Education at a Glance 2014

OECD INDICATORS

2014

OECD

Education at a Glance 2014

OECD INDICATORS

BETTER POLICIES FOR BETTER LIVES

Please cite this publication as:
OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing.
http://dx.doi.org/10.1787/eag-2014-en

ISBN 978-92-64-21132-2 (print)
ISBN 978-92-64-21505-4 (PDF)

Revised version, September 2014
Details of revisions available at:
http://www.oecd.org/about/publishing/Corrigendum-EAG2014.pdf

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

Photo credits:
Stocklib Image Bank © Cathy Yeulet
Fotolia.com © Feng Yu
Getty Images © blue jean images

Foreword

Governments are increasingly looking to international comparisons of education opportunities and outcomes as they develop policies to enhance individuals' social and economic prospects, provide incentives for greater efficiency in schooling, and help to mobilise resources to meet rising demands. The OECD Directorate for Education and Skills contributes to these efforts by developing and analysing the quantitative, internationally comparable indicators that it publishes annually in *Education at a Glance*. Together with OECD country policy reviews, these indicators can be used to assist governments in building more effective and equitable education systems.

Education at a Glance addresses the needs of a range of users, from governments seeking to learn policy lessons to academics requiring data for further analysis to the general public wanting to monitor how its country's schools are progressing in producing world-class students. The publication examines the quality of learning outcomes, the policy levers and contextual factors that shape these outcomes, and the broader private and social returns that accrue to investments in education.

Education at a Glance is the product of a long-standing, collaborative effort between OECD governments, the experts and institutions working within the framework of the OECD Indicators of Education Systems (INES) programme and the OECD Secretariat. The publication was prepared by the staff of the Innovation and Measuring Progress Division of the OECD Directorate for Education and Skills, under the responsibility of Dirk Van Damme and Corinne Heckmann and in co-operation with Étienne Albiser, Rodrigo Castañeda Valle, Éric Charbonnier, Estelle Herbaut, Karinne Logez, Koji Miyamoto, Joris Ranchin, Cuauhtémoc Rebolledo Gómez, Gara Rojas González, Ignacio Marín, Wida Rogh, David Valenciano and Jean Yip. Administrative support was provided by Rhodia Diallo and Laetitia Dehelle, and additional advice as well as analytical support were provided by Camila de Moraes, Adrien Régnier-Laurent and Vaishali Zambre. The authoring team benefited from the analytical review of José Luis Álvarez-Galván, Francesco Avvisati, Rose Bolognini, Veronica Borg, Vanessa Denis, Alfonso Echazarra, Carlos González Sancho, Sonia Guerriero, Maria Huerta, Hiroko Ikesako, Marco Kools, Kelly Makowiecki, Patricia Mangeol, Simon Normandeau, Giannina Rech, Michele Rimini, Simone Stelten, William Thorn, Karine Tremblay, Sophie Vayssettes, Elisabeth Villoutreix and Juliana Zapata. Marilyn Achiron, Louise Binns, Marika Boiron, Célia Braga-Schich, Cassandra Davis and Sophie Limoges provided valuable support in the editorial and production process. The development of the publication was steered by member countries through the INES Working Party and facilitated by the INES Networks. The members of the various bodies as well as the individual experts who have contributed to this publication and to OECD INES more generally are listed at the end of the book.

While much progress has been accomplished in recent years, member countries and the OECD continue to strive to strengthen the link between policy needs and the best available internationally comparable data. This presents various challenges and trade-offs. First, the indicators need to respond to education issues that are high on national policy agendas, and where the international comparative perspective can offer added value to what can be accomplished through national analysis and evaluation. Second, while the indicators should be as comparable as possible, they also need to be as country-specific as is necessary to allow for historical, systemic and cultural differences between countries. Third, the indicators need to be presented in as straightforward a manner as possible, while remaining sufficiently complex to reflect multi-faceted realities. Fourth, there is a general desire to keep the indicator set as small as possible, but it needs to be large enough to be useful to policy makers across countries that face different challenges in education.

The OECD will continue not only to address these challenges vigorously and develop indicators in areas where it is feasible and promising to develop data, but also to advance in areas where a considerable investment still needs to be made in conceptual work. The OECD Programme for International Student Assessment (PISA) and its extension through the Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC), as well as the OECD Teaching and Learning International Survey (TALIS), are major efforts to this end.

Table of Contents

Number of the indicator in the 2013 edition

Editorial

Education and skills for inclusive growth

The world is slowly moving out of the worst economic crisis of our lifetimes. With productivity, innovation, investment and trade not yet at full steam, the recovery still bears risks. It is also becoming clear that economic growth is not enough to foster social progress, particularly if the growth dividend is not shared equitably. Indeed, the social cost of the crisis continues to weigh heavily, with more than 46 million people out of work in OECD countries and relative poverty affecting millions more. In many countries the gap between the richest and the poorest is widening, youth unemployment remains high, and access to social services remains elusive for many. The world is looking for ways to spur economic growth in a more inclusive manner. The OECD contributes to this effort by developing the evidence and tools that policy makers can use to formulate new policies to achieve this goal.

This edition of *Education at a Glance* provides ample evidence of the critical role that education and skills play in fostering social progress. In addition to the usual data sources used for generating the OECD Education Indicators, this edition also draws on the rich database on skills provided by the 2012 Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), published in October 2013 (OECD, 2013a). Together with the 2012 data on the learning outcomes of 15-year-olds from the OECD Programme for International Student Assessment (PISA 2012), published in 2013 and 2014 (OECD, 2013b and 2014a), and 2013 data on lower secondary teachers from the OECD Teaching and Learning International Survey (TALIS 2013), published in June 2014 (OECD, 2014b), we now have the richest international evidence base on education and skills ever produced. And with our newly developed, web-based research tool, *Education GPS*, all this evidence is easily accessible at the click of a mouse.

A first glance at the evidence shows that in OECD countries access to education continues to expand. The change in societies over only a couple of generations, from a time when only an elite few were educated to a situation today where three-quarters of the population have at least an upper secondary education, is one whose consequences are still unfolding. Close to 40% of 25-34 year-olds now have a tertiary education, a proportion 15 percentage points larger than that of 55-64 year-olds; and in many countries, this difference exceeds 20 percentage points. Importantly, the crisis did not slow this process of expansion; on the contrary, when scanty labour markets didn't provide much of an alternative, many individuals used the low opportunity costs to invest in their education with the aim of improving their chances for a better life. And in emerging economies, schooling is expanding – from a relatively narrow base – at a rate that surpasses that in the industrialised world.

It is therefore no surprise that the level of skills found in the population has also increased tremendously. The data on skills show that, across the 24 OECD countries or subnational entities that participated in the Survey of Adult Skills, there is a 13 percentage-point increase, on average, between the share of older and younger adults scoring at the highest levels of literacy proficiency; in a number of countries, the share of younger adults with this level of literacy is 20 percentage points larger than the share of older adults. But the data also show that educational attainment and skills do not always align. Moreover, not all countries with the largest increase in educational attainment rates are those with the largest increase in the proportion of highly skilled adults. In fact, across countries, adults with similar levels of education can have very different levels of proficiency in skills – a fact that argues for a reconsideration of how we define educational qualifications.

On the face of it, the expansion of education and the general increase in the level of skills available in the population should imply a growing and more highly skilled workforce. But we find that socio-economic divisions are deepening, because the impact that skills have on the life chances of individuals has increased considerably. Take the employment situation. On average, over 80% of tertiary-educated adults are employed compared to less than 60% of people with below upper secondary education. And the employment gap between these two groups is 30 percentage-points wide or more in several countries. Still, tertiary-educated people, especially young adults, are not immune to unemployment, and many governments are concerned about rising levels of unemployment among graduates.

On average across OECD countries, the unemployment rate among tertiary-educated adults stood at 5.0% in 2012 (up from 3.3% in 2008), but among 25-34 year-olds, it was 7.4% (up from 4.6% in 2008). By comparison, the unemployment rate for 25-34 year-olds without an upper secondary education reached 19.8% in 2012 (and even higher in many countries), up from 13.6% in 2008. Our data reconfirm that the economic crisis hit young, low-educated adults hardest.

A lack of skills increases the risk of unemployment – even among people with similar levels of education. For example, on average across countries that participated in the Survey of Adult Skills, 5.8% of adults without upper secondary education, but who had a moderate level of literacy proficiency, were unemployed compared to 8.0% of adults with similar educational attainment but who had low levels of literacy proficiency. Similarly, among tertiary-educated adults, 3.9% of those with lower literacy proficiency were unemployed compared with 2.5% of those with the highest proficiency.

The data on earnings also point to a widening gap between the educational "haves" and "have-nots". Across OECD countries, the difference in income from employment between adults without upper secondary education and those with a tertiary degree continues to grow. If we consider that the average income for 25-64 year-olds with an upper secondary education is represented by an index of 100, the income level for adults without upper secondary education was 80 in 2000 and fell to 76 in 2012, while the average income of tertiary-educated adults increased from 151 in 2000 to 159 in 2012. These data also show that the relative income gap between mid-educated and high-educated adults grew twice as large as the gap between mid-educated and low-educated adults. This means that, in relative terms, mid-educated adults moved closer in income to those with low levels of education, which is consistent with the thesis of the "hollowing-out of the middle classes".

Changes in the income distribution towards greater inequality are increasingly determined by the distribution of education and skills in societies. Across OECD countries, 73% of people without an upper secondary education find themselves at or below the median level of earnings, while only 27% of university graduates do. Educational attainment is the measure by which people are being sorted into poverty or relative wealth; and the skills distribution in a society – its inclusiveness, or lack thereof – is manifested in the degree of income inequality in the society. Countries with large proportions of low-skilled adults are also those with high levels of income inequality, as measured by the Gini coefficient, as are countries with a polarised skills profile (i.e. many low-skilled and many high-skilled people, and the skills distribution is usually linked to socio-economic background).

The risks – and, in many instances, also the penalties – of low educational attainment and low skills pertain not only to income and employment, but to many other social outcomes as well. For example, there is a 23 percentage-point difference between the share of adults with high levels of education who report that they are in good health and the share of adults with low levels of education who report so. Levels of interpersonal trust, participation in volunteering activities, and the belief that an individual can have an impact on the political process are all closely related to both education and skills levels. Thus, societies that have large shares of low-skilled people risk a deterioration in social cohesion and well-being. When large numbers of people do not share the benefits that accrue to more highly skilled populations, the long-term costs to society – in healthcare, unemployment and security, to name just a few – accumulate to become overwhelming.

Indeed, the increasing social divide between the educational "haves" and "have-nots" – and the risks that the latter are excluded from the social benefits of educational expansion – threatens societies as a whole. In the past, countries were predominantly concerned with raising their average level of human capital without paying much attention to the way education and skills were distributed across the population. Of course, improving the general level of educational attainment and skills in a population is necessary for economic growth and social progress. But as more developed countries move towards higher levels of education and skills, aggregate measures of human capital seem to lose their ability to explain differences in economic output between countries. Analysis of data from the Survey of Adult Skills shows that when people of all skills levels benefit from greater access to education, so do economic growth and social inclusion. Countries with small shares of low-skilled adults and large shares of high-skilled adults – i.e. countries with a higher degree of inclusiveness in their skills distribution – do better in terms of economic output (per capita GDP) and social equality (Gini coefficient) than countries with a similar average level of skills but with larger differences in skills proficiency across the population (Van Damme, 2014).

Education and skills have thus become increasingly important dimensions of social inequality; but they are also an indispensable part of the solution to this problem. Education can lift people out of poverty and social exclusion, but in order to do so, educational attainment has to translate into social mobility. Maybe the biggest threat to inclusive growth is the risk that social mobility could grind to a halt. Comparing our cross-sectional data over age groups

seems to confirm that across OECD countries this risk is real. In the countries that participated in the Survey of Adult Skills in 2012, 39% of 35-44 year-old adults, on average, had a tertiary qualification. Their parents' educational background had a strong influence on the likelihood that they too would acquire a tertiary degree: 68% of the adults with at least one tertiary-educated parent had also attained a tertiary education; while only 24% of adults whose parents had not attained an upper secondary education had a tertiary degree. But among the younger age group (25-34 year-olds), where the tertiary attainment rate had risen to 43%, the impact of parents' educational background was just as strong: of the adults with at least one tertiary-educated parent, 65% attained a tertiary qualification, while of the adults with low-educated parents only 23% did. In other words, the benefits of the expansion in education were shared by the middle class, but did not trickle down to less-advantaged families. In relative terms, the children of low-educated families became increasingly excluded from the potential benefits that the expansion in education provided to most of the population. And even if they were able to access education, the interplay between their disadvantaged background and the lower quality of education that these students disproportionately endure resulted in the kinds of education outcomes that did not help them to move up the social ladder.

Inclusive societies need education systems that promote learning and the acquisition of skills in an equitable manner and that support meritocracy and social mobility. When the engine of social mobility slows down, societies become less inclusive. Even at a time when access to education is expanding, too many families risk remaining excluded from the promises of intergenerational educational mobility. On average across the countries that participated in the Survey of Adult Skills, upward mobility (the percentage of the population with higher educational attainment than their parents) is now estimated at 42% among 55-64 year-olds and 43% among 45-54 year-olds, but falls to 38% among 35-44 year-olds and to 32% among 25-34 year-olds. Downward educational mobility increases from 9% among 55-64 year-olds and 10% among 45-54 year-olds, to 12% among 35-44 year-olds and 16% among 25-34 year-olds. These data suggest that the expansion in education has not yet resulted in a more inclusive society, and we must urgently address this setback.

OECD averages can be misleading in that they hide huge differences among countries. In this edition of *Education at a Glance*, the most interesting findings may not be the averages across OECD countries, but the way the indicators highlight the differences among countries. These variations reflect different historical and cultural contexts, but they also demonstrate the power of policies. Different policies produce different outcomes, and this is also true with regard to education and skills. Some countries do better than others in breaking the cycle of social inequality that leads to inequality in education, in containing the risk of exclusion based on education and skills, and in keeping the proportion of low-skilled adults small while providing opportunities to as many adults as possible to improve their skills proficiency.

Education and skills hold the key to future wellbeing and will be critical to restoring long-term growth, tackling unemployment, promoting competitiveness, and nurturing more inclusive and cohesive societies. This large collection of data on education and skills helps countries to compare and benchmark themselves, and will assist them in identifying policies that work.

Angel Gurría
OECD Secretary-General

References

Education GPS: The World of Education at your Fingertips, *http://gpseducation.oecd.org*.

OECD Initiative on Inclusive Growth, *www.oecd.org/inclusive-growth*.

OECD (2014a):

- *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264208780-en*.
- *PISA 2012 Results: Creative Problem Solving (Volume V): Students' Skills in Tackling Real-Life Problem*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264208070-en*.
- *PISA 2012 Results: Students and Money (Volume VI): Financial Literacy Skills for the 21st Century*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264208094-en*.

OECD (2014b), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264196261-en*.

OECD (2013a), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204256-en*.

OECD (2013b):

- *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201132-en*.
- *PISA 2012 Results: Ready to Learn (Volume III): Students' Engagement, Drive and Self-Beliefs*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201170-en*.
- *PISA 2012 Results: What Makes Schools Successful? (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201156-en*.

Van Damme, D. (2014), "How closely is the distribution of skills related to countries' overall level of social inequality and economic prosperity?", *EDU NAEC Paper Series*, No. 1, *www.oecd.org/edu/skills-beyond-school/EDUNAEC1.pdf*.

Introduction: The Indicators and their Framework

The organising framework

Education at a Glance 2014: OECD Indicators offers a rich, comparable and up-to-date array of indicators that reflects a consensus among professionals on how to measure the current state of education internationally. The indicators provide information on the human and financial resources invested in education, how education and learning systems operate and evolve, and the returns to investments in education. The indicators are organised thematically, and each is accompanied by information on the policy context and an interpretation of the data. The education indicators are presented within an organising framework that:

- distinguishes between the actors in education systems: individual learners and teachers, instructional settings and learning environments, education service providers, and the education system as a whole;
- groups the indicators according to whether they address learning outcomes for individuals or countries, policy levers or circumstances that shape these outcomes, or to antecedents or constraints that put policy choices into context; and
- identifies the policy issues to which the indicators relate, with three major categories distinguishing between the quality of education outcomes and education opportunities, issues of equity in education outcomes and opportunities, and the adequacy and effectiveness of resource management.

The following matrix describes the first two dimensions:

	1. Education and learning outputs and outcomes	**2. Policy levers and contexts shaping educational outcomes**	**3. Antecedents or constraints that contextualise policy**
I. Individual participants in education and learning	**1.I.** The quality and distribution of individual educational outcomes	**2.I.** Individual attitudes towards, engagement in, and behaviour in teaching and learning	**3.I.** Background characteristics of the individual learners and teachers
II. Instructional settings	**1.II.** The quality of instructional delivery	**2.II.** Pedagogy, learning practices and classroom climate	**3.II.** Student learning conditions and teacher working conditions
III. Providers of educational services	**1.III.** The output of educational institutions and institutional performance	**2.III.** School environment and organisation	**3.III.** Characteristics of the service providers and their communities
IV. The education system as a whole	**1.IV.** The overall performance of the education system	**2.IV.** System-wide institutional settings, resource allocations, and policies	**3.IV.** The national educational, social, economic, and demographic contexts

Actors in education systems

The OECD Indicators of Education Systems (INES) programme seeks to gauge the performance of national education systems as a whole, rather than to compare individual institutional or other sub-national entities. However, there is increasing recognition that many important features of the development, functioning and impact of education systems can only be assessed through an understanding of learning outcomes and their relationships to inputs and processes at the level of individuals and institutions. To account for this, the indicator framework distinguishes between a macro level, two meso-levels and a micro-level of education systems. These relate to:

- the education system as a whole;
- the educational institutions and providers of educational services;
- the instructional setting and the learning environment within the institutions; and
- the individual participants in education and learning.

To some extent, these levels correspond to the entities from which data are being collected, but their importance mainly centres on the fact that many features of the education system play out quite differently at different levels of the system, which needs to be taken into account when interpreting the indicators. For example, at the level of students within a classroom, the relationship between student achievement and class size may be negative, if students in small classes benefit from improved contact with teachers. At the class or school level, however, students are often intentionally grouped such that weaker or disadvantaged students are placed in smaller classes so that they receive more individual attention. At the school level, therefore, the observed relationship between class size and student achievement is often positive, suggesting that students in larger classes perform better than students in smaller classes. At higher aggregated levels of education systems, the relationship between student achievement and class size is further confounded, e.g. by the socio-economic intake of schools or by factors relating to the learning culture in different countries. Therefore, past analyses that have relied on macro-level data alone have sometimes led to misleading conclusions.

