	65.2	60.7	50.1	100	101	95	97	98	91	75
	total	15-19	147.7	150.6	141.5	144.4	145.7	135.7	112.2	100	102	96	98	99	92	76
		20-24	16.3	15.6	15.0	14.9	15.4	14.7	11.8	100	96	92	92	95	91	73
	total		163.9	166.2	156.5	159.4	161.1	150.4	124.0	100	101	95	97	98	92	76
students	males	15-19	27.5	28.1	26.4	26.9	27.2	25.4	21.0	100	102	96	98	99	92	76
ISCED		20-24	5.1	4.9	4.7	4.7	4.9	4.7	3.7	100	96	93	92	95	91	73
level 3	total		32.6	33.0	31.1	31.6	32.1	30.1	24.7	100	101	95	97	98	92	76
vocational	females	15-19	33.0	33.5	31.4	32.2	32.3	30.1	24.9	100	102	95	98	98	91	75
		20-24	3.5	3.4	3.2	3.2	3.3	3.2	2.5	100	95	91	91	94	89	72
	total		36.5	36.9	34.6	35.4	35.7	33.3	27.4	100	101	95	97	98	91	75
	total	15-19	60.5	61.6	57.8	59.1	59.6	55.5	45.8	100	102	95	98	98	92	76
		20-24	8.6	8.3	8.0	7.9	8.2	7.8	6.3	100	96	92	92	94	90	73
	total		69.2	69.9	65.8	67.0	67.7	63.3	52.1	100	101	95	97	98	92	75
students	males	15-19	0.3	0.3	0.3	0.3	0.3	0.3	0.2	100	100	94	96	97	91	75
ISCED		20-24	3.9	3.6	3.6	3.5	3.6	3.5	2.8	100	93	92	89	91	90	71
level 4	total		4.2	3.9	3.9	3.8	3.9	3.8	3.0	100	93	93	89	92	90	72
vocational	females	15-19	0.5	0.5	0.5	0.5	0.5	0.5	0.4	100	99	92	95	96	90	73
		20-24	6.1	5.6	5.6	5.4	5.5	5.4	4.3	100	91	91	87	90	88	70
	total		6.7	6.1	6.1	5.8	6.0	5.9	4.7	100	92	91	88	90	88	70
	total	15-19	0.8	0.8	0.8	0.8	0.8	0.8	0.6	100	100	93	95	96	90	74
		20-24	10.0	9.2	9.2	8.8	9.1	8.9	7.1	100	92	91	88	90	89	70
	total		10.9	10.1	10.0	9.6	9.9	9.7	7.7	100	93	92	88	91	89	71
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	100	94	96	97	91	75
ISCED		20-24	0.7	0.7	0.7	0.6	0.6	0.6	0.5	100	91	92	87	89	89	70
level 5b	total		0.7	0.7	0.7	0.6	0.6	0.6	0.5	100	91	92	87	89	89	70
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.9	0.8	0.8	0.8	0.8	0.8	0.6	100	90	90	85	87	87	68
	total		0.9	0.8	0.8	0.8	0.8	0.8	0.6	100	90	90	85	87	87	68
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	100	94	96	97	91	75
		20-24	1.6	1.5	1.5	1.4	1.4	1.4	1.1	100	90	91	86	88	88	69
	total		1.6	1.5	1.5	1.4	1.4	1.4	1.1	100	90	91	86	88	88	69

Table 15.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Italy, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050	
			index (2005=100)														
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
		Humanities	1.4	1.4	1.3	1.3	1.3	1.3	1.0	100	101	95	97	98	92	76	
	females	Business	8.7	8.8	8.3	8.5	8.6	8.0	6.6	100	101	95	97	98	92	76	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Engineering	14.9	15.0	14.2	14.4	14.6	13.7	11.3	100	101	95	97	98	92	76	
		Agriculture	1.4	1.5	1.4	1.4	1.4	1.3	1.1	100	101	95	97	98	92	76	
		Health	0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	101	95	97	98	92	76	
		Services	2.9	2.9	2.7	2.8	2.8	2.6	2.2	100	101	95	97	98	92	76	
		Unknown	3.3	3.3	3.1	3.2	3.2	3.0	2.5	100	101	95	97	98	92	76	
		total	32.6	33.0	31.1	31.6	32.1	30.1	24.7	100	101	95	97	98	92	76	
		males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Humanities	3.2	3.2	3.0	3.1	3.1	2.9	2.4	100	101	95	97	98	91	75
			Business	19.8	20.0	18.8	19.2	19.3	18.0	14.8	100	101	95	97	98	91	75
			Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Engineering	4.8		4.9	4.6	4.7	4.7	4.4	3.6	100	101	95	97	98	91	75		
Agriculture	0.7		0.7	0.6	0.7	0.7	0.6	0.5	100	101	95	97	98	91	75		
Health	0.8		0.8	0.7	0.7	0.7	0.7	0.6	100	101	95	97	98	91	75		
Services	4.3		4.4	4.1	4.2	4.2	3.9	3.2	100	101	95	97	98	91	75		
Unknown	3.0		3.0	2.9	2.9	2.9	2.7	2.3	100	101	95	97	98	91	75		
total	36.5		36.9	34.6	35.4	35.7	33.3	27.4	100	101	95	97	98	91	75		
females	Education		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	Humanities		4.6	4.6	4.3	4.4	4.5	4.2	3.4	100	101	95	97	98	91	75	
	Business	28.5	28.8	27.1	27.6	27.9	26.1	21.4	100	101	95	97	98	91	75		
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Engineering	19.7	19.9	18.8	19.1	19.3	18.1	14.9	100	101	95	97	98	92	76		
	Agriculture	2.1	2.1	2.0	2.1	2.1	2.0	1.6	100	101	95	97	98	92	75		
	Health	0.8	0.8	0.8	0.8	0.8	0.8	0.6	100	101	95	97	98	91	75		
	Services	7.2	7.2	6.8	7.0	7.0	6.6	5.4	100	101	95	97	98	91	75		
	Unknown	6.3	6.4	6.0	6.1	6.2	5.8	4.7	100	101	95	97	98	92	75		
	total	69.2	69.9	65.8	67.0	67.7	63.3	52.1	100	101	95	97	98	92	75		
	students ISCED level 4 vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
females		Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Unknown	4.2	3.9	3.9	3.8	3.9	3.8	3.0	100	93	93	89	92	90	72	
		total	4.2	3.9	3.9	3.8	3.9	3.8	3.0	100	93	93	89	92	90	72	
		males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Engineering	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Agriculture	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Health	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Services	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Unknown	6.7		6.1	6.1	5.8	6.0	5.9	4.7	100	92	91	88	90	88	70		
total	6.7		6.1	6.1	5.8	6.0	5.9	4.7	100	92	91	88	90	88	70		
females	Education		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	Humanities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Unknown	10.9	10.1	10.0	9.6	9.9	9.7	7.7	100	93	92	88	91	89	71		
	total	10.9	10.1	10.0	9.6	9.9	9.7	7.7	100	93	92	88	91	89	71		
	students ISCED level 5b vocational	males	Education	0.5	0.4	0.4	0.4	0.4	0.4	0.3	100	91	92	87	89	89	70
			Humanities	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	91	92	87	89	89	70
females		Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.7	0.7	0.7	0.6	0.6	0.6	0.5	100	91	92	87	89	89	70	
		males	Education	0.4	0.4	0.4	0.4	0.4	0.4	0.3	100	90	90	85	87	87	68
			Humanities	0.5	0.4	0.4	0.4	0.4	0.4	0.3	100	90	90	85	87	87	68
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Engineering	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Agriculture	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Health	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Services	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Unknown	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
total	0.9		0.8	0.8	0.8	0.8	0.8	0.6	100	90	90	85	87	87	68		
females	Education		0.9	0.8	0.8	0.8	0.8	0.8	0.6	100	90	91	86	88	88	69	
	Humanities		0.7	0.6	0.6	0.6	0.6	0.6	0.5	100	90	91	86	88	88	69	
	Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	total	1.6	1.5	1.5	1.4	1.4	1.4	1.1	100	90	91	86	88	88	69		

Latvia

Table 16.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Latvia, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	94.4	73.1	48.3	50.2	55.9	60.7	44.4	100	77	51	53	59	64	47
		20-24	89.0	93.2	72.0	47.7	50.1	56.4	46.6	100	105	81	54	56	63	52
		total	183.3	166.3	120.3	97.9	106.0	117.1	91.0	100	91	66	53	58	64	50
	females	15-19	90.2	70.6	45.5	48.1	53.5	58.4	41.9	100	78	50	53	59	65	46
		20-24	86.0	89.5	69.7	45.1	48.4	54.6	44.4	100	104	81	52	56	63	52
		total	176.2	160.0	115.2	93.2	102.0	113.0	86.3	100	91	65	53	58	64	49
	total	15-19	184.5	143.6	93.8	98.3	109.4	119.1	86.3	100	78	51	53	59	65	47
		20-24	175.0	182.7	141.7	92.8	98.6	111.0	91.0	100	104	81	53	56	63	52
		total	359.5	326.3	235.5	191.1	208.0	230.1	177.3	100	91	66	53	58	64	49
students	males	15-19	24.6	16.4	12.7	13.9	15.4	16.4	12.0	100	67	52	57	63	67	49
		20-24	0.4	0.4	0.3	0.2	0.2	0.2	0.2	100	104	77	51	56	63	51
		total	25.0	16.8	13.0	14.1	15.6	16.7	12.2	100	67	52	56	63	67	49
	females	15-19	20.1	13.4	10.5	11.5	12.9	13.7	9.8	100	67	52	57	64	68	49
		20-24	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	103	76	50	56	63	50
		total	20.3	13.6	10.6	11.6	13.0	13.8	9.9	100	67	52	57	64	68	49
	total	15-19	44.7	29.9	23.1	25.4	0.0	30.1	21.8	100	67	52	57	0	67	49
		20-24	0.5	0.6	0.4	0.3	0.3	0.3	0.3	100	103	77	51	56	63	51
		total	45.2	30.4	23.6	25.7	0.3	30.4	22.1	100	67	52	57	1	67	49
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	0.3	0.2	0.1	0.2	0.2	0.2	0.1	100	67	52	57	63	67	49
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	77	51	56	63	51
		total	0.3	0.2	0.1	0.2	0.2	0.2	0.1	100	67	52	56	63	67	49
	females	15-19	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100	67	52	57	64	68	49
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	103	76	50	56	63	50
		total	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100	67	52	57	64	68	49
	total	15-19	0.3	0.2	0.2	0.2	0.2	0.2	0.2	100	67	52	57	63	67	49
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	77	51	56	63	51
		total	0.4	0.2	0.2	0.2	0.2	0.2	0.2	100	67	52	57	63	67	49
students	males	15-19	47.6	37.3	23.7	24.9	27.8	30.3	22.1	100	78	50	52	58	64	46
		20-24	5.7	5.8	4.2	2.9	3.2	3.6	2.8	100	102	74	51	56	63	50
		total	53.3	43.1	27.9	27.8	31.0	33.9	25.0	100	81	52	52	58	64	47
	females	15-19	47.4	37.0	23.1	24.8	27.7	30.3	21.7	100	78	49	52	58	64	46
		20-24	4.6	4.7	3.5	2.3	2.6	2.9	2.3	100	102	75	50	56	63	50
		total	52.1	41.7	26.6	27.2	30.3	33.3	23.9	100	80	51	52	58	64	46
	total	15-19	95.1	74.4	46.8	49.7	55.6	60.6	43.8	100	78	49	52	58	64	46
		20-24	10.3	10.5	7.6	5.2	5.7	6.5	5.1	100	102	74	51	56	63	50
		total	105.4	84.8	54.4	54.9	61.3	67.1	48.9	100	81	52	52	58	64	46
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	21.2	16.6	10.6	11.1	12.4	13.5	9.9	100	78	50	52	58	64	46
		20-24	2.5	2.6	1.9	1.3	1.4	1.6	1.3	100	102	74	51	56	63	50
		total	23.8	19.2	12.4	12.4	13.8	15.1	11.1	100	81	52	52	58	64	47
	females	15-19	13.7	10.7	6.7	7.2	8.0	8.7	6.2	100	78	49	52	58	64	46
		20-24	1.3	1.4	1.0	0.7	0.7	0.8	0.7	100	102	75	50	56	63	50
		total	15.0	12.0	7.6	7.8	8.7	9.6	6.9	100	80	51	52	58	64	46
	total	15-19	34.9	27.3	17.2	18.2	20.4	22.2	16.1	100	78	49	52	58	64	46
		20-24	3.9	3.9	2.9	2.0	2.1	2.4	1.9	100	102	74	51	56	63	50
		total	38.7	31.2	20.1	20.2	22.5	24.7	18.0	100	81	52	52	58	64	46
students	males	15-19	0.8	0.7	0.4	0.4	0.4	0.5	0.4	100	87	53	51	57	63	46
		20-24	0.8	0.9	0.7	0.4	0.5	0.5	0.4	100	104	80	53	56	63	52
		total	1.6	1.5	1.1	0.8	0.9	1.0	0.8	100	96	67	53	57	63	49
	females	15-19	1.6	1.4	0.8	0.8	0.9	1.0	0.7	100	88	52	52	57	64	46
		20-24	2.2	2.3	1.8	1.2	1.3	1.4	1.1	100	103	79	52	56	63	51
		total	3.8	3.7	2.6	2.0	2.2	2.4	1.9	100	97	68	52	57	63	49
	total	15-19	2.3	2.1	1.2	1.2	1.3	1.5	1.1	100	88	53	52	57	63	46
		20-24	3.1	3.2	2.4	1.6	1.7	1.9	1.6	100	103	79	52	56	63	51
		total	5.4	5.2	3.7	2.8	3.1	3.4	2.7	100	97	68	52	57	63	49
students	males	15-19	0.8	0.7	0.4	0.4	0.4	0.5	0.4	100	87	53	51	57	63	46
		20-24	0.8	0.9	0.7	0.4	0.5	0.5	0.4	100	104	80	53	56	63	52
		total	1.6	1.5	1.1	0.8	0.9	1.0	0.8	100	96	67	53	57	63	49
	females	15-19	1.6	1.4	0.8	0.8	0.9	1.0	0.7	100	88	52	52	57	64	46
		20-24	2.2	2.3	1.8	1.2	1.3	1.4	1.1	100	103	79	52	56	63	51
		total	3.8	3.7	2.6	2.0	2.2	2.4	1.9	100	97	68	52	57	63	49
	total	15-19	2.3	2.1	1.2	1.2	1.3	1.5	1.1	100	88	53	52	57	63	46
		20-24	3.1	3.2	2.4	1.6	1.7	1.9	1.6	100	103	79	52	56	63	51
		total	5.4	5.2	3.7	2.8	3.1	3.4	2.7	100	97	68	52	57	63	49
students	males	15-19	7.9	7.0	4.3	4.1	4.5	4.9	3.7	100	89	55	52	57	63	47
		20-24	23.3	24.1	18.1	12.2	13.1	14.7	12.0	100	104	78	53	56	63	51
		total	31.1	31.1	22.4	16.3	17.5	19.6	15.6	100	100	72	52	56	63	50
	females	15-19	11.4	10.3	6.1	5.9	6.5	7.2	5.2	100	91	53	52	57	64	46
		20-24	32.1	32.9	24.8	16										

Figure 16.1. Projected number of students in (pre) vocational education by ISCED level in Latvia, 2005-2050, baseline population variant / constant educational participation

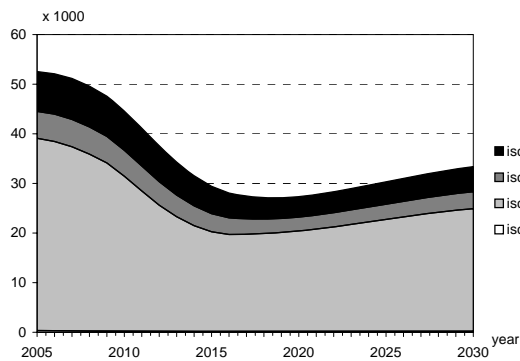


Figure 16.2. Index of the projected number of students in (pre) vocational education by ISCED level in Latvia, 2005-2050, baseline population variant / constant educational participation

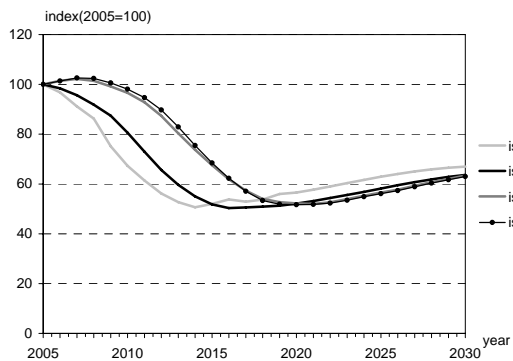


Figure 16.2. Projected number of graduates in (pre) vocational education by ISCED level in Latvia, 2005-2050, baseline population variant / constant educational participation

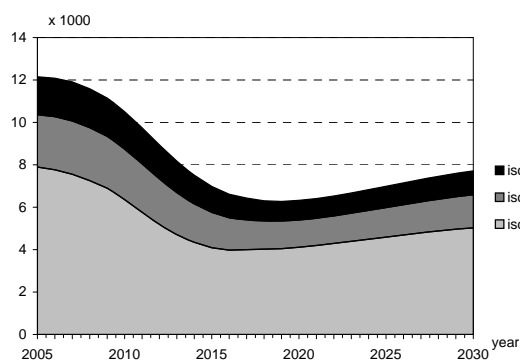


Figure 16.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Latvia, 2005-2050, baseline population variant / constant educational participation

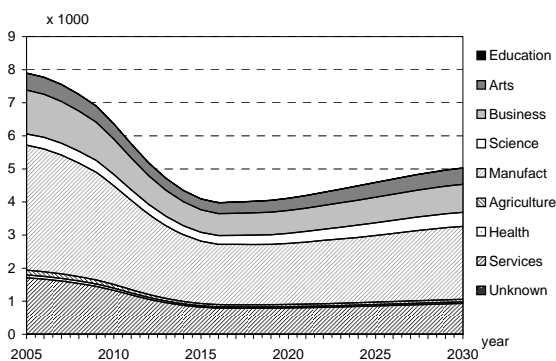


Table 16.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Latvia, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	4.5	3.5	2.2	2.3	2.6	2.8	2.1	100	78	50	52	58	64	46
ISCED		20-24	0.5	0.5	0.4	0.3	0.3	0.3	0.3	100	102	74	51	56	63	50
level 3	total		5.0	4.0	2.6	2.6	2.9	3.2	2.3	100	81	52	52	58	64	47
vocational	females	15-19	2.6	2.1	1.3	1.4	1.5	1.7	1.2	100	78	49	52	58	64	46
		20-24	0.3	0.3	0.2	0.1	0.1	0.2	0.1	100	102	75	50	56	63	50
	total		2.9	2.3	1.5	1.5	1.7	1.9	1.3	100	80	51	52	58	64	46
		15-19	7.1	5.6	3.5	3.7	4.2	4.5	3.3	100	78	49	52	58	64	46
		20-24	0.8	0.8	0.6	0.4	0.4	0.5	0.4	100	102	74	51	56	63	50
	total		7.9	6.4	4.1	4.1	4.6	5.0	3.7	100	81	52	52	58	64	47
students	males	15-19	0.4	0.3	0.2	0.2	0.2	0.2	0.2	100	87	53	51	57	63	46
ISCED		20-24	0.4	0.4	0.3	0.2	0.2	0.3	0.2	100	104	80	53	56	63	52
level 4	total		0.8	0.7	0.5	0.4	0.4	0.5	0.4	100	96	67	53	57	63	49
vocational	females	15-19	0.7	0.6	0.4	0.4	0.4	0.4	0.3	100	88	52	52	57	64	46
		20-24	1.0	1.0	0.8	0.5	0.6	0.6	0.5	100	103	79	52	56	63	51
	total		1.7	1.6	1.1	0.9	1.0	1.1	0.8	100	97	68	52	57	63	49
		15-19	1.1	0.9	0.6	0.6	0.6	0.7	0.5	100	88	53	52	57	63	46
		20-24	1.4	1.4	1.1	0.7	0.8	0.9	0.7	100	103	79	52	56	63	51
	total		2.5	2.4	1.7	1.3	1.4	1.6	1.2	100	97	68	52	57	63	49
students	males	15-19	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	90	55	52	57	63	47
ISCED		20-24	0.6	0.6	0.4	0.3	0.3	0.4	0.3	100	102	75	52	56	63	51
level 5b	total		0.8	0.8	0.5	0.4	0.4	0.5	0.4	100	99	70	52	56	63	50
vocational	females	15-19	0.3	0.3	0.2	0.2	0.2	0.2	0.1	100	91	53	52	57	64	46
		20-24	0.7	0.7	0.5	0.4	0.4	0.4	0.3	100	100	73	51	56	63	50
	total		1.0	1.0	0.7	0.5	0.6	0.6	0.5	100	97	67	51	56	63	48
		15-19	0.5	0.5	0.3	0.3	0.3	0.3	0.2	100	90	54	52	57	63	46
		20-24	1.3	1.3	0.9	0.6	0.7	0.8	0.6	100	101	74	51	56	63	50
	total		1.8	1.8	1.2	0.9	1.0	1.1	0.9	100	98	68	52	56	63	49