Outcomes, policy levers and antecedents

The second dimension in the organising framework further groups the indicators at each of the above levels:

- indicators on observed outputs of education systems, as well as indicators related to the impact of knowledge and skills for individuals, societies and economies, are grouped under the sub-heading *output and outcomes of education and learning;*
- the sub-heading *policy levers and contexts* groups activities seeking information on the policy levers or circumstances that shape the outputs and outcomes at each level; and
- these policy levers and contexts typically have *antecedents* – factors that define or constrain policy. These are represented by the sub-heading *antecedents and constraints*. The antecedents or constraints are usually specific for a given level of the education system; antecedents at a lower level of the system may well be policy levers at a higher level. For teachers and students in a school, for example, teacher qualifications are a given constraint while, at the level of the education system, professional development of teachers is a key policy lever.

Policy issues

Each of the resulting cells in the framework can then be used to address a variety of issues from different policy perspectives. For the purpose of this framework, policy perspectives are grouped into three classes that constitute the third dimension in the organising framework for INES:

- quality of educational outcomes and educational opportunities;
- equality of educational outcomes and equity in educational opportunities; and
- adequacy, effectiveness and efficiency of resource management.

In addition to the dimensions mentioned above, the time perspective in the framework allows for dynamic aspects of the development of education systems to be modelled as well.

The indicators that are published in *Education at a Glance 2014* fit within this framework, though often they speak to more than one cell.

Most of the indicators in **Chapter A,** *The output of educational institutions and the impact of learning,* relate to the first column of the matrix describing outputs and outcomes of education. Even so, indicators in Chapter A measuring educational attainment for different generations, for instance, not only provide a measure of the output of the education system, but also provide context for current education policies, helping to shape polices on, for example, lifelong learning.

Chapter B, *Financial and human resources invested in education,* provides indicators that are either policy levers or antecedents to policy, or sometimes both. For example, expenditure per student is a key policy measure that most directly affects the individual learner, as it acts as a constraint on the learning environment in schools and learning conditions in the classroom.

Chapter C, *Access to education, participation and progression,* provides indicators that are a mixture of outcome indicators, policy levers and context indicators. Internationalisation of education and progression rates are, for instance, outcome measures to the extent that they indicate the results of policies and practices at the classroom, school and system levels. But they can also provide contexts for establishing policy by identifying areas where policy intervention is necessary to address issues of inequity, for example.

Chapter D, *The learning environment and organisation of schools,* provides indicators on instruction time, teachers' working time and teachers' salaries that not only represent policy levers that can be manipulated but also provide contexts for the quality of instruction in instructional settings and for the outcomes of individual learners. It also presents data on the profile of teachers, the levels of government at which decisions about education are taken, and pathways and gateways to gain access to secondary and tertiary education.

The reader should note that this edition of *Education at a Glance* covers a significant amount of data from partner countries as well (please refer to the *Reader's Guide* for details).

Reader's Guide

Coverage of the statistics

Although a lack of data still limits the scope of the indicators in many countries, the coverage extends, in principle, to the entire national education system (within the national territory), regardless of who owns or sponsors the institutions concerned and regardless of how education is delivered. With one exception (described below), all types of students and all age groups are included: children (including students with special needs), adults, nationals, foreigners, and students in open-distance learning, in special education programmes or in education programmes organised by ministries other than the Ministry of Education, provided that the main aim of the programme is to broaden or deepen an individual's knowledge. However, children below the age of three are only included if they participate in programmes that typically cater to children who are at least three years old. Vocational and technical training in the workplace, with the exception of combined school- and work-based programmes that are explicitly deemed to be part of the education system, is not included in the basic education expenditure and enrolment data.

Educational activities classified as "adult" or "non-regular" are covered, provided that the activities involve the same or similar content as "regular" education studies, or that the programmes of which they are a part lead to qualifications similar to those awarded in regular educational programmes.

Courses for adults that are primarily for general interest, personal enrichment, leisure or recreation are excluded.

Country coverage

This publication features data on education from the 34 OECD member countries, two partner countries that participate in the OECD Indicators of Education Systems programme (INES), namely Brazil and the Russian Federation, and the other partner countries that do not participate in INES (Argentina, China, Colombia, India, Indonesia, Latvia, Saudi Arabia and South Africa). Data sources for these latter eight countries are specified below the tables.

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

Calculation of international means

The OECD average is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. The OECD average therefore refers to an average of data values at the level of the national systems and can be used to answer the question of how an indicator value for a given country compares with the value for a typical or average country. It does not take into account the absolute size of the education system in each country.

The OECD total is calculated as the weighted mean of the data values of all OECD countries for which data are available or can be estimated. It reflects the value for a given indicator when the OECD area is considered as a whole. This approach is taken for the purpose of comparing, for example, expenditure charts for individual countries with those of the entire OECD area for which valid data are available, with this area considered as a single entity.

Both the OECD average and the OECD total can be significantly affected by missing data. Given the relatively small number of countries surveyed, no statistical methods are used to compensate for this. In cases where a category is not applicable (code "a") in a country or where the data value is negligible (code "n") for the corresponding calculation, the value zero is imputed for the purpose of calculating OECD averages. In cases where both the numerator and the denominator of a ratio are not applicable (code "a") for a certain country, this country is not included in the OECD average.

For financial tables using trend series over 1995-2011, both the OECD average and OECD total are also calculated for countries providing data for all reference years used. This allows for a comparison of the OECD average and OECD total over time with no distortion due to the exclusion of certain countries in the different years.

For many indicators, an **EU21 average** is also presented. It is calculated as the unweighted mean of the data values of the 21 countries that are members of both the European Union and the OECD for which data are available or can be estimated. These 21 countries are Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom.

For some indicators, a **G20 average** is presented. The G20 average is calculated as the unweighted mean of the data values of all G20 countries for which data are available or can be estimated (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, the Russian Federation, Saudi Arabia, South Africa, Turkey, the United Kingdom and the United States; the European Union is the 20th member of the G20 but is not included in the calculation). The G20 average is not computed if the data for China or India are not available.

For some indicators, an **average** is presented. This average is included in tables with data from the 2012 Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC). The average corresponds to the arithmetic mean of the estimates included in the table or chart from both the national and the sub-national entities (which include Flanders (Belgium) and England/Northern Ireland [UK]). Partner countries are not included in the average presented in any of the tables or charts.

Standard error (S.E.)

The statistical estimates presented in this report are based on samples of adults, rather than values that could be calculated if every person in the target population in every country had answered every question. Therefore, each estimate has a degree of uncertainty associated with sampling and measurement error, which can be expressed as a standard error. The use of confidence intervals provides a way to make inferences about the population means and proportions in a manner that reflects the uncertainty associated with the sample estimates. In this report, confidence intervals are stated at a 95% level. In other words, the result for the corresponding population would lie within the confidence interval in 95 out of 100 replications of the measurement on different samples drawn from the same population.

In tables showing standard errors, there is one column with the heading "%", which indicates the average percentage, and a column with the heading "S.E.", which indicates the standard error. Given the survey method, there is a sampling uncertainty in the percentages (%) of twice the standard error (S.E.). For example, for the values: % = 10 and S.E. = 2.6, 10% has an uncertainty zone of twice (1.96) the standard error of 2.6, assuming an error risk of 5%. Thus, the true percentage would probably (error risk of 5%) be somewhere between 5% and 15% ("confidence interval"). The confidence interval is calculated as: % +/– 1.96 * S.E., i.e. for the previous example, 5% = 10% – 1.96 * 2.6 and 15% = 10% + 1.96 * 2.6.

Classification of levels of education

The classification of the levels of education is based on the International Standard Classification of Education (ISCED 1997). ISCED 1997 is an instrument for compiling statistics on education internationally; it distinguishes among six levels of education. ISCED 1997 was recently revised, and the new International Standard Classification of Education (ISCED 2011) was formally adopted in November 2011. This new classification will be implemented in *Education at a Glance 2015*.

Term used in this publication	**ISCED classification** (and subcategories)
Pre-primary education The first stage of organised instruction designed to introduce very young children to the school atmosphere. Minimum entry age of 3.	**ISCED 0**
Primary education Designed to provide a sound basic education in reading, writing and mathematics and a basic understanding of some other subjects. Entry age: between 5 and 7. Duration: 6 years.	**ISCED 1**

…

Lower secondary education Completes provision of basic education, usually in a more subject oriented way with more specialist teachers. Entry follows 6 years of primary education; duration is 3 years. In some countries, the end of this level marks the end of compulsory education.	**ISCED 2** (subcategories: 2A prepares students for continuing academic education, leading to 3A; 2B has stronger vocational focus, leading to 3B; 2C offers preparation of entering workforce)
Upper secondary education Stronger subject specialisation than at lower secondary level, with teachers usually more qualified. Students typically expected to have completed 9 years of education or lower secondary schooling before entry and are generally 15 or 16 years old.	**ISCED 3** ISCED 3 (subcategories: 3A prepares students for university-level education at level 5A; 3B for entry to vocationally oriented tertiary education at level 5B; 3C prepares students for workforce or for post-secondary non-tertiary education at level ISCED 4)
Post-secondary non-tertiary education Internationally, this level straddles the boundary between upper secondary and post-secondary education, even though it might be considered upper secondary or post-secondary in a national context. Programme content may not be significantly more advanced than that in upper secondary, but is not as advanced as that in tertiary programmes. Duration usually the equivalent of between 6 months and 2 years of full-time study. Students tend to be older than those enrolled in upper secondary education.	**ISCED 4** ISCED 4 (subcategories: 4A may prepare students for entry to tertiary education, both university level and vocationally oriented; 4B typically prepares students to enter the workforce)
Tertiary education	**ISCED 5** (subcategories: 5A and 5B; see below)
Tertiary-type A education Largely theory-based programmes designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements, such as medicine, dentistry or architecture. Duration at least 3 years full-time, though usually 4 or more years. These programmes are not exclusively offered at universities; and not all programmes nationally recognised as university programmes fulfil the criteria to be classified as tertiary-type A. Tertiary-type A programmes include second-degree programmes, such as the American master's degree.	**ISCED 5A**
Tertiary-type B education Programmes are typically shorter than those of tertiary-type A and focus on practical, technical or occupational skills for direct entry into the labour market, although some theoretical foundations may be covered in the respective programmes. They have a minimum duration of two years full-time equivalent at the tertiary level.	**ISCED 5B**
Advanced research programmes Programmes that lead directly to the award of an advanced research qualification, e.g. Ph.D. The theoretical duration of these programmes is 3 years, full-time, in most countries (for a cumulative total of at least 7 years full-time equivalent at the tertiary level), although the actual enrolment time is typically longer. Programmes are devoted to advanced study and original research.	**ISCED 6**

The glossary available at *www.oecd.org/edu/eag.htm* also describes these levels of education in detail, and Annex 1 shows the typical age of graduates of the main educational programmes, by ISCED level.

Symbols for missing data and abbreviations

These symbols and abbreviations are used in the tables and charts:

- a Data are not applicable because the category does not apply.
- c There are too few observations to provide reliable estimates (e.g. in PISA, there are fewer than 30 students or fewer than five schools with valid data; in the Survey of Adult Skills, there are fewer than 30 individuals). However, these statistics were included in the calculation of cross-country averages.

ESCS *PISA index of economic, social and cultural status*
m Data are not available.
n Magnitude is either negligible or zero.
r Values are below a certain reliability threshold and should be interpreted with caution (see Annex 3 for country-specific definitions).
S.E. Standard Error.
w Data have been withdrawn at the request of the country concerned.
x Data included in another category or column of the table (e.g. x(2) means that data are included in column 2 of the table).
~ Average is not comparable with other levels of education.

Further resources

The website *www.oecd.org/edu/eag.htm* is a rich source of information on the methods used to calculate the indicators, on the interpretation of the indicators in the respective national contexts, and on the data sources involved. The website also provides access to the data underlying the indicators and to a comprehensive glossary for technical terms used in this publication.

All post-production changes to this publication are listed at *www.oecd.org/edu/eag.htm*.

Education at a Glance uses the OECD's StatLinks service. Below each table and chart in *Education at Glance 2014* is a URL that leads to a corresponding Excel workbook containing the underlying data for the indicator. These URLs are stable and will remain unchanged over time. In addition, readers of the *Education at a Glance* e-book will be able to click directly on these links and the workbook will open in a separate window.

Layout of tables

In all tables, the numbers in parentheses at the top of the columns are simply used for reference. When a consecutive number does not appear, that column is available on line only.

Codes used for territorial entities

These codes are used in certain charts. Country or territorial entity names are used in the text. Note that throughout the publication, the Flemish Community of Belgium and the French Community of Belgium may be referred to as "Belgium (Fl.)" or "Flanders (Belgium)", and "Belgium (Fr.)", respectively.

ARG	Argentina	IRL	Ireland
AUS	Australia	ISL	Iceland
AUT	Austria	ISR	Israel
BEL	Belgium	ITA	Italy
BFL	Belgium (Flemish Community)	JPN	Japan
BFR	Belgium (French Community)	KOR	Korea
BRA	Brazil	LUX	Luxembourg
CAN	Canada	LVA	Latvia
CHE	Switzerland	MEX	Mexico
CHL	Chile	NLD	Netherlands
CHN	China	NOR	Norway
COL	Colombia	NZL	New Zealand
CZE	Czech Republic	POL	Poland
DEU	Germany	PRT	Portugal
DNK	Denmark	RUS	Russian Federation
ENG	England	SAU	Saudi Arabia
ESP	Spain	SCO	Scotland
EST	Estonia	SVK	Slovak Republic
FIN	Finland	SVN	Slovenia
FRA	France	SWE	Sweden
GRC	Greece	TUR	Turkey
HUN	Hungary	UKM	United Kingdom
IDN	Indonesia	USA	United States
IND	India	ZAF	South Africa

About the Survey of Adults Skills

Design and methods

The Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), assessed the proficiency of adults from the ages of 16-65 in literacy, numeracy and problem solving in technology-rich environments. These skills are key information-processing competencies that are relevant to adults in many social contexts and work situations, and necessary for fully integrating and participating in the labour market, education and training, and social and civic life.

Information was also collected on the background of respondents, their education and labour market experience and some other outcomes, such as their health. In addition, the survey collected a range of information on the reading- and numeracy-related activities of respondents, the use of information and communication technologies at work and in everyday life, and on a range of generic skills, such as collaborating with others and organising one's time, required of individuals in their work. Respondents were also asked whether their skills and qualifications match their work requirements and whether they have autonomy over key aspects of their work.

The Survey of Adult Skills was designed primarily as a computer-based assessment. Most respondents completed the assessment in this format. Respondents who had no prior experience with computers or very limited computer skills took the assessment in a pencil-and-paper format. Respondents took the assessment in the national language or languages of their country of residence, or in some cases, a widely used minority language.

Twenty-four countries[1] took part in the first round of the assessment.[2] Data collection took place between August 2011 and March 2012 in most countries. All participating countries administered the literacy and numeracy assessments. Four countries (Cyprus[3], France, Italy and Spain) did not administer the assessment of problem solving in technology-rich environments.

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia excluding the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, 2013, forthcoming).

More information on the design and methods of the survey can be found in:

OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204256-en*.

OECD (2013), *The Survey of Adult Skills: Reader's Companion*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204027-en*.

The Survey of Adult Skills uses the following definitions of literacy, numeracy and problem-solving in technology-rich environments:

Literacy

Literacy is defined as "understanding, evaluating, using and engaging with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential". It does not involve either the comprehension or production of spoken language or the production of text (writing). Literacy is conceived as a skill that involves constructing meaning, and evaluating and using texts to achieve a range of possible goals in a variety of contexts. It thus extends well beyond the skills of decoding or comprehending texts to encompass the capacity to respond to texts in a manner that is appropriate to the context.

Numeracy

Numeracy is defined as the ability to access, use, interpret and communicate mathematical information and ideas in order to engage in and manage the mathematical demands of a range of situations in adult life. A numerate adult is one who responds appropriately to mathematical content, information, and ideas represented in various ways in order to manage situations and solve problems in a real-life context. While performance on numeracy tasks is, in part, dependent on the ability to read and understand text, numeracy involves more than applying arithmetical skills to information embedded in text.

Problem solving in technology-rich environments

Problem solving in technology-rich environments is defined as "using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks". It focuses on "the abilities to solve problems for personal, work and civic purposes by setting up appropriate goals and plans, and accessing and making use of information through computers and computer networks" (*OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, *http://dx.doi.org/10.1787/9789264204256-en*).

Problem solving in technology-rich environments represents the intersection of what are sometimes described as "computer literacy" skills (i.e. the capacity to use information and communication technologies [ICT] tools and applications) and the cognitive skills required to solve problems. However, the objective was not to test proficiency in the use of ICT tools and applications in isolation, but rather to assess the capacity of adults to use these tools to access, process, evaluate and analyse information effectively in a goal-oriented way.

Reporting the results

In each of the three domains assessed, proficiency is considered as a continuum of ability involving the mastery of information-processing tasks of increasing complexity. The results are represented on a 500-point scale.

To help interpret the results, the reporting scales have been divided into "proficiency levels" defined by particular score-point ranges. Six proficiency levels are defined for literacy and numeracy (Levels 1 through 5 plus below Level 1) and four for problem solving in technology-rich environments (Levels 1 through 3 plus below Level 1). Each proficiency level is described in terms of the characteristics of the types of tasks that can be successfully completed by adults with proficiency scores in the range of scores that defines a level. Descriptions of the types of tasks related to each level on the literacy scale are provided below.

Proficiency at Level 5 (scores equal to or higher than 376 points)

Level 5 is the highest proficiency level on the skills scale. Adults reaching this level can perform tasks that involve searching for and integrating information across multiple, dense texts; constructing syntheses of similar and contrasting ideas or points of view, or evaluating evidence and arguments. They can apply and evaluate logical and conceptual models, and evaluate the reliability of evidentiary sources and select key information. They are aware of subtle, rhetorical cues and are able to make high-level inferences or use specialised background knowledge.

Proficiency at Level 4 (scores from 326 points to less than 376 points)

At Level 4, adults can perform multiple-step operations to integrate, interpret, or synthesise information from complex or lengthy continuous, non-continuous, mixed, or multiple-type texts that involve conditional and/or competing information.

Proficiency at Level 3 (scores from 276 points to less than 326 points)

Adults performing at Level 3 can understand and respond appropriately to dense or lengthy texts, including continuous, non-continuous, mixed, or multiple pages. They understand text structures and rhetorical devices and can identify, interpret, or evaluate one or more pieces of information and make appropriate inferences. They can also perform multistep operations and select relevant data from competing information in order to identify and formulate responses.

Proficiency at Level 2 (scores from 226 points to less than 276 points)

At Level 2, adults can integrate two or more pieces of information based on criteria, compare and contrast or reason about information and make low-level inferences. They can navigate within digital texts to access and identify information from various parts of a document.

Proficiency at Level 1 (scores from 176 points to less than 226 points)

At Level 1, adults can read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information, which is identical to or synonymous with the information given in the question or directive. These texts contain little competing information. Adults performing at this level can complete simple forms, understand basic vocabulary, determine the meaning of sentences, and read continuous texts with a degree of fluency.

Proficiency below Level 1 (scores below 176 points)

Individuals at this level can read brief texts on familiar topics and locate a single piece of specific information identical in form to information in the question or directive. They are not required to understand the structure of sentences or paragraphs and only basic vocabulary knowledge is required. Tasks below Level 1 do not make use of any features specific to digital texts.

For more information on the Survey of Adult Skills (PIAAC), please consult *http://skills.oecd.org* and *http://www.oecd.org/site/piaac*.

Notes

1. Australia, Austria, Belgium (Flanders), Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Russian Federation, the Slovak Republic, Spain, Sweden, the United Kingdom (England and Northern Ireland), and the United States.

2. A further nine countries will collect data in 2014.

3. Readers should note the following information provided by Turkey and by the European Union Member States of the OECD and the European Union regarding the status of Cyprus:

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Chapter

A

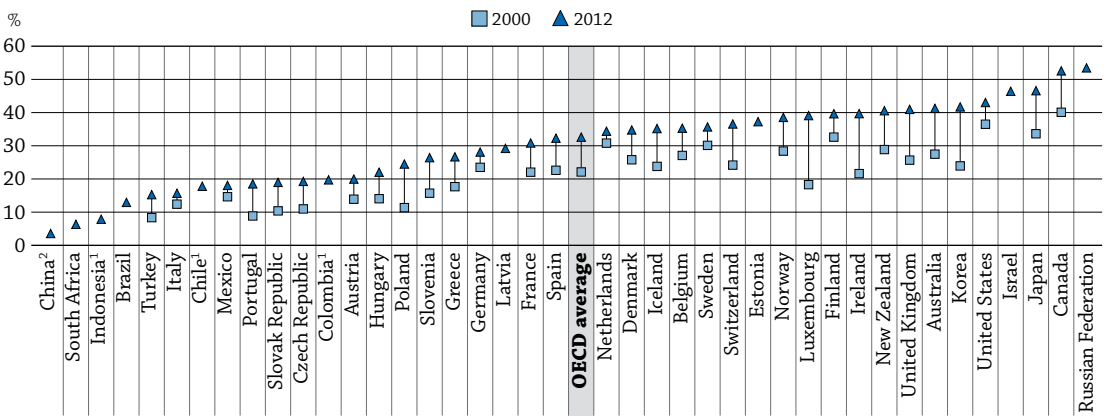
The Output of Educational Institutions and the Impact of Learning

TO WHAT LEVEL HAVE ADULTS STUDIED?

- Across countries, about 75% of adults aged 25-64 have attained at least upper secondary education; among 25-34 year-olds, about 80% have.
- On average, 25-34 year-old women have higher attainment rates in both upper secondary and tertiary education than men of the same age.
- Across the countries that participated in the Survey of Adult Skills (PIAAC), the proportion of adults who perform at the highest proficiency levels in literacy is largest among tertiary-educated adults.

Chart A1.1. Percentage of tertiary-educated adults in 2000 and 2012

25-64 year-olds



1. Year of reference 2011.
2. Year of reference 2010.

Countries are ranked in ascending order of the percentage of 25-64 year-olds who have attained tertiary education in 2012 (or latest available year).

Source: OECD. Table A1.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933114951

Context

The level of educational attainment is the percentage of a population that has reached a certain level of education. Higher levels of educational attainment are associated with better health, more social engagement, higher employment rates and are perceived as a gateway to better labour opportunities and higher relative earnings. Foundation skills, such as literacy and numeracy, are also strongly associated with better outcomes in the labour market and with living better and healthier lives. Individuals have strong incentives to pursue more education, and governments have incentives to build on the skills of the population through education.

Educational attainment is frequently used as a measure of human capital and the level of an individual's skills – in other words, a measure of the skills available in the population and the labour force. Qualifications certify and offer information on the type of knowledge and skills that graduates have acquired in formal education.

The importance of formal education and training in the development of skills like literacy and numeracy is more evident today than ever before. The Survey of Adult Skills (OECD, 2013a), a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), complements the annual data on educational attainment with new data on the distribution of literacy, numeracy and problem-solving skills in the adult population.

Over the past decades, almost all OECD countries have seen significant increases in the educational attainment of their populations. Tertiary education has expanded markedly, and in most OECD countries, a large majority of adults now has an upper secondary qualification.

This indicator includes information on educational attainment and, for the first time, a snapshot of adults' skills by level and orientation of education, age and gender.

Other findings

- **In some OECD countries, younger adults have higher tertiary attainment rates than older adults by an average of more than 20 percentage points**.
- **More than 40% of 25-34 year-olds in most OECD and partner countries have tertiary education**, but this proportion of tertiary-educated 55-64 year-olds is seen only in Canada, Israel, the Russian Federation and the United States.
- **In Australia, Finland, Japan, the Netherlands and Sweden, more than 30% of tertiary-educated adults perform at Level 4 or 5** – the highest levels – in literacy proficiency on the Survey of Adult Skills.

Trends

Between 2000 and 2012, the proportion of people without upper secondary or post-secondary non-tertiary education has shrunk at an average annual rate of about 3%. Meanwhile, tertiary education continued to expand during the same period, growing more than 3% each year. For the first time, in 2012, about one in three adults in OECD countries held a tertiary qualification.

Gender differences in educational attainment have reversed over the years. In 2000, adult men had higher tertiary attainment rates than adult women. In 2012, the situation was inverted: 34% of women had attained a tertiary education compared with 31% of men.

Note

Different indicators in this publication show the level of education among individuals. Indicator A1 shows the level of attainment, i.e. the percentage of a population that has successfully completed a given level of education and the relationship between level of attainment and the acquisition of basic skills. Graduation rates in Indicators A2 and A3 measure the estimated percentage of younger adults who are expected to graduate from a particular level of education during their lifetimes. Completion rates from upper secondary programmes in Indicator A2 estimate the proportion of students who enter a programme and complete it successfully within a certain period of time.

A1

Analysis

Attainment levels in OECD countries

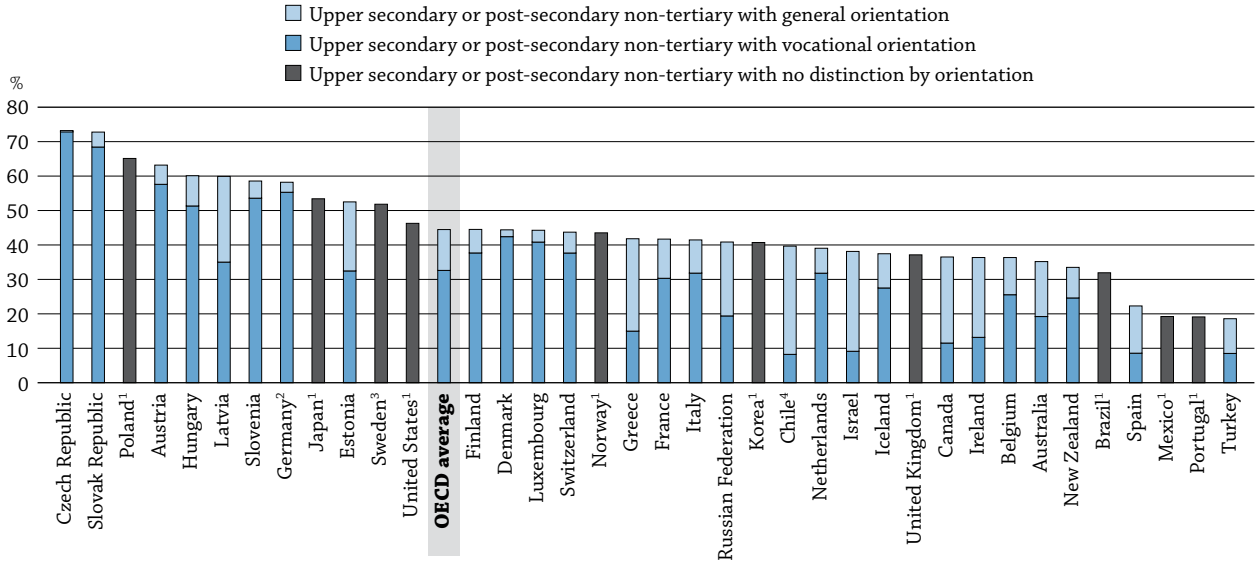
Upper secondary attainment and the weight of vocational education and training (VET)

Upper secondary education is the most commonly attained level of education in most OECD countries: more adults (25-64 year-olds) have attained upper secondary education or post-secondary non-tertiary education as their highest level of education (i.e. ISCED levels 3 and 4; see *Definitions* section at the end of this chapter) than have attained any other level of education. On average, about 45% of adults across OECD countries have attained an upper secondary education as their highest qualification. In Austria, the Czech Republic, Hungary, Latvia, Poland and the Slovak Republic, more than 60% of adults have attained this level of education (Table A1.4a).

The increase in attainment rates signals that people are staying longer in education and that policy initiatives have been successful in tackling such problems as dropout and lack of equity in education. Indeed, results from the latest round of the OECD Programme for International Student Assessment (PISA) reveal that most of the countries that have improved their performance since 2003 either maintained or improved equity in education so that a basic minimum standard of education is available to all (OECD, 2013b).

Chart A1.2. Population whose highest level of education is upper secondary or post-secondary non-tertiary, by programme orientation (2012)

25-64 year-olds



1. Countries for which no information about programme orientation is available.
2. Persons with ISCED 4A attainment in Germany have successfully completed both a general and a vocational programme. In this chart they have been allocated to vocational.
3. Figures for Sweden include about 10% of 25-64 year-olds who have attained ISCED levels 3 or 4 in programmes that cannot be allocated by orientation.
4. Year of reference 2011.

Countries are ranked in descending order of the percentage of 25-64 year-olds with upper secondary or post-secondary non-tertiary attainment (ISCED 3/4) as highest level of attainment, regardless of the orientation of the programmes.

Source: OECD. Table A1.5a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933114970

Chart A1.2 shows the percentage of the population with upper secondary or post-secondary non-tertiary education as the highest level of education and whether the qualification is from a general or vocational track. It shows the different weight that vocational upper secondary education has in several countries. At least one in two adults in Austria, the Czech Republic, Germany, Hungary, the Slovak Republic and Slovenia, have attained vocational upper secondary qualifications as the highest level of attainment while in Chile, Israel, Spain and Turkey, this proportion is smaller than 10%. There are large differences in attainment depending on programme orientation, as in upper secondary attainment overall, among countries (Table A1.5a).

Countries with relatively low upper secondary attainment rates can fall into one of two categories: either most individuals leave education before obtaining an upper secondary qualification (i.e. they have below upper secondary education), or they continue in education beyond this level until they earn a higher degree (i.e. they have attained tertiary education). In Australia, Canada, Ireland, Israel, Korea, New Zealand, the Russian Federation, Spain and the United Kingdom, tertiary attainment rates are higher than upper secondary attainment rates. In Luxembourg and Portugal, the rates for upper secondary and tertiary education are similar (Table A1.4a).

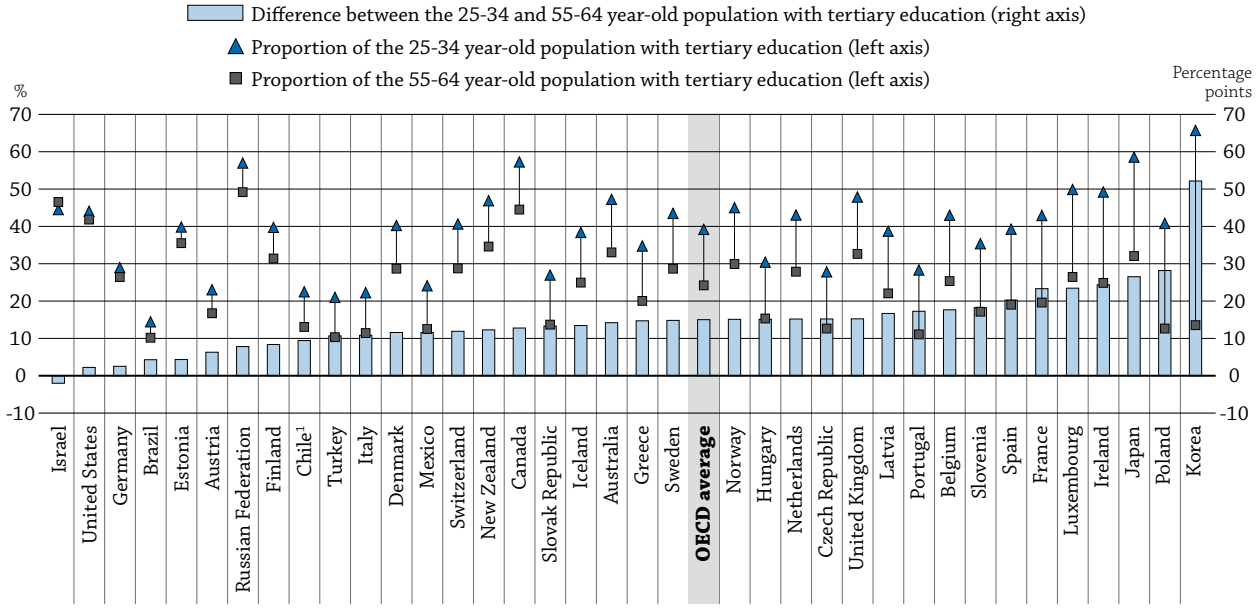
The gender gap in attainment rates has reversed among younger adults. On average, 25-34 year-old women have higher attainment rates in tertiary education than men of the same age. Some 84% of younger women have attained at least an upper secondary education while 81% of younger men have, on average (Tables A1.2b and A1.4b, available on line).

Tertiary attainment

Chart A1.1 shows that across OECD countries, tertiary attainment (including advanced research programmes, i.e. ISCED levels 5A, 5B and 6) has increased by 10 percentage points since 2000. On average, 34% of adult women and 31% of adult men have attained tertiary education. Younger adults have spurred this growth, and the change is even larger among women: in all OECD countries, younger women have higher tertiary attainment rates than older women by an average of more than 20 percentage points (Table A1.3b, available on line).

Chart A1.3. **Percentage of younger and older tertiary-educated adults (2012)**

25-34 and 55-64 year-olds, and percentage-point difference between these two groups



1. Year of reference 2011.

Countries are ranked in ascending order of the percentage-point difference between the 25-34 and 55-64 year-old population with tertiary education.

Source: OECD. Table A1.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933114989

Chart A1.3 shows that in some countries, the difference between generations is substantial: over 20 percentage points in France, Ireland, Japan, Luxembourg, Poland and Spain. In Korea, there is a 52 percentage-point gap in tertiary attainment rates between these two age groups. By contrast, the gap in tertiary attainment rates between the two age groups is less than three percentage points in Germany, Israel and the United States (Table A1.3a).

The proportion of 25-34 year-olds with tertiary education is larger than 40% in most OECD and partner countries (the OECD average is 39%), while among 55-64 year-olds this is only the case in Canada, Israel, the Russian Federation and the United States. Data also show that only 14% of 25-34 year-olds in Brazil have a tertiary education, and less than 14% of 55-64 year-olds in Brazil, Chile, the Czech Republic, Italy, Mexico, Poland, Portugal and Turkey do.

Although among 55-64 year-olds men are more likely to hold a tertiary degree (25%) than women (23%), in most OECD countries, women – particularly young women – are more likely to hold a tertiary qualification than men. Tertiary attainment rates among young women (25-34 year-olds) are highest in Australia, Belgium, Canada, Denmark, Estonia, Ireland, Israel, Japan, Korea, Latvia, Luxembourg, New Zealand, Norway, Poland, the Russian Federation, Sweden and the United Kingdom, where at least one in two young women have attained tertiary education (Table A1.3b, available on line).

Box A1.1. **Policy relevance of sub-national comparisons**

The main purpose of *Education at a Glance* is to provide an authoritative compilation of key international comparisons of education statistics. While countries attain specific values in these comparisons, readers should not assume that countries themselves are homogeneous. The country averages include significant variations among sub-national jurisdictions, much as the OECD average encompasses a variety of national experiences.

In most OECD countries, at least some education policy decisions are made by sub-national government authorities, while national decisions may affect sub-national entities differently. In some counties, the structure of the education system and the relatively small geographic expanse may limit the policy relevance of sub-national comparisons. In countries with federal education systems, sub-national governments have the primary role for managing education programmes; even in countries with more centralised education systems, sub-national education authorities may have specific administrative responsibilities. It is not surprising, then, that large federal countries, such as Canada, Germany and the United States, in which education is largely controlled by regional authorities, might have large internal variations in education measures. But, many other countries with centralised education systems, such as France and Italy, have substantial variations within their countries as well. The proportion of 25-34 year-olds with a tertiary degree in the United States in 2011 ranged from a low of 29% in the state of Nevada to a high of 71% in the District of Columbia (treated by the United States as a state for statistical purposes). In Canada, the proportion of 25-34 year-olds in 2010 who attained tertiary education ranged from 28% in Nunavut to 64% in Ontario. In Germany, the proportion of 25-34 year-olds with tertiary education ranged from 20% in Sachsen-Anhalt to 38% in Berlin.

Although France has a national education system, there is still a substantial variation in tertiary attainment across regions. The percentage of 25-34 year-olds with a tertiary degree ranged from a low of 19% in Guyane to a high of 55% in Île-de-France. The tertiary attainment of 30-34 year-olds in Italy in 2011 ranged from a low of 15% in Campania to a high of 27% in Puglia [Apulia], based on data compiled for the European Union by Eurostat. The tertiary attainment rates for 30-34 year-olds in the United Kingdom ranged from 32% in Merseyside to 69% in Inner London. Examples of countries with large differences in tertiary education attainment rates (i.e. more than double) among 30-34 year-olds in sub-national regions include Greece, Hungary, Portugal, the Slovak Republic, Spain, and Turkey. OECD countries with smaller ranges include Austria, Finland, Ireland, Norway, Poland, Slovenia, Sweden and Switzerland.