Table 16.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Latvia, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			index (2005=100)													
			x 1000													
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	78	48	46	49	54	40
level 3 (pre)		Business	0.4	0.3	0.2	0.2	0.3	0.3	0.2	100	88	61	65	77	85	62
vocational		Science	0.3	0.3	0.2	0.3	0.3	0.4	0.3	100	100	77	89	113	124	91
		Engineering	3.2	2.6	1.6	1.6	1.7	1.9	1.4	100	79	50	49	54	59	43
		Agriculture	0.1	0.1	0.0	0.0	0.0	0.1	0.0	100	78	48	46	49	54	40
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	78	48	46	49	54	40
		Services	0.8	0.6	0.4	0.4	0.4	0.4	0.3	100	78	48	46	49	54	40
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	5.0	4.0	2.6	2.6	2.9	3.2	2.3	100	81	52	52	58	64	47
	females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.4	0.3	0.3	0.3	0.4	0.4	0.3	100	96	71	82	103	113	82
		Business	0.9	0.7	0.5	0.4	0.5	0.5	0.4	100	77	48	47	50	55	40
		Science	0.0	0.0	0.0	0.0	0.1	0.1	0.0	100	103	80	96	124	136	98
		Engineering	0.5	0.4	0.3	0.3	0.3	0.3	0.2	100	77	48	47	50	55	40
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	77	48	47	50	55	40
		Health	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	77	48	47	50	55	40
		Services	0.9	0.7	0.4	0.4	0.4	0.5	0.4	100	77	48	47	50	55	40
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	2.9	2.3	1.5	1.5	1.7	1.9	1.3	100	80	51	52	58	64	46
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.5	0.5	0.3	0.4	0.4	0.5	0.4	100	91	64	72	88	96	70
		Business	1.3	1.1	0.7	0.7	0.8	0.8	0.6	100	80	51	52	58	64	46
		Science	0.3	0.3	0.3	0.3	0.4	0.4	0.3	100	100	78	90	115	126	92
		Engineering	3.8	3.0	1.9	1.8	2.0	2.2	1.6	100	79	50	49	53	58	43
		Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	78	48	46	50	54	40
		Health	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	78	48	47	50	55	40
		Services	1.7	1.3	0.8	0.8	0.9	0.9	0.7	100	78	48	47	50	55	40
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	7.9	6.4	4.1	4.1	4.6	5.0	3.7	100	81	52	52	58	64	47
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	95	66	51	54	60	47
level 4		Business	0.1	0.1	0.1	0.0	0.1	0.1	0.0	100	95	66	51	54	60	47
vocational		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	138	125	120	154	172	134
		Engineering	0.3	0.3	0.2	0.2	0.2	0.2	0.1	100	95	66	51	54	60	47
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	95	66	51	54	60	47
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	95	66	51	54	60	47
		Services	0.3	0.3	0.2	0.2	0.2	0.2	0.1	100	95	66	51	54	60	47
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.8	0.7	0.5	0.4	0.4	0.5	0.4	100	96	67	53	57	63	49
	females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	67	52	56	63	49
		Business	0.3	0.2	0.2	0.1	0.1	0.2	0.1	100	97	67	52	56	63	49
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	118	97	86	105	118	91
		Engineering	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	97	67	52	56	63	49
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	67	52	56	63	49
		Health	0.7	0.6	0.4	0.3	0.4	0.4	0.3	100	97	67	52	56	63	49
		Services	0.6	0.5	0.4	0.3	0.3	0.4	0.3	100	97	67	52	56	63	49
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	1.7	1.6	1.1	0.9	1.0	1.1	0.8	100	97	68	52	57	63	49
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	96	67	51	55	62	48
		Business	0.3	0.3	0.2	0.2	0.2	0.2	0.2	100	96	67	51	55	62	48
		Science	0.0	0.0	0.0	0.0	0.0	0.1	0.0	100	129	113	106	133	149	116
		Engineering	0.4	0.4	0.3	0.2	0.2	0.3	0.2	100	95	66	51	55	61	47
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	96	67	51	55	62	48
		Health	0.7	0.7	0.5	0.4	0.4	0.4	0.3	100	97	67	52	56	63	48
		Services	0.9	0.8	0.6	0.4	0.5	0.5	0.4	100	96	67	51	55	62	48
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	2.5	2.4	1.7	1.3	1.4	1.6	1.2	100	97	68	52	57	63	49
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	122	102	88	108	121	95
ISCED		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	124	105	92	114	127	101
level 5b		Business	0.4	0.3	0.2	0.2	0.2	0.2	0.2	100	96	66	48	50	56	44
vocational		Science	0.0	0.1	0.0	0.0	0.1	0.1	0.0	100	121	101	87	107	120	95
		Engineering	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	96	66	48	50	56	44
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	101	73	55	61	68	54
		Services	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	96	66	48	50	56	44
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.8	0.8	0.5	0.4	0.4	0.5	0.4	100	99	70	52	56	63	50
	females	Education	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	97	67	51	56	63	48
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	67	51	56	63	48
		Business	0.8	0.8	0.5	0.4	0.4	0.5	0.4	100	97	67	51	56	63	48
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	67	51	56	63	48
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	67	51	56	63	48
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	97	67	51	56	63	48
		Services	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	97	67	51	56	63	48
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	1.0	1.0	0.7	0.5	0.6	0.6	0.5	100	97	67	51	56	63	48
	total	Education	0.1	0.1	0.1	0.0	0.0	0.1	0.0	100	101	73	58	65	73	57
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	108	82	67	78	88	69
		Business	1.2	1.1	0.8	0.6	0.6	0.7	0.5	100	97	67	50	54	61	47
		Science	0.1	0.1	0.1	0.0	0.1	0.1	0.1	100	116	94	80	97	108	85
		Engineering	0.2	0.2	0.1	0.1	0.1									

Lithuania

Table 17.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Lithuania, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	139.5	123.8	94.6	79.0	79.8	83.5	68.9	100	89	68	57	57	60	49
		20-24	129.9	136.1	120.4	92.6	78.8	80.4	74.6	100	105	93	71	61	62	57
	females	15-19	269.4	259.9	215.0	171.6	158.5	163.9	143.5	100	96	80	64	59	61	53
		20-24	134.6	118.3	89.5	74.5	75.5	79.1	65.0	100	88	66	55	56	59	48
	total	15-19	125.4	132.1	115.7	88.1	74.9	77.0	71.3	100	105	92	70	60	61	57
		20-24	260.0	250.4	205.2	162.6	150.3	156.0	136.4	100	96	79	63	58	60	52
	total	15-19	274.2	242.2	184.1	153.5	155.3	162.6	133.9	100	88	67	56	57	59	49
		20-24	255.3	268.2	236.1	180.7	153.6	157.4	146.0	100	105	92	71	60	62	57
	total		529.5	510.3	420.1	334.2	308.9	319.9	279.9	100	96	79	63	58	60	53
	students	males	15-19	61.1	50.8	41.5	35.0	36.1	37.8	30.6	100	83	68	57	59	62
20-24			3.0	3.1	2.7	2.1	1.8	1.8	1.7	100	104	91	71	60	62	57
level 2		total	64.1	53.9	44.2	37.1	37.9	39.6	32.3	100	84	69	58	59	62	50
		15-19	52.8	43.1	35.1	29.8	30.9	32.3	26.0	100	82	66	56	59	61	49
females		20-24	1.5	1.6	1.4	1.0	0.9	0.9	0.8	100	105	92	70	59	61	57
		total	54.2	44.7	36.4	30.8	31.8	33.2	26.9	100	82	67	57	59	61	49
total		15-19	113.9	93.9	76.5	64.7	67.0	70.1	56.6	100	82	67	57	0	62	50
		20-24	4.5	4.7	4.1	3.2	2.7	2.8	2.5	100	104	92	70	60	62	57
total		118.4	98.6	80.6	67.9	69.7	72.8	59.1	100	83	68	57	2	62	50	
students		males	15-19	0.6	0.5	0.4	0.4	0.4	0.4	0.3	100	83	68	57	59	62
	20-24		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	91	71	60	62	57
	level 2 pre	total	0.6	0.5	0.4	0.4	0.4	0.4	0.3	100	84	69	58	59	62	50
		15-19	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	82	66	56	59	61	49
	vocational	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	105	92	70	59	61	57
		total	0.2	0.2	0.2	0.1	0.1	0.1	0.1	100	82	67	57	59	61	49
	total	15-19	0.8	0.7	0.6	0.5	0.5	0.5	0.4	100	83	67	57	59	62	50
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	104	92	71	60	62	57
	total		0.9	0.7	0.6	0.5	0.5	0.5	0.4	100	84	68	58	59	62	50
	students	males	15-19	2.0	1.7	1.4	1.2	1.2	1.2	1.0	100	83	68	57	59	62
20-24			0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	104	91	71	60	62	57
level 2		total	2.1	1.8	1.5	1.2	1.3	1.3	1.1	100	84	69	58	59	62	50
		15-19	0.5	0.4	0.3	0.3	0.3	0.3	0.3	100	82	66	56	59	61	49
vocational		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	105	92	70	59	61	57
		total	0.5	0.4	0.4	0.3	0.3	0.3	0.3	100	82	67	57	59	61	49
total		15-19	2.5	2.1	1.7	1.4	1.5	1.6	1.3	100	83	68	57	59	62	50
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	104	92	71	60	62	57
total		2.6	2.2	1.8	1.5	1.6	1.6	1.3	100	84	69	58	59	62	50	
students		males	15-19	50.3	46.3	33.5	27.5	28.0	29.4	24.4	100	92	67	55	56	58
	20-24		5.1	5.2	4.5	3.6	3.1	3.1	2.9	100	102	87	69	59	61	56
	level 3	total	55.4	51.6	38.0	31.1	31.1	32.5	27.3	100	93	69	56	56	59	49
		15-19	51.1	46.6	33.5	27.4	28.0	29.4	24.3	100	91	66	54	55	57	47
	females	20-24	3.5	3.6	3.0	2.4	2.0	2.1	1.9	100	102	86	68	58	60	55
		total	54.7	50.2	36.5	29.8	30.1	31.5	26.2	100	92	67	54	55	58	48
	total	15-19	101.4	93.0	67.0	54.9	56.0	58.8	48.7	100	92	66	54	55	58	48
		20-24	8.7	8.8	7.5	6.0	5.1	5.3	4.8	100	102	87	69	59	61	55
	total		110.1	101.8	74.6	60.8	61.1	64.0	53.5	100	92	68	55	56	58	49
	students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	92	67	55	56	58
20-24			0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	102	87	69	59	61	56
level 3 pre		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	93	69	56	56	59	49
		15-19	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	91	66	54	55	57	47
vocational		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	102	86	68	58	60	55
		total	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	92	67	54	55	58	48
total		15-19	0.1	0.1	0.1	0.0	0.0	0.0	0.0	100	91	66	54	55	58	48
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	102	87	69	59	61	55
total		0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	92	67	55	55	58	48	
students		males	15-19	15.1	13.9	10.1	8.3	8.4	8.8	7.3	100	92	67	55	56	58
	20-24		1.5	1.6	1.3	1.1	0.9	0.9	0.9	100	102	87	69	59	61	56
	level 3	total	16.7	15.5	11.4	9.3	9.3	9.8	8.2	100	93	69	56	56	59	49
		15-19	9.9	9.0	6.5	5.3	5.4	5.7	4.7	100	91	66	54	55	57	47
	vocational	20-24	0.7	0.7	0.6	0.5	0.4	0.4	0.4	100	102	86	68	58	60	55
		total	10.6	9.7	7.1	5.8	5.8	6.1	5.1	100	92	67	54	55	58	48
	total	15-19	25.0	23.0	16.6	13.6	13.8	14.5	12.0	100	92	66	54	55	58	48
		20-24	2.2	2.3	1.9	1.5	1.3	1.4	1.2	100	102	87	69	59	61	55
	total		27.3	25.2	18.5	15.1	15.2	15.9	13.3	100	93	68	55	56	58	49
	students	males	15-19	1.9	1.8	1.3	1.1	1.0	1.1	0.9	100	95	70	59	56	58
20-24			1.8	1.7	1.4	1.2	1.0	1.1	0.9	100	99	82	67	58	60	54
level 4		total	3.6	3.5	2.7	2.3	2.0	2.1	1.9	100	97	76	63	57	59	52
		15-19	2.4	2.3	1.7	1.4	1.3	1.4	1.2	100	93	68	57	54	57	48
females		20-24	2.3	2.3	1.9	1.5	1.3	1.4	1.2	100	99	81	66	57	59	53
		total	4.8	4.6	3.6	2.9	2.6	2.8	2.4	100	96	75	61	55	58	51
total		15-19	4.3	4.0	3.0	2.5	2.3	2.5	2.1	100	94	69	58	55	57	49
		20-24	4.1	4.0	3.3	2.7	2.3	2.4	2.2	100	99	81	66	57	60	53
total		8.4	8.1	6.3	5.2	4.7	4.9	4.3	100	96	75	62	56	58	51	
students		males	15-19	1.9	1.8	1.3	1.1	1.0	1.1	0.9	100	95	70	59	56	58
	20-24		1.8	1.7	1.4	1.2	1.0	1.1	0.9	100	99	82	67	58	60	54
	level 4	total	3.6	3.5	2.7	2.3	2.0	2.1	1.9	100	97	76	63	57	59	52
		15-19	2.4	2.3	1.7	1.4	1.3	1.4	1.2	100	93	68	57	54	57	48
	vocational	20-24	2.3	2.3	1.9	1.5	1.3	1.4	1.2	100	99	81	66	57	59	53
		total	4.8	4.6	3.6	2.9	2.6	2.8	2.4	100	96	75	61	55	58	51
	total	15-19	4.3	4.0	3.0	2.5	2.3	2.5	2.1	100	94	69	58	55	57	49
		20-24	4.1	4.0	3.3	2.7	2.3	2.4	2.2	100	99	81	66	57	60	53
	total		8.4	8.1	6.3	5.2	4.7	4.9	4.3	100	96	75	62	56	58	51
	students	males	15-19	13.9	13.2	9.8	8.3	7.8	8.1	6.9	100	95	70	59	56	58
20-24			39.0	40.0	34.7											

Figure 17.1. Projected number of students in (pre) vocational education by ISCED level in Lithuania, 2005-2050, baseline population variant / constant educational participation

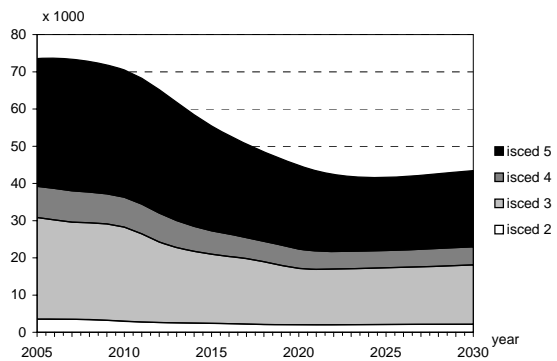


Figure 17.2. Index of the projected number of students in (pre) vocational education by ISCED level in Lithuania, 2005-2050, baseline population variant / constant educational participation

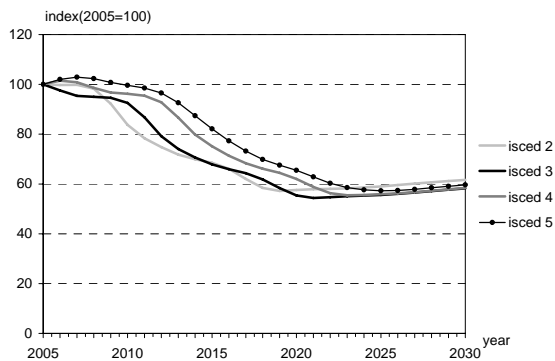


Figure 17.2. Projected number of graduates in (pre) vocational education by ISCED level in Lithuania, 2005-2050, baseline population variant / constant educational participation

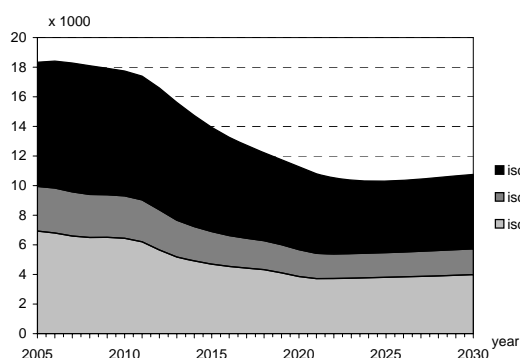


Figure 17.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Lithuania, 2005-2050, baseline population variant / constant educational participation

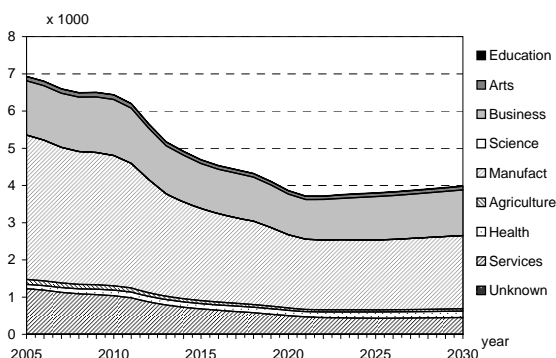


Table 17.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Lithuania, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	92	66	54	56	59	48	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	100	92	66	54	56	59	48	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	91	65	52	55	58	47	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	100	91	65	52	55	58	47	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	92	65	52	55	58	48	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	100	92	65	52	55	58	48	
students	males	15-19	3.7	3.5	2.5	2.1	2.1	1.8	100	93	67	55	55	58	48	
ISCED		20-24	0.4	0.4	0.3	0.2	0.2	0.2	100	98	81	67	57	60	54	
level 3	total		4.1	3.8	2.8	2.3	2.3	2.0	100	93	68	56	55	58	49	
vocational	females	15-19	2.5	2.3	1.7	1.4	1.4	1.2	100	92	66	54	54	57	47	
		20-24	0.3	0.3	0.2	0.2	0.1	0.1	100	98	80	66	57	59	53	
	total		2.8	2.6	1.9	1.6	1.5	1.3	100	93	68	55	54	57	48	
	total	15-19	6.3	5.8	4.2	3.4	3.4	3.0	100	92	66	55	55	57	48	
		20-24	0.6	0.6	0.5	0.4	0.4	0.3	100	98	81	66	57	59	53	
	total		6.9	6.4	4.7	3.9	3.8	3.3	100	93	68	56	55	58	48	
students	males	15-19	0.8	0.7	0.5	0.5	0.4	0.5	100	94	69	58	55	58	49	
ISCED		20-24	0.4	0.3	0.3	0.2	0.2	0.2	100	100	84	68	58	60	54	
level 4	total		1.1	1.1	0.8	0.7	0.6	0.6	100	96	73	61	56	59	51	
vocational	females	15-19	1.3	1.2	0.9	0.7	0.7	0.6	100	93	68	56	54	57	48	
		20-24	0.6	0.6	0.5	0.4	0.4	0.3	100	99	82	66	57	59	53	
	total		1.9	1.8	1.4	1.1	1.0	0.9	100	95	72	59	55	58	50	
	total	15-19	2.0	1.9	1.4	1.2	1.1	1.2	100	93	68	57	54	57	48	
		20-24	1.0	1.0	0.8	0.6	0.6	0.5	100	99	83	67	57	60	54	
	total		3.0	2.9	2.2	1.8	1.7	1.5	100	95	73	60	55	58	50	
students	males	15-19	0.5	0.5	0.3	0.3	0.3	0.2	100	96	71	61	56	59	50	
ISCED		20-24	2.3	2.3	2.0	1.6	1.3	1.4	100	101	86	69	59	61	55	
level 5b	total		2.7	2.7	2.3	1.8	1.6	1.7	100	100	84	67	58	60	54	
vocational	females	15-19	0.9	0.8	0.6	0.5	0.5	0.4	100	93	69	57	54	57	48	
		20-24	4.8	4.9	4.1	3.2	2.8	2.9	100	102	87	68	58	60	55	
	total		5.6	5.7	4.7	3.7	3.2	3.4	100	101	84	66	57	60	54	
	total	15-19	1.4	1.3	0.9	0.8	0.7	0.8	100	94	70	59	55	57	49	
		20-24	7.0	7.2	6.1	4.8	4.1	4.3	100	102	87	68	58	60	55	
	total		8.4	8.4	7.0	5.6	4.8	5.0	100	100	84	67	58	60	54	

Table 17.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Lithuania, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			index (2005=100)													
x 1000																
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	559	746	895	1159	1215	1023
ISCED		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	88	61	47	44	46	39
level 3 (pre)		Business	0.6	0.8	0.7	0.7	0.8	0.8	0.7	100	121	108	106	120	126	106
vocational		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	3.0	2.7	1.9	1.5	1.4	1.5	1.3	100	90	64	51	48	51	43
		Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	88	61	47	44	46	39
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	113	97	92	102	107	90
		Services	0.4	0.2	0.1	0.0	0.0	0.0	0.0	100	70	34	14	0	0	0
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	4.1	3.8	2.8	2.3	2.3	2.4	2.0	100	93	68	56	55	58	49
	females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	555	743	887	1142	1198	1007
		Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	106	88	80	87	91	77
		Business	0.8	0.7	0.5	0.4	0.4	0.4	0.4	100	90	64	51	49	51	43
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	0.9	0.8	0.6	0.5	0.4	0.5	0.4	100	90	64	51	49	51	43
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	90	64	51	49	51	43
		Health	0.1	0.1	0.1	0.1	0.2	0.2	0.1	100	131	123	124	144	151	127
		Services	0.9	0.8	0.6	0.4	0.4	0.4	0.4	100	90	64	51	49	51	43
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	2.8	2.6	1.9	1.6	1.5	1.6	1.3	100	93	68	55	54	57	48
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	556	744	889	1145	1201	1010
		Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	103	83	75	80	84	70
		Business	1.5	1.5	1.2	1.1	1.2	1.2	1.0	100	104	83	75	80	84	71
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	3.9	3.5	2.5	2.0	1.9	2.0	1.7	100	90	64	51	48	51	43
		Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	88	61	48	44	46	39
		Health	0.1	0.2	0.1	0.1	0.2	0.2	0.1	100	130	122	123	143	150	126
		Services	1.2	1.0	0.7	0.5	0.4	0.4	0.4	100	84	56	41	35	37	31
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	6.9	6.4	4.7	3.9	3.8	4.0	3.3	100	93	68	56	55	58	48
students	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	70	56	51	53	46
level 4		Business	0.4	0.4	0.3	0.2	0.2	0.2	0.2	100	94	71	58	52	54	47
vocational		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	0.4	0.4	0.3	0.3	0.2	0.3	0.2	100	98	76	64	60	63	54
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	146	150	155	172	180	156
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	126	119	117	126	132	114
		Services	0.3	0.3	0.2	0.2	0.2	0.2	0.1	100	95	72	59	54	57	49
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	1.1	1.1	0.8	0.7	0.6	0.7	0.6	100	96	73	61	56	59	51
	females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.1	0.2	0.1	0.1	0.1	0.1	0.1	100	108	92	84	85	89	77
		Business	1.0	0.9	0.7	0.6	0.5	0.6	0.5	100	95	73	61	56	59	51
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	0.3	0.2	0.2	0.1	0.1	0.1	0.1	100	83	54	37	27	29	25
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	72	58	53	56	48
		Health	0.0	0.1	0.1	0.1	0.1	0.1	0.0	100	120	111	107	114	119	103
		Services	0.4	0.4	0.3	0.2	0.2	0.2	0.2	100	95	72	59	54	57	49
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	1.9	1.8	1.4	1.1	1.0	1.1	0.9	100	95	72	59	55	58	50
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Humanities	0.2	0.2	0.2	0.1	0.1	0.2	0.1	100	105	87	77	77	81	70
		Business	1.4	1.3	1.0	0.8	0.7	0.8	0.7	100	95	73	60	55	58	50
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	0.7	0.7	0.5	0.4	0.3	0.3	0.3	100	91	67	53	46	49	42
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	109	94	86	87	91	79
		Health	0.0	0.1	0.1	0.1	0.1	0.1	0.1	100	120	112	108	114	120	103
		Services	0.7	0.7	0.5	0.4	0.4	0.4	0.3	100	95	72	59	54	57	49
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	3.0	2.9	2.2	1.8	1.7	1.7	1.5	100	95	73	60	55	58	50
students	males	Education	0.1	0.1	0.1	0.1	0.0	0.0	0.0	100	99	82	65	55	57	52
ISCED		Humanities	0.1	0.1	0.1	0.0	0.0	0.0	0.0	100	99	82	65	55	57	52
level 5b		Business	0.8	0.8	0.7	0.5	0.4	0.5	0.4	100	99	82	65	55	57	52
vocational		Science	0.1	0.2	0.2	0.2	0.2	0.2	0.1	100	125	126	118	117	121	109
		Engineering	1.1	1.1	0.9	0.7	0.6	0.6	0.6	100	99	82	65	55	57	52
		Agriculture	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	99	82	65	55	57	52
		Health	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	99	82	65	55	57	52
		Services	0.3	0.3	0.2	0.2	0.1	0.2	0.1	100	99	82	65	55	57	52
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	2.7	2.7	2.3	1.8	1.6	1.7	1.5	100	100	84	67	58	60	54
	females	Education	0.5	0.5	0.4	0.3	0.2	0.2	0.2	100	93	72	52	41	42	38
		Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	93	72	52	41	42	38
		Business	3.0	3.2	2.9	2.4	2.2	2.2	2.0	100	106	94	78	71	74	67
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	93	72	52	41	42	38
		Engineering	0.4	0.4	0.3	0.2	0.2	0.2	0.2	100	93	72	52	41	42	38
		Agriculture	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	99	82	64	54	57	51
		Health	1.1	1.0	0.8	0.6	0.5	0.5	0.4	100	94	72	52	41	43	39
		Services	0.2	0.2	0.2	0.1	0.1	0.1	0.1	100	93	72	52	41	42	38
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	5.6	5.7	4.7	3.7	3.2	3.4	3.0	100	101	84	66	57	60	54
	total	Education	0.6	0.6	0.4	0.3	0.3	0.3	0.2	100	94	73	54	43	44	40
		Humanities	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100	95	75	56	45	47	42
		Business	3.9	4.0	3.5	2.9	2.6	2.7	2.4	100	105	91	75	68	70	63
		Science	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	118	114	104	100	104	94
		Engineering	1.5													

Luxembourg

Table 18.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Luxemburg, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	13.4	15.0	15.6	15.4	15.2	15.7	18.4	100	112	116	115	113	117	137
		20-24	13.6	14.5	16.1	16.7	16.6	16.3	19.4	100	107	119	123	122	120	143
		total	27.0	29.6	31.8	32.2	31.8	32.1	37.9	100	109	118	119	118	119	140
	females	15-19	13.0	14.4	14.9	14.6	14.6	15.1	17.6	100	111	115	113	112	116	136
		20-24	12.8	14.3	15.7	16.2	15.9	15.8	18.8	100	111	122	126	124	123	146
		total	25.8	28.7	30.6	30.8	30.5	30.9	36.4	100	111	118	119	118	120	141
	total	15-19	26.4	29.4	30.6	30.1	29.8	30.8	36.1	100	111	116	114	113	117	137
		20-24	26.4	28.8	31.8	32.9	32.5	32.2	38.2	100	109	120	125	123	122	145
		total	52.8	58.2	62.4	63.0	62.3	62.9	74.3	100	110	118	119	118	119	141
students	males	15-19	2.5	2.7	2.7	2.7	2.7	2.8	3.3	100	109	111	109	109	114	132
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	108	118	122	118	119	142
		total	2.5	2.7	2.8	2.7	2.7	2.8	3.3	100	109	111	109	109	114	132
	females	15-19	2.2	2.4	2.4	2.3	2.4	2.5	2.9	100	111	110	106	108	113	130
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	112	122	126	123	123	146
		total	2.2	2.5	2.4	2.4	2.4	2.5	2.9	100	111	110	106	108	113	130
	total	15-19	4.7	5.1	5.2	5.0	5.0	5.3	6.1	100	110	111	107	0	114	131
		20-24	0.0	0.0	0.1	0.1	0.1	0.1	0.1	100	110	120	124	121	121	144
		total	4.7	5.2	5.2	5.0	5.0	5.3	6.2	100	110	111	107	1	114	131
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	7.3	8.2	8.6	8.5	8.3	8.6	10.1	100	112	117	116	114	118	138
		20-24	1.6	1.8	1.9	2.0	1.9	1.9	2.3	100	109	119	122	119	120	143
		total	8.9	10.0	10.5	10.4	10.3	10.5	12.4	100	112	117	117	115	118	139
	females	15-19	7.9	8.8	9.1	8.9	8.9	9.2	10.8	100	111	115	113	112	116	136
		20-24	1.5	1.7	1.9	1.9	1.8	1.8	2.2	100	113	124	124	120	122	145
		total	9.4	10.5	11.0	10.8	10.7	11.0	12.9	100	111	116	115	114	117	137
	total	15-19	15.3	17.0	17.7	17.4	17.2	17.8	20.9	100	111	116	114	113	117	137
		20-24	3.1	3.4	3.8	3.8	3.7	3.8	4.5	100	111	121	123	120	121	144
		total	18.4	20.4	21.5	21.2	21.0	21.6	25.4	100	111	117	116	114	117	138
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	4.9	5.5	5.8	5.7	5.6	5.8	6.8	100	112	117	116	114	118	138
		20-24	1.1	1.2	1.3	1.3	1.3	1.3	1.6	100	109	119	122	119	120	143
		total	6.0	6.7	7.1	7.0	6.9	7.1	8.4	100	112	117	117	115	118	139
	females	15-19	4.8	5.3	5.5	5.4	5.4	5.6	6.5	100	111	115	113	112	116	136
		20-24	0.9	1.0	1.1	1.1	1.1	1.1	1.3	100	113	124	124	120	122	145
		total	5.7	6.3	6.6	6.5	6.5	6.7	7.8	100	111	116	115	114	117	137
	total	15-19	9.7	10.9	11.3	11.1	11.0	11.4	13.3	100	111	116	114	113	117	137
		20-24	2.0	2.2	2.4	2.5	2.4	2.4	2.9	100	111	121	123	120	121	144
		total	11.7	13.1	13.7	13.6	13.4	13.8	16.2	100	111	117	116	114	117	138
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	117	122	124	118	120	143
		20-24	0.3	0.3	0.4	0.4	0.4	0.4	0.4	100	107	119	124	123	121	143
		total	0.3	0.4	0.4	0.4	0.4	0.4	0.5	100	107	119	124	122	121	143
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	114	123	125	119	121	144
		20-24	0.1	0.1	0.1	0.2	0.2	0.2	0.2	100	111	121	126	124	123	146
		total	0.1	0.1	0.2	0.2	0.2	0.2	0.2	100	111	121	126	123	123	146
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	116	122	124	118	120	143
		20-24	0.4	0.5	0.5	0.5	0.5	0.5	0.6	100	108	120	124	123	121	144
		total	0.5	0.5	0.6	0.6	0.6	0.6	0.7	100	109	120	124	123	121	144
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	117	122	124	118	120	143
		20-24	0.3	0.3	0.4	0.4	0.4	0.4	0.4	100	107	119	124	123	121	143
		total	0.3	0.4	0.4	0.4	0.4	0.4	0.5	100	107	119	124	122	121	143
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	114	123	125	119	121	144
		20-24	0.1	0.1	0.1	0.2	0.2	0.2	0.2	100	111	121	126	124	123	146
		total	0.1	0.1	0.2	0.2	0.2	0.2	0.2	100	111	121	126	123	123	146
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	116	122	124	118	120	143
		20-24	0.4	0.5	0.5	0.5	0.5	0.5	0.6	100	108	120	124	123	121	144
		total	0.5	0.5	0.6	0.6	0.6	0.6	0.7	100	109	120	124	123	121	144
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	118	122	126	119	121	144
		20-24	0.4	0.5	0.5	0.5	0.5	0.5	0.6	100	106	118	123	122	120	143
		total	0.4	0.5	0.5	0.5	0.5	0.5	0.6	100	107	118	123	122	120	143
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	115	123	126	11		

Figure 18.1. Projected number of students in (pre) vocational education by ISCED level in Luxembourg, 2005-2050, baseline population variant / constant educational participation

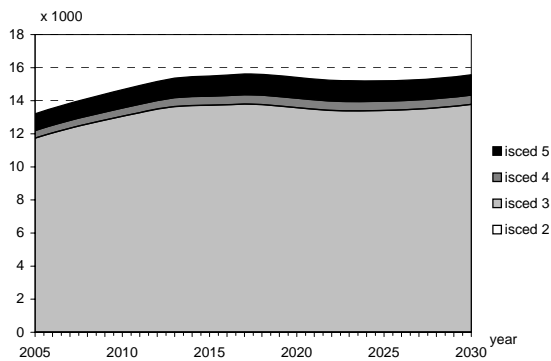


Figure 18.2. Index of the projected number of students in (pre) vocational education by ISCED level in Luxembourg, 2005-2050, baseline population variant / constant educational participation

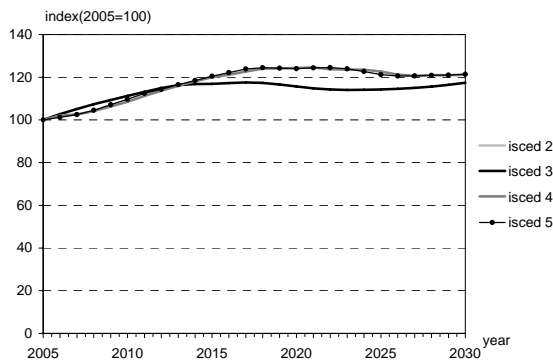


Figure 18.2. Projected number of graduates in (pre) vocational education by ISCED level in Luxembourg, 2005-2050, baseline population variant / constant educational participation

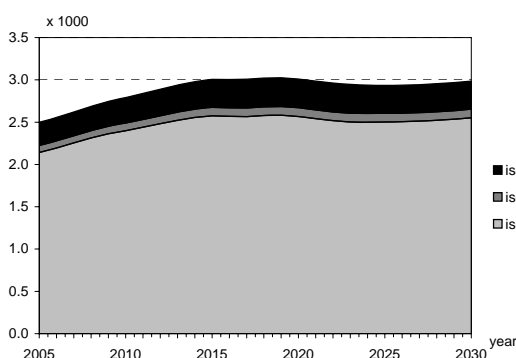


Figure 18.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Luxembourg, 2005-2050, baseline population variant / constant educational participation

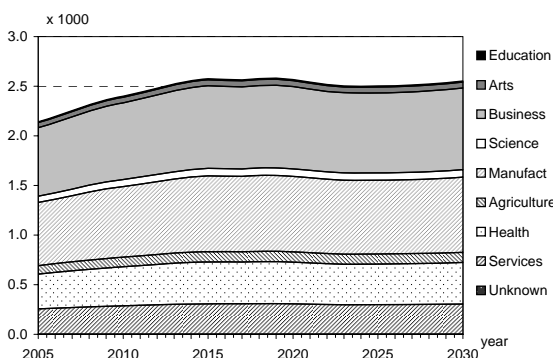


Table 18.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Luxembourg, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		ISCED 20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		level 3 pre total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		vocational females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
			total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		males 15-19	0.8	0.9	0.9	0.9	0.9	0.9	1.1	100	113	120	118	115	118	140
		ISCED 20-24	0.3	0.4	0.4	0.4	0.4	0.4	0.5	100	109	119	122	120	120	143
		level 3 total	1.1	1.2	1.3	1.3	1.3	1.3	1.6	100	112	120	119	117	119	141
vocational females	15-19	0.7	0.8	0.9	0.9	0.8	0.9	1.0	100	112	119	119	116	118	140	
	20-24	0.3	0.4	0.4	0.4	0.4	0.4	0.5	100	113	124	124	120	122	145	
	total	1.0	1.2	1.3	1.3	1.2	1.2	1.5	100	112	121	120	117	120	141	
	total	15-19	1.5	1.7	1.8	1.8	1.7	1.8	2.1	100	112	120	118	115	118	140
		20-24	0.6	0.7	0.8	0.8	0.8	0.8	0.9	100	111	122	123	120	121	144
		total	2.1	2.4	2.6	2.6	2.5	2.6	3.0	100	112	120	120	117	119	141
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		ISCED 20-24	0.0	0.1	0.1	0.1	0.1	0.1	0.1	100	107	119	124	123	120	143
		level 4 total	0.0	0.1	0.1	0.1	0.1	0.1	0.1	100	107	119	124	123	120	143
	vocational females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146
total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	108	120	125	123	122	144	
	total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	108	120	125	123	122	144	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	118	122	126	119	121	144	
		ISCED 20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	106	118	123	122	120	143
		level 5b total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	107	118	123	122	120	143
	vocational females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	115	123	126	119	122	144
		20-24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	112	122	125	121	122	145
		total	0.2	0.2	0.2	0.2	0.2	0.2	0.3	100	112	122	125	121	122	145
total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	116	123	126	119	122	144	
	20-24	0.3	0.3	0.3	0.3	0.3	0.3	0.4	100	110	121	124	121	122	144	
	total	0.3	0.3	0.3	0.3	0.3	0.3	0.4	100	110	121	124	121	122	144	

Table 18.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Luxembourg, 2005-2050, baseline population variant / constant graduation rates

Field			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
x 1000			index (2005=100)													
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	112	120	119	117	119	141
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	112	120	119	117	119	141
		Business	0.2	0.3	0.3	0.3	0.3	0.3	0.3	100	112	120	119	117	119	141
		Science	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	119	117	119	141
		Engineering	0.6	0.6	0.7	0.7	0.7	0.7	0.8	100	112	120	119	117	119	141
		Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	119	117	119	141
		Health	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	119	117	119	141
		Services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	119	117	119	141
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	1.1	1.2	1.3	1.3	1.3	1.3	1.6	100	112	120	119	117	119	141
		females	Education	0.0	0.0	0.0	0.0	0.0	0.0	100	112	121	120	117	120	141
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	112	121	120	117	120	141
			Business	0.5	0.5	0.5	0.5	0.5	0.5	100	112	121	120	117	120	141
			Science	0.0	0.0	0.0	0.0	0.0	0.0	100	112	121	120	117	120	141
		Engineering	0.1	0.1	0.1	0.1	0.1	0.1	100	112	121	120	117	120	141	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	100	112	121	120	117	120	141	
		Health	0.3	0.3	0.4	0.3	0.3	0.3	100	112	121	120	117	120	141	
		Services	0.2	0.2	0.2	0.2	0.2	0.2	100	112	121	120	117	120	141	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	1.0	1.2	1.3	1.3	1.2	1.2	100	112	121	120	117	120	141	
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	100	112	120	119	117	119	141	
		Humanities	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	120	117	119	141	
		Business	0.7	0.8	0.8	0.8	0.8	0.8	100	112	120	120	117	119	141	
		Science	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	119	117	119	141	
		Engineering	0.6	0.7	0.8	0.8	0.7	0.8	100	112	120	119	117	119	141	
		Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	100	112	120	120	117	119	141	
		Health	0.4	0.4	0.4	0.4	0.4	0.5	100	112	121	120	117	119	141	
		Services	0.3	0.3	0.3	0.3	0.3	0.3	100	112	120	120	117	119	141	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	2.1	2.4	2.6	2.6	2.5	2.6	100	112	120	120	117	119	141	
students ISCED level 4 vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	120	143	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	120	143	
		Business	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	120	143	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	120	143	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	120	143	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	120	143	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.0	0.1	0.1	0.1	0.1	0.1	100	107	119	124	123	120	143	
		females	Education	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146
			Business	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			Science	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	127	124	123	146	
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	100	108	121	125	123	122	144	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	108	120	124	123	121	144	
		Business	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	124	123	121	143	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	100	108	120	124	123	121	144	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	100	110	122	126	124	123	146	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	100	109	121	126	124	122	145	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.1	0.1	0.1	0.1	0.1	0.1	100	108	120	125	123	122	144	
students ISCED level 5b vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	100	107	118	123	122	120	143	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	107	118	123	122	120	143	
		Business	0.0	0.0	0.0	0.0	0.0	0.0	100	107	118	123	122	120	143	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	100	107	118	123	122	120	143	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	100	107	118	123	122	120	143	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	100	107	118	123	122	120	143	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.1	0.1	0.1	0.1	0.1	0.1	100	107	118	123	122	120	143	
		females	Education	0.1	0.1	0.1	0.1	0.1	0.1	100	112	122	125	121	122	145
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	112	122	125	121	122	145
			Business	0.1	0.1	0.1	0.1	0.1	0.1	100	112	122	125	121	122	145
			Science	0.0	0.0	0.0	0.0	0.0	0.0	100	112	122	125	121	122	145
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	100	112	122	125	121	122	145	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	100	112	122	125	121	122	145	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.2	0.2	0.2	0.2	0.2	0.3	100	112	122	125	121	122	145	
	total	Education	0.1	0.1	0.1	0.1	0.1	0.1	100	111	121	124	121	122	145	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	100	109	120	124	121	121	144	
		Business	0.1	0.1	0.1	0.1	0.1	0.1	100	111	121	124	121	122	145	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	100	107	119	123	122	120	143	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.1	100	107	118	123	122	120	143	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	100	111	122	124	121	122	145	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.3	0.3	0.3	0.3	0.3	0.4	100	110	121	124	121	122	144	

Malta

Figure 19.1. Projected number of students in (pre) vocational education by ISCED level in Malta, 2005-2050, baseline population variant / constant educational participation

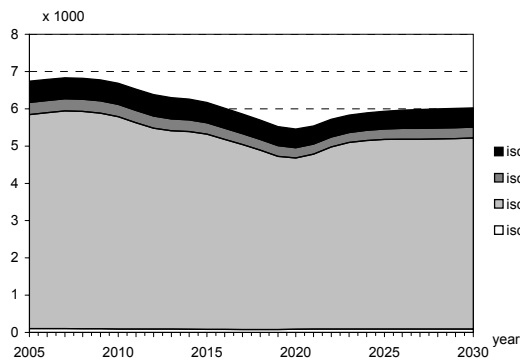


Figure 19.2. Index of the projected number of students in (pre) vocational education by ISCED level in Malta, 2005-2050, baseline population variant / constant educational participation

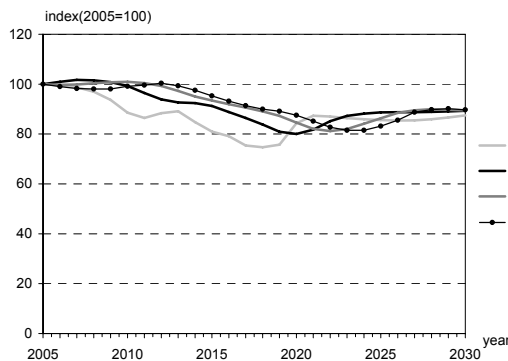


Figure 19.2. Projected number of graduates in (pre) vocational education by ISCED level in Malta, 2005-2050, baseline population variant / constant educational participation

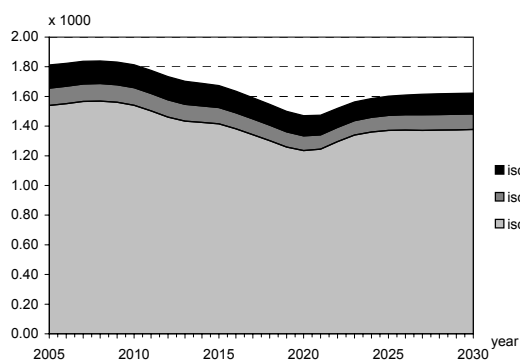


Figure 19.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Malta, 2005-2050, baseline population variant / constant educational participation

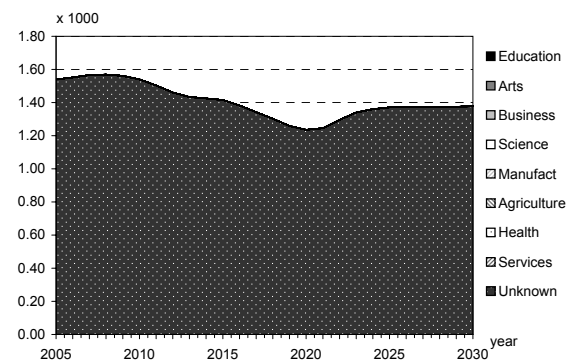


Table 19.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Malta, 2005-2050, baseline population variant / constant graduation rates

Age group			2005	2010	2015	2020	2025	2030	index (2005=100)						
			x 1000												
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	99	91	78	90	90	92
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	99	92	84	84	88	92
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	100	99	92	79	89	89	92
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	101	92	80	92	91	92
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	104	92	87	91	90	94
	total		0.0	0.0	0.0	0.0	0.0	0.0	100	101	92	80	92	91	93
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	100	92	79	91	90	92
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	102	92	86	88	89	93
	total		0.0	0.0	0.0	0.0	0.0	0.0	100	100	92	80	91	90	92
students	males	15-19	0.8	0.8	0.8	0.7	0.8	0.8	100	100	92	78	90	89	92
ISCED		20-24	0.3	0.3	0.3	0.2	0.2	0.3	100	100	93	85	83	88	92
level 3	total		1.1	1.1	1.0	0.9	1.0	1.0	100	100	92	80	88	89	92
vocational	females	15-19	0.3	0.4	0.3	0.3	0.3	0.3	100	101	92	80	92	91	93
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	103	94	88	89	91	94
	total		0.4	0.4	0.4	0.3	0.4	0.3	100	101	92	81	92	91	93
	total	15-19	1.2	1.2	1.1	0.9	1.1	1.1	100	100	92	79	90	90	92
		20-24	0.3	0.3	0.3	0.3	0.3	0.3	100	100	93	85	84	88	92
	total		1.5	1.5	1.4	1.2	1.3	1.3	100	100	92	80	89	89	92
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	101	92	79	90	89	92
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	99	94	86	81	88	92
level 4	total		0.1	0.1	0.1	0.1	0.1	0.1	100	100	93	84	84	88	92
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	105	94	83	94	92	95
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	101	94	87	85	90	93
	total		0.1	0.1	0.1	0.0	0.0	0.1	100	103	94	85	90	91	94
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	103	93	81	93	91	93
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	100	100	94	86	82	89	92
	total		0.1	0.1	0.1	0.1	0.1	0.1	100	101	94	84	87	90	93
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	101	91	79	90	89	92
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	98	95	88	79	88	92
level 5b	total		0.1	0.1	0.0	0.0	0.0	0.0	100	99	94	86	81	88	92
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	104	92	87	94	91	94
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	100	99	96	88	82	90	94
	total		0.1	0.1	0.1	0.1	0.1	0.1	100	99	96	88	84	90	94
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	103	92	84	93	90	93
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	100	98	96	88	81	90	93
	total		0.2	0.2	0.1	0.1	0.1	0.1	100	99	95	87	83	90	93

Netherlands

Figure 20.1. Projected number of students in (pre) vocational education by ISCED level in the Netherlands, 2005-2050, baseline population variant / constant educational participation

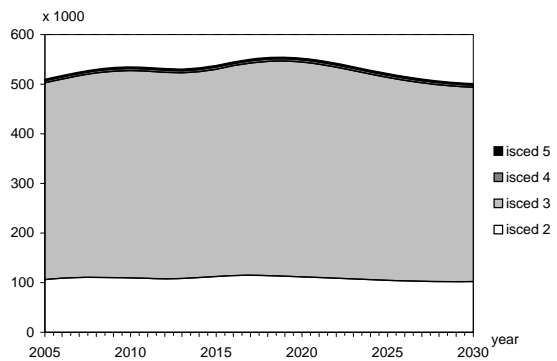


Figure 20.2. Index of the projected number of students in (pre) vocational education by ISCED level in the Netherlands, 2005-2050, baseline population variant / constant educational participation

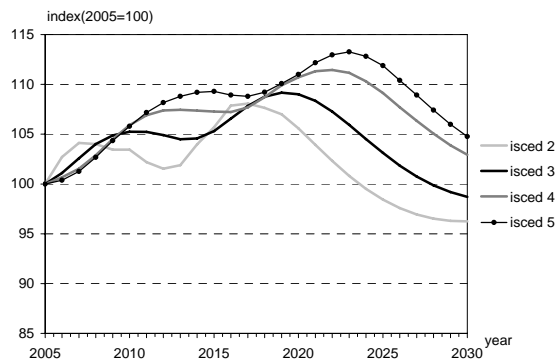


Figure 20.2. Projected number of graduates in (pre) vocational education by ISCED level in the Netherlands, 2005-2050, baseline population variant / constant educational participation

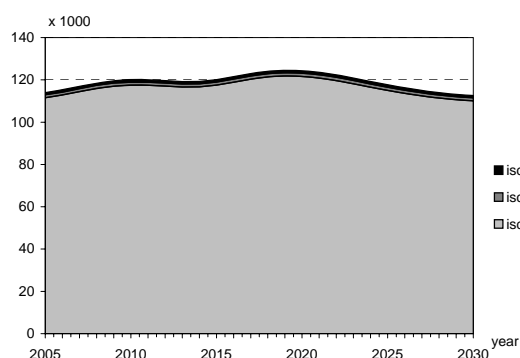


Figure 20.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the Netherlands, 2005-2050, baseline population variant / constant educational participation