Other types of education statistics show substantial sub-national variations as well, including those preceding the tertiary level of attainment. In some countries, the proportions of 15-19 year-olds enrolled in secondary school or tertiary education varied widely among sub-national units in 2011. For example, the enrolment rates for 15-19 year-olds in sub-national areas ranged from 58% to 87% in Italy, from 70% to 95% in Spain, and from 71% to 95% in Portugal. While still significant, the ranges were smaller in such countries as France (69% to 88%), the United Kingdom (71% to 88%), and the United States (82% to 91%). Some countries had small sub-national differences in enrolment rates for 15-19 year-olds, including Norway (84% to 92%) and Sweden (87% to 88%).

While more complete information is needed to understand the geographical context of these data and their local implications, they do serve to illustrate that country-level averages sometimes mask important variations within countries that are of high interest to national and local policy makers. In additional to governmental boundaries, other types of subnational distinctions may be relevant for countries, such as those based on geographic boundaries, or urban or rural distinctions. Some countries with relatively high overall averages may have local areas that are lagging substantially behind average national levels. Some countries with low overall averages may have some localities showing high performance. Sub-national data can also help to show countries' success in ensuring equity in education across regions.

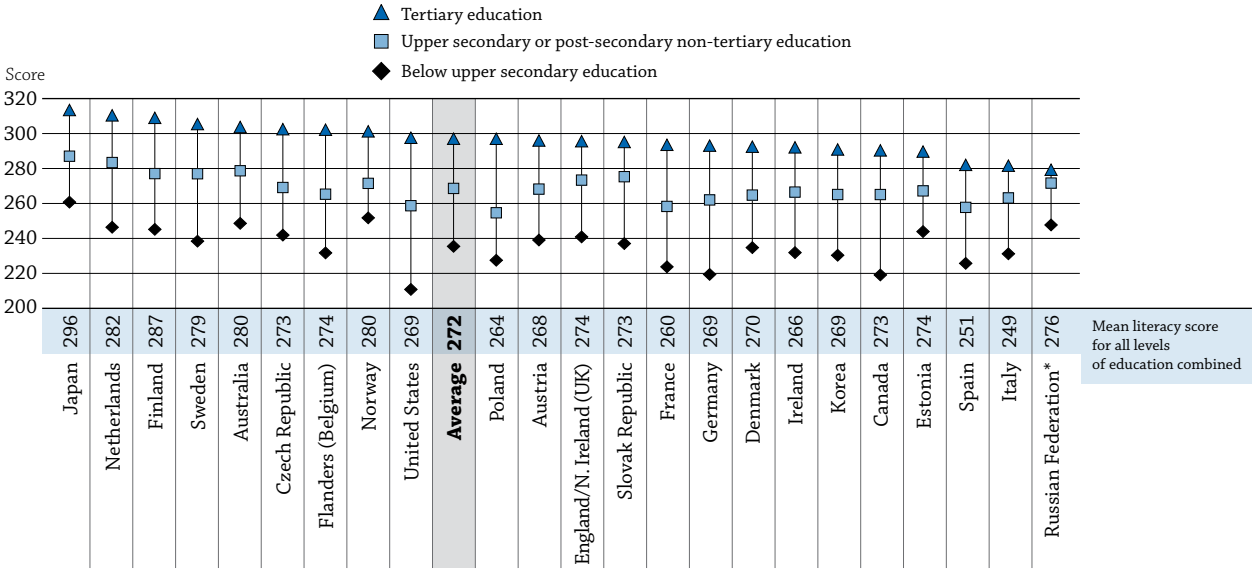
Educational attainment and literacy and numeracy skills

The Survey of Adult Skills assessed the proficiency of adults in literacy and numeracy. These skills are considered foundation skills in that they are essential for other types of learning, for example, people learn to read and then they learn through reading. Given that these skills are largely acquired and developed through formal education, measuring proficiency in literacy and numeracy can give governments and policy makers an indication of the effectiveness of their education systems.

Although closely related to each other, proficiency in literacy and numeracy and educational attainment measure different things. Qualifications earned through formal education do not always reflect the level of an individual's literacy or numeracy skills – even at the point in life when those qualifications are acquired. They also represent other sets of skills that cannot be reflected in literacy and numeracy proficiency, such as specialised (or practical) knowledge and work-specific skills.

Chart A1.4. **Mean literacy score, by educational attainment (2012)**

Survey of Adult Skills, 25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the mean literacy score of 25-64 year-olds with tertiary education.

Source: OECD. Table A1.9a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115008

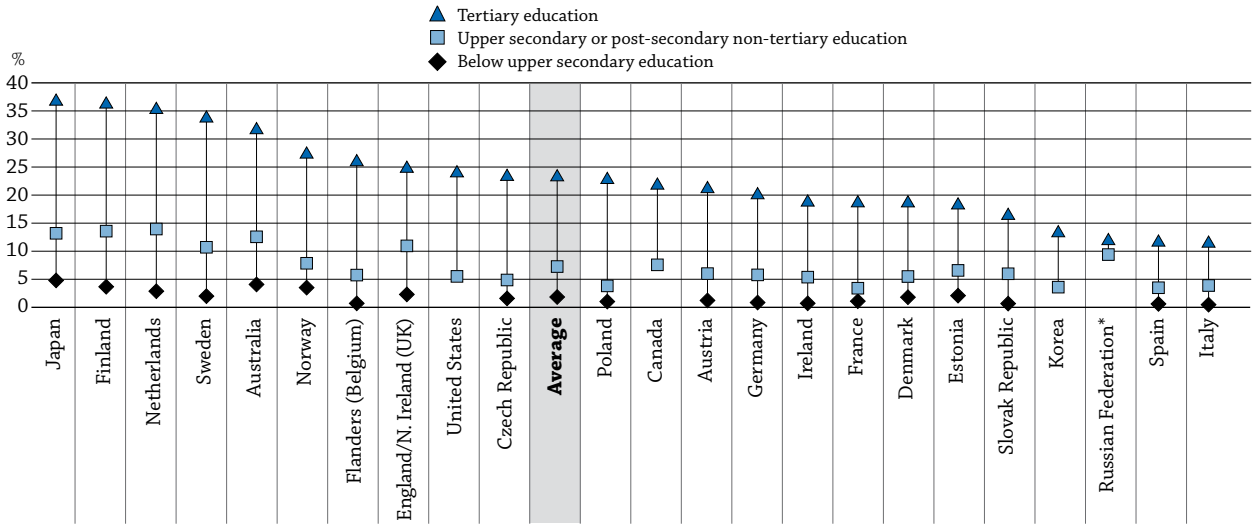
Chart A1.4 gives some insights into this complex relationship and shows the dispersion of the mean literacy score in the Survey of Adult Skills for all levels of education combined. The average mean literacy score is over 270 points. In all countries, the mean score is highest for those adults with tertiary education and lowest for those with below upper secondary education. In all countries except the Russian Federation, adults with tertiary education have a mean score above 280 points. Across countries, the average difference in score between adults with tertiary education and those with below upper secondary education is about 60 points, ranging from about 30 points in the Russian Federation to over 70 points in Canada, Flanders (Belgium), Germany and the United States (Table A1.9a [L]).

Chart A1.5 shows that, in all countries, the proportion of adults who perform at the highest proficiency levels in the Survey of Adult Skills (i.e. Level 4 or 5) is largest for tertiary-educated adults. In Australia, Finland, Japan, the Netherlands and Sweden, the proportion of adults scoring at literacy proficiency Level 4 or 5 is the largest: more than 30% of the tertiary-educated population scores at Level 4 or 5. In these countries, the difference in scores between tertiary-educated adults and those with below upper secondary education is also the largest: more than 25 percentage points. Data also show that, in all countries, there are larger proportions of adults who perform at literacy proficiency Level 4 or 5 among adults with higher educational attainment. The difference in literacy levels between tertiary-educated adults and those with an upper secondary education is larger than that between adults with an upper secondary education and those with below upper secondary education (Table A1.6a [L]).

A1

Chart A1.5. Percentage of adults scoring at literacy proficiency Level 4/5, by educational attainment (2012)

Survey of Adult Skills, 25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the percentage of 25-64 year-olds with tertiary education performing at literacy proficiency Level 4 or 5.

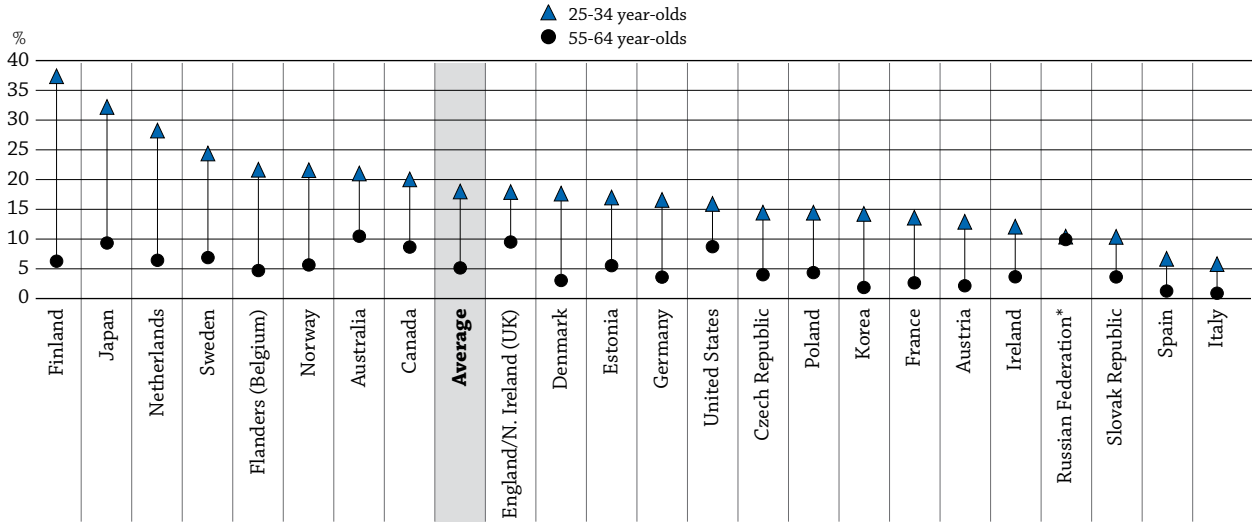
Source: OECD. Table A1.6a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115027

Chart A1.6 shows that, in all countries, the proportion of adults scoring at literacy proficiency Level 4 or 5 in the Survey of Adult Skills is on average about 10 percentage points greater among younger adults than older adults. This difference is over 20 percentage points in Finland, Japan and the Netherlands. In all countries, more than 5% of younger adults score at these high proficiency levels, while in Austria, the Czech Republic, Denmark, France, Germany, Ireland, Italy, Korea, Poland, the Slovak Republic and Spain, less than 5% of older adults do (Table A1.7a [L]).

Chart A1.6. Percentage of younger and older adults scoring at literacy proficiency Level 4/5 (2012)

Survey of Adult Skills, 25-34 and 55-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the percentage of 25-34 year-olds performing at literacy proficiency Level 4 or 5.

Source: OECD. Table A1.7a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115046

Box A1.2. Adults' skills and readiness to use information and communication technologies (ICT) for problem solving

While on the one hand there is a need for new and better skills in the context of an ever-evolving labour market, on the other hand, the rapid development of new technologies renders some skills redundant. As Frank Levy (2010) observed, "… technology can change the nature of work faster than people can change their skills". Thus, having the skills to use technology for completing non-routine tasks for which technology cannot (yet) replace people, is of critical value. For most of today's workers, ICT skills are key to getting a job and/or a better salary; for economies, they are crucial for remaining competitive in the global market. OECD countries anticipate that technology will continue to be a key driver of job creation, and have placed the development of ICT skills as the most important policy strategy for economic recovery (Chinien and Boutin, 2011; OECD, 2010).

Besides literacy and numeracy, the Survey of Adult Skills also measured problem solving skills in technology-rich environments and estimated the frequency of using different skills, including ICT skills, at work and at home. The assessment of problem solving in technology-rich environments was established as a computer-based assessment. Respondents had to have had earlier computer experience, some readiness to solve tasks with the laptop offered by the interviewer, and minimal computer skills, which were tested with a simple six-task test called "ICT core". Across the countries that participated in the survey, 74% of respondents passed the ICT core test and took the computer-based assessment (OECD, 2013a). The focus of the problem-solving assessment included understanding the nature of the problem, setting sub-goals and steps through which the problem may be solved, and taking the steps required to reach those sub-goals. However, the problems presented in the assessment were directly related to computer technology, and solving the problems required using technology. Higher levels of proficiency in problem solving in technology-rich environments thus reflect both higher problem-solving skills and also better skills in using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks (PIAAC Expert Group in Problem Solving in Technology-Rich Environments, 2009).

The information available through the Survey of Adult Skills allowed for the creation of an indicator that measures **skills and readiness to use ICT for problem solving**. This indicator brings together the information about performance in the problem-solving assessment (four groups, from below Level 1 to Level 3) and information about the reasons for not participating in the computer-based assessment and thus not having a score in problem solving (three groups). A self-estimate of the frequency of ICT use was used to validate the division of the groups. The use of ICT (the frequency of different activities related to the computer and the Internet) is related to the level of skills and readiness to use ICT for problem solving (see Chart A1.b below). The above mentioned groups are defined as follows:

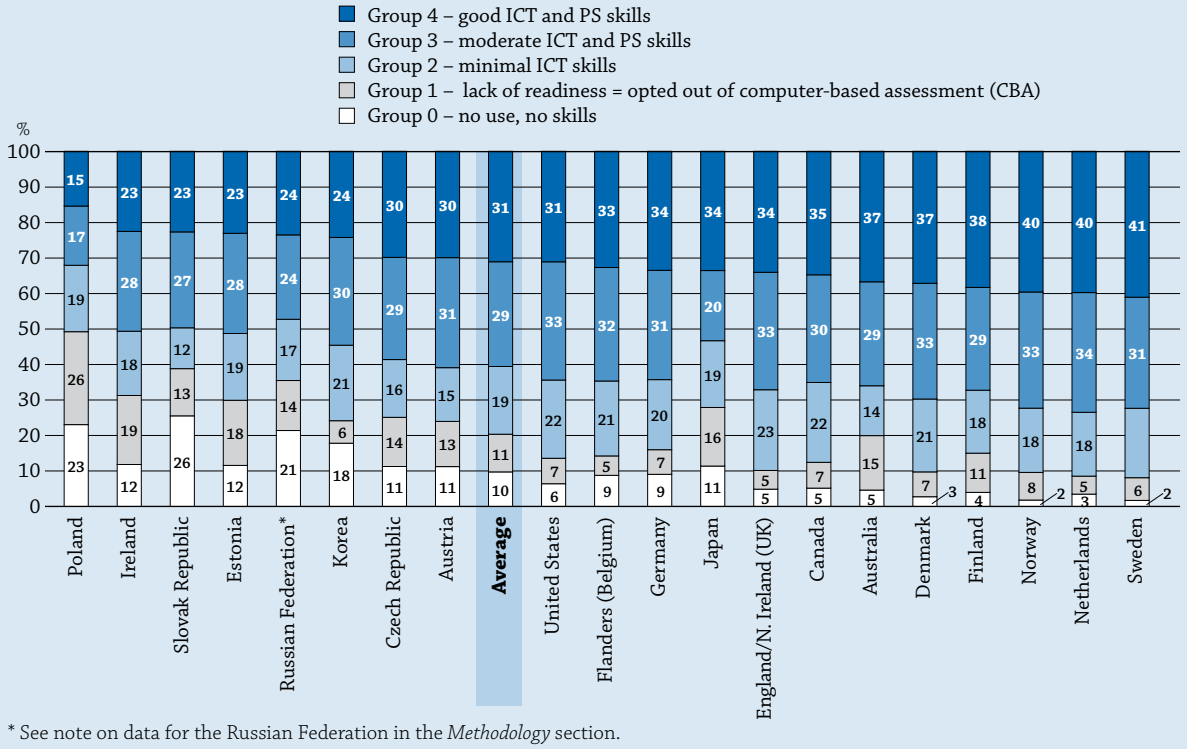
- **Group 0 – No use, no skills.** Individuals with no computer experience. Across 19 countries that participated in the assessment of problem solving in technology-rich environments, **9% of 16-65 year-olds** belong to this group.
- **Group 1 – Lack of readiness to use new devices and systems, minimal use of ICT.** This group **opted out of the computer-based assessment**. Although there may have been very different reasons for opting out of the assessment, the frequency of computer use at home, as well as the self-reported level of required computer skills at work, are lower than for the next group; thus this group probably has less skill in ICT use too. About **10% of the population** belong to this group.
- **Group 2 – Minimal ICT skills, moderate ICT use.** These are individuals with low ICT skills but who have the confidence to use ICT. They are able to use only "one function within a generic interface" (OECD, 2013c) and may even fail in very basic ICT tasks like scrolling or highlighting text (ICT core). This group includes individuals who score below Level 1 in the assessment of problem solving in technology-rich environments and those who fail the ICT core test. These two groups were merged into one since their experiences in using computers are similar across countries: they use computers at home more often than people in Group 1 do but less often than people in Group 3 do. They also differ from the other groups in their literacy and numeracy skills, which are generally better than those of people in Group 0 but not as high as those in Groups 1 and 3. This group includes about **17% of the population.**

…

A1

- **Group 3 – Moderate ICT and problem-solving skills** (Level 1). These individuals can "use widely available and familiar technology applications, such as e-mail software or a web browser" (OECD, 2013c). They are often not aware of, nor do they know how to use, specific tools and functions (e.g. a sort function). The tasks they succeed in completing require little or no navigation. About **29% of the population** belong to this group.
- **Group 4 – Good ICT and problem-solving skills** (Levels 2 and 3). These are individuals with high ICT skills who can solve complicated problems with the help of technology. At this level, "tasks typically require the use of both generic and more specific technology applications. Some navigation across pages and applications is required to solve the problem. The use of tools (e.g. a sort function) facilitates the resolution of the problem" (OECD, 2013c). About **33% of the population** belong to this group.