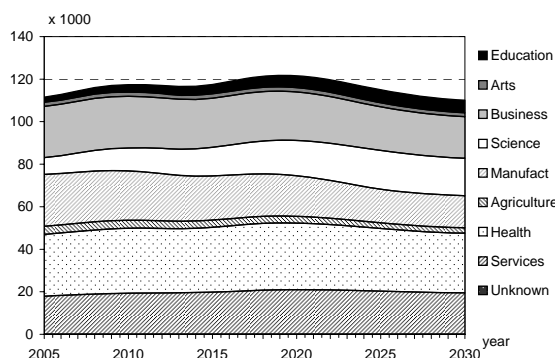


Table 20.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the Netherlands, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	44.5	46.8	46.3	48.3	45.3	43.7	45.9	100	105	104	109	102	98	103
ISCED		20-24	12.0	12.6	13.1	13.3	13.5	12.7	13.0	100	105	110	111	113	106	109
level 3	total		56.5	59.4	59.4	61.7	58.8	56.4	58.9	100	105	105	109	104	100	104
vocational	females	15-19	46.1	48.5	48.1	49.9	46.1	44.3	46.3	100	105	104	108	100	96	100
		20-24	9.0	9.6	10.0	10.1	10.1	9.4	9.6	100	106	111	112	112	104	106
	total		55.1	58.1	58.1	60.0	56.2	53.7	55.8	100	105	105	109	102	98	101
	total	15-19	90.6	95.2	94.4	98.2	91.4	88.1	92.2	100	105	104	108	101	97	102
		20-24	21.0	22.2	23.1	23.4	23.6	22.0	22.6	100	106	110	112	113	105	108
	total		111.6	117.4	117.5	121.6	115.0	110.1	114.7	100	105	105	109	103	99	103
students	males	15-19	0.4	0.4	0.4	0.5	0.4	0.4	0.4	100	107	104	111	105	100	105
ISCED		20-24	0.7	0.7	0.7	0.7	0.8	0.7	0.7	100	105	110	110	113	106	109
level 4	total		1.1	1.1	1.2	1.2	1.2	1.1	1.2	100	106	108	111	110	104	107
vocational	females	15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	107	104	111	103	98	102
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	106	111	111	112	104	106
	total		0.3	0.3	0.3	0.3	0.3	0.3	0.3	100	107	106	111	107	100	103
	total	15-19	0.6	0.6	0.6	0.7	0.6	0.6	0.6	100	107	104	111	104	99	104
		20-24	0.8	0.8	0.9	0.9	0.9	0.8	0.9	100	105	110	110	113	106	108
	total		1.4	1.5	1.5	1.5	1.5	1.4	1.5	100	106	107	111	109	103	106
students	males	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	108	104	113	107	101	106
ISCED		20-24	0.4	0.4	0.4	0.4	0.4	0.4	0.4	100	105	110	111	114	107	109
level 5b	total		0.4	0.5	0.5	0.5	0.5	0.5	0.5	100	106	109	111	113	106	109
vocational	females	15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	108	104	112	104	98	102
		20-24	0.4	0.5	0.5	0.5	0.5	0.5	0.5	100	106	110	111	112	104	105
	total		0.6	0.6	0.7	0.7	0.7	0.6	0.6	100	106	109	111	110	102	105
	total	15-19	0.2	0.2	0.2	0.3	0.2	0.2	0.2	100	108	104	112	105	99	103
		20-24	0.8	0.9	0.9	0.9	0.9	0.9	0.9	100	105	110	111	113	105	107
	total		1.0	1.1	1.1	1.2	1.2	1.1	1.1	100	106	109	111	111	104	106

Poland

Figure 21.1. Projected number of students in (pre) vocational education by ISCED level in Poland, 2005-2050, baseline population variant / constant educational participation

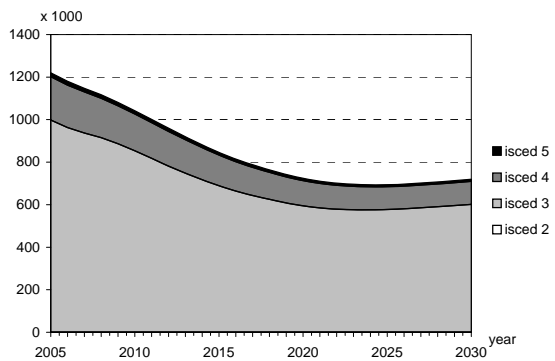


Figure 21.2. Index of the projected number of students in (pre) vocational education by ISCED level in Poland, 2005-2050, baseline population variant / constant educational participation

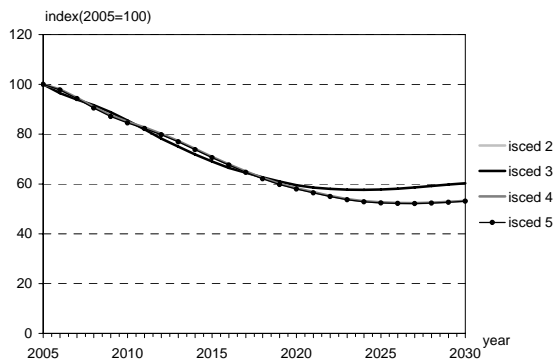


Figure 21.2. Projected number of graduates in (pre) vocational education by ISCED level in Poland, 2005-2050, baseline population variant / constant educational participation

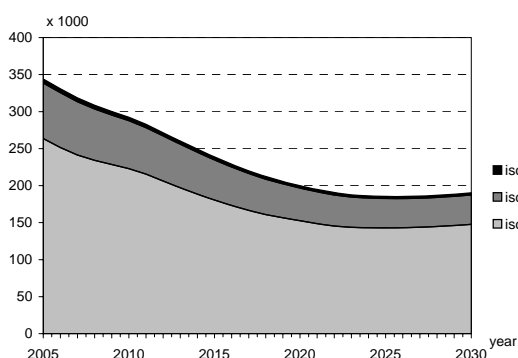


Figure 21.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Poland, 2005-2050, baseline population variant / constant educational participation

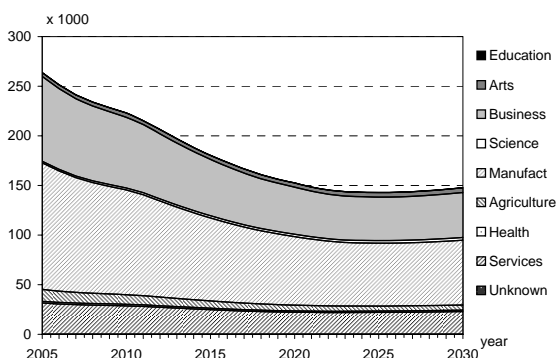


Table 21.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Poland, 2005-2050, baseline population variant / constant graduation rates

			x 1000							index (2005=100)						
Age group			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	108.8	92.2	73.4	63.0	59.6	62.0	53.2	100	85	67	58	55	57	49
ISCED		20-24	53.7	45.1	37.7	30.9	28.2	28.5	25.8	100	84	70	58	52	53	48
level 3	total		162.5	137.3	111.1	93.9	87.7	90.5	79.0	100	84	68	58	54	56	49
vocational	females	15-19	79.4	67.7	54.1	46.3	44.0	45.9	38.8	100	85	68	58	55	58	49
		20-24	21.7	18.0	15.2	12.4	11.2	11.4	10.3	100	83	70	57	52	52	47
	total		101.2	85.7	69.3	58.7	55.2	57.2	49.1	100	85	68	58	55	57	48
	total	15-19	188.3	159.8	127.5	109.3	103.5	107.8	92.0	100	85	68	58	55	57	49
		20-24	75.4	63.2	52.8	43.2	39.4	39.9	36.1	100	84	70	57	52	53	48
	total		263.7	223.0	180.3	152.6	142.9	147.7	128.1	100	85	68	58	54	56	49
students	males	15-19	1.7	1.5	1.2	1.0	0.9	1.0	0.8	100	84	66	57	53	55	48
ISCED		20-24	28.2	24.4	20.6	16.7	15.0	15.0	13.9	100	87	73	59	53	53	49
level 4	total		29.9	25.9	21.7	17.7	15.9	15.9	14.7	100	86	73	59	53	53	49
vocational	females	15-19	3.1	2.6	2.1	1.8	1.7	1.7	1.5	100	83	67	57	53	55	47
		20-24	42.0	36.2	30.6	24.8	22.2	22.1	20.3	100	86	73	59	53	53	48
	total		45.1	38.8	32.6	26.5	23.8	23.9	21.8	100	86	72	59	53	53	48
	total	15-19	4.9	4.1	3.2	2.8	2.6	2.7	2.3	100	83	67	57	53	55	47
		20-24	70.2	60.6	51.1	41.5	37.2	37.1	34.2	100	86	73	59	53	53	49
	total		75.0	64.7	54.4	44.3	39.7	39.8	36.5	100	86	72	59	53	53	49
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	66	57	53	55	48
ISCED		20-24	1.0	0.9	0.8	0.6	0.6	0.6	0.5	100	89	76	61	54	53	50
level 5b	total		1.1	0.9	0.8	0.6	0.6	0.6	0.5	100	89	76	61	54	53	50
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	4.2	3.6	3.1	2.5	2.2	2.2	2.0	100	87	74	59	53	52	49
	total		4.2	3.6	3.1	2.5	2.2	2.2	2.0	100	87	74	59	53	52	49
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	66	57	53	55	48
		20-24	5.2	4.6	3.9	3.1	2.8	2.8	2.6	100	87	74	60	53	53	49
	total		5.2	4.6	3.9	3.1	2.8	2.8	2.6	100	87	74	60	53	53	49

Table 21.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Poland, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050		
Field			index (2005=100)															
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	105	101	100	106	109	95		
		Humanities	1.9	2.2	2.2	2.2	2.4	2.5	2.2	100	113	114	115	126	130	113		
		Business	26.0	21.5	17.0	14.0	12.8	13.2	11.5	100	83	65	54	49	51	44		
		Science	0.8	1.0	1.0	1.1	1.2	1.2	1.1	100	120	125	130	144	148	130		
		Engineering	111.0	91.8	72.6	60.0	54.7	56.4	49.3	100	83	65	54	49	51	44		
		Agriculture	7.5	5.8	4.2	3.2	2.6	2.7	2.4	100	77	57	43	35	37	32		
		Health	0.5	0.5	0.5	0.5	0.6	0.6	0.5	100	113	114	116	126	130	114		
	females	Services	14.8	14.6	13.5	12.8	13.3	13.8	12.0	100	99	91	87	90	93	81		
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	507	752	925	1134	1169	1021		
		total	162.5	137.3	111.1	93.9	87.7	90.5	79.0	100	84	68	58	54	56	49		
		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	71	47	31	20	21	18		
		Humanities	1.9	2.0	2.0	2.0	2.2	2.3	2.0	100	109	108	108	118	122	105		
		Business	59.4	49.8	39.8	33.3	31.0	32.1	27.6	100	84	67	56	52	54	46		
		Science	0.8	1.0	1.1	1.2	1.4	1.5	1.3	100	136	152	164	187	194	167		
total	Engineering	16.4	13.7	11.0	9.2	8.6	8.9	7.6	100	84	67	56	52	54	46			
	Agriculture	4.7	3.9	3.1	2.6	2.4	2.5	2.2	100	84	67	56	52	54	46			
	Health	1.2	1.1	0.9	0.8	0.8	0.9	0.7	100	90	78	70	69	72	62			
	Services	16.8	14.1	11.3	9.4	8.8	9.1	7.8	100	84	67	56	52	54	46			
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-			
	total	101.2	85.7	69.3	58.7	55.2	57.2	49.1	100	85	68	58	55	57	48			
	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	81	63	51	45	47	41			
students ISCED level 4 vocational	males	Humanities	3.8	4.2	4.2	4.3	4.6	4.8	4.1	100	111	111	112	122	126	109		
		Business	85.4	71.3	56.8	47.4	43.8	45.4	39.1	100	83	66	55	51	53	46		
		Science	1.6	2.0	2.2	2.3	2.6	2.7	2.3	100	128	138	146	165	170	147		
		Engineering	127.4	105.5	83.6	69.2	63.3	65.3	56.9	100	83	66	54	50	51	45		
		Agriculture	12.1	9.7	7.3	5.8	5.1	5.2	4.5	100	80	61	48	42	43	38		
		Health	1.7	1.6	1.5	1.4	1.4	1.5	1.3	100	97	88	83	85	88	76		
		Services	31.6	28.7	24.8	22.3	22.1	22.8	19.8	100	91	78	70	70	72	63		
	females	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	507	752	925	1134	1169	1021		
		total	263.7	223.0	180.3	152.6	142.9	147.7	128.1	100	85	68	58	54	56	49		
		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	86	72	59	53	53	48		
		students ISCED level 5b vocational	males	Humanities	1.2	1.0	0.9	0.7	0.6	0.6	0.6	100	86	72	59	53	53	48
				Business	19.9	17.1	14.4	11.7	10.5	10.5	9.6	100	86	72	59	53	53	48
				Science	3.9	3.4	2.8	2.3	2.1	2.1	1.9	100	86	72	59	53	53	48
				Engineering	1.1	1.0	0.8	0.7	0.6	0.6	0.5	100	86	72	59	53	53	48
Agriculture	0.1			0.1	0.1	0.0	0.0	0.0	0.0	100	86	72	59	53	53	48		
Health	9.2			7.9	6.7	5.4	4.9	4.9	4.4	100	86	72	59	53	53	48		
Services	9.5			8.2	6.9	5.6	5.0	5.1	4.6	100	86	72	59	53	53	48		
females	Unknown		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	86	72	59	53	53	48		
	total		45.1	38.8	32.6	26.5	23.8	23.9	21.8	100	86	72	59	53	53	48		
	Education		0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	84	69	55	48	49	45		
	students ISCED level 5b vocational		males	Humanities	2.0	1.7	1.4	1.1	1.0	1.0	0.9	100	84	69	55	48	48	44
				Business	25.1	21.4	17.8	14.3	12.7	12.7	11.6	100	85	71	57	50	50	46
				Science	14.2	11.7	9.4	7.3	6.3	6.3	5.8	100	83	66	52	44	44	41
				Engineering	2.8	2.3	1.9	1.5	1.3	1.3	1.2	100	83	68	53	46	46	42
Agriculture		0.3		0.2	0.2	0.1	0.1	0.1	0.1	100	83	66	52	44	44	41		
Health		12.4		11.1	9.6	8.0	7.4	7.4	6.8	100	89	77	64	59	60	55		
Services		17.9		16.1	14.0	11.8	11.0	11.0	10.1	100	90	78	66	61	61	56		
females		Unknown	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	80	61	45	37	37	33		
		total	75.0	64.7	54.4	44.3	39.7	39.8	36.5	100	86	72	59	53	53	49		
		Education	1.1	0.9	0.8	0.6	0.6	0.6	0.5	100	89	76	61	54	53	50		
		students ISCED level 5b vocational	males	Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Agriculture	0.0			0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Health	0.0			0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Services	0.0			0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
females	Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	total		1.1	0.9	0.8	0.6	0.6	0.6	0.5	100	89	76	61	54	53	50		
	Education		4.2	3.6	3.1	2.5	2.2	2.2	2.0	100	87	74	59	53	52	49		
	students ISCED level 5b vocational		males	Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Agriculture		0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Health		0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Services		0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
females		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
		total	4.2	3.6	3.1	2.5	2.2	2.2	2.0	100	87	74	59	53	52	49		
		Education	5.2	4.6	3.9	3.1	2.8	2.8	2.6	100	87	74	60	53	53	49		
		students ISCED level 5b vocational	males	Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
				Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
Agriculture	0.0			0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Health	0.0			0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
Services	0.0			0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
females	Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-		
	total		5.2	4.6	3.9	3.1	2.8	2.8	2.6	100	87	74	60	53	53	49		

Portugal

Table 22.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Portugal, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	305.6	287.2	280.4	293.9	298.3	285.5	238.6	100	94	92	96	98	93	78
		20-24	369.8	309.3	289.4	282.3	295.7	300.1	240.9	100	84	78	76	80	81	65
		total	675.4	596.5	569.7	576.2	594.0	585.6	479.5	100	88	84	85	88	87	71
	females	15-19	292.9	276.3	269.6	277.4	282.8	270.6	226.3	100	94	92	95	97	92	77
		20-24	358.7	298.5	280.0	272.9	280.6	285.9	229.6	100	83	78	76	78	80	64
		total	651.7	574.8	549.5	550.4	563.4	556.5	455.9	100	88	84	84	86	85	70
	total	15-19	598.6	563.5	549.9	571.3	581.1	556.0	464.9	100	94	92	95	97	93	78
		20-24	728.5	607.8	569.3	555.3	576.3	586.0	470.4	100	83	78	76	79	80	65
		total	1327.1	1171.3	1119.3	1126.6	1157.4	1142.0	935.4	100	88	84	85	87	86	70
students	males	15-19	52.3	49.0	49.9	51.8	52.1	49.1	41.8	100	94	95	99	100	94	80
		20-24	2.7	2.3	2.1	2.1	2.2	2.2	1.8	100	84	79	78	81	82	66
		total	55.0	51.3	52.0	53.9	54.3	51.3	43.6	100	93	95	98	99	93	79
	females	15-19	39.0	36.5	37.4	38.0	38.4	36.1	30.8	100	94	96	98	99	93	79
		20-24	2.1	1.7	1.6	1.6	1.6	1.7	1.3	100	84	78	77	79	81	65
		total	41.0	38.2	39.1	39.6	40.0	37.8	32.2	100	93	95	97	98	92	78
	total	15-19	91.2	85.5	87.3	89.8	90.5	85.2	72.7	100	94	96	98	100	93	80
		20-24	4.7	4.0	3.7	3.7	3.8	3.9	3.1	100	84	78	77	80	81	65
		total	96.0	89.5	91.1	93.5	94.3	89.1	75.8	100	93	95	97	100	94	79
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	95	99	100	94	80
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	79	78	81	82	66
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	93	95	98	99	93	79
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	96	98	99	93	79
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	77	79	81	65
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	93	95	97	98	92	78
	total	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	94	96	98	99	93	80
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	77	80	81	65
		total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	93	95	97	98	93	79
students	males	15-19	1.6	1.5	1.5	1.6	1.6	1.5	1.3	100	94	95	99	100	94	80
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	84	79	78	81	82	66
		total	1.6	1.5	1.6	1.6	1.6	1.5	1.3	100	93	95	98	99	93	79
	females	15-19	0.5	0.5	0.5	0.5	0.5	0.5	0.4	100	94	96	98	99	93	79
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	77	79	81	65
		total	0.5	0.5	0.5	0.5	0.5	0.5	0.4	100	93	95	97	98	92	78
	total	15-19	2.1	1.9	2.0	2.1	2.1	1.9	1.7	100	94	96	99	99	94	80
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	84	79	78	81	82	66
		total	2.2	2.0	2.1	2.1	2.2	2.0	1.7	100	93	95	98	99	93	79
students	males	15-19	128.9	121.4	118.6	125.0	126.6	120.8	101.2	100	94	92	97	98	94	78
		20-24	27.9	23.5	22.0	21.9	22.8	23.1	18.5	100	84	79	79	82	83	66
		total	156.8	144.9	140.6	146.9	149.4	143.9	119.7	100	92	90	94	95	92	76
	females	15-19	151.7	143.5	140.6	145.1	147.7	140.7	118.2	100	95	93	96	97	93	78
		20-24	24.9	21.0	19.6	19.6	20.0	20.3	16.3	100	84	79	79	80	82	66
		total	176.6	164.5	160.2	164.7	167.7	161.0	134.5	100	93	91	93	95	91	76
	total	15-19	280.6	265.0	259.2	270.1	274.2	261.5	219.4	100	94	92	96	98	93	78
		20-24	52.8	44.5	41.6	41.5	42.9	43.4	34.8	100	84	79	79	81	82	66
		total	333.4	309.4	300.8	311.7	317.1	304.9	254.2	100	93	90	93	95	91	76
students	males	15-19	29.5	27.8	27.1	28.6	29.0	27.6	23.2	100	94	92	97	98	94	78
		20-24	6.4	5.4	5.0	5.0	5.2	5.3	4.2	100	84	79	79	82	83	66
		total	35.9	33.2	32.2	33.6	34.2	32.9	27.4	100	92	90	94	95	92	76
	females	15-19	24.6	23.2	22.8	23.5	23.9	22.8	19.1	100	95	93	96	97	93	78
		20-24	4.0	3.4	3.2	3.2	3.2	3.3	2.6	100	84	79	79	80	82	66
		total	28.6	26.6	26.0	26.7	27.2	26.1	21.8	100	93	91	93	95	91	76
	total	15-19	54.1	51.0	49.9	52.1	52.9	50.4	42.3	100	94	92	96	98	93	78
		20-24	10.4	8.8	8.2	8.2	8.5	8.6	6.9	100	84	79	79	81	82	66
		total	64.5	59.8	58.1	60.3	61.4	59.0	49.2	100	93	90	94	95	91	76
students	males	15-19	13.4	12.6	12.3	13.0	13.2	12.6	10.5	100	94	92	97	98	94	78
		20-24	2.9	2.4	2.3	2.3	2.4	2.4	1.9	100	84	79	79	82	83	66
		total	16.3	15.1	14.6	15.3	15.5	15.0	12.4	100	92	90	94	95	92	76
	females	15-19	12.1	11.4	11.2	11.5	11.7	11.2	9.4	100	95	93	96	97	93	78
		20-24	2.0	1.7	1.6	1.6	1.6	1.6	1.3	100	84	79	79	80	82	66
		total	14.0	13.1	12.7	13.1	13.3	12.8	10.7	100	93	91	93	95	91	76
	total	15-19	25.5	24.0	23.5	24.5	24.9	23.7	19.9	100	94	92	96	98	93	78
		20-24	4.9	4.1	3.8	3.8	4.0	4.0	3.2	100	84	79	79	81	82	66
		total	30.3	28.1	27.4	28.4	28.9	27.8	23.1	100	93	90	93	95	91	76
students	males	15-19	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	93	88	91	94	92	75
		20-24	0.6	0.5	0.4	0.4	0.5	0.5	0.4	100	84	78	77	81	82	66
		total	0.7	0.6	0.6	0.6	0.6	0.6	0.5	100	86	81	80	84	84	68
	females	15-19	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	94	88	90	93	91	74
		20-24	0.3	0.2	0.2	0.2	0.2	0.2	0.2	100	84	79	78	80	81	65
		total	0.4	0.4	0.4	0.4	0.4	0.4	0.3	100	87	82	82	84	84	68
	total	15-19	0.3	0.3	0.3	0.3	0.3	0.3	0.2	100	94	88	91	93	92	75
		20-24	0.9	0.7	0.7	0.7	0.7	0.7	0.6	100	84	78	77	80	81	65
		total	1.2	1.0	0.9	0.9	1.0	1.0	0.8	100	86	81	81	84	84	68
students	males	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.0	100	93	88	91	94	92	75
		20-24	0.2	0.2	0.2	0.2	0.2	0.2	0.1	100	84	78	77	81	82	66
		total	0.3	0.2	0.2	0.2	0.2	0.2	0.2	100	86	81	80	84	84	68
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	88	91	93	91	74
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	83	78	77	79	81	65
		total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	87	82	82	84	84	68
	total	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	94	88	91	94	92	75
		20-24	0.3	0.3	0.2	0.2	0.2	0.2	0.2	100	84	78	77	80	81	65
		total	0.4	0.4	0.3	0.3	0.3	0.3	0.3	100	86	81	81	84	84	68
students	males	15-19	21.5	20.1	19.0	19.6	20.3	19.8	16.2	100	93	88	91	94	92	75
		20-24	79.9	66.9	62.6	61.3	64.3									

Figure 22.1. Projected number of students in (pre) vocational education by ISCED level in Portugal, 2005-2050, baseline population variant / constant educational participation

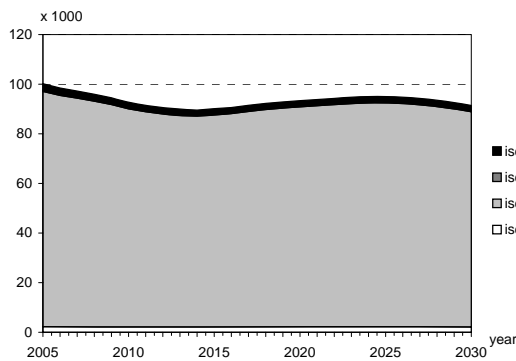


Figure 22.2. Index of the projected number of students in (pre) vocational education by ISCED level in Portugal, 2005-2050, baseline population variant / constant educational participation

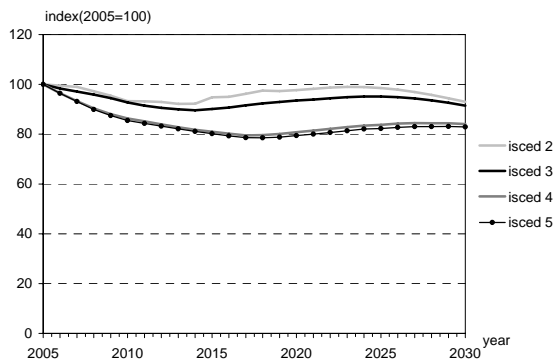


Figure 22.2. Projected number of graduates in (pre) vocational education by ISCED level in Portugal, 2005-2050, baseline population variant / constant educational participation

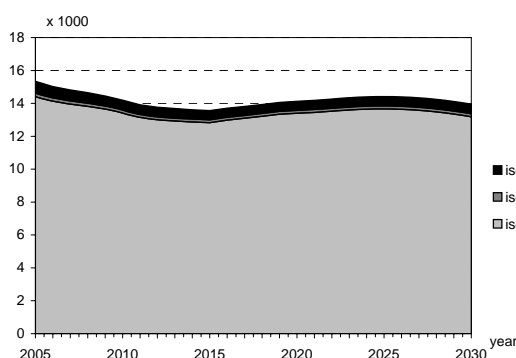


Figure 22.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Portugal, 2005-2050, baseline population variant / constant educational participation

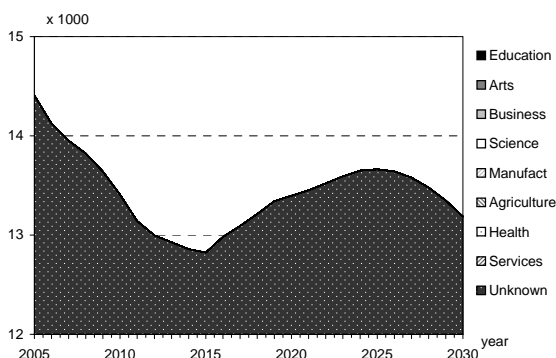


Table 22.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Portugal, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)							
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	3.4	3.2	3.1	3.3	3.3	2.6	100	94	91	97	98	78	
		20-24	0.6	0.5	0.5	0.5	0.5	0.4	100	84	79	78	81	66	
		total	4.0	3.7	3.5	3.7	3.8	3.0	100	93	89	94	95	76	
vocational	females	15-19	3.3	3.1	3.0	3.1	3.2	2.5	100	95	91	95	97	78	
		20-24	0.7	0.6	0.5	0.5	0.5	0.4	100	83	78	77	79	64	
		total	3.9	3.7	3.5	3.6	3.7	3.0	100	93	89	92	94	75	
	total	15-19	6.6	6.3	6.0	6.4	6.5	5.2	100	95	91	96	98	78	
		20-24	1.3	1.1	1.0	1.0	1.0	0.8	100	84	78	77	80	65	
		total	7.9	7.4	7.0	7.4	7.5	6.0	100	93	89	93	95	76	
students	males	15-19	3.0	2.8	2.7	2.9	2.9	2.3	100	94	91	96	98	78	
		20-24	0.6	0.5	0.4	0.4	0.5	0.4	100	85	79	80	83	67	
		total	3.6	3.3	3.2	3.3	3.4	2.7	100	93	89	94	95	76	
vocational	females	15-19	2.5	2.4	2.3	2.4	2.4	1.9	100	95	91	95	97	77	
		20-24	0.4	0.4	0.3	0.3	0.3	0.3	100	85	79	80	82	66	
		total	2.9	2.7	2.6	2.7	2.8	2.2	100	94	89	92	94	76	
	total	15-19	5.5	5.2	5.0	5.3	5.4	4.3	100	95	91	95	97	78	
		20-24	1.0	0.8	0.8	0.8	0.8	0.7	100	85	79	80	82	67	
		total	6.5	6.0	5.8	6.0	6.2	4.9	100	93	89	93	95	76	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	93	88	90	94	75	
		20-24	0.1	0.1	0.1	0.1	0.1	0.1	100	84	78	77	81	66	
		total	0.1	0.1	0.1	0.1	0.1	0.1	100	86	81	81	84	68	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	94	88	90	93	74	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	84	79	78	80	65	
		total	0.1	0.1	0.1	0.1	0.1	0.0	100	87	82	82	84	68	
	total	15-19	0.1	0.1	0.1	0.1	0.1	0.0	100	93	88	90	93	75	
		20-24	0.2	0.1	0.1	0.1	0.1	0.1	100	84	79	77	81	66	
		total	0.2	0.2	0.2	0.2	0.2	0.1	100	87	81	81	84	68	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	93	87	89	93	74	
		20-24	0.2	0.2	0.2	0.2	0.2	0.2	100	84	78	76	80	65	
		total	0.2	0.2	0.2	0.2	0.2	0.2	100	84	78	76	80	65	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	93	87	89	92	74	
		20-24	0.5	0.4	0.4	0.4	0.4	0.3	100	83	78	77	79	65	
		total	0.5	0.4	0.4	0.4	0.4	0.3	100	83	78	77	79	65	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	93	87	89	92	74	
		20-24	0.7	0.6	0.6	0.6	0.6	0.5	100	83	78	77	79	65	
		total	0.7	0.6	0.6	0.6	0.6	0.5	100	84	78	77	80	65	

Table 22.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Portugal, 2005-2050, baseline population variant / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050			
			index (2005=100)																
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Unknown	3.6	3.3	3.2	3.3	3.4	3.3	2.7	100	93	89	94	95	92	92	76	76	
		total	3.6	3.3	3.2	3.3	3.4	3.3	2.7	100	93	89	94	95	92	92	76	76	
		females	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
Science	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Engineering	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Agriculture	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Health	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Services	0.0		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Unknown	2.9		2.7	2.6	2.7	2.8	2.7	2.2	100	94	89	92	94	91	91	76	76		
total	2.9		2.7	2.6	2.7	2.8	2.7	2.2	100	94	89	92	94	91	91	76	76		
total	Education		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
	Humanities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
	Business		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Unknown	6.5	6.0	5.8	6.0	6.2	6.0	4.9	100	93	89	93	95	92	92	76	76		
	total	6.5	6.0	5.8	6.0	6.2	6.0	4.9	100	93	89	93	95	92	92	76	76		
	students ISCED level 4 vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
Science			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
Engineering			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
Agriculture			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
Health			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
Services			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
Unknown			0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	86	81	81	84	85	85	68	68	
total			0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	86	81	81	84	85	85	68	68	
females			Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	Unknown	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	87	82	82	84	84	84	68	68		
	total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	87	82	82	84	84	84	68	68		
	total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
		Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
Science		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Engineering		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Agriculture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Health		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Services		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
Unknown		0.2	0.2	0.2	0.2	0.2	0.2	0.1	100	87	81	81	84	85	85	68	68		
total		0.2	0.2	0.2	0.2	0.2	0.2	0.1	100	87	81	81	84	85	85	68	68		
students ISCED level 5b vocational		males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65
	Science		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65	
	Engineering		0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65	
	Agriculture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65	
	Health		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65	
	Services		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	76	80	81	81	65	65	
	Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-	
	total		0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	84	78	76	80	81	81	65	65	
	females		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	78	77	79	81	81	65	65
			Humanities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	83	78	77	79	81	81	65	65
			Business	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	83	78	77	79	81	81	65	65
Science		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	78	77	79	81	81	65	65		
Engineering		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	78	77	79	81	81	65	65		
Agriculture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	78	77	79	81	81	65	65		
Health		0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	83	78	77	79	81	81	65	65		
Services		0.1	0.0	0.0	0.0	0.0	0.0	0.0	100	83	78	77	79	81	81	65	65		
Unknown		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
total		0.5	0.4	0.4	0.4	0.4	0.4	0.3	100	83	78	77	79	81	81	65	65		
total		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	83	78	77	79	81	81	65	65	
		Humanities	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	84	78	77	80	81	81	65	65	
		Business	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	84	78	77	80	81	81	65	65	
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	77	80	81	81	65	65		
	Engineering	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	84	78	77	80	81	81	65	65		
	Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	84	78	77	80	81	81	65	65		
	Health	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	84	78	77	79	81	81	65	65		
	Services	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	84	78	77	80	81	81	65	65		
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	-		
	total	0.7	0.6	0.6	0.6	0.6	0.6	0.5	100	84	78	77	80	81	81	65	65		

Romania

Table 23.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, Romania, 2005-2050, baseline population variant / constant educational participation

		Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
		x 1000	index (2005=100)													
population	males	15-19	883.9	646.4	564.1	539.6	541.3	519.8	387.8	100	73	64	61	61	59	44
		20-24	832.7	876.2	636.5	552.3	530.7	539.2	394.7	100	105	76	66	64	65	47
		total	1716.6	1522.6	1200.6	1091.9	1072.0	1059.0	782.5	100	89	70	64	62	62	46
	females	15-19	847.7	616.9	537.0	509.9	511.8	493.0	366.4	100	73	63	60	60	58	43
		20-24	796.0	841.4	607.5	524.4	500.5	510.3	374.5	100	106	76	66	63	64	47
		total	1643.7	1458.3	1144.4	1034.3	1012.4	1003.3	740.9	100	89	70	63	62	61	45
	total	15-19	1731.6	1263.3	1101.1	1049.5	1053.1	1012.8	754.2	100	73	64	61	61	58	44
		20-24	1628.7	1717.6	1244.0	1076.7	1031.3	1049.5	769.2	100	105	76	66	63	64	47
		total	3360.3	2980.9	2345.1	2126.2	2084.4	2062.3	1523.4	100	89	70	63	62	61	45
students	males	15-19	38.0	25.9	24.8	23.4	23.5	22.2	16.9	100	68	65	62	62	59	45
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	38.0	25.9	24.8	23.4	23.5	22.2	16.9	100	68	65	62	62	59	45
	females	15-19	23.7	16.0	15.3	14.4	14.4	13.7	10.4	100	67	65	61	61	58	44
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	23.7	16.0	15.3	14.4	14.4	13.7	10.4	100	67	65	61	61	58	44
	total	15-19	61.7	41.9	40.1	37.8	37.9	35.9	27.3	100	68	65	61	61	58	44
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	61.7	41.9	40.1	37.8	37.9	35.9	27.3	100	68	65	61	61	58	44
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	461.6	324.1	294.2	278.4	281.8	269.1	202.0	100	70	64	60	61	58	44
		20-24	30.0	33.3	22.5	21.5	20.2	20.5	14.9	100	111	75	72	67	69	50
		total	491.6	357.4	316.7	299.9	302.0	289.6	216.9	100	73	64	61	61	59	44
	females	15-19	473.5	328.9	298.5	280.5	284.4	272.1	203.4	100	69	63	59	60	57	43
		20-24	17.6	19.8	13.2	12.6	11.7	12.0	8.7	100	113	75	72	67	68	50
		total	491.1	348.7	311.8	293.1	296.1	284.1	212.1	100	71	63	60	60	58	43
	total	15-19	935.1	653.0	592.8	558.9	566.2	541.2	405.4	100	70	63	60	61	58	43
		20-24	47.5	53.1	35.7	34.1	31.9	32.6	23.6	100	112	75	72	67	68	50
		total	982.7	706.1	628.5	593.0	598.1	573.7	429.0	100	72	64	60	61	58	44
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	334.5	234.8	213.2	201.8	204.2	195.0	146.4	100	70	64	60	61	58	44
		20-24	21.7	24.1	16.3	15.5	14.6	14.9	10.8	100	111	75	72	67	69	50
		total	356.2	259.0	229.5	217.3	218.9	209.9	157.2	100	73	64	61	61	59	44
	females	15-19	270.6	188.0	170.6	160.3	162.5	155.5	116.3	100	69	63	59	60	57	43
		20-24	10.0	11.3	7.6	7.2	6.7	6.9	5.0	100	113	75	72	67	68	50
		total	280.6	199.3	178.2	167.5	169.2	162.4	121.2	100	71	63	60	60	58	43
	total	15-19	605.1	422.8	383.8	362.1	366.8	350.5	262.6	100	70	63	60	61	58	43
		20-24	31.8	35.4	23.9	22.8	21.3	21.8	15.8	100	112	75	72	67	68	50
		total	636.9	458.3	407.7	384.8	388.1	372.2	278.4	100	72	64	60	61	58	44
students	males	15-19	4.2	3.6	2.8	2.7	2.6	2.6	1.9	100	84	65	64	62	61	45
		20-24	16.3	18.3	12.4	11.8	11.1	11.3	8.2	100	112	76	72	68	69	50
		total	20.6	21.9	15.1	14.5	13.7	13.9	10.1	100	106	74	71	67	68	49
	females	15-19	6.6	5.5	4.2	4.1	4.0	4.0	2.9	100	83	65	63	62	60	44
		20-24	26.9	30.7	20.5	19.5	18.1	18.6	13.5	100	114	76	73	67	69	50
		total	33.4	36.2	24.7	23.7	22.1	22.5	16.3	100	108	74	71	66	67	49
	total	15-19	10.8	9.0	7.0	6.9	6.7	6.5	4.8	100	83	65	64	62	61	44
		20-24	43.2	49.0	32.9	31.3	29.2	29.9	21.6	100	114	76	72	68	69	50
		total	54.0	58.0	39.8	38.2	35.8	36.4	26.4	100	108	74	71	66	67	49
students	males	15-19	4.2	3.6	2.8	2.7	2.6	2.6	1.9	100	84	65	64	62	61	45
		20-24	16.3	18.3	12.4	11.8	11.1	11.3	8.2	100	112	76	72	68	69	50
		total	20.6	21.9	15.1	14.5	13.7	13.9	10.1	100	106	74	71	67	68	49
	females	15-19	6.6	5.5	4.2	4.1	4.0	4.0	2.9	100	83	65	63	62	60	44
		20-24	26.9	30.7	20.5	19.5	18.1	18.6	13.5	100	114	76	73	67	69	50
		total	33.4	36.2	24.7	23.7	22.1	22.5	16.3	100	108	74	71	66	67	49
	total	15-19	10.8	9.0	7.0	6.9	6.7	6.5	4.8	100	83	65	64	62	61	44
		20-24	43.2	49.0	32.9	31.3	29.2	29.9	21.6	100	114	76	72	68	69	50
		total	54.0	58.0	39.8	38.2	35.8	36.4	26.4	100	108	74	71	66	67	49
students	males	15-19	60.4	49.6	38.8	38.4	37.4	36.5	26.8	100	82	64	64	62	61	44
		20-24	162.8	173.3	123.5	109.6	104.7	106.6	77.8	100	106	76	67	64	65	48
		total	223.2	222.9	162.3	147.9	142.1	143.1	104.6	100	100	73	66	64	64	47
	females	15-19	83.0	68.5	53.4	52.3	50.9</									

Figure 23.1. Projected number of students in (pre) vocational education by ISCED level in Romania, 2005-2050, baseline population variant / constant educational participation

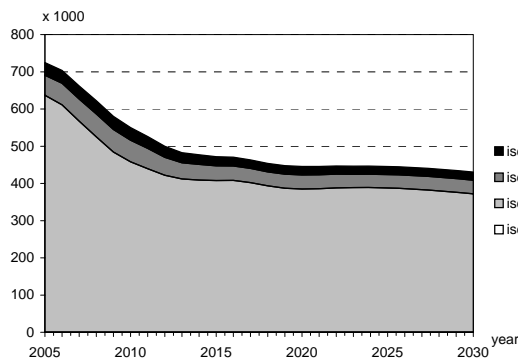


Figure 23.2. Index of the projected number of students in (pre) vocational education by ISCED level in Romania, 2005-2050, baseline population variant / constant educational participation

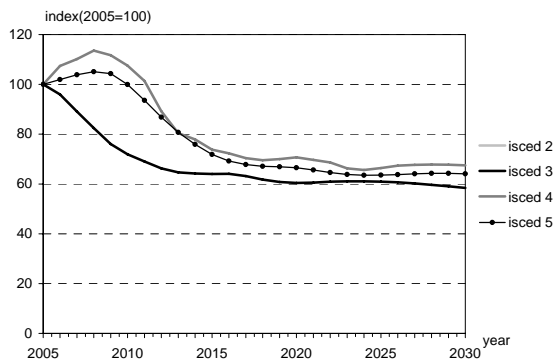


Figure 23.2. Projected number of graduates in (pre) vocational education by ISCED level in Romania, 2005-2050, baseline population variant / constant educational participation

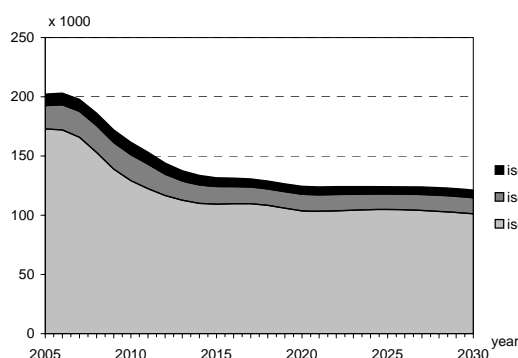


Figure 23.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Romania, 2005-2050, baseline population variant / constant educational participation

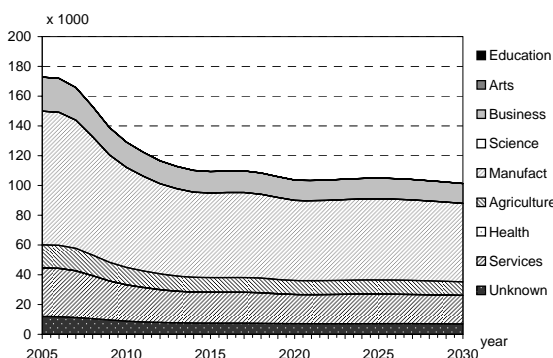


Table 23.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Romania, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	90.2	64.7	56.5	53.6	54.6	52.5	39.0	100	72	63	59	61	58	43
ISCED		20-24	10.6	11.3	7.7	7.3	6.9	7.0	5.1	100	107	73	69	66	66	48
level 3	total		100.8	76.0	64.2	61.0	61.6	59.5	44.1	100	75	64	61	61	59	44
vocational	females	15-19	67.3	48.0	41.8	39.4	40.1	38.7	28.6	100	71	62	58	60	57	43
		20-24	4.8	5.2	3.5	3.3	3.1	3.1	2.3	100	109	73	69	65	66	48
	total		72.1	53.1	45.2	42.7	43.2	41.8	30.9	100	74	63	59	60	58	43
	total	15-19	157.5	112.7	98.3	93.0	94.8	91.1	67.7	100	72	62	59	60	58	43
		20-24	15.3	16.5	11.1	10.6	10.0	10.2	7.4	100	108	73	69	66	66	48
	total		172.8	129.2	109.4	103.6	104.8	101.3	75.0	100	75	63	60	61	59	43
students	males	15-19	0.8	0.7	0.5	0.5	0.5	0.5	0.3	100	87	66	66	63	62	45
ISCED		20-24	6.3	7.1	4.8	4.6	4.3	4.4	3.2	100	112	76	72	68	69	50
level 4	total		7.1	7.8	5.3	5.1	4.8	4.9	3.5	100	110	75	72	67	68	50
vocational	females	15-19	1.1	0.9	0.7	0.7	0.7	0.7	0.5	100	87	66	65	62	61	45
		20-24	11.5	13.2	8.8	8.4	7.8	8.0	5.8	100	114	76	73	67	69	50
	total		12.6	14.1	9.5	9.1	8.4	8.6	6.2	100	112	75	72	67	68	50
	total	15-19	1.8	1.6	1.2	1.2	1.1	1.1	0.8	100	87	66	65	63	62	45
		20-24	17.9	20.3	13.6	12.9	12.1	12.4	9.0	100	114	76	72	68	69	50
	total		19.7	21.9	14.8	14.1	13.2	13.5	9.8	100	111	75	72	67	68	50
students	males	15-19	0.8	0.7	0.5	0.5	0.5	0.5	0.4	100	87	66	66	63	62	45
ISCED		20-24	3.3	3.6	2.5	2.3	2.2	2.2	1.6	100	108	77	68	65	66	48
level 5b	total		4.1	4.3	3.1	2.8	2.7	2.7	2.0	100	104	74	68	65	66	48
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	5.7	6.2	4.4	3.9	3.7	3.8	2.7	100	109	76	68	64	66	48
	total		5.7	6.2	4.4	3.9	3.7	3.8	2.7	100	109	76	68	64	66	48
	total	15-19	0.8	0.7	0.5	0.5	0.5	0.5	0.4	100	87	66	66	63	62	45
		20-24	9.0	9.8	6.9	6.2	5.8	6.0	4.4	100	109	76	68	65	66	48
	total		9.8	10.5	7.4	6.7	6.3	6.5	4.7	100	107	76	68	64	66	48

Slovakia

Figure 24.1. Projected number of students in (pre) vocational education by ISCED level in Slovakia, 2005-2050, baseline population variant / constant educational participation

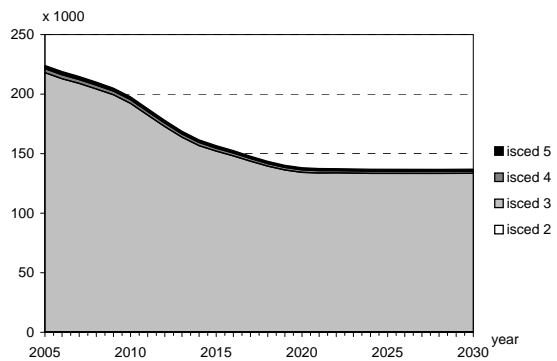


Figure 24.2. Index of the projected number of students in (pre) vocational education by ISCED level in Slovakia, 2005-2050, baseline population variant / constant educational participation

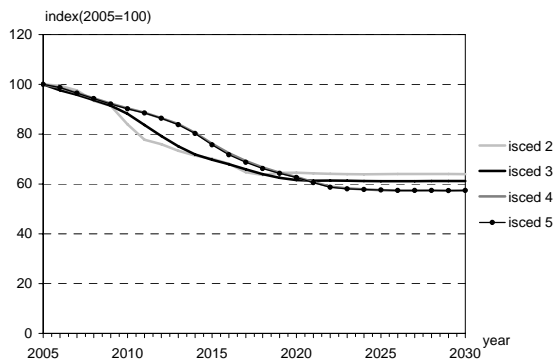


Figure 24.2. Projected number of graduates in (pre) vocational education by ISCED level in Slovakia, 2005-2050, baseline population variant / constant educational participation

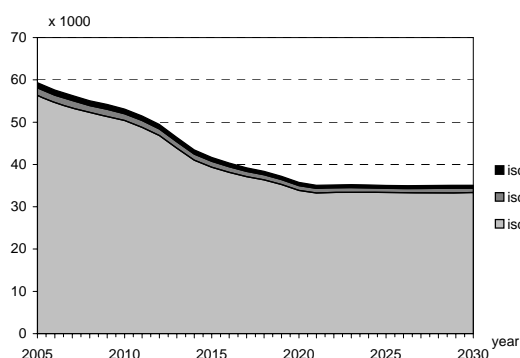


Figure 24.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Slovakia, 2005-2050, baseline population variant / constant educational participation