Chart A1.a. Distribution of skills and readiness to use information and communication technologies (ICT) for problem solving (PS) among adult population
25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.
Countries are ranked in ascending order of the proportion of adult population with good ICT and PS skills.
Source: OECD. Survey of Adult Skills (PIAAC). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933115065

Although there is a clear relationship between frequency of computer use at home and skills and readiness to use ICT (Chart A1.b), the term "group" is used rather than "level" since these groupings differ in nature from those concerning literacy and numeracy and are based on different kinds of information. Groups 0 and 1 are derived from the information about earlier experience and readiness to use computers in testing situation; groups 2-4 are based on an assessment of ICT and problem-solving skills.

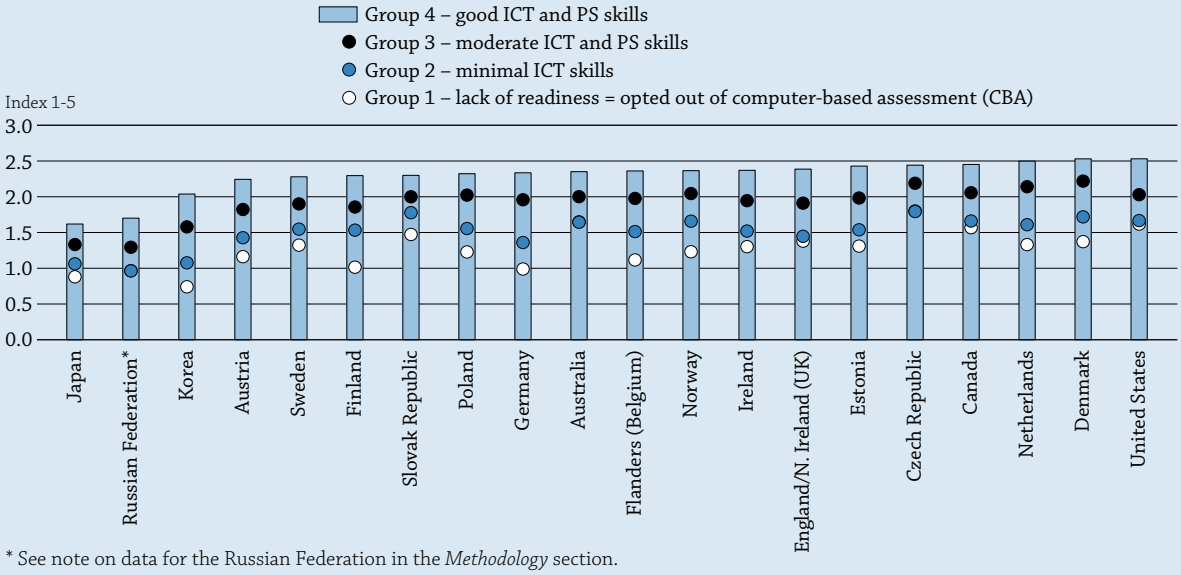
The distribution of the population according to these five groups in each of the countries participating in the Survey of Adult Skills is represented in Chart A1.a.

Chart A1.c shows that higher skills and readiness to use ICT for problem solving is associated with significant differences in adults' salaries in all countries. Further relationships between skills and readiness to use ICT for problem solving will be examined in a special chapter in *Education at a Glance 2015*.

...

Chart A1.b. Frequency of using ICT at home (index 1-5) across people with different skills and readiness to use information and communication technologies (ICT) for problem solving (PS)

25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

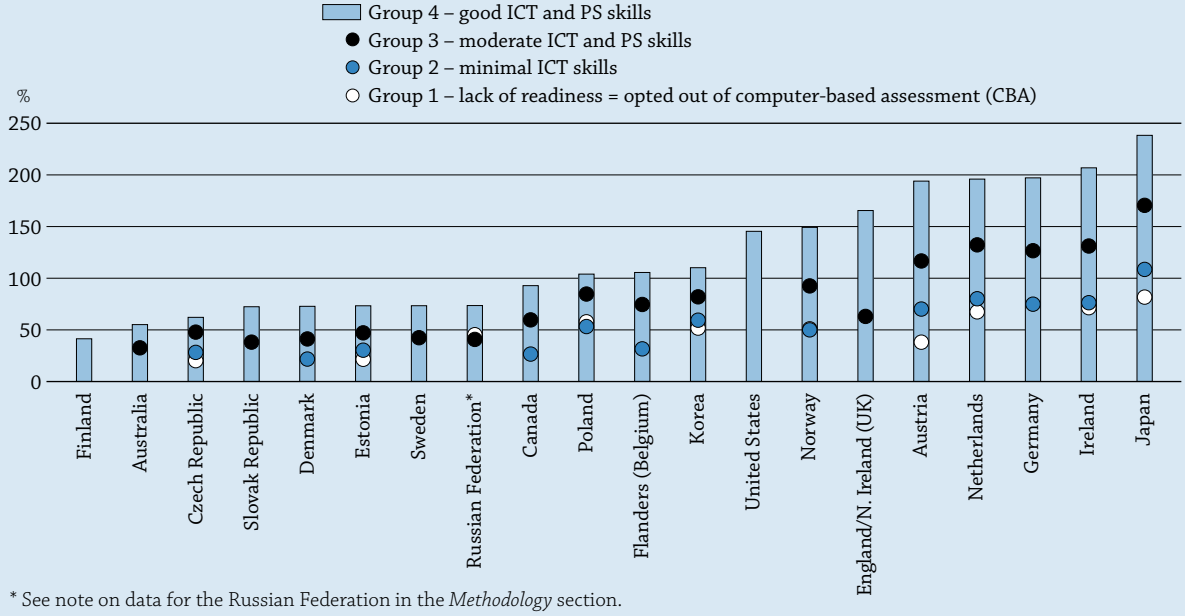
Countries are ranked in ascending order of the average frequency of using ICT at home among adult population with good ICT and PS skills.

Source: OECD. Survey of Adult Skills (PIAAC). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115084

Chart A1.c. Difference in salary (%) compared to the group 0 (no use, no skills), adjusted for age and education

25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Note: Only differences statistically significant are shown on the chart.

Countries are ranked in ascending order of the difference in salary (%) compared to the group 0.

Source: OECD. Survey of Adult Skills (PIAAC). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115103

A1

Definitions

Age groups: adults refers to 25-64 year-olds; **younger adults** refers to 25-34 year-olds; **older adults** refers to 55-64 year-olds.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED levels 3A, 3B, 3C long programmes, and ISCED level 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the *Reader's Guide* at the beginning of the book for a presentation of all ISCED levels.

Methodology

Data on population and educational attainment for most countries are taken from OECD and Eurostat databases, which are compiled from National Labour Force Surveys by the OECD LSO (Labour Market and Social Outcomes of Learning) Network. Data on educational attainment for Argentina, China, Colombia, Indonesia, Saudi Arabia and South Africa are taken from the UNESCO Institute of Statistics (UIS) database on educational attainment of the population aged 25 and older. Data on proficiency levels and mean scores are based on the Survey of Adult Skills (PIAAC) (2012). PIAAC is the OECD Programme for the International Assessment of Adult Competencies. See *About the Survey of Adult Skills* at the beginning of this publication and Annex 3 for additional information (*www.oecd.org/edu/eag.htm*). Box A1.1 is based on the INES survey of sub-national data.

Attainment profiles are based on the percentage of the population aged 25-64 that has successfully completed a specified level of education.

Most OECD countries include people without education (i.e. illiterate adults or people whose educational attainment does not fit national classifications) under the international classification ISCED 0 and therefore averages for ISCED 0/1 (i.e. pre-primary and primary education) are likely to be influenced.

Note regarding data from Israel

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

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, forthcoming).

References

Chinien, C. and F. Boutin (2011), *Defining Essential Digital Skills in the Canadian Workplace: Final Report*, WDM-Consultants.

Levy, F. (2010), "How technology changes demands for human skills", *OECD Education Working Papers,* No. 45, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kmhds6czqzq-en*.

OECD (2013a), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204256-en*.

OECD (2013b), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, PISA, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201132-en*.

OECD (2013c), *The Survey of Adult Skills: Reader's Companion*, OECD Publishing, Paris, *http://dx.doi.org/ 10.1787/9789264204027-en*.

OECD (2010), "Highlights", in *OECD Information Technology Outlook 2010,* OECD Publishing, Paris, *www.oecd.org/dataoecd/60/21/ 46444955.pdf*.

PIAAC Expert Group in Problem Solving in Technology-Rich Environments (2009), "PIAAC problem solving in technology-rich environments: a conceptual framework", *OECD Education Working Papers*, No. 36, OECD Publishing, Paris, *http://dx.doi.org/10.1787/220262483674*.

Tables of Indicator A1

StatLink http://dx.doi.org/10.1787/888933114761

	Table A1.1a	Educational attainment of 25-64 year-olds (2012)
WEB	Table A1.1b	Educational attainment of 25-64 year-olds, by gender (2012)
	Table A1.2a	Percentage of adults who have attained at least upper secondary education, by age group (2012)
WEB	Table A1.2b	Percentage of adults who have attained at least upper secondary education, by age group and gender (2012)
	Table A1.3a	Percentage of adults who have attained tertiary education, by type of programme and age group (2012)
WEB	Table A1.3b	Percentage of adults who have attained tertiary education, by type of programme, age group and gender (2012)
	Table A1.4a	Trends in educational attainment, by age group, and average annual growth rate (2000, 2005-12)
WEB	Table A1.4b	Trends in educational attainment, by gender and age group, and average annual growth rate (2000, 2005-12)
	Table A1.5a	Adults with upper secondary education, by programme orientation and gender (2012)
WEB	Table A1.5b	Educational attainment, by programme orientation, age group and gender (2012)
	Table A1.6a (L)	Educational attainment of 25-64 year-olds, by literacy proficiency level (2012)
WEB	Table A1.6a (N)	Educational attainment of 25-64 year-olds, by numeracy proficiency level (2012)
WEB	Table A1.6b (L)	Educational attainment of 25-64 year-olds, by literacy proficiency level and gender (2012)
WEB	Table A1.6b (N)	Educational attainment of 25-64 year-olds, by numeracy proficiency level and gender (2012)
	Table A1.7a (L)	Distribution of literacy proficiency levels, by age (2012)
WEB	Table A1.7a (N)	Distribution of numeracy proficiency levels, by age (2012)
WEB	Table A1.7b (L)	Distribution of literacy proficiency levels, by age and gender (2012)
WEB	Table A1.7b (N)	Distribution of numeracy proficiency levels, by age and gender (2012)
	Table A1.8 (L)	Percentage of 25-64 year-olds with vocational or general upper secondary or post-secondary non-tertiary education, by literacy proficiency level and mean literacy score (2012)
WEB	Table A1.8 (N)	Percentage of 25-64 year-olds with upper secondary or post-secondary non-tertiary education, by programme orientation, numeracy proficiency level and mean numeracy score (2012)
	Table A1.9a (L)	Mean literacy score, by educational attainment and age (2012)
WEB	Table A1.9a (N)	Mean numeracy score, by educational attainment and age (2012)
WEB	Table A1.9b (L)	Distribution of mean literacy scores, 25-64 year-olds (2012)
WEB	Table A1.9b (N)	Distribution of mean numeracy scores, 25-64 year-olds (2012)

A1

Table A1.1a. Educational attainment of 25-64 year-olds (2012)

		Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A	Tertiary education: Advanced research programmes	All levels of education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	6	18	a	14	16	5	11	29	1	100
	Austria	x(2)	16	1	47	6	10	7	13	x(8)	100
	Belgium	12	16	a	10	24	3	17	18	1	100
	Canada	3	8	a	x(5)	25	12	25	28	x(8)	100
	Chile[1]	18	25	a	x(5)	40	a	6	11	1	100
	Czech Republic	n	7	a	38	35	x(5)	x(8)	19	x(8)	100
	Denmark	1	20	1	37	6	c	6	28	1	100
	Estonia	1	10	a	14	32	7	13	24	n	100
	Finland	6	10	a	a	44	1	13	25	1	100
	France	10	18	a	30	11	n	12	18	1	100
	Germany	3	10	a	47	3	8	11	16	1	100
	Greece	21	11	x(4)	7	27	8	9	17	n	100
	Hungary	1	17	a	29	29	2	1	21	1	100
	Iceland	21	7	2	19	10	6	4	30	1	100
	Ireland	10	14	1	x(5)	21	13	15	24	1	100
	Israel	10	6	a	7	31	a	14	31	1	100
	Italy	10	32	1	8	33	1	n	15	n	100
	Japan	x(5)	x(5)	x(5)	x(5)	53	a	20	26	x(8)	100
	Korea	8	10	a	x(5)	41	a	13	28	x(8)	100
	Luxembourg	8	9	5	16	20	4	13	25	1	100
	Mexico	39	23	a	5	14	a	1	17	x(8)	100
	Netherlands	8	19	x(4)	14	22	3	3	31	1	100
	New Zealand	x(2)	19	7	14	9	11	15	25	x(8)	100
	Norway	n	18	a	27	13	4	2	36	1	100
	Poland	x(2)	10	a	31	31	4	x(8)	25	x(8)	100
	Portugal	42	21	x(5)	x(5)	19	n	x(8)	16	3	100
	Slovak Republic	n	8	x(4)	35	38	x(5)	1	17	n	100
	Slovenia	1	14	a	27	32	a	12	12	2	100
	Spain	17	29	a	9	14	n	10	22	1	100
	Sweden	4	9	a	x(5)	45	7	9	25	1	100
	Switzerland	3	9	2	39	5	6	11	23	3	100
	Turkey	55	12	a	9	10	a	x(8)	15	x(8)	100
	United Kingdom	n	9	13	30	7	a	10	30	1	100
	United States	4	7	x(5)	x(5)	46	x(5)	10	31	1	100
		Below upper secondary education			Upper secondary level of education			Tertiary level of education			
	OECD average	24			44			33			
	EU21 average	23			48			29			
Partners	Argentina[2]	44	14	a	x(5)	28	a	x(8)	14	x(8)	100
	Brazil	40	15	x(5)	x(5)	32	a	x(8)	13	x(8)	100
	China[3]	35	43	m	x(5)	14	5	x(8)	4	x(8)	100
	Colombia[1]	44	14	a	x(5)	22	a	x(8)	20	x(8)	100
	India	m	m	m	m	m	m	m	m	m	m
	Indonesia[1]	56	16	a	x(5)	21	a	x(8)	8	x(8)	100
	Latvia	1	10	m	3	48	8	1	27	n	100
	Russian Federation	1	5	x(4)	19	21	x(4)	26	28	n	100
	Saudi Arabia[4]	33	18	a	x(5)	23	5	x(8)	21	x(8)	100
	South Africa	26	14	a	x(5)	47	7	x(8)	6	x(8)	100
	G20 average	36			36			27			

Note: Due to discrepancies in the data, OECD and EU21 averages have not been calculated for each column individually.

1. Year of reference 2011.
2. Year of reference 2003.
3. Year of reference 2010.
4. Year of reference 2013.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114780

Table A1.2a. Percentage of adults who have attained at least upper secondary education, by age group (2012)

		Age group					
		25-64	30-34	25-34	35-44	45-54	55-64
		(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia	76	86	87	81	71	64
OECD	Austria	83	89	89	86	83	74
OECD	Belgium	72	82	82	79	69	56
OECD	Canada	89	93	92	92	88	84
OECD	Chile[1]	57	72	77	61	50	38
OECD	Czech Republic	92	93	94	95	93	87
OECD	Denmark	78	83	82	82	77	71
OECD	Estonia	90	86	86	90	94	88
OECD	Finland	85	91	90	90	87	74
OECD	France	73	83	83	79	69	59
OECD	Germany	86	87	87	87	87	84
OECD	Greece	68	81	83	74	65	50
OECD	Hungary	82	87	88	84	82	75
OECD	Iceland	71	77	75	75	71	61
OECD	Ireland	75	86	86	80	70	55
OECD	Israel	85	89	90	86	81	77
OECD	Italy	57	70	72	62	53	42
OECD	Japan	m	m	m	m	m	m
OECD	Korea	82	98	98	96	78	48
OECD	Luxembourg	78	86	86	80	76	69
OECD	Mexico	37	42	46	37	35	25
OECD	Netherlands	73	83	83	78	72	61
OECD	New Zealand	74	81	80	78	73	64
OECD	Norway	82	84	82	86	79	82
OECD	Poland	90	94	94	92	90	81
OECD	Portugal	38	55	58	43	27	20
OECD	Slovak Republic	92	94	94	94	92	86
OECD	Slovenia	85	94	94	89	83	74
OECD	Spain	55	65	64	62	51	35
OECD	Sweden	88	90	91	92	88	79
OECD	Switzerland	86	89	89	88	86	82
OECD	Turkey	34	43	46	32	25	21
OECD	United Kingdom	78	85	85	81	76	69
OECD	United States	89	89	89	89	89	90
	OECD average	75	82	82	79	73	64
	EU21 average	77	84	84	81	75	66
Partners	Argentina[2]	42	m	m	m	m	m
Partners	Brazil	45	56	59	45	38	27
Partners	China[3]	22	m	m	m	m	m
Partners	Colombia[1]	42	m	m	m	m	m
Partners	India	m	m	m	m	m	m
Partners	Indonesia[1]	29	m	m	m	m	m
Partners	Latvia	89	84	85	89	94	87
Partners	Russian Federation	94	94	94	95	96	92
Partners	Saudi Arabia[4]	49	m	m	m	m	m
Partners	South Africa	61	m	m	m	m	m
	G20 average	61	m	m	m	m	m

Note: These calculations exclude ISCED 3C short programmes.