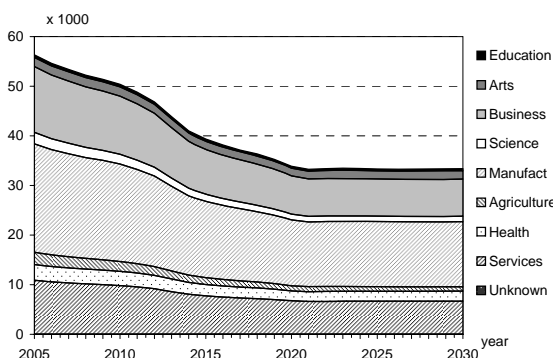


Table 24.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Slovakia, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)								
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050		
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	level 3 pre	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-		
students	males	15-19	28.2	25.3	19.7	17.0	16.9	16.9	14.2	100	90	70	60	60	50	
		20-24	1.8	1.6	1.4	1.1	1.1	1.0	0.9	100	90	76	63	58	50	
	level 3	total	30.0	26.9	21.1	18.2	17.9	17.9	15.1	100	90	70	60	60	50	
		total	24.8	22.2	17.1	14.8	14.6	14.6	12.2	100	89	69	59	59	49	
	vocational	females	15-19	1.5	1.3	1.1	0.9	0.9	0.8	0.7	100	90	76	63	57	49
			20-24	26.3	23.5	18.3	15.7	15.4	15.4	12.9	100	89	69	60	59	49
		total	15-19	53.0	47.4	36.8	31.8	31.4	31.5	26.4	100	89	69	60	59	50
total	20-24	3.3	3.0	2.5	2.1	1.9	1.9	1.6	100	90	76	63	58	50		
	total	56.3	50.4	39.4	33.9	33.3	33.4	28.1	100	89	70	60	59	50		
	students	males	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	89	69	61	58	49
20-24			0.7	0.6	0.5	0.4	0.4	0.4	0.3	100	91	80	64	58	50	
level 4		total	0.8	0.7	0.6	0.5	0.5	0.5	0.4	100	91	78	63	57	50	
		total	0.3	0.2	0.2	0.2	0.1	0.1	0.1	100	88	69	61	57	48	
vocational		females	15-19	0.7	0.7	0.6	0.5	0.4	0.4	0.4	100	91	79	63	57	50
			20-24	1.0	0.9	0.7	0.6	0.6	0.6	0.5	100	90	76	63	57	49
		total	15-19	0.4	0.3	0.3	0.2	0.2	0.2	0.2	100	89	69	61	58	49
total	20-24	1.4	1.3	1.1	0.9	0.8	0.8	0.7	100	91	79	64	57	50		
	total	1.8	1.6	1.4	1.1	1.0	1.0	0.9	100	91	77	63	57	50		
	students	males	15-19	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100	89	69	61	58	49
20-24			0.3	0.3	0.2	0.2	0.2	0.2	0.2	100	91	80	64	58	50	
level 5b		total	0.4	0.3	0.3	0.2	0.2	0.2	0.2	100	91	78	63	58	50	
		total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	88	69	61	58	49	
vocational		females	15-19	0.7	0.6	0.6	0.5	0.4	0.4	0.4	100	91	78	63	57	49
			20-24	0.8	0.7	0.6	0.5	0.5	0.5	0.4	100	91	77	63	57	49
		total	15-19	0.2	0.1	0.1	0.1	0.1	0.1	0.1	100	89	69	61	58	49
total	20-24	1.0	0.9	0.8	0.7	0.6	0.6	0.5	100	91	79	63	57	50		
	total	1.2	1.1	0.9	0.8	0.7	0.7	0.6	100	91	77	63	57	50		

Slovenia

Figure 25.1. Projected number of students in (pre) vocational education by ISCED level in Slovenia, 2005-2050, baseline population variant / constant educational participation

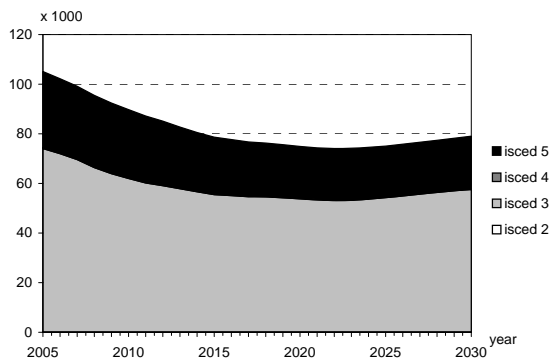


Figure 25.2. Index of the projected number of students in (pre) vocational education by ISCED level in Slovenia, 2005-2050, baseline population variant / constant educational participation

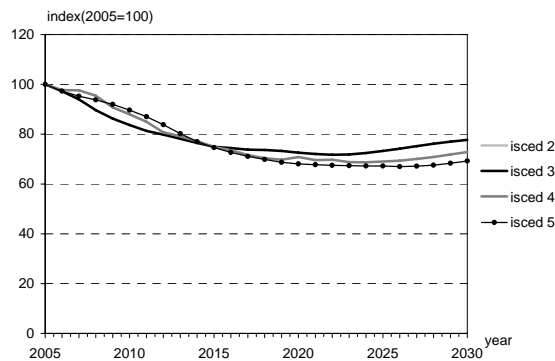


Figure 25.2. Projected number of graduates in (pre) vocational education by ISCED level in Slovenia, 2005-2050, baseline population variant / constant educational participation

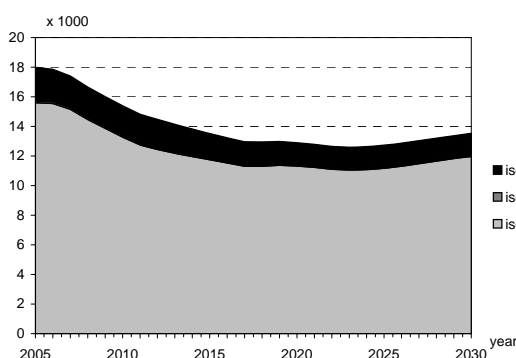


Figure 25.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Slovenia, 2005-2050, baseline population variant / constant educational participation

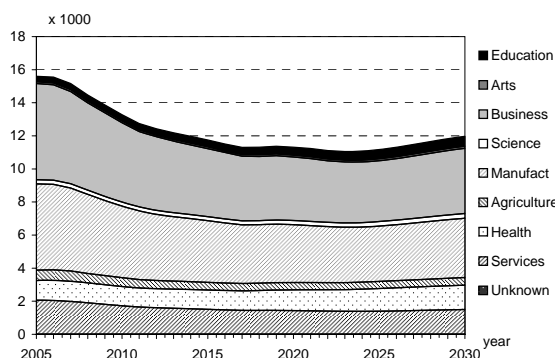


Table 25.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Slovenia, 2005-2050, baseline population variant / constant graduation rates

		x 1000						index (2005=100)							
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
level 3 pre	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	7.7	6.6	5.8	5.7	5.6	5.1	100	85	76	74	72	77	
		20-24	0.7	0.6	0.5	0.5	0.5	0.4	100	91	75	69	68	71	
		total	8.4	7.2	6.3	6.1	6.0	5.5	100	86	76	73	72	77	
vocational	females	15-19	6.7	5.6	5.0	4.8	4.8	4.4	100	84	75	72	72	77	
		20-24	0.5	0.5	0.4	0.4	0.4	0.3	100	90	75	68	68	72	
		total	7.2	6.1	5.4	5.2	5.1	4.7	100	85	75	72	71	76	
	total	15-19	14.4	12.2	10.9	10.5	10.4	9.5	100	85	75	73	72	77	
		20-24	1.2	1.1	0.9	0.8	0.8	0.8	100	91	75	68	68	72	
		total	15.6	13.3	11.7	11.3	11.2	10.2	100	85	75	73	72	77	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	87	75	74	71	76	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	93	75	69	68	70	
		total	0.0	0.0	0.0	0.0	0.0	0.0	100	88	75	72	70	74	
level 4	total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	88	75	72	70	74	
vocational	females	15-19	0.1	0.1	0.0	0.0	0.0	0.0	100	87	75	73	71	76	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	91	74	68	68	71	
		total	0.1	0.1	0.1	0.1	0.1	0.1	100	88	75	71	70	74	
	total	15-19	0.1	0.1	0.1	0.1	0.1	0.1	100	87	75	73	71	76	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	100	91	74	68	68	71	
		total	0.1	0.1	0.1	0.1	0.1	0.1	100	88	75	71	70	74	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	87	75	74	70	75	
		20-24	0.8	0.7	0.6	0.5	0.5	0.5	100	88	75	66	65	64	
		total	0.8	0.7	0.6	0.5	0.5	0.5	100	88	75	66	65	64	
level 5b	total	0.8	0.7	0.6	0.5	0.5	0.5	0.5	100	88	75	66	65	64	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	87	75	73	70	75	
		20-24	1.5	1.3	1.1	1.0	1.0	0.9	100	89	74	66	65	66	
		total	1.5	1.3	1.1	1.0	1.0	0.9	100	89	74	66	65	66	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	100	87	75	73	70	75	
		20-24	2.3	2.0	1.7	1.5	1.5	1.4	100	88	75	66	65	65	
		total	2.3	2.0	1.7	1.5	1.5	1.4	100	88	75	66	65	65	

Spain

Figure 26.1. Projected number of students in (pre) vocational education by ISCED level in Spain, 2005-2050, baseline population variant / constant educational participation

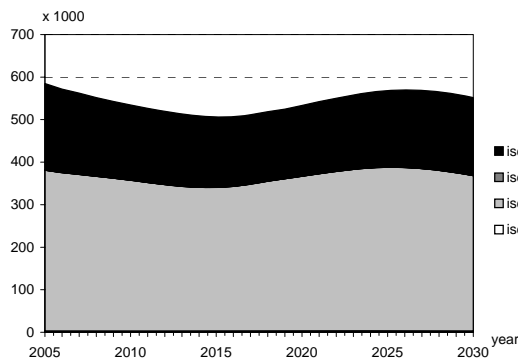


Figure 26.2. Index of the projected number of students in (pre) vocational education by ISCED level in Spain, 2005-2050, baseline population variant / constant educational participation

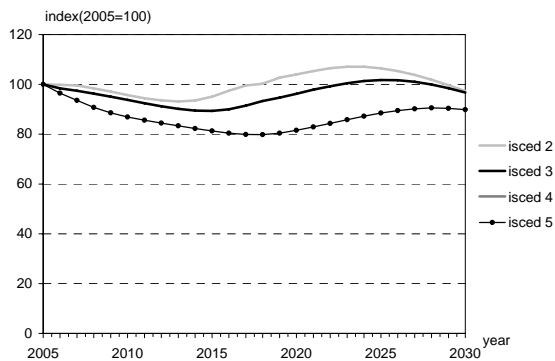


Figure 26.2. Projected number of graduates in (pre) vocational education by ISCED level in Spain, 2005-2050, baseline population variant / constant educational participation

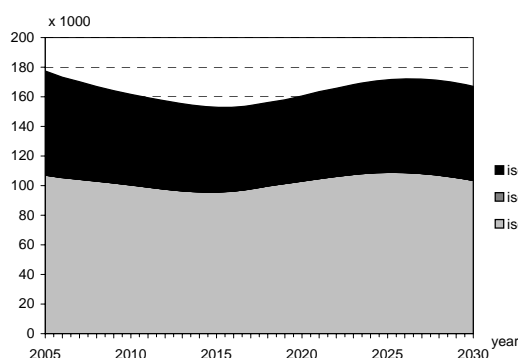


Figure 26.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Spain, 2005-2050, baseline population variant / constant educational participation

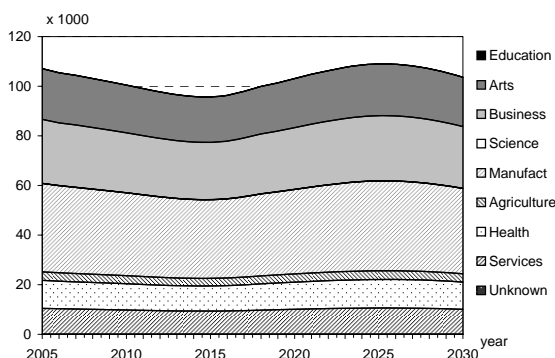


Table 26.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Spain, 2005-2050, baseline population variant / constant graduation rates

			x 1000							index (2005=100)						
Age group			2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	45.6	43.3	41.2	44.8	47.4	44.6	34.3	100	95	90	98	104	98	75
ISCED		20-24	7.4	6.3	5.9	5.8	6.3	6.5	4.7	100	86	80	78	86	88	64
level 3	total		53.0	49.6	47.0	50.6	53.7	51.1	38.9	100	94	89	96	101	97	74
vocational	females	15-19	46.6	44.4	42.6	46.6	48.9	45.9	35.3	100	95	91	100	105	98	76
		20-24	7.5	6.4	6.0	5.9	6.4	6.6	4.8	100	85	79	78	85	88	63
	total		54.2	50.8	48.6	52.5	55.3	52.5	40.1	100	94	90	97	102	97	74
	total	15-19	92.2	87.8	83.8	91.4	96.3	90.5	69.6	100	95	91	99	104	98	75
		20-24	14.9	12.7	11.9	11.6	12.7	13.1	9.4	100	85	80	78	85	88	64
	total		107.1	100.4	95.6	103.1	109.0	103.6	79.0	100	94	89	96	102	97	74
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
level 4	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
students	males	15-19	9.4	8.7	8.1	8.6	9.2	9.1	6.7	100	92	86	91	98	96	71
ISCED		20-24	23.0	19.6	18.3	17.8	19.5	20.2	14.5	100	85	79	78	85	88	63
level 5b	total		32.4	28.3	26.4	26.4	28.7	29.3	21.2	100	87	81	81	88	90	65
vocational	females	15-19	11.6	10.7	10.1	10.6	11.4	11.2	8.3	100	92	87	91	98	96	71
		20-24	26.2	22.2	20.8	20.4	22.3	22.9	16.6	100	85	79	78	85	88	63
	total		37.8	32.9	30.8	31.1	33.8	34.2	24.8	100	87	82	82	89	90	66
	total	15-19	21.1	19.4	18.2	19.2	20.7	20.3	14.9	100	92	86	91	98	96	71
		20-24	49.2	41.7	39.1	38.3	41.8	43.1	31.1	100	85	79	78	85	88	63
	total		70.3	61.2	57.2	57.5	62.4	63.5	46.0	100	87	81	82	89	90	66

Table 26.3 Projected number of graduates at ISCED level 3-5 by gender and field of education, Spain, 2005-2050, baseline population variant / constant graduation rates

		Field	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050		
			x 1000								index (2005=100)							
students ISCED level 3 (pre) vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Humanities	7.3	6.9	6.5	7.0	7.4	7.1	5.4	100	94	89	96	101	97	74	74	
		Business	7.2	6.7	6.4	6.9	7.3	6.9	5.3	100	94	89	96	101	97	74	74	
		Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	89	96	101	97	74	74	
		Engineering	32.0	30.0	28.5	30.6	32.5	30.9	23.6	100	94	89	96	101	97	74	74	
		Agriculture	2.3	2.2	2.1	2.2	2.4	2.2	1.7	100	94	89	96	101	97	74	74	
	females	Health	1.4	1.3	1.2	1.3	1.4	1.3	1.0	100	94	89	96	101	97	74	74	
		Services	2.7	2.5	2.4	2.5	2.7	2.6	2.0	100	94	89	96	101	97	74	74	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	89	96	101	97	74	74	
		total	53.0	49.6	47.0	50.6	53.7	51.1	38.9	100	94	89	96	101	97	74	74	
		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Humanities	13.2	12.3	11.8	12.7	13.4	12.7	9.7	100	94	90	97	102	97	74	74	
	Business	18.6	17.5	16.7	18.0	19.0	18.0	13.8	100	94	90	97	102	97	74	74		
Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
Engineering	3.6	3.4	3.2	3.5	3.7	3.5	2.7	100	94	90	97	102	97	74	74			
Agriculture	1.1	1.1	1.0	1.1	1.2	1.1	0.8	100	94	90	97	102	97	74	74			
Health	9.9	9.3	8.9	9.6	10.1	9.6	7.3	100	94	90	97	102	97	74	74			
Services	7.8	7.3	7.0	7.5	7.9	7.5	5.7	100	94	90	97	102	97	74	74			
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	90	97	102	97	74	74			
total	54.2	50.8	48.6	52.5	55.3	52.5	40.1	100	94	90	97	102	97	74	74			
total	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	Humanities	20.5	19.2	18.3	19.8	20.9	19.8	15.1	100	94	89	96	102	97	74	74		
	Business	25.8	24.2	23.1	24.9	26.3	24.9	19.0	100	94	89	96	102	97	74	74		
	Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	89	96	101	97	74	74		
	Engineering	35.6	33.4	31.7	34.1	36.2	34.4	26.2	100	94	89	96	101	97	74	74		
	Agriculture	3.5	3.2	3.1	3.3	3.5	3.3	2.5	100	94	89	96	102	97	74	74		
	Health	11.3	10.6	10.1	10.9	11.5	10.9	8.4	100	94	90	97	102	97	74	74		
	Services	10.4	9.8	9.3	10.1	10.6	10.1	7.7	100	94	90	97	102	97	74	74		
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	94	89	96	102	97	74	74		
	total	107.1	100.4	95.6	103.1	109.0	103.6	79.0	100	94	89	96	102	97	74	74		
	students ISCED level 4 vocational	males	Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
			Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
			Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-
Science			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Engineering			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Agriculture			0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
females		Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		Humanities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
Business		0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
Science	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
Engineering	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
Agriculture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
students ISCED level 5b vocational	males	Education	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	87	81	81	87	89	65	65	
		Humanities	2.5	2.2	2.0	2.0	2.2	2.2	1.6	100	87	81	81	87	89	65	65	
		Business	4.6	4.0	3.7	3.7	4.0	4.1	3.0	100	87	81	81	87	89	65	65	
		Science	7.1	6.1	5.7	5.7	6.2	6.3	4.6	100	87	81	81	87	89	65	65	
		Engineering	12.4	10.8	10.1	10.0	10.9	11.1	8.0	100	87	81	81	87	89	65	65	
		Agriculture	0.3	0.3	0.2	0.2	0.3	0.3	0.2	100	87	81	81	87	89	65	65	
	females	Health	1.5	1.4	1.4	1.5	1.7	1.7	1.2	100	92	90	95	107	110	79	79	
		Services	3.9	3.4	3.2	3.2	3.4	3.5	2.5	100	87	81	81	87	89	65	65	
		Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-	
		total	32.4	28.3	26.4	26.4	28.7	29.3	21.2	100	87	81	81	88	90	65	65	
		Education	3.6	3.1	2.9	2.9	3.2	3.2	2.3	100	87	82	82	89	90	66	66	
		Humanities	3.2	2.8	2.6	2.7	2.9	2.9	2.1	100	87	82	82	89	90	66	66	
	Business	12.9	11.2	10.5	10.6	11.5	11.7	8.5	100	87	82	82	89	90	66	66		
Science	2.3	2.0	1.9	1.9	2.0	2.1	1.5	100	87	82	82	89	90	66	66			
Engineering	2.7	2.3	2.2	2.2	2.4	2.4	1.7	100	87	82	82	89	90	66	66			
Agriculture	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	87	82	82	89	90	66	66			
Health	7.3	6.3	5.9	6.0	6.5	6.6	4.8	100	87	82	82	89	90	66	66			
Services	5.8	5.0	4.7	4.7	5.2	5.2	3.8	100	87	82	82	89	90	66	66			
Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-			
total	37.8	32.9	30.8	31.1	33.8	34.2	24.8	100	87	82	82	89	90	66	66			
total	Education	3.7	3.2	3.0	3.0	3.3	3.3	2.4	100	87	82	82	89	90	66	66		
	Humanities	5.7	5.0	4.6	4.7	5.1	5.1	3.7	100	87	81	82	88	90	65	65		
	Business	17.5	15.2	14.2	14.3	15.5	15.8	11.4	100	87	81	82	89	90	65	65		
	Science	9.4	8.1	7.6	7.6	8.2	8.4	6.1	100	87	81	81	88	90	65	65		
	Engineering	15.1	13.1	12.2	12.2	13.2	13.5	9.8	100	87	81	81	88	89	65	65		
	Agriculture	0.4	0.3	0.3	0.3	0.3	0.4	0.3	100	87	81	81	88	90	65	65		
	Health	8.8	7.7	7.3	7.4	8.2	8.3	6.0	100	88	83	84	92	94	68	68		
	Services	9.7	8.4	7.9	7.9	8.6	8.7	6.3	100	87	81	82	89	90	65	65		
	Unknown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	-		
	total	70.3	61.2	57.2	57.5	62.4	63.5	46.0	100	87	81	82	89	90	66	66		

Sweden

Figure 27.1. Projected number of students in (pre) vocational education by ISCED level in Sweden, 2005-2050, baseline population variant / constant educational participation

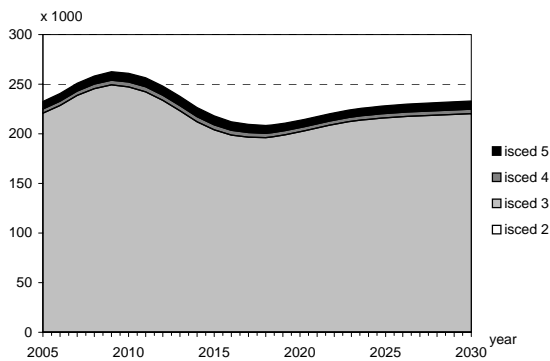


Figure 27.2. Index of the projected number of students in (pre) vocational education by ISCED level in Sweden, 2005-2050, baseline population variant / constant educational participation

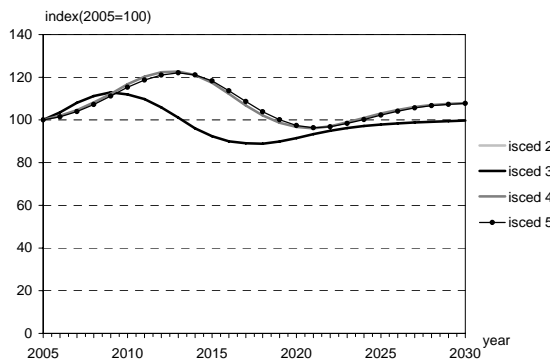


Figure 27.2. Projected number of graduates in (pre) vocational education by ISCED level in Sweden, 2005-2050, baseline population variant / constant educational participation

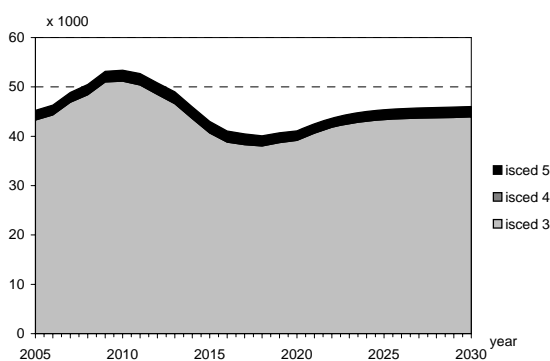


Figure 27.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in Sweden, 2005-2050, baseline population variant / constant educational participation