1. Year of reference 2011.
2. Year of reference 2003.
3. Year of reference 2010.
4. Year of reference 2013.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114799

A1

Table A1.3a. Percentage of adults who have attained tertiary education, by type of programme and age group (2012)

		Tertiary-type B						Tertiary-type A or advanced research programmes						Total tertiary						
		25-64	30-34	25-34	35-44	45-54	55-64	25-64	30-34	25-34	35-44	45-54	55-64	25-64	30-34	25-34	35-44	45-54	55-64	25-64 (in thousands)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
OECD	Australia	**11**	11	10	13	12	10	**30**	38	37	32	25	23	**41**	49	47	45	37	33	4 846
	Austria	**7**	6	5	7	8	8	**13**	20	18	14	10	8	**20**	26	23	22	19	17	934
	Belgium	**17**	20	18	20	16	13	**18**	24	25	21	16	12	**35**	44	43	40	32	25	2 089
	Canada	**25**	26	25	27	25	22	**28**	32	32	32	24	22	**53**	58	57	59	50	44	9 981
	Chile[1]	**6**	6	6	7	6	4	**12**	17	16	12	9	9	**18**	23	22	19	16	13	1 492
	Czech Republic	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**19**	26	28	19	18	13	**19**	26	28	19	18	13	1 164
	Denmark	**6**	6	5	6	6	5	**29**	37	35	32	27	24	**35**	43	40	39	32	29	817
	Estonia	**13**	12	13	12	13	12	**25**	27	27	24	24	23	**37**	39	40	36	37	35	272
	Finland	**13**	2	1	15	21	17	**26**	44	39	33	21	15	**40**	46	40	47	41	31	1 136
	France	**12**	17	16	16	10	7	**19**	27	27	22	14	13	**31**	44	43	38	24	20	10 049
	Germany	**11**	10	9	11	12	11	**17**	22	19	19	15	15	**28**	32	29	30	28	26	12 612
	Greece	**9**	11	13	8	8	5	**18**	20	21	19	16	15	**27**	31	35	27	24	20	1 641
	Hungary	**1**	1	1	1	c	c	**21**	29	29	22	19	15	**22**	30	30	22	19	15	1 225
	Iceland	**4**	c	3	5	5	5	**31**	40	36	37	30	20	**35**	40	38	42	34	25	56
	Ireland	**15**	18	16	18	13	10	**25**	33	33	28	19	15	**40**	51	49	46	32	25	965
	Israel	**14**	13	12	14	14	16	**33**	38	33	36	30	30	**46**	51	44	50	45	47	1 691
	Italy	**n**	n	n	n	n	n	**15**	21	22	17	12	11	**16**	22	22	17	12	11	5 272
	Japan	**20**	m	23	25	20	13	**26**	m	35	27	26	19	**47**	m	59	52	46	32	30 890
	Korea	**13**	25	26	17	6	2	**28**	40	40	36	23	11	**42**	66	66	52	29	14	12 331
	Luxembourg	**13**	12	14	15	12	10	**26**	38	36	30	20	17	**39**	50	50	45	32	26	114
	Mexico	**1**	1	1	1	1	1	**17**	20	23	15	15	12	**18**	21	24	16	17	13	9 661
	Netherlands	**3**	3	3	3	3	2	**32**	41	40	34	28	25	**34**	44	43	37	31	28	2 922
	New Zealand	**15**	14	14	15	16	17	**25**	34	33	28	22	18	**41**	48	47	42	38	35	882
	Norway	**2**	c	1[r]	2	3	3	**36**	47	44	41	32	27	**39**	47	45	44	35	30	1 017
	Poland	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**25**	39	41	26	16	13	**25**	39	41	26	16	13	5 157
	Portugal	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**19**	27	28	20	14	11	**19**	27	28	20	14	11	1 095
	Slovak Republic	**1**	1	1	1	1	1	**18**	22	26	16	15	12	**19**	24	27	17	16	14	598
	Slovenia	**12**	15	14	13	11	9	**15**	24	22	18	12	8	**26**	39	35	30	23	17	315
	Spain	**10**	13	13	12	8	4	**23**	27	27	27	20	15	**32**	40	39	39	28	19	8 508
	Sweden	**9**	9	9	8	9	10	**27**	39	34	32	21	19	**36**	48	43	40	30	29	1 736
	Switzerland	**11**	10	9	12	12	10	**26**	34	32	29	23	19	**37**	44	41	41	35	29	1 619
	Turkey	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**15**	19	21	15	10	10	**15**	19	21	15	10	10	5 271
	United Kingdom	**10**	9	8	11	11	10	**31**	42	40	35	26	22	**41**	50	48	45	37	33	13 508
	United States	**10**	11	10	11	10	11	**33**	35	34	35	31	31	**43**	45	44	46	41	42	70 207
	OECD average	**10**	10	10	11	10	9	**24**	31	30	26	20	17	**32**	40	39	35	29	24	
	OECD total (in thousands)																			222 074
	EU21 average	**9**	9	9	10	10	8	**22**	30	29	24	18	15	**30**	38	37	33	26	22	
Partners	Argentina[2]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**14**	m	m	m	m	m	m
	Brazil	**x(7)**	x(8)	x(9)	x(10)	x(11)	x(12)	**13**	15	14	13	13	10	**13**	15	14	13	13	10	13 199
	China[3]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**4**	m	m	m	m	m	m
	Colombia[1]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**20**	m	m	m	m	m	m
	India	**m**	m	m	m	m	m	**m**	m	m	m	m	m	**m**	m	m	m	m	m	m
	Indonesia[1]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**8**	m	m	m	m	m	m
	Latvia	**1**	2	3	2	1	n	**28**	36	36	27	26	22	**29**	37	39	29	27	22	321
	Russian Federation	**26**	22	21	26	28	28	**28**	34	35	29	24	21	**53**	56	57	55	52	49	44 583
	Saudi Arabia[4]	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**21**	m	m	m	m	m	m
	South Africa	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**6**	m	m	m	m	m	m
	G20 average	**x(13)**	m	m	m	m	m	**x(13)**	m	m	m	m	m	**27**	m	m	m	m	m	
	G20 total (in thousands)																			m

1. Year of reference 2011.
2. Year of reference 2003.
3. Year of reference 2010.
4. Year of reference 2013.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933114818

A1

Table A1.4a. [1/2] Trends in educational attainment, by age group, and average annual growth rate (2000, 2005-12)

		Educational attainment	25-64 year-olds				25-34 year-olds				55-64 year-olds			
			2000	2005	2010	2012	2000	2005	2010	2012	2000	2005	2010	2012
			(1)	(2)	(7)	(9)	(11)	(12)	(17)	(19)	(21)	(22)	(27)	(29)
OECD	Australia	Below upper secondary	41	35	27	24	32	21	15	13	54	50	42	36
		Upper secondary or post-secondary non-tertiary	31	33	36	35	37	41	40	39	27	26	29	30
		Tertiary	27	32	38	41	31	38	44	47	19	24	30	33
	Austria	Below upper secondary	24	19	18	17	16	13	12	11	37	30	27	26
		Upper secondary or post-secondary non-tertiary	62	63	63	63	69	68	67	66	53	56	56	57
		Tertiary	14	18	19	20	14	20	21	23	10	14	16	17
	Belgium	Below upper secondary	41	34	30	28	25	19	18	18	62	52	46	44
		Upper secondary or post-secondary non-tertiary	31	35	36	36	39	40	38	39	22	26	29	31
		Tertiary	27	31	35	35	36	41	44	43	17	22	26	25
	Canada	Below upper secondary	19	15	12	11	12	9	8	8	36	25	18	16
		Upper secondary or post-secondary non-tertiary	41	39	38	36	40	37	36	35	36	39	40	39
		Tertiary	40	46	51	53	48	54	56	57	28	36	42	44
	Chile[1]	Below upper secondary	m	m	29	m	m	m	13	m	m	m	47	m
		Upper secondary or post-secondary non-tertiary	m	m	45	m	m	m	48	m	m	m	34	m
		Tertiary	m	m	27	m	m	m	38	m	m	m	19	m
	Czech Republic	Below upper secondary	14	10	8	8	8	6	6	6	24	17	14	13
		Upper secondary or post-secondary non-tertiary	75	77	75	73	81	80	72	66	67	73	75	74
		Tertiary	11	13	17	19	11	14	23	28	9	11	12	13
	Denmark	Below upper secondary	20	19	24	22	13	13	20	18	31	25	32	29
		Upper secondary or post-secondary non-tertiary	54	47	42	43	58	48	42	42	51	48	41	42
		Tertiary	26	34	33	35	29	40	38	40	18	27	28	29
	Estonia[2]	Below upper secondary	15	11	11	10	9	13	13	14	33	20	15	12
		Upper secondary or post-secondary non-tertiary	56	56	54	53	60	55	49	47	39	51	54	53
		Tertiary	29	33	35	37	31	33	38	40	27	29	31	36
	Finland	Below upper secondary	27	21	17	15	14	11	9	10	50	39	30	26
		Upper secondary or post-secondary non-tertiary	41	44	45	45	48	52	52	50	27	34	40	43
		Tertiary	33	35	38	40	39	38	39	40	23	27	30	31
	France	Below upper secondary	38	33	29	27	24	19	16	17	56	49	44	41
		Upper secondary or post-secondary non-tertiary	41	41	42	42	45	42	41	40	31	35	37	39
		Tertiary	22	25	29	31	31	40	43	43	13	16	18	20
	Germany	Below upper secondary	18	17	14	14	15	16	14	13	26	21	17	16
		Upper secondary or post-secondary non-tertiary	58	59	59	58	63	62	60	58	54	56	58	58
		Tertiary	23	25	27	28	22	22	26	29	20	23	25	26
	Greece	Below upper secondary	51	43	35	32	31	26	21	17	75	68	56	50
		Upper secondary or post-secondary non-tertiary	32	36	41	42	45	49	48	48	17	20	27	30
		Tertiary	18	21	25	27	24	26	31	35	8	12	17	20
	Hungary	Below upper secondary	31	24	19	18	19	15	14	12	60	39	26	25
		Upper secondary or post-secondary non-tertiary	55	59	61	60	67	65	60	57	28	46	58	59
		Tertiary	14	17	20	22	15	20	26	30	12	15	16	15
	Iceland	Below upper secondary	44	37	33	29	37	31	28	25	60	51	45	39
		Upper secondary or post-secondary non-tertiary	32	32	34	36	33	33	36	37	27	28	32	36
		Tertiary	24	31	33	35	30	36	36	38	13	21	23	25
	Ireland	Below upper secondary	43	35	27	25	27	19	14	14	64	60	50	45
		Upper secondary or post-secondary non-tertiary	36	35	35	35	43	40	37	37	22	23	29	30
		Tertiary	22	29	38	40	30	41	48	49	13	17	22	25
	Israel	Below upper secondary	m	21	18	15	m	14	12	10	m	31	26	23
		Upper secondary or post-secondary non-tertiary	m	33	37	38	m	36	44	46	m	26	29	31
		Tertiary	m	46	46	46	m	50	44	44	m	43	45	47
	Italy	Below upper secondary	55	50	45	43	41	34	29	28	76	70	62	58
		Upper secondary or post-secondary non-tertiary	36	38	40	42	49	50	50	50	18	22	28	31
		Tertiary	10	12	15	16	11	16	21	22	6	8	11	11
	Japan	Below upper secondary	17	m	m	m	6	m	m	m	37	m	m	m
		Upper secondary or post-secondary non-tertiary	49	60	55	53	46	47	43	41	48	78	71	68
		Tertiary	34	40	45	47	48	53	57	59	15	22	29	32
	Korea	Below upper secondary	32	24	20	18	7	3	2	2	71	65	57	52
		Upper secondary or post-secondary non-tertiary	44	44	41	41	56	46	33	33	20	25	30	34
		Tertiary	24	32	40	42	37	51	65	66	9	10	13	14
	Luxembourg	Below upper secondary	39	34	22	22	32	23	16	14	51	45	31	31
		Upper secondary or post-secondary non-tertiary	43	39	42	39	45	40	40	36	36	37	44	42
		Tertiary	18	27	35	39	23	37	44	50	13	19	25	26
	Mexico	Below upper secondary	71	68	65	63	63	62	57	54	87	84	78	75
		Upper secondary or post-secondary non-tertiary	14	17	18	19	20	20	21	22	6	8	10	12
		Tertiary	15	15	17	18	17	18	21	24	7	8	12	13
	Netherlands	Below upper secondary	34	28	28	27	25	19	18	17	46	41	40	39
		Upper secondary or post-secondary non-tertiary	42	42	40	40	48	46	42	42	35	35	34	35
		Tertiary	24	30	32	33	27	35	40	41	19	24	26	27

Note: Columns showing data for years 2006, 2007, 2008, 2009, 2011 and average annual growth rate are available for consultation on line (see *StatLink* below).

1. Break in the time series between 2010 and 2011. Data for 2011 are not comparable with previous years.

2. Figures for 2012 for Estonia and Slovenia in this table may differ from figures in other tables of Indicator A1 because the source of the figures is different. This table uses EU-LFS for all years.

3. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114837

A1

Table A1.4a. [2/2] Trends in educational attainment, by age group, and average annual growth rate (2000, 2005-12)

		Educational attainment	25-64 year-olds				25-34 year-olds				55-64 year-olds			
			2000	2005	2010	2012	2000	2005	2010	2012	2000	2005	2010	2012
			(1)	(2)	(7)	(9)	(11)	(12)	(17)	(19)	(21)	(22)	(27)	(29)
OECD	New Zealand	Below upper secondary	37	32	27	26	31	24	21	20	49	44	38	36
		Upper secondary or post-secondary non-tertiary	34	29	32	33	40	33	33	33	28	24	29	29
		Tertiary	29	39	41	41	29	43	46	47	23	32	34	35
	Norway[3]	Below upper secondary	15	23	19	18	7	17	17	18	30	27	21	18
		Upper secondary or post-secondary non-tertiary	57	45	43	43	59	43	36	37	50	49	51	52
		Tertiary	28	33	37	39	35	41	47	45	20	24	27	30
	Poland	Below upper secondary	20	15	11	10	11	8	6	6	43	30	21	19
		Upper secondary or post-secondary non-tertiary	69	68	66	65	75	66	57	54	47	58	66	69
		Tertiary	11	17	22	25	14	26	37	41	10	13	13	13
	Portugal	Below upper secondary	81	74	68	62	68	57	48	42	92	87	84	80
		Upper secondary or post-secondary non-tertiary	11	14	16	19	19	24	27	30	3	5	7	9
		Tertiary	9	13	15	19	13	19	25	28	5	7	9	11
	Slovak Republic	Below upper secondary	16	12	9	8	6	7	6	6	38	23	17	14
		Upper secondary or post-secondary non-tertiary	73	74	74	73	82	77	70	67	54	65	71	72
		Tertiary	10	14	17	19	11	16	24	27	8	12	13	14
	Slovenia[2]	Below upper secondary	25	20	17	15	15	9	7	6	39	31	28	26
		Upper secondary or post-secondary non-tertiary	59	60	60	59	66	67	62	59	49	53	56	57
		Tertiary	16	20	24	26	19	25	31	35	12	16	16	17
	Spain	Below upper secondary	62	51	47	45	45	36	35	36	85	74	68	65
		Upper secondary or post-secondary non-tertiary	16	21	22	22	21	24	26	25	6	11	14	16
		Tertiary	23	28	31	32	34	40	39	39	10	14	18	19
	Sweden	Below upper secondary	22	16	14	12	13	9	9	9	37	28	23	21
		Upper secondary or post-secondary non-tertiary	47	54	52	52	54	53	49	47	40	47	50	51
		Tertiary	30	30	34	36	34	37	42	43	23	25	27	29
	Switzerland	Below upper secondary	16	15	14	14	10	10	11	11	26	21	19	18
		Upper secondary or post-secondary non-tertiary	60	56	51	50	64	59	49	49	55	57	53	53
		Tertiary	24	29	35	37	26	31	40	41	18	22	28	29
	Turkey	Below upper secondary	77	72	69	66	72	63	58	54	87	84	81	79
		Upper secondary or post-secondary non-tertiary	15	18	18	19	19	24	25	25	7	8	9	10
		Tertiary	8	10	13	15	9	13	17	21	6	8	9	10
	United Kingdom	Below upper secondary	37	33	25	22	33	27	17	15	45	40	35	31
		Upper secondary or post-secondary non-tertiary	37	37	37	37	38	38	37	37	37	36	35	36
		Tertiary	26	30	38	41	29	35	46	48	19	24	30	33
	United States	Below upper secondary	13	12	11	11	12	13	12	11	18	14	10	10
		Upper secondary or post-secondary non-tertiary	51	49	47	46	50	47	46	45	52	49	49	48
		Tertiary	36	39	42	43	38	39	42	44	30	37	41	42
	OECD average	Below upper secondary	34	30	26	24	24	21	18	17	51	43	38	35
		Upper secondary or post-secondary non-tertiary	44	44	44	44	49	47	45	44	34	38	40	42
		Tertiary	22	27	31	33	26	33	38	40	15	20	23	25
	OECD average for countries with data available for all reference years	Below upper secondary	35	30	26	25	25	21	19	18	51	44	38	35
		Upper secondary or post-secondary non-tertiary	44	44	44	44	49	47	45	44	34	37	40	41
		Tertiary education	22	26	30	32	26	32	37	39	15	19	22	24
	EU21 average	Below upper secondary	34	29	25	23	23	19	17	16	51	42	36	34
		Upper secondary or post-secondary non-tertiary	46	48	48	48	53	52	49	47	35	40	43	44
		Tertiary education	20	24	28	29	24	29	35	37	14	18	20	22
Partners	Argentina		m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	Below upper secondary	m	m	m	55	m	m	m	41	m	m	m	73
		Upper secondary or post-secondary non-tertiary	m	m	m	32	m	m	m	44	m	m	m	17
		Tertiary education	m	m	m	13	m	m	m	14	m	m	m	10
	China	Below upper secondary	m	m	78	m	m	m	m	m	m	m	m	m
		Upper secondary or post-secondary non-tertiary	m	m	19	m	m	m	m	m	m	m	m	m
		Tertiary education	m	m	4	m	m	m	m	m	m	m	m	m
	Colombia		m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m
	Latvia	Below upper secondary	m	m	m	11	m	m	m	15	m	m	m	13
		Upper secondary or post-secondary non-tertiary	m	m	m	60	m	m	m	47	m	m	m	65
		Tertiary education	m	m	m	29	m	m	m	39	m	m	m	22
	Russian Federation	Below upper secondary	m	m	m	6	m	m	m	6	m	m	m	8
		Upper secondary or post-secondary non-tertiary	m	m	m	41	m	m	m	37	m	m	m	42
		Tertiary education	m	m	m	53	m	m	m	57	m	m	m	49
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	Below upper secondary	m	m	m	39	m	m	m	m	m	m	m	m
		Upper secondary or post-secondary non-tertiary	m	m	m	54	m	m	m	m	m	m	m	m
		Tertiary education	m	m	m	6	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m

Note: Columns showing data for years 2006, 2007, 2008, 2009, 2011 and average annual growth rate are available for consultation on line (see *StatLink* below).

1. Break in the time series between 2010 and 2011. Data for 2011 are not comparable with previous years.

2. Figures for 2012 for Estonia and Slovenia in this table may differ from figures in other tables of Indicator A1 because the source of the figures is different. This table uses EU-LFS for all years.

3. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114837

Table A1.5a. Adults with upper secondary education, by programme orientation and gender (2012)

Upper secondary or post-secondary non-tertiary education, 25-64 year-olds

		Vocational			General			Total[1]		
		M + W	Men	Women	M+W	Men	Women	M+W	Men	Women
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	19	25	13	16	15	17	35	40	30
OECD	Austria	58	61	54	6	5	6	63	66	60
OECD	Belgium	26	28	23	11	10	12	36	38	35
OECD	Canada	12	15	8	25	25	24	36	41	32
OECD	Chile[2]	8	8	8	31	32	31	40	40	39
OECD	Czech Republic	73	76	70	n	n	n	73	76	70
OECD	Denmark	42	47	38	2	2	2	43	48	38
OECD	Estonia	32	38	28	20	21	19	53	59	47
OECD	Finland	38	41	34	7	8	6	45	49	41
OECD	France	30	35	26	11	9	13	42	44	39
OECD	Germany[3]	55	55	56	3	3	3	58	58	58
OECD	Greece	15	18	12	27	24	29	42	42	42
OECD	Hungary	51	60	43	9	6	11	60	66	55
OECD	Iceland	28	36	19	10	8	11	36	44	28
OECD	Ireland	13	14	12	23	23	23	35	36	34
OECD	Israel	9	11	7	29	31	27	38	42	35
OECD	Italy	32	36	28	10	6	13	42	42	41
OECD	Japan	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	53	53	54
OECD	Korea	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	41	41	41
OECD	Luxembourg	41	40	42	3	3	4	39	38	40
OECD	Mexico	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	19	19	20
OECD	Netherlands	32	32	32	7	7	7	40	41	40
OECD	New Zealand	25	31	19	9	8	9	33	39	28
OECD	Norway	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	43	48	39
OECD	Poland	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	65	69	61
OECD	Portugal	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	19	19	20
OECD	Slovak Republic	68	74	63	4	3	6	73	77	69
OECD	Slovenia	54	61	46	5	4	6	59	65	52
OECD	Spain	9	8	9	14	14	13	22	22	22
OECD	Sweden	33	37	28	10	10	10	52	56	48
OECD	Switzerland[4]	38	36	40	6	5	7	50	46	53
OECD	Turkey	9	10	6	10	11	9	19	21	15
OECD	United Kingdom	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	37	39	35
OECD	United States	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	46	48	45
	OECD average	33	36	29	12	11	12	44	46	41
	EU21 average	39	42	36	10	9	10	48	50	45
Partners	Argentina	m	m	m	m	m	m	m	m	m
Partners	Brazil	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	32	31	33
Partners	China	m	m	m	m	m	m	m	m	m
Partners	Colombia	m	m	m	m	m	m	m	m	m
Partners	India	m	m	m	m	m	m	m	m	m
Partners	Indonesia	m	m	m	m	m	m	m	m	m
Partners	Latvia	35	39	31	25	25	24	60	64	56
Partners	Russian Federation	19	24	15	21	24	20	41	48	35
Partners	Saudi Arabia	m	m	m	m	m	m	m	m	m
Partners	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

1. Figures stand for one of the following: the combined proportions of people with vocational and general attainment; the combined proportions of people with attainment in both tracks and in programmes for which no orientation is specified; or the proportion of people with attainment in programmes for which no orientation is specified. Figures in these columns are equivalent to those for upper secondary or post-secondary non-tertiary education in Tables A1.4a and b.

2. Year of reference 2011.

3. Persons with ISCED 4A attainment in Germany have successfully completed both a general and a vocational programme. In this table they have been allocated to vocational.

4. Persons with ISCED 4 attainment in Switzerland are only included in the Total given that it is no possible to distinguish the programme orientation for this ISCED level.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114856

A1

Table A1.6a (L). [1/2] Educational attainment of 25-64 year-olds, by literacy proficiency level (2012)

Literacy proficiency in the Survey of Adult Skills

		Proficiency level	Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		All levels of education	
			%	S.E	%	S.E	%	S.E	%	S.E
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	**National entities**									
	Australia	**0/1**	28	(1.6)	11	(1.0)	5	(0.5)	13	(0.6)
		2	40	(1.9)	33	(1.7)	19	(1.4)	29	(0.8)
		3	28	(1.7)	44	(1.8)	45	(1.8)	40	(1.1)
		4/5	4	(0.7)	13	(1.4)	32	(1.5)	18	(0.8)
	Austria	**0/1**	35	(2.2)	14	(0.8)	4	(0.9)	16	(0.7)
		2	45	(2.5)	42	(1.4)	24	(1.8)	39	(1.0)
		3	19	(2.3)	38	(1.4)	51	(2.0)	37	(1.0)
		4/5	1	(0.6)	6	(0.6)	21	(1.5)	8	(0.5)
	Canada	**0/1**	53	(2.4)	18	(0.9)	9	(0.5)	17	(0.5)
		2	35	(2.4)	39	(1.1)	26	(0.7)	32	(0.7)
		3	12	(1.3)	35	(1.1)	43	(1.0)	37	(0.7)
		4/5	1	(0.4)	8	(0.8)	22	(0.9)	14	(0.6)
	Czech Republic	**0/1**	33	(4.6)	12	(1.1)	2	(0.9)	12	(0.9)
		2	46	(6.0)	43	(2.4)	18	(2.9)	38	(1.9)
		3	19	(4.4)	40	(2.0)	57	(3.8)	41	(1.8)
		4/5	2	(1.3)	5	(0.7)	24	(3.0)	8	(0.8)
	Denmark	**0/1**	39	(2.3)	16	(1.0)	6	(0.5)	16	(0.6)
		2	40	(2.2)	42	(1.5)	23	(1.2)	34	(0.9)
		3	20	(1.9)	37	(1.5)	52	(1.4)	40	(0.8)
		4/5	2	(0.7)	5	(0.7)	19	(1.3)	10	(0.6)
	Estonia	**0/1**	33	(2.1)	16	(1.0)	7	(0.6)	14	(0.6)
		2	42	(2.7)	40	(1.1)	28	(1.1)	35	(0.7)
		3	23	(2.2)	38	(1.1)	47	(1.6)	40	(1.0)
		4/5	2	(0.8)	7	(0.7)	19	(1.2)	11	(0.7)
	Finland	**0/1**	31	(2.5)	13	(0.9)	4	(0.5)	11	(0.5)
		2	41	(2.6)	33	(1.6)	16	(1.1)	27	(0.9)
		3	25	(2.3)	40	(1.6)	44	(1.4)	40	(0.9)
		4/5	4	(1.1)	14	(1.0)	37	(1.2)	22	(0.6)
	France	**0/1**	49	(1.3)	20	(1.0)	5	(0.6)	23	(0.6)
		2	37	(1.5)	45	(1.1)	24	(1.3)	37	(0.8)
		3	13	(1.1)	31	(1.0)	52	(1.3)	33	(0.7)
		4/5	1	(0.3)	3	(0.4)	19	(1.1)	7	(0.4)
	Germany	**0/1**	55	(3.7)	20	(1.1)	6	(0.8)	18	(0.8)
		2	35	(3.8)	42	(1.6)	25	(1.6)	35	(1.1)
		3	9	(2.0)	33	(1.3)	49	(1.6)	36	(1.0)
		4/5	1	(0.5)	6	(0.7)	20	(1.3)	10	(0.7)
	Ireland	**0/1**	40	(2.3)	14	(1.2)	5	(0.7)	18	(0.9)
		2	43	(2.4)	42	(1.6)	27	(1.5)	37	(0.9)
		3	16	(1.5)	38	(1.8)	49	(1.5)	36	(0.9)
		4/5	1	(0.4)	5	(0.9)	19	(1.4)	9	(0.6)
	Italy	**0/1**	42	(2.0)	17	(1.3)	9	(1.3)	29	(1.2)
		2	44	(1.7)	45	(1.6)	31	(2.3)	43	(1.0)
		3	13	(1.2)	35	(1.8)	48	(2.6)	25	(1.0)
		4/5	n	(0.3)	4	(0.7)	12	(1.7)	3	(0.3)
	Japan	**0/1**	19	(2.2)	6	(0.8)	1	(0.3)	5	(0.4)
		2	42	(3.1)	30	(1.4)	12	(0.9)	23	(0.9)
		3	34	(2.7)	51	(1.5)	50	(1.5)	49	(1.1)
		4/5	5	(1.4)	13	(1.0)	37	(1.3)	23	(0.8)
	Korea	**0/1**	43	(2.2)	13	(0.9)	3	(0.4)	14	(0.6)
		2	44	(2.1)	48	(1.7)	29	(1.3)	40	(0.9)
		3	12	(1.3)	35	(1.7)	55	(1.3)	39	(1.0)
		4/5	c	c	4	(0.5)	14	(0.9)	7	(0.4)
	Netherlands	**0/1**	32	(1.7)	9	(1.0)	3	(0.6)	13	(0.6)
		2	39	(1.9)	31	(1.5)	14	(1.1)	27	(0.8)
		3	26	(1.7)	47	(1.6)	48	(1.5)	41	(0.8)
		4/5	3	(0.7)	14	(1.1)	36	(1.5)	18	(0.8)
	Norway	**0/1**	26	(2.0)	13	(1.3)	5	(0.6)	12	(0.7)
		2	41	(2.4)	37	(1.6)	17	(1.1)	30	(0.9)
		3	30	(2.0)	42	(1.5)	51	(1.4)	43	(0.9)
		4/5	4	(1.1)	8	(1.0)	28	(1.2)	15	(0.7)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Rows showing information for all literacy proficiency levels combined are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114875

Table A1.6a (L). [2/2] Educational attainment of 25-64 year-olds, by literacy proficiency level (2012)

Literacy proficiency in the Survey of Adult Skills

		Proficiency level	Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		All levels of education	
			%	S.E	%	S.E	%	S.E	%	S.E
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD	**National entities**									
	Poland	0/1	45	(3.1)	24	(1.1)	4	(0.8)	20	(0.7)
		2	39	(3.2)	44	(1.4)	24	(1.5)	38	(1.1)
		3	15	(2.1)	29	(1.2)	48	(2.0)	33	(1.1)
		4/5	1	(0.7)	4	(0.5)	23	(1.7)	9	(0.6)
	Slovak Republic	0/1	37	(2.6)	9	(0.7)	3	(0.8)	12	(0.7)
		2	44	(3.2)	39	(1.6)	23	(2.1)	37	(1.2)
		3	18	(2.2)	46	(1.5)	57	(2.1)	44	(1.1)
		4/5	1	(0.5)	6	(0.6)	17	(1.9)	7	(0.5)
	Spain	0/1	47	(1.5)	21	(1.4)	8	(1.0)	29	(0.8)
		2	41	(1.4)	46	(2.0)	32	(1.5)	39	(0.9)
		3	12	(1.1)	30	(1.8)	48	(1.8)	27	(0.8)
		4/5	1	(0.2)	3	(0.8)	12	(1.1)	5	(0.4)
	Sweden	0/1	34	(2.7)	12	(1.0)	5	(0.6)	14	(0.7)
		2	43	(3.5)	32	(1.8)	15	(1.3)	28	(1.2)
		3	21	(2.2)	45	(1.9)	46	(1.5)	41	(1.0)
		4/5	2	(0.8)	11	(0.9)	34	(1.6)	17	(0.6)
	United States	0/1	62	(2.8)	22	(1.4)	5	(0.7)	19	(0.9)
		2	31	(2.8)	42	(1.8)	23	(1.3)	33	(1.2)
		3	7	(1.5)	31	(1.4)	49	(1.7)	36	(1.1)
		4/5	c	c	6	(0.8)	24	(1.7)	12	(0.8)
	Sub-national entities									
	Flanders (Belgium)	0/1	42	(2.3)	16	(1.1)	3	(0.5)	16	(0.6)
		2	41	(2.4)	41	(1.5)	17	(1.3)	32	(0.9)
		3	17	(1.8)	36	(1.8)	53	(1.7)	40	(1.1)
		4/5	1	(0.4)	6	(0.7)	26	(1.6)	13	(0.7)
	England (UK)	0/1	34	(1.7)	14	(1.4)	7	(0.9)	16	(0.8)
		2	45	(2.2)	35	(1.8)	23	(1.4)	33	(1.0)
		3	20	(1.6)	39	(1.6)	45	(1.8)	37	(1.1)
		4/5	2	(0.7)	11	(1.1)	25	(1.8)	15	(0.9)
	Northern Ireland (UK)	0/1	35	(2.5)	14	(2.0)	5	(1.0)	18	(1.3)
		2	46	(2.6)	41	(2.9)	23	(2.1)	37	(1.8)
		3	17	(2.0)	38	(3.6)	50	(2.1)	35	(1.8)
		4/5	1	(0.4)	8	(1.2)	22	(2.1)	10	(0.8)
	England/N. Ireland (UK)	0/1	34	(1.7)	14	(1.3)	7	(0.9)	16	(0.8)
		2	45	(2.1)	35	(1.8)	23	(1.4)	33	(1.0)
		3	19	(1.5)	39	(1.6)	45	(1.8)	37	(1.0)
		4/5	2	(0.7)	11	(1.1)	25	(1.7)	14	(0.9)
	Average	0/1	39	(0.5)	15	(0.2)	5	(0.2)	16	(0.2)
		2	41	(0.6)	40	(0.3)	22	(0.3)	34	(0.2)
		3	19	(0.4)	38	(0.3)	49	(0.4)	38	(0.2)
		4/5	2	(0.2)	7	(0.2)	24	(0.3)	12	(0.1)
Partners	Russian Federation*	0/1	c	c	15	(2.5)	11	(1.6)	13	(1.7)
		2	c	c	36	(2.7)	34	(2.5)	35	(2.0)
		3	c	c	40	(3.8)	44	(2.2)	42	(2.2)
		4/5	c	c	9	(2.9)	12	(2.1)	11	(2.0)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Rows showing information for all literacy proficiency levels combined are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114875

A1

Table A1.7a (L). Distribution of literacy proficiency levels, by age (2012)

Literacy proficiency in the Survey of Adult Skills

		25-34 year-olds								55-64 year-olds							
		Level 0/1		Level 2		Level 3		Level 4/5		Level 0/1		Level 2		Level 3		Level 4/5	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
OECD	**National entities**																
	Australia	10	(1.1)	26	(1.8)	43	(2.4)	21	(1.7)	20	(1.7)	35	(2.0)	35	(1.9)	10	(1.2)
	Austria	11	(1.3)	31	(1.9)	45	(2.0)	13	(1.3)	24	(1.8)	51	(2.6)	23	(2.1)	2	(0.6)
	Canada	11	(0.9)	29	(1.7)	40	(2.1)	20	(1.3)	23	(1.1)	37	(1.3)	32	(1.1)	9	(0.8)
	Czech Republic	7	(1.3)	29	(2.9)	50	(2.9)	14	(1.8)	17	(2.1)	43	(3.8)	36	(3.5)	4	(1.1)
	Denmark	12	(1.1)	26	(2.0)	44	(2.3)	18	(1.8)	25	(1.1)	43	(1.2)	29	(1.1)	3	(0.5)
	Estonia	10	(1.1)	28	(1.5)	45	(1.8)	17	(1.5)	20	(1.4)	41	(1.6)	34	(1.6)	5	(0.8)
	Finland	5	(0.9)	15	(1.7)	43	(2.1)	37	(1.6)	20	(1.3)	41	(1.5)	32	(1.4)	6	(0.7)
	France	13	(1.1)	31	(1.5)	42	(1.8)	14	(1.0)	35	(1.4)	40	(1.6)	23	(1.2)	3	(0.4)
	Germany	14	(1.4)	28	(1.7)	42	(1.7)	17	(1.5)	23	(2.1)	45	(2.4)	29	(1.8)	4	(0.9)
	Ireland	13	(1.1)	35	(1.7)	40	(1.7)	12	(1.2)	28	(2.1)	40	(2.2)	28	(1.9)	4	(0.9)
	Italy	22	(2.3)	38	(2.4)	34	(2.3)	6	(1.1)	41	(2.5)	42	(2.7)	16	(1.9)	1	(0.4)
	Japan	2	(0.6)	14	(1.6)	52	(1.9)	32	(2.0)	12	(1.2)	38	(1.9)	41	(2.1)	9	(1.2)
	Korea	4	(0.6)	28	(1.7)	53	(1.8)	14	(1.3)	30	(1.7)	47	(1.9)	21	(1.8)	2	(0.5)
	Netherlands	8	(1.2)	19	(1.5)	45	(2.4)	28	(2.4)	22	(1.5)	38	(2.0)	34	(1.9)	6	(0.9)
	Norway	11	(1.3)	21	(1.7)	46	(2.4)	22	(1.9)	19	(1.8)	42	(2.4)	34	(2.0)	6	(0.8)
	Poland	14	(1.3)	34	(2.0)	39	(2.1)	14	(1.3)	28	(1.7)	42	(2.0)	26	(1.6)	4	(1.0)
	Slovak Republic	11	(1.1)	32	(1.7)	47	(1.7)	10	(1.2)	15	(1.6)	41	(2.3)	40	(2.1)	4	(0.9)
	Spain	20	(1.4)	39	(1.8)	34	(1.5)	7	(1.0)	46	(2.0)	38	(2.1)	15	(1.6)	1	(0.5)
	Sweden	11	(1.2)	20	(1.7)	45	(2.2)	24	(1.7)	19	(1.5)	39	(2.2)	35	(2.1)	7	(1.0)
	United States	17	(1.7)	31	(2.2)	37	(2.2)	16	(1.7)	22	(1.7)	36	(2.4)	34	(1.9)	9	(1.0)
	Sub-national entities																
	Flanders (Belgium)	8	(1.0)	23	(1.7)	47	(2.2)	22	(1.9)	26	(1.5)	39	(2.0)	31	(2.1)	5	(0.9)
	England (UK)	14	(1.6)	29	(2.2)	38	(1.9)	18	(1.5)	19	(1.6)	38	(2.1)	34	(2.3)	10	(1.5)
	Northern Ireland (UK)	15	(2.2)	31	(2.9)	40	(2.8)	14	(1.7)	24	(2.5)	43	(2.8)	28	(2.8)	6	(1.4)
	England/N. Ireland (UK)	14	(1.5)	30	(2.1)	38	(1.9)	18	(1.4)	19	(1.6)	38	(2.0)	33	(2.2)	9	(1.5)
	OECD average	11	(0.3)	28	(0.4)	43	(0.4)	18	(0.3)	24	(0.4)	41	(0.5)	30	(0.4)	5	(0.2)
Partners	Russian Federation*	15	(2.7)	35	(3.1)	40	(3.7)	10	(2.2)	12	(2.5)	36	(4.6)	42	(4.9)	10	(2.2)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age groups (i.e. 35-44, 45-54 and 25-64 year-olds) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114894