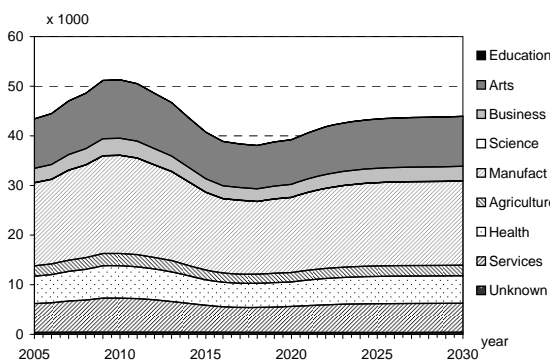


Table 27.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, Sweden, 2005-2050, baseline population variant / constant graduation rates

			x 1000							index (2005=100)							
Age group			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
			total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
		total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-	
	students	males	15-19	23.4	27.7	21.7	21.1	23.4	23.7	23.6	100	118	93	90	100	101	101
			20-24	0.8	0.9	0.9	0.7	0.8	0.8	0.9	100	120	116	95	106	109	110
			total	24.2	28.6	22.6	21.9	24.2	24.6	24.4	100	118	93	90	100	102	101
females			15-19	18.5	21.8	17.4	16.7	18.5	18.7	18.6	100	118	94	90	100	101	100
			20-24	0.6	0.7	0.7	0.6	0.7	0.7	0.7	100	120	117	95	106	109	110
			total	19.1	22.6	18.1	17.3	19.1	19.4	19.2	100	118	95	91	100	101	101
total		15-19	41.9	49.5	39.1	37.9	41.9	42.4	42.1	100	118	93	90	100	101	101	
		20-24	1.4	1.7	1.6	1.3	1.5	1.5	1.5	100	120	117	95	106	109	110	
		total	43.3	51.2	40.7	39.2	43.4	43.9	43.7	100	118	94	91	100	101	101	
students		males	15-19	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100	121	99	92	102	103	103
			20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	115	123	98	103	110	113
			total	0.1	0.2	0.2	0.1	0.1	0.1	0.2	100	116	116	96	103	108	110
	females		15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	121	99	91	101	103	102
			20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	114	123	99	102	108	111
			total	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	114	120	98	102	108	110
	total	15-19	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100	121	99	92	102	103	103	
		20-24	0.1	0.2	0.2	0.1	0.2	0.2	0.2	100	114	123	99	103	109	112	
		total	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	116	117	97	103	108	110	
	students	males	15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	122	102	92	102	104	104
			20-24	0.8	0.9	1.0	0.8	0.8	0.9	0.9	100	114	124	99	102	110	113
			total	0.9	1.0	1.1	0.9	0.9	1.0	1.0	100	115	121	98	102	109	112
females			15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	123	102	92	102	104	104
			20-24	0.8	0.9	1.0	0.8	0.8	0.9	0.9	100	113	124	99	102	108	111
			total	0.8	1.0	1.0	0.8	0.9	0.9	0.9	100	114	122	99	102	108	111
total		15-19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100	122	102	92	102	104	104	
		20-24	1.6	1.8	1.9	1.5	1.6	1.7	1.7	100	113	124	99	102	109	112	
		total	1.7	2.0	2.1	1.7	1.8	1.9	1.9	100	114	122	99	102	108	111	

United Kingdom

Table 28.1 Projected population and number of students at ISCED level 2-5 by gender, age group and type of education, the United Kingdom, 2005-2050, baseline population variant / constant educational participation

	Age group	2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050	
		x 1000	index (2005=100)													
population	males	15-19	2008.7	2005.8	1873.5	1768.7	1776.5	1781.8	1674.6	100	100	93	88	88	89	83
		20-24	1923.4	2079.9	2068.7	1932.8	1825.9	1832.5	1780.2	100	108	108	100	95	95	93
	females	15-19	3932.1	4085.8	3942.2	3701.5	3602.4	3614.3	3454.9	100	104	100	94	92	92	88
		20-24	1900.1	1892.4	1769.1	1671.2	1676.9	1681.9	1579.1	100	100	93	88	88	89	83
	total	15-19	1876.3	1974.5	1958.6	1831.8	1732.0	1736.9	1685.9	100	105	104	98	92	93	90
		20-24	3776.4	3866.8	3727.7	3503.0	3408.9	3418.7	3265.0	100	102	99	93	90	91	86
ISCED level 2	males	15-19	3908.8	3898.2	3642.6	3439.9	3453.4	3463.6	3253.8	100	100	93	88	88	89	83
		20-24	3799.8	4054.4	4027.2	3764.6	3557.9	3569.4	3466.2	100	107	106	99	94	94	91
	females	15-19	7708.5	7952.6	7669.8	7204.5	7011.3	7033.0	6719.9	100	103	99	93	91	91	87
		20-24	15.4	15.0	14.0	13.6	13.5	13.6	12.7	100	97	91	88	88	88	82
	total	15-19	8.5	8.3	7.8	7.5	7.5	7.5	7.0	100	97	91	88	88	88	82
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED level 2 pre	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED level 3	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED level 4	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	-
ISCED level 5	males	15-19	886.0	871.2	815.8	780.6	779.1	783.5	733.1	100	98	92	88	88	88	83
		20-24	182.2	196.5	194.6	181.9	172.6	172.9	167.8	100	108	107	100	95	95	92
	females	15-19	1068.2	1067.7	1010.4	962.5	951.7	956.4	900.9	100	100	95	90	89	90	84
		20-24	977.9	958.9	899.1	860.0	858.0	862.9	806.5	100	98	92	88	88	88	82
	total	15-19	240.3	252.9	250.4	234.3	221.8	222.3	215.7	100	105	104	97	92	93	90
		20-24	1218.1	1211.8	1149.8	1094.3	1079.8	1085.2	1022.2	100	99	94	90	89	89	84

Figure 28.1. Projected number of students in (pre) vocational education by ISCED level in the United Kingdom, 2005-2050, baseline population variant / constant educational participation

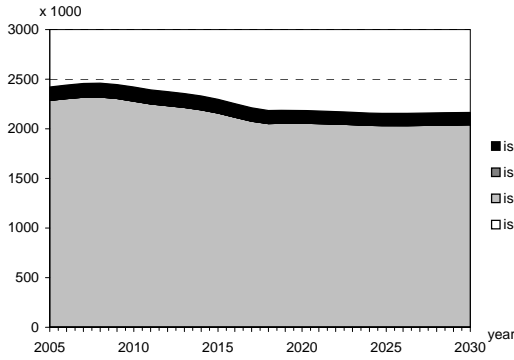


Figure 28.2. Index of the projected number of students in (pre) vocational education by ISCED level in the United Kingdom, 2005-2050, baseline population variant / constant educational participation

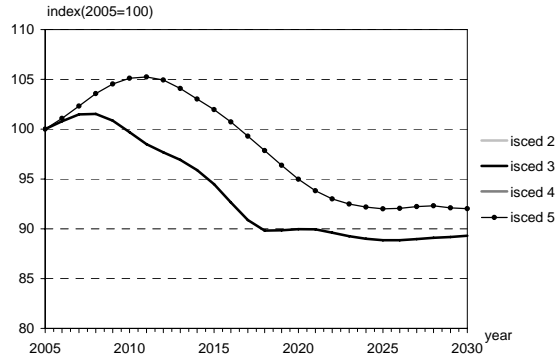


Figure 28.2. Projected number of graduates in (pre) vocational education by ISCED level in the United Kingdom, 2005-2050, baseline population variant / constant educational participation

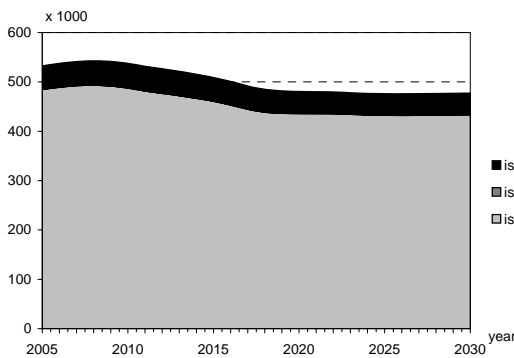


Figure 28.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the United Kingdom, 2005-2050, baseline population variant / constant educational participation

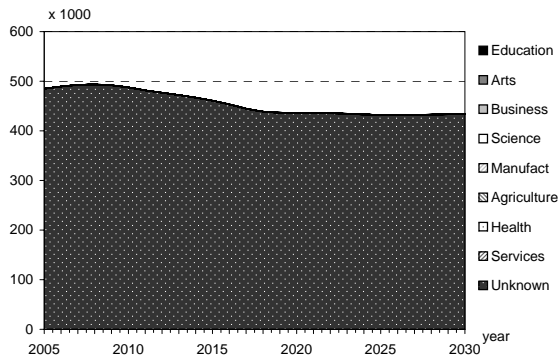


Table 28.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the United Kingdom, 2005-2050, baseline population variant / constant graduation rates

		x 1000							index (2005=100)						
		2005	2010	2015	2020	2025	2030	2005	2010	2015	2020	2025	2030	2050	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
level 3 pre	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	207.0	205.1	191.9	182.0	182.4	183.2	100	99	93	88	88	89	
ISCED		20-24	55.6	59.9	59.2	55.4	52.6	51.1	100	108	106	100	95	95	
level 3	total		262.6	265.0	251.1	237.4	235.1	236.0	100	101	96	90	90	85	
vocational	females	15-19	185.7	184.1	172.3	163.2	163.5	164.2	100	99	93	88	88	88	
		20-24	36.5	38.2	37.7	35.2	33.6	32.6	100	105	103	96	92	89	
	total		222.2	222.3	210.0	198.4	197.2	197.8	100	100	94	89	89	84	
	total	15-19	392.7	389.2	364.2	345.2	346.0	347.4	100	99	93	88	88	88	
		20-24	92.2	98.1	96.9	90.6	86.3	86.3	100	106	105	98	94	91	
	total		484.9	487.3	461.1	435.8	432.2	409.4	100	101	95	90	89	84	
students	males	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
ISCED		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
level 4	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
vocational	females	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total	15-19	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
		20-24	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
	total		0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	-	
students	males	15-19	8.6	8.9	8.3	7.6	7.7	7.3	100	103	96	88	90	89	
ISCED		20-24	12.1	13.0	12.8	12.0	11.4	11.1	100	108	106	99	94	91	
level 5b	total		20.7	21.9	21.1	19.6	19.2	18.4	100	106	102	94	92	89	
vocational	females	15-19	8.4	8.6	8.0	7.4	7.5	7.1	100	103	96	88	89	88	
		20-24	18.4	19.4	19.1	17.9	17.0	16.5	100	105	104	97	92	90	
	total		26.8	28.0	27.1	25.3	24.5	23.6	100	105	101	94	91	88	
	total	15-19	17.0	17.5	16.3	15.0	15.2	14.4	100	103	96	88	89	85	
		20-24	30.5	32.4	31.9	29.8	28.5	27.6	100	106	104	98	93	90	
	total		47.5	50.0	48.2	44.8	43.7	42.0	100	105	101	94	92	88	

European Union (EU-27) – high population variant

Figure 29.1. Projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2030, high population variant / constant educational participation

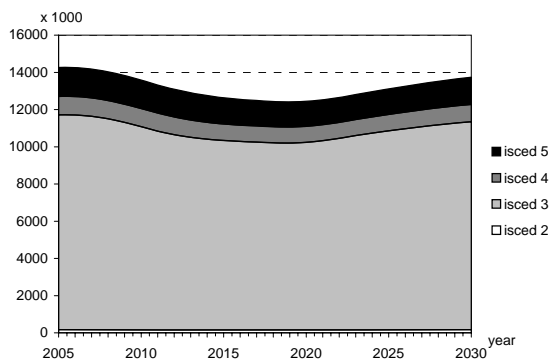


Figure 29.2. Percentage of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2030, high population variant / constant educational participation

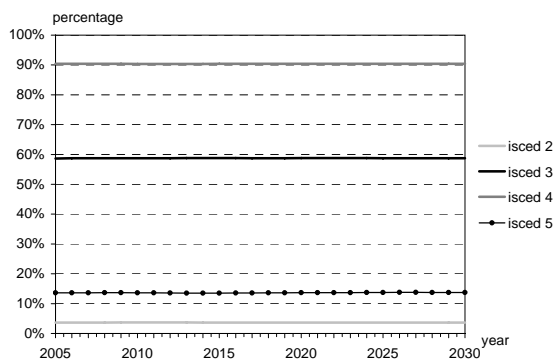


Figure 29.2. Projected number of graduates in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2030, high population variant / constant educational participation

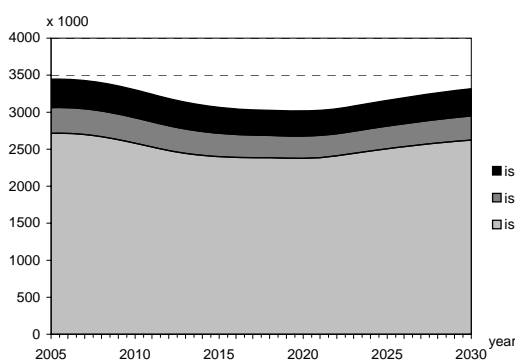


Figure 29.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the European Union (EU-27), 2005-2030, high population variant / constant educational participation

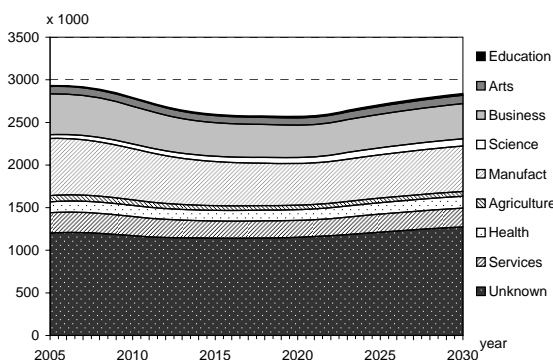


Table 29.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the European Union (EU-27), 2005-2050, high population variant / constant educational participation / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			x 1000							index (2005=100)						
students	males	15-19	114.6	110.7	101.0	99.7	106.2	112.2	112.5	100	97	88	87	93	98	98
		20-24	13.6	13.6	12.6	12.1	12.3	13.0	13.2	100	100	92	89	90	96	97
	level 3 pre	total	128.2	124.4	113.6	111.8	118.6	125.3	125.6	100	97	89	87	92	98	98
		total	128.2	124.4	113.6	111.8	118.6	125.3	125.6	100	97	89	87	92	98	98
	vocational	15-19	86.4	82.9	76.3	75.6	80.3	84.6	84.5	100	96	88	87	93	98	98
		20-24	6.0	6.0	5.6	5.3	5.4	5.7	5.8	100	100	92	88	90	95	95
	total	15-19	92.5	88.9	81.8	80.9	85.7	90.3	90.2	100	96	88	87	93	98	98
		20-24	201.1	193.6	177.3	175.3	186.6	196.8	196.9	100	96	88	87	93	98	98
	total	15-19	19.6	19.7	18.1	17.4	17.7	18.8	18.9	100	100	92	88	90	95	96
		total	220.7	213.3	195.4	192.7	204.3	215.5	215.8	100	97	89	87	93	98	98
students	males	15-19	1235.7	1172.8	1094.7	1093.8	1166.5	1218.8	1223.3	100	95	89	89	94	99	99
		20-24	252.6	242.9	221.9	208.2	209.3	224.0	226.7	100	96	88	82	83	89	90
	level 3	total	1488.2	1415.7	1316.6	1302.0	1375.7	1442.7	1450.0	100	95	88	87	92	97	97
		total	1488.2	1415.7	1316.6	1302.0	1375.7	1442.7	1450.0	100	95	88	87	92	97	97
	vocational	15-19	1052.1	997.3	932.9	932.2	986.8	1028.9	1025.7	100	95	89	89	94	98	97
		20-24	172.1	165.7	150.8	142.9	143.3	151.8	152.3	100	96	88	83	83	88	88
	total	15-19	1224.2	1163.0	1083.6	1075.1	1130.1	1180.7	1178.0	100	95	89	88	92	96	96
		20-24	2287.8	2170.1	2027.6	2025.9	2153.3	2247.6	2249.0	100	95	89	89	94	98	98
	total	15-19	424.7	408.6	372.6	351.1	352.6	375.8	379.0	100	96	88	83	83	88	89
		total	2712.5	2578.7	2400.2	2377.1	2505.9	2623.5	2628.0	100	95	88	88	92	97	97
students	males	15-19	60.0	59.8	54.0	53.8	56.3	59.2	59.4	100	100	90	90	94	99	99
		20-24	105.9	104.8	96.7	90.5	90.8	98.8	98.8	100	99	91	85	86	91	93
	level 4	total	165.9	164.5	150.7	144.2	147.1	156.0	158.2	100	99	91	87	89	94	95
		total	165.9	164.5	150.7	144.2	147.1	156.0	158.2	100	99	91	87	89	94	95
	vocational	15-19	63.6	63.2	57.1	56.7	59.2	62.2	62.3	100	99	90	89	93	98	98
		20-24	119.9	115.9	106.6	99.3	100.1	107.0	108.1	100	97	89	83	84	89	90
	total	15-19	183.5	179.1	163.7	156.0	159.3	169.1	170.3	100	98	89	85	87	92	93
		20-24	123.6	122.9	111.1	110.5	115.4	121.4	121.7	100	99	90	89	93	98	98
	total	15-19	225.8	220.6	203.3	189.7	191.0	203.8	206.8	100	98	90	84	85	90	92
		total	349.3	343.6	314.4	300.2	306.4	325.2	328.6	100	98	90	86	88	93	94
students	males	15-19	51.5	50.8	46.2	46.3	48.4	50.8	51.2	100	99	90	90	94	98	99
		20-24	110.8	110.0	103.1	98.2	99.6	106.3	109.2	100	99	93	89	90	96	99
	level 5b	total	162.3	160.9	149.3	144.5	148.1	157.1	160.4	100	99	92	89	91	97	99
		total	162.3	160.9	149.3	144.5	148.1	157.1	160.4	100	99	92	89	91	97	99
	vocational	15-19	65.3	63.5	58.2	58.7	61.5	64.4	64.6	100	97	89	90	94	99	99
		20-24	156.4	153.4	143.1	135.3	137.7	146.7	149.7	100	98	92	87	88	94	96
	total	15-19	221.6	216.8	201.3	194.0	199.2	211.1	214.3	100	98	91	88	90	95	97
		20-24	116.8	114.3	104.4	105.0	110.0	115.1	115.8	100	98	89	90	94	99	99
	total	15-19	267.1	263.4	246.2	233.5	237.3	253.0	258.9	100	99	92	87	89	95	97
		total	384.0	377.7	350.5	338.5	347.3	368.2	374.7	100	98	91	88	90	96	98

European Union (EU-27) – low population variant

Figure 30.1. Projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2030, low population variant / constant educational participation

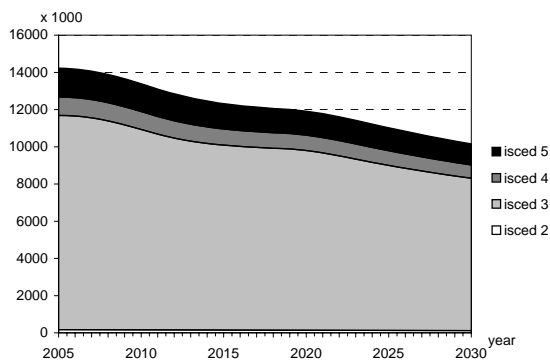


Figure 30.2. Percentage of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2030, low population variant / constant educational participation

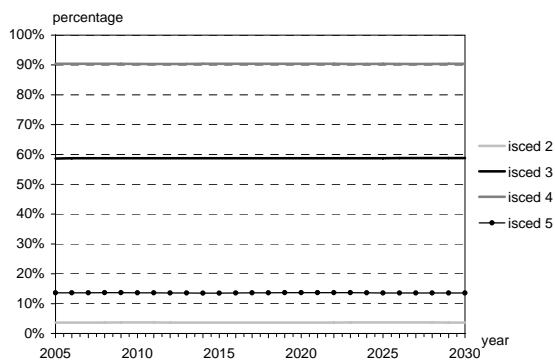


Figure 30.2. Projected number of graduates in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2030, low population variant / constant educational participation

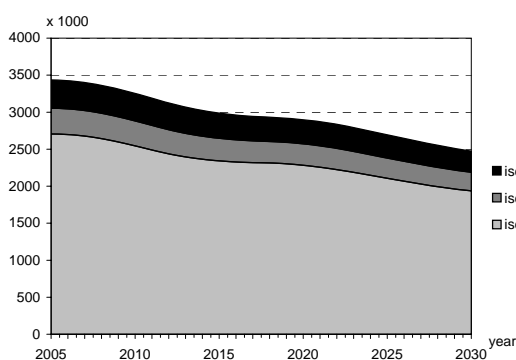


Figure 30.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the European Union (EU-27), 2005-2030, low population variant / constant educational participation

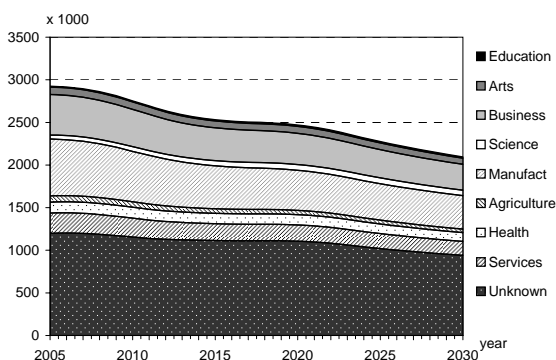


Table 30.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the European Union (EU-27), 2005-2050, low population variant / constant educational participation / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	index (2005=100)						
Age group			x 1000													
students	males	15-19	114.3	109.2	98.5	96.0	89.1	82.6	67.6	100	95	86	84	78	72	59
		20-24	13.6	13.4	12.2	11.6	11.2	10.1	8.1	100	99	90	85	83	75	60
		total	127.9	122.6	110.7	107.6	100.3	92.7	75.7	100	96	87	84	78	73	59
vocational	females	15-19	86.2	81.8	74.5	72.9	67.1	62.2	50.8	100	95	86	85	78	72	59
		20-24	6.0	5.9	5.4	5.1	4.9	4.4	3.5	100	98	90	85	82	74	59
		total	92.2	87.7	79.9	78.0	72.0	66.6	54.3	100	95	87	85	78	72	59
total	15-19	200.5	191.0	173.0	168.9	156.2	144.8	118.4	100	95	86	84	78	72	59	
		20-24	19.6	19.3	17.6	16.7	16.1	14.6	11.6	100	99	90	85	82	74	59
		total	220.1	210.3	190.6	185.6	172.3	159.4	130.0	100	96	87	84	78	72	59
students	males	15-19	1232.6	1156.7	1068.2	1050.3	963.5	889.7	730.8	100	94	87	85	78	72	59
		20-24	251.8	238.9	215.4	199.8	193.1	176.1	139.7	100	95	86	79	77	70	55
		total	1484.4	1395.5	1283.6	1250.1	1156.6	1065.8	870.5	100	94	86	84	78	72	59
vocational	females	15-19	1049.3	984.9	912.3	896.8	815.3	751.6	613.5	100	94	87	85	78	72	59
		20-24	171.5	162.4	146.1	136.9	132.1	119.3	93.6	100	95	85	80	77	70	55
		total	1220.8	1147.3	1058.3	1033.7	947.4	870.9	707.0	100	94	87	85	78	71	58
total	15-19	2281.9	2141.6	1980.5	1947.2	1778.8	1641.3	1344.3	100	94	87	85	78	72	59	
		20-24	423.2	401.3	361.4	336.6	325.2	295.5	233.2	100	95	85	80	77	70	55
		total	2705.1	2542.9	2341.9	2283.8	2104.0	1936.7	1577.5	100	94	87	84	78	72	58
students	males	15-19	59.8	58.9	52.6	51.8	48.2	44.2	36.1	100	98	88	87	81	74	60
		20-24	105.6	103.0	93.9	86.8	84.0	76.1	60.9	100	98	89	82	80	72	58
		total	165.4	161.9	146.5	138.6	132.2	120.3	96.9	100	98	89	84	80	73	59
vocational	females	15-19	63.4	62.3	55.7	54.8	50.6	46.4	37.8	100	98	88	86	80	73	60
		20-24	119.4	113.6	103.3	95.1	92.4	83.9	66.4	100	95	86	80	77	70	56
		total	182.8	175.9	159.0	149.8	143.0	130.3	104.2	100	96	87	82	78	71	57
total	15-19	123.2	121.2	108.3	106.6	98.8	90.5	73.8	100	98	88	87	80	73	60	
		20-24	225.0	216.6	197.2	181.9	176.5	160.0	127.3	100	96	88	81	78	71	57
		total	348.2	337.7	305.5	288.5	275.3	250.6	201.1	100	97	88	83	79	72	58
students	males	15-19	51.4	50.1	45.0	44.6	41.6	37.9	31.1	100	97	88	87	81	74	60
		20-24	110.4	108.1	100.0	94.2	92.4	84.1	67.3	100	98	91	85	84	76	61
		total	161.8	158.2	145.0	138.8	134.0	122.0	98.4	100	98	90	86	83	75	61
vocational	females	15-19	65.1	62.6	56.7	56.6	52.7	48.0	39.2	100	96	87	87	81	74	60
		20-24	155.8	150.3	138.6	129.5	127.4	115.6	92.1	100	96	89	83	82	74	59
		total	220.8	212.9	195.3	186.2	180.1	163.6	131.2	100	96	88	84	82	74	59
total	15-19	116.5	112.7	101.7	101.3	94.3	86.0	70.3	100	97	87	87	81	74	60	
		20-24	266.2	258.4	238.6	223.7	219.9	199.7	159.4	100	97	90	84	83	75	60
		total	382.7	371.1	340.3	325.0	314.1	285.6	229.6	100	97	89	85	82	75	60

European Union (EU-27) – baseline population + increased vocational education participation variant

Figure 31.1. Projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, baseline population variant / increased vocational education participation

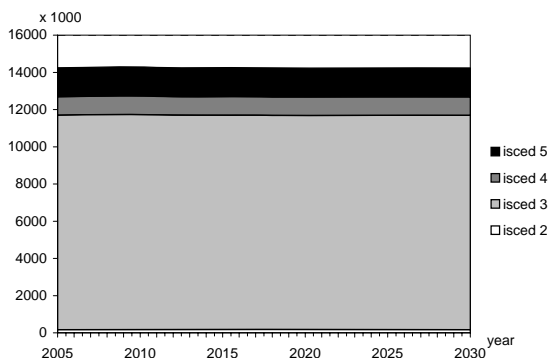


Figure 31.2. Percentage of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, baseline population variant / increased vocational education participation

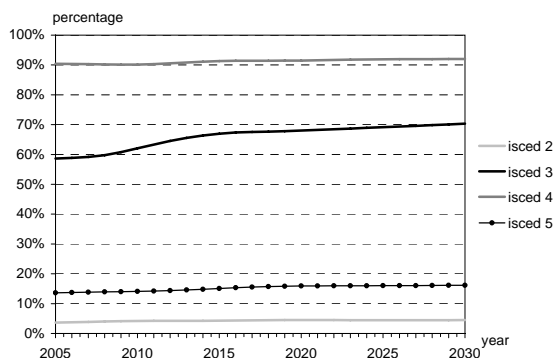


Figure 31.2. Projected number of graduates in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, baseline population variant / increased vocational education participation

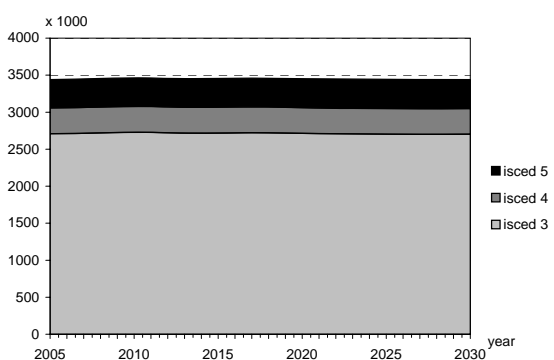


Figure 31.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the European Union (EU-27), 2005-2050, baseline population variant / increased vocational education participation

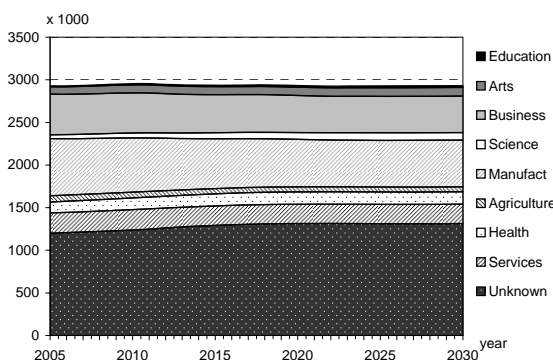


Table 31.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the European Union (EU-27), 2005-2050, baseline population variant / increased vocational education participation / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			x 1000							index (2005=100)						
students	males	15-19	114.5	118.7	114.8	113.8	117.7	119.4	117.6	100	104	100	99	103	104	103
		20-24	13.6	13.3	13.2	12.7	13.4	13.9	13.1	100	98	97	93	98	102	96
		total	128.1	132.0	128.0	126.5	131.0	133.3	130.7	100	103	100	99	102	104	102
level 3 pre vocational	females	15-19	86.3	88.8	86.4	86.5	89.0	90.2	89.1	100	103	100	100	103	105	103
		20-24	6.0	5.8	5.7	5.5	5.7	6.0	5.7	100	96	95	91	95	99	94
		total	92.3	94.6	92.1	92.0	94.7	96.2	94.7	100	102	100	100	103	104	103
		total	200.8	207.5	201.1	200.3	206.6	209.7	206.7	100	103	100	100	103	104	103
		15-19	19.6	19.1	18.9	18.2	19.1	19.8	18.8	100	97	96	93	97	101	96
		20-24	19.6	19.1	18.9	18.2	19.1	19.8	18.8	100	97	96	93	97	101	96
		total	220.4	226.6	220.0	218.5	225.7	229.5	225.5	100	103	100	99	102	104	102
students	males	15-19	1234.1	1229.7	1222.6	1228.2	1232.1	1233.3	1237.2	100	100	99	100	100	100	100
		20-24	252.2	265.8	262.7	253.5	246.1	245.9	251.6	100	105	104	101	98	98	100
		total	1486.3	1495.5	1485.2	1481.7	1478.2	1479.2	1488.8	100	101	100	100	99	100	100
level 3 vocational	females	15-19	1050.7	1050.4	1049.7	1055.0	1052.2	1051.3	1052.7	100	100	100	100	100	100	100
		20-24	171.8	181.0	181.9	177.2	172.9	171.7	175.8	100	105	106	103	101	100	102
		total	1222.5	1231.3	1231.6	1232.2	1225.2	1222.9	1228.5	100	101	101	101	100	100	100
		total	2284.8	2280.1	2272.2	2283.2	2284.3	2284.5	2290.0	100	100	99	100	100	100	100
		15-19	424.0	446.7	444.6	430.7	419.0	417.6	427.4	100	105	105	102	99	98	101
		20-24	2708.8	2726.8	2716.8	2713.9	2703.4	2702.1	2717.4	100	101	100	100	100	100	100
students	males	15-19	59.9	62.0	62.1	64.4	65.8	65.7	66.3	100	104	104	107	110	110	111
		20-24	105.8	105.1	106.0	103.3	102.2	102.0	102.6	100	99	100	98	97	96	97
		total	165.7	167.1	168.1	167.6	168.0	167.8	168.9	100	101	101	101	101	101	102
level 4 vocational	females	15-19	63.5	65.3	65.9	67.3	68.4	68.2	68.6	100	103	104	106	108	107	108
		20-24	119.6	117.1	116.3	111.5	109.9	109.7	108.9	100	98	97	93	92	92	91
		total	183.1	182.4	182.2	178.8	178.3	178.0	177.5	100	100	100	98	97	97	97
		total	123.4	127.3	128.0	131.7	134.2	133.9	134.9	100	103	104	107	109	109	109
		15-19	225.4	222.3	222.4	214.8	212.1	211.8	211.5	100	99	99	95	94	94	94
		20-24	348.8	349.5	350.3	346.5	346.3	345.7	346.4	100	100	100	99	99	99	99
		total	383.3	384.9	388.3	391.2	394.3	393.1	395.3	100	100	101	102	103	103	103
students	males	15-19	51.5	52.1	52.6	55.7	55.5	55.1	56.0	100	101	102	108	108	107	109
		20-24	110.6	111.0	112.6	111.8	114.0	114.2	114.5	100	100	102	101	103	103	103
		total	162.1	163.0	165.2	167.5	169.5	169.3	170.5	100	101	102	103	105	104	105
level 5b vocational	females	15-19	65.2	65.4	65.7	68.9	68.2	67.7	68.2	100	100	101	106	105	104	105
		20-24	156.1	156.5	157.3	154.8	156.5	156.1	156.7	100	100	101	99	100	100	100
		total	221.2	221.9	223.0	223.7	224.8	223.8	224.8	100	100	101	101	102	101	102
		total	116.6	117.4	118.3	124.7	123.8	122.8	124.2	100	101	101	107	106	105	106
		15-19	266.7	267.5	269.9	266.5	270.5	270.3	271.1	100	100	101	100	101	101	102
		20-24	383.3	384.9	388.3	391.2	394.3	393.1	395.3	100	100	101	102	103	103	103

European Union (EU-27) – high population + increased vocational education participation variant

Figure 32.1. Projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, high population variant / increased vocational education participation

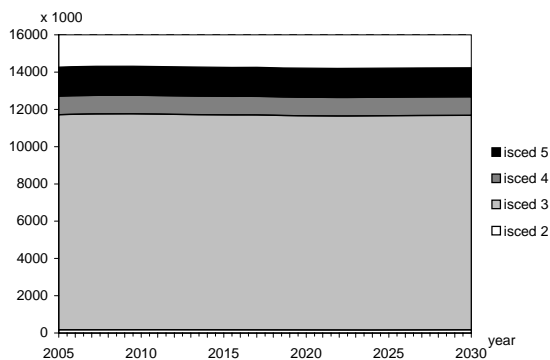


Figure 32.2. Percentage of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, high population variant / increased vocational education participation

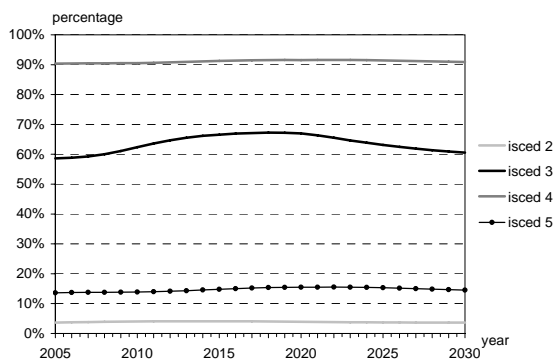


Figure 32.2. Projected number of graduates in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, high population variant / increased vocational education participation

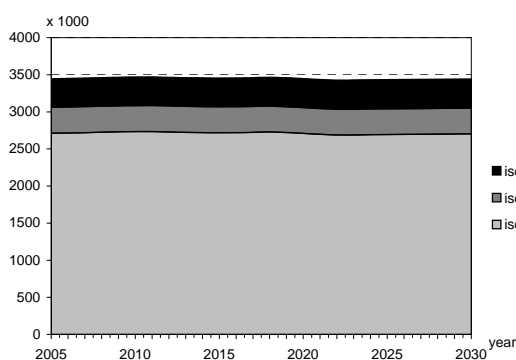


Figure 32.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the European Union (EU-27), 2005-2050, high population variant / increased vocational education participation

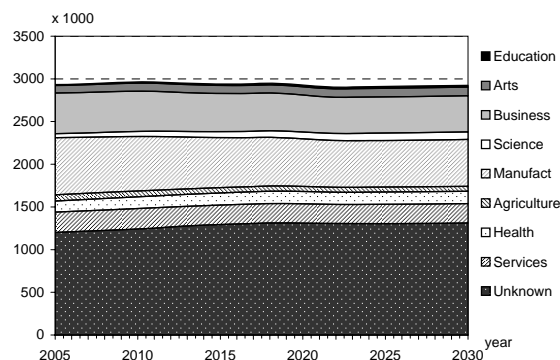


Table 32.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the European Union (EU-27), 2005-2050, high population variant / increased vocational education participation / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			index (2005=100)													
students	males	15-19	114.6	119.3	115.0	113.0	113.1	115.0	116.1	100	104	100	99	99	100	101
		20-24	13.6	14.7	14.3	13.7	13.1	13.4	13.6	100	108	105	100	96	98	100
	level 3 pre	total	128.2	134.1	129.3	126.6	126.2	128.4	129.7	100	105	101	99	98	100	101
		total	128.2	134.1	129.3	126.6	126.2	128.4	129.7	100	105	101	99	98	100	101
	vocational	15-19	86.4	89.3	86.8	85.6	85.5	86.7	87.2	100	103	100	99	99	100	101
		20-24	6.0	6.5	6.3	6.0	5.8	5.9	5.9	100	108	105	100	95	97	98
	total	15-19	92.5	95.8	93.1	91.7	91.2	92.6	93.1	100	104	101	99	99	100	101
		20-24	19.6	21.2	20.6	19.7	18.9	19.2	19.5	100	108	105	100	96	98	99
	total	15-19	201.1	208.7	201.8	198.6	198.6	201.8	203.3	100	104	100	99	99	100	101
		20-24	220.7	229.9	222.4	218.3	217.4	221.0	222.8	100	104	101	99	99	100	101
students	males	15-19	1235.7	1243.1	1239.5	1246.8	1254.3	1256.2	1267.1	100	101	100	101	102	102	103
		20-24	252.6	257.5	251.2	237.4	225.0	230.8	234.8	100	102	99	94	89	91	93
	level 3	total	1488.2	1500.6	1490.7	1484.2	1479.4	1487.0	1501.9	100	101	100	100	99	100	101
		total	1488.2	1500.6	1490.7	1484.2	1479.4	1487.0	1501.9	100	101	100	100	99	100	101
	vocational	15-19	1052.1	1057.2	1056.2	1062.6	1061.1	1060.5	1062.4	100	100	100	101	101	101	101
		20-24	172.1	175.6	170.7	162.9	154.1	156.5	157.7	100	102	99	95	90	91	92
	total	15-19	1224.2	1232.8	1226.9	1225.6	1215.3	1217.0	1220.2	100	101	100	100	99	99	100
		20-24	2287.8	2300.3	2295.7	2309.5	2315.5	2316.6	2329.5	100	101	100	101	101	101	102
	total	15-19	424.7	433.2	421.9	400.3	379.2	387.3	392.5	100	102	99	94	89	91	92
		20-24	2712.5	2733.5	2717.6	2709.8	2694.6	2704.0	2722.1	100	101	100	99	99	100	100
students	males	15-19	60.0	60.8	60.2	62.1	63.6	62.9	62.6	100	101	100	104	106	105	104
		20-24	105.9	106.7	107.8	104.5	102.6	102.9	104.1	100	101	102	99	97	97	98
	level 4	total	165.9	167.5	168.0	166.6	166.2	165.9	166.7	100	101	101	100	100	100	100
		total	165.9	167.5	168.0	166.6	166.2	165.9	166.7	100	101	101	100	100	100	100
	vocational	15-19	63.6	64.3	63.7	65.5	66.9	66.1	65.6	100	101	100	103	105	104	103
		20-24	119.9	118.0	118.7	114.7	113.2	113.7	113.9	100	98	99	96	94	95	95
	total	15-19	183.5	182.3	182.4	180.2	180.0	179.8	179.5	100	99	99	98	98	98	98
		20-24	123.6	125.2	123.8	127.6	130.4	129.0	128.2	100	101	100	103	106	104	104
	total	15-19	225.8	224.6	226.5	219.1	215.8	216.6	217.9	100	100	100	97	96	96	97
		20-24	349.3	349.8	350.4	346.8	346.3	345.6	346.2	100	100	100	99	99	99	99
students	males	15-19	51.5	51.9	51.3	53.6	55.0	54.3	54.1	100	101	100	104	107	105	105
		20-24	110.8	112.3	114.4	113.8	113.2	113.7	115.3	100	101	103	103	102	103	104
	level 5b	total	162.3	164.2	165.7	167.4	168.2	167.9	169.4	100	101	102	103	104	103	104
		total	162.3	164.2	165.7	167.4	168.2	167.9	169.4	100	101	102	103	104	103	104
	vocational	15-19	65.3	64.8	64.6	67.9	69.9	68.8	68.2	100	99	99	104	107	105	105
		20-24	156.4	156.6	158.8	156.7	156.4	156.8	158.2	100	100	102	100	100	100	101
	total	15-19	221.6	221.4	223.4	224.7	226.3	225.7	226.5	100	100	101	101	102	102	102
		20-24	116.8	116.7	115.8	121.6	124.9	123.1	122.4	100	100	99	104	107	105	105
	total	15-19	267.1	268.9	273.2	270.5	269.6	270.5	273.5	100	101	102	101	101	101	102
		20-24	384.0	385.6	389.1	392.1	394.5	393.6	395.9	100	101	101	102	103	103	103

European Union (EU-27) – low population + increased vocational education participation variant

Figure 33.1. Projected number of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, low population variant / increased vocational education participation

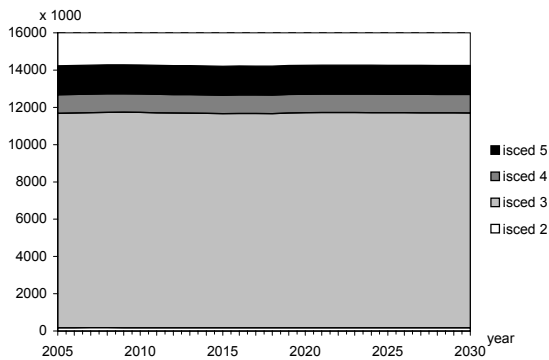


Figure 33.2. Percentage of students in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, low population variant / increased vocational education participation

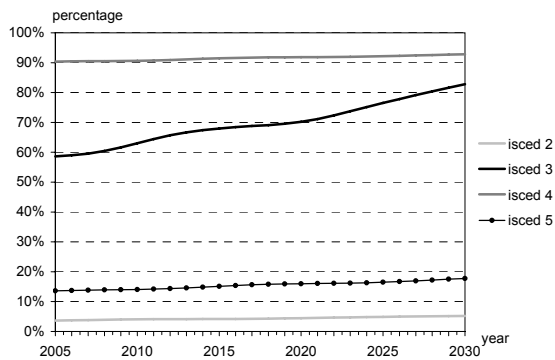


Figure 33.2. Projected number of graduates in (pre) vocational education by ISCED level in the European Union (EU-27), 2005-2050, low population variant / increased vocational education participation

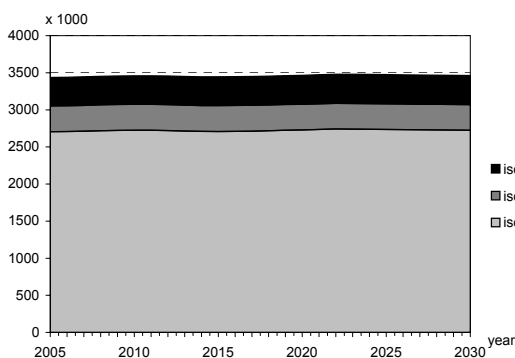


Figure 33.3. Projected number of graduates in (pre) vocational education at ISCED level 3 by field of education in the European Union (EU-27), 2005-2050, low population variant / increased vocational education participation

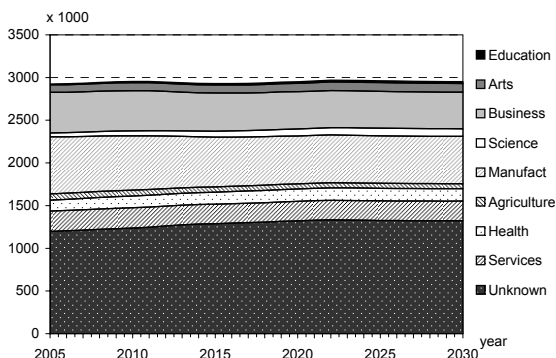


Table 33.2 Projected number of graduates in vocational education at ISCED level 3-5 by gender and age group, the European Union (EU-27), 2005-2050, low population variant / increased vocational education participation / constant graduation rates

			2005	2010	2015	2020	2025	2030	2050	2005	2010	2015	2020	2025	2030	2050
			index (2005=100)													
students	males	15-19	114.3	118.9	114.4	115.5	117.3	117.4	118.2	100	104	100	101	103	103	103
		20-24	13.6	14.6	14.2	13.9	14.8	14.4	14.1	100	108	104	103	109	106	104
	level 3 pre	total	127.9	133.5	128.6	129.5	132.1	131.7	132.3	100	104	101	101	103	103	103
		total	127.9	133.5	128.6	129.5	132.1	131.7	132.3	100	104	101	101	103	103	103
	vocational	15-19	86.2	89.1	86.5	87.7	88.4	88.3	88.7	100	103	100	102	103	102	103
		20-24	6.0	6.4	6.3	6.1	6.5	6.3	6.2	100	107	104	102	108	105	103
	total	total	92.2	95.5	92.8	93.9	94.9	94.6	94.9	100	104	101	102	103	103	103
		total	200.5	208.0	201.0	203.3	205.7	205.7	206.9	100	104	100	101	103	103	103
	total	15-19	19.6	21.1	20.4	20.1	21.3	20.7	20.3	100	108	104	102	109	106	104
		total	220.1	229.0	221.4	223.3	227.0	226.4	227.2	100	104	101	101	103	103	103
students	males	15-19	1232.6	1239.4	1235.2	1254.7	1252.9	1252.0	1144.6	100	101	100	102	102	102	93
		20-24	251.8	255.9	249.0	238.6	251.1	247.9	221.0	100	102	99	95	100	98	88
	level 3	total	1484.4	1495.4	1484.2	1493.4	1503.9	1499.8	1365.6	100	101	100	101	101	101	92
		total	1049.3	1055.4	1054.9	1071.3	1060.1	1057.6	1064.2	100	101	101	102	101	101	101
	vocational	15-19	1049.3	1055.4	1054.9	1071.3	1060.1	1057.6	1064.2	100	101	101	102	101	101	101
		20-24	171.5	174.1	168.9	163.5	171.7	167.9	159.4	100	102	98	95	100	98	93
	total	total	1220.8	1229.5	1223.8	1234.8	1231.9	1225.5	1223.5	100	101	100	101	101	100	100
		total	2281.9	2294.8	2290.1	2326.1	2313.0	2309.6	2208.8	100	101	100	102	101	101	97
	total	15-19	423.2	430.0	417.9	402.1	422.8	415.8	380.3	100	102	99	95	100	98	90
		total	2705.1	2724.8	2708.0	2728.2	2735.8	2725.4	2589.1	100	101	100	101	101	101	96
students	males	15-19	59.8	60.8	60.1	62.1	60.4	60.8	61.8	100	102	101	104	101	102	103
		20-24	105.6	106.3	107.3	104.0	105.3	104.7	104.4	100	101	102	99	100	99	99
	level 4	total	165.4	167.1	167.5	166.1	165.8	165.5	166.3	100	101	101	100	100	100	101
		total	165.4	167.1	167.5	166.1	165.8	165.5	166.3	100	101	101	100	100	100	101
	vocational	15-19	63.4	64.3	63.7	65.6	63.4	63.8	64.8	100	101	100	104	100	101	102
		20-24	119.4	117.2	118.0	113.9	115.9	115.4	113.9	100	98	99	95	97	97	
	total	total	182.8	181.5	181.7	179.5	179.3	179.2	178.7	100	99	99	98	98	98	98
		total	123.2	125.1	123.8	127.7	123.9	124.5	126.7	100	102	100	104	101	101	103
	total	15-19	225.0	223.6	225.4	217.9	221.2	220.1	218.3	100	99	100	97	98	98	97
		total	348.2	348.6	349.2	345.7	345.1	344.7	345.0	100	100	100	99	99	99	99
students	males	15-19	51.4	51.9	51.3	53.7	52.1	52.1	53.4	100	101	100	104	101	101	104
		20-24	110.4	112.0	113.9	113.2	116.0	115.6	115.7	100	101	103	103	105	105	105
	level 5b	total	161.8	163.8	165.2	166.9	168.1	167.7	169.1	100	101	102	103	104	104	104
		total	65.1	64.8	64.6	68.1	66.1	66.1	67.4	100	100	99	105	102	102	104
	vocational	15-19	155.8	155.6	157.9	155.7	159.9	158.9	158.2	100	100	101	100	103	102	102
		20-24	220.8	220.4	222.5	223.8	226.0	225.0	225.6	100	100	101	101	102	102	102
	total	15-19	116.5	116.7	115.9	121.7	118.3	118.2	120.8	100	100	100	105	102	101	104
		20-24	266.2	267.6	271.8	269.0	275.9	274.5	273.9	100	101	102	101	104	103	103
	total	total	382.7	384.3	387.7	390.7	394.1	392.7	394.7	100	100	101	102	103	103	103