A1

Table A1.8 (L). Percentage of 25-64 year-olds with vocational or general upper secondary or post-secondary non-tertiary education, by literacy proficiency level and mean literacy score (2012)

Literacy proficiency in the Survey of Adult Skills

		Vocational								General							
		Level 0/1		Level 2		Level 3		Level 4/5		Level 0/1		Level 2		Level 3		Level 4/5	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OECD	**National entities**																
	Australia	11	(1.2)	36	(1.9)	43	(2.3)	11	(1.3)	12	(1.5)	28	(2.8)	45	(2.8)	15	(2.4)
	Austria	15	(1.0)	44	(1.5)	36	(1.4)	5	(0.5)	9	(2.4)	25	(4.1)	52	(5.1)	14	(3.6)
	Canada	15	(1.2)	38	(1.6)	38	(1.8)	8	(1.1)	20	(1.2)	39	(1.4)	34	(1.4)	7	(0.9)
	Czech Republic	13	(1.2)	44	(2.4)	38	(2.0)	4	(0.7)	2	(1.5)	27	(5.9)	56	(7.1)	14	(5.3)
	Denmark	19	(1.1)	45	(1.6)	34	(1.5)	3	(0.7)	10	(1.8)	27	(3.5)	46	(4.8)	17	(3.2)
	Estonia	17	(1.2)	41	(1.7)	37	(1.5)	5	(0.8)	15	(1.4)	38	(1.6)	38	(1.7)	8	(1.1)
	Finland	14	(1.1)	37	(1.8)	39	(1.7)	9	(1.0)	6	(1.9)	13	(2.6)	46	(3.4)	35	(3.5)
	France	23	(1.1)	48	(1.3)	27	(1.1)	2	(0.4)	11	(1.4)	38	(2.1)	44	(2.1)	8	(1.3)
	Germany	20	(1.2)	42	(1.6)	33	(1.4)	5	(0.7)	c	c	c	c	c	c	c	c
	Ireland	15	(1.6)	42	(2.0)	37	(2.2)	6	(1.3)	14	(1.7)	43	(2.5)	38	(2.4)	5	(1.1)
	Italy	23	(2.8)	49	(3.2)	25	(2.6)	2	(0.9)	c	c	c	c	c	c	c	c
	Japan	5	(1.1)	30	(2.8)	53	(3.1)	12	(1.9)	6	(1.1)	30	(1.8)	50	(1.7)	13	(1.5)
	Korea	11	(1.4)	47	(2.3)	39	(2.3)	3	(0.7)	14	(1.3)	49	(2.1)	33	(2.1)	4	(0.7)
	Netherlands	10	(1.2)	35	(1.8)	45	(2.0)	10	(1.1)	5	(1.5)	17	(2.6)	52	(3.5)	26	(3.3)
	Norway	15	(1.3)	41	(1.5)	39	(1.4)	5	(1.0)	10	(1.9)	28	(2.7)	48	(3.2)	14	(2.1)
	Poland	25	(1.3)	44	(1.6)	27	(1.2)	4	(0.6)	14	(2.6)	42	(3.8)	38	(3.5)	6	(1.6)
	Slovak Republic	15	(1.1)	45	(1.8)	37	(1.8)	3	(0.5)	5	(0.8)	35	(2.0)	52	(1.9)	8	(1.0)
	Spain	27	(5.0)	52	(5.5)	20	(4.1)	c	c	20	(1.6)	46	(2.1)	31	(1.9)	4	(0.9)
	Sweden	12	(1.6)	37	(2.2)	43	(2.1)	7	(1.1)	13	(1.6)	27	(2.7)	46	(3.0)	14	(1.7)
	United States	16	(3.1)	42	(3.9)	35	(3.1)	7	(1.7)	28	(2.3)	45	(2.6)	24	(1.8)	3	(0.7)
	Sub-national entities																
	Flanders (Belgium)	27	(2.6)	48	(2.9)	23	(2.5)	1	(0.7)	c	c	c	c	c	c	c	c
	England (UK)	19	(2.8)	41	(3.9)	35	(3.5)	5	(2.0)	14	(1.5)	37	(2.0)	38	(2.3)	11	(1.6)
	Northern Ireland (UK)	13	(2.8)	47	(4.6)	35	(4.7)	5	(2.1)	14	(2.3)	43	(3.0)	37	(3.6)	6	(1.3)
	England/N. Ireland (UK)	18	(2.6)	41	(3.7)	35	(3.3)	5	(1.9)	14	(1.4)	37	(1.9)	38	(2.2)	11	(1.5)
	OECD average	17	(0.4)	42	(0.5)	36	(0.5)	6	(0.2)	12	(0.4)	33	(0.7)	43	(0.7)	12	(0.5)
Partners	Russian Federation*	14	(2.5)	36	(3.7)	39	(4.0)	11	(3.2)	16	(3.7)	35	(3.8)	41	(5.7)	8	(3.5)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing proficiency levels for Total (i.e. General plus Vocational) and the mean scores by programme orientation are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114913

A1

Table A1.9a (L). Mean literacy score, by educational attainment and age (2012)

Literacy proficiency in the Survey of Adult Skills

		Below upper secondary education				Upper secondary or post-secondary non-tertiary education				Tertiary education				All levels of education			
		25-34		55-64		25-34		55-64		25-34		55-64		25-34		55-64	
		Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
		(1)	(2)	(7)	(8)	(11)	(12)	(17)	(18)	(21)	(22)	(27)	(28)	(31)	(32)	(37)	(38)
OECD	**National entities**																
	Australia	250	(5.4)	242	(2.9)	282	(2.6)	265	(3.2)	306	(2.5)	292	(2.7)	287	(1.7)	264	(1.9)
	Austria	238	(5.4)	235	(3.5)	279	(1.8)	251	(1.8)	308	(2.9)	276	(3.6)	280	(1.5)	250	(1.6)
	Canada	230	(5.0)	220	(2.7)	274	(2.0)	258	(1.9)	299	(1.6)	279	(1.7)	285	(1.3)	261	(1.2)
	Czech Republic	257	(6.6)	242	(5.8)	278	(2.4)	263	(2.0)	311	(2.9)	289	(4.0)	287	(1.8)	262	(2.1)
	Denmark	242	(6.8)	228	(2.5)	275	(2.6)	250	(1.5)	298	(2.4)	277	(1.7)	282	(1.7)	253	(1.1)
	Estonia	250	(4.0)	240	(3.5)	279	(2.0)	258	(2.0)	304	(1.9)	275	(2.1)	286	(1.7)	261	(1.5)
	Finland	264	(8.0)	237	(3.5)	298	(2.5)	256	(2.3)	328	(2.0)	285	(2.0)	309	(1.7)	261	(1.5)
	France	231	(3.9)	220	(2.2)	269	(1.7)	250	(1.8)	305	(1.5)	278	(2.2)	278	(1.4)	242	(1.3)
	Germany	224	(6.0)	217	(7.2)	276	(2.3)	248	(2.1)	306	(2.3)	275	(2.7)	281	(1.8)	255	(1.7)
	Ireland	235	(4.1)	230	(2.9)	267	(2.5)	264	(2.6)	295	(2.0)	284	(3.3)	276	(1.5)	251	(1.9)
	Italy	231	(4.0)	224	(2.6)	263	(2.7)	256	(3.2)	290	(2.9)	262	(4.8)	260	(2.2)	234	(2.3)
	Japan	280	(5.0)	247	(3.2)	299	(2.6)	271	(2.1)	319	(1.8)	299	(2.4)	309	(1.7)	274	(1.6)
	Korea	c	c	227	(1.9)	278	(2.4)	258	(2.3)	298	(1.4)	279	(3.5)	290	(1.2)	245	(1.4)
	Netherlands	255	(5.1)	240	(2.4)	291	(2.6)	264	(2.5)	323	(2.8)	292	(2.6)	298	(2.0)	261	(1.7)
	Norway	253	(5.3)	245	(3.2)	280	(3.0)	256	(2.4)	308	(2.5)	283	(2.4)	289	(1.8)	262	(1.6)
	Poland	236	(7.2)	223	(3.8)	260	(2.2)	250	(2.1)	300	(2.1)	283	(4.0)	277	(1.5)	250	(1.7)
	Slovak Republic	230	(4.6)	242	(2.6)	278	(1.7)	272	(1.7)	300	(2.1)	284	(3.4)	278	(1.4)	266	(1.4)
	Spain	235	(2.7)	211	(2.2)	263	(2.5)	247	(3.7)	286	(2.0)	265	(3.6)	263	(1.5)	228	(1.9)
	Sweden	245	(7.2)	239	(3.0)	284	(2.7)	267	(2.3)	313	(2.6)	286	(2.8)	290	(1.9)	264	(1.4)
	United States	221	(5.7)	203	(5.1)	261	(2.7)	256	(2.2)	304	(2.5)	289	(2.7)	275	(2.0)	262	(1.6)
	Sub-national entities																
	Flanders (Belgium)	236	(6.2)	230	(2.8)	275	(2.3)	255	(2.7)	314	(2.2)	284	(2.4)	291	(1.8)	255	(1.6)
	England (UK)	240	(4.3)	241	(3.3)	277	(3.3)	269	(3.2)	296	(2.8)	288	(3.2)	280	(2.1)	265	(2.1)
	Northern Ireland (UK)	234	(5.0)	238	(3.6)	273	(4.3)	269	(4.7)	301	(3.5)	282	(4.8)	278	(2.9)	257	(3.2)
	England/N. Ireland (UK)	240	(4.2)	241	(3.2)	277	(3.2)	269	(3.2)	296	(2.7)	288	(3.1)	280	(2.1)	265	(2.0)
	OECD average	242	(1.2)	231	(0.7)	277	(0.5)	258	(0.5)	305	(0.5)	282	(0.6)	284	(0.4)	256	(0.4)
Partners	Russian Federation*	c	c	257	(12.2)	266	(6.3)	274	(5.7)	278	(3.7)	278	(3.7)	273	(4.1)	275	(4.2)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age groups (i.e. 35-44, 45-54 and 25-64 year-olds) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

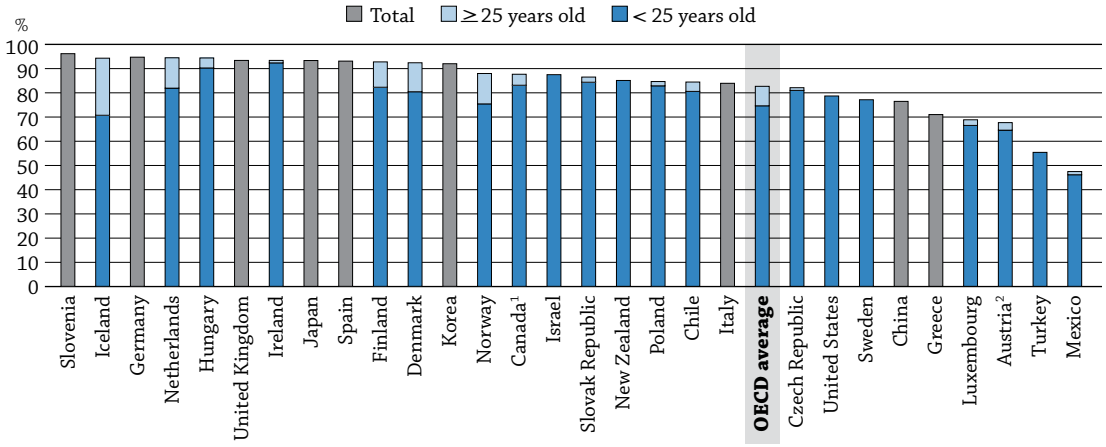
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933114932

HOW MANY STUDENTS ARE EXPECTED TO COMPLETE UPPER SECONDARY EDUCATION?

- Based on current patterns, it is estimated that an average of 84% of today's young people in OECD countries will complete upper secondary education over their lifetimes; in G20 countries, some 80% of young people will.
- Young women are now more likely than young men to graduate from upper secondary programmes in almost all OECD countries, a reversal of the historical pattern.
- More than 10% of upper secondary graduates in Denmark, Finland, the Netherlands and Norway are 25 or older, while in Iceland nearly 20% are.

Chart A2.1. Upper secondary graduation rates (2012)



Note: Only first-time graduates in upper secondary programmes are reported in this chart.
1. Year of reference 2011.
2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.
Countries are ranked in descending order of the upper secondary graduation rates in 2012.
Source: OECD. Tables A2.1a and A2.1b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933115255

Context

Upper secondary education, which consolidates students' basic skills and knowledge through either an academic or a vocational pathway, aims to prepare students for entry into tertiary education or the labour market, and to become engaged citizens. In many countries, this level of education is not compulsory and can last from two to five years. What is crucial, however, is that these two pathways are of equal quality and that both ensure that students can make those transitions successfully.

Graduating from upper secondary education has become increasingly important in all countries, as the skills needed in the labour market are becoming more knowledge-based and as workers are progressively required to adapt to the uncertainties of a rapidly changing global economy. While graduation rates give an indication of the extent to which education systems are succeeding in preparing students to meet the labour market's minimum requirements, they do not capture the quality of education outcomes.

By the end of lower secondary education in many OECD countries, students can exit or disengage from the education system, meaning, in turn, that they can leave school without an upper secondary qualification. These young people tend to face severe difficulties entering – and remaining in – the labour market. Leaving school early is a problem, both for individuals and society. Policy makers are examining ways to reduce the number of early school-leavers, defined as those students who do not complete their upper secondary education. Internationally comparable measures of how many students successfully complete upper secondary programmes – which also imply how many students do not complete those programmes – can assist efforts to that end.

Other findings

- **In 25 of 31 countries with available data, first-time upper secondary graduation rates equal or exceed 75%**. In Denmark, Finland, Germany, Hungary, Iceland, Ireland, Japan, Korea, Latvia, the Netherlands, Slovenia, Spain and the United Kingdom, graduation rates equal or exceed 90%.
- **On average across OECD countries, students graduate for the first time at upper secondary level at the age of 19**, from the age of 17 in Israel, New Zealand, Turkey and the United States, to the age of 22 or older in Iceland and Norway.
- **More young women are graduating from vocational programmes than ever before**. Their graduation rates from these programmes are now approaching those of young men.
- **Most young men in upper secondary vocational programmes choose to study engineering, manufacturing and construction, while young women in such programmes opt for several different fields of study**, notably business, law, social sciences, health and welfare, and services.
- This edition marks the third time that comparable data have been published from 29 countries that participated in a special survey on the successful completion of upper secondary programmes. The data show that **72% of students who begin upper secondary education complete the programmes they entered within the theoretical duration of the programme**. However, there are large differences in completion rates, depending on gender and type of programme.

Trends

Since 2000, upper secondary graduation rates have increased by an average of 8 percentage points among OECD countries with comparable data. The greatest increase occurred in Mexico, which showed an annual growth rate of 3% between 2000 and 2012.

Note

Graduation rates represent the estimated percentage of people from a given age cohort that is expected to graduate at some point during their lifetime. This estimate is based on the number of graduates in 2012 and the age distribution of this group. Graduation rates are based on both the population and the current pattern of graduation, and are thus sensitive to any changes in the education system, such as the introduction of new programmes, and the lengthening or shortening of programme duration. Graduation rates can be very high – even above 100% – during a period when an unexpected number of people goes back to school. This happened in 2010 in Portugal, for example, when the "New Opportunities" programme was launched to provide a second chance for those individuals who left school early without a secondary diploma.

In this indicator, the age refers generally to the age of the students at the beginning of the calendar year; students could be one year older than the age indicated when they graduate at the end of the school year. Twenty-five is regarded as the upper age limit for completing initial education. Among OECD countries, more than 90% of first-time graduates from upper secondary programmes in 2012 were younger than 25. People who graduate from this level at age 25 or older are usually enrolled in specific programmes, e.g. second-chance programmes.

A2

Analysis

Graduation from upper secondary programmes

A snapshot of upper secondary graduation rates

Since 2000, first-time upper secondary graduation rates increased by 8 percentage points. Current estimates indicate that 84% of people will complete upper secondary education over their lifetime across OECD countries (Table A2.1a). Attaining an upper secondary education is often considered to be the minimum credential for successful entry into the labour market and needed to continue to further education. The costs, to both individuals and society, of not completing this level of education on time can be considerable (see Indicators A6 and A7).

Graduation rates offer an indication of whether government initiatives have been successful in increasing the number of people who graduate from upper secondary education. The great differences in graduation rates between countries reflect the variety of systems and programmes available.

In Denmark, Finland, Germany, Hungary, Iceland, Ireland, Latvia, Japan, Korea, the Netherlands, Slovenia, Spain and the United Kingdom, more than 90% of people are expected to graduate from upper secondary school during their lifetime; in Mexico and Turkey, less than 60% of people are expected to do so (Table A2.1a). Yet Mexico, Spain and Turkey show the highest average annual growth rates (from 1995 or 2000 to 2012) for upper secondary graduation – considerably above the OECD average of 0.8%. The annual growth rate in Spain and Turkey exceeds 2%, while in Mexico the annual increase is more than 3% (Table A2.2a). For some countries, the annual growth rate is low because they had earlier made it a priority to increase access to upper secondary education to a larger number of students. Thus, graduation rates in Japan, Korea and Norway had already reached 90% in 2000 and have remained at this level since then.

Vocational education and training (VET) is an important part of upper secondary education in many OECD countries (see Indicator A1). Between 2005 and 2012, graduation rates for pre-vocational and vocational programmes kept pace with overall upper secondary rates, increasing by about 3 percentage points, on average. However, countries vary considerably in these trends. In Germany, for example, upper secondary VET graduation rates shrunk by 15 percentage points during the period, while in Portugal they increased by 37 percentage points (Table A2.2b, available on line).

In addition, graduation rates do not imply that all graduates will pursue a tertiary degree or enter the labour force immediately. Indeed, the number of graduates who wind up neither employed nor in education or training (NEET) has been growing throughout OECD countries (see Indicator C5). For this reason, it is important to have quality upper secondary programmes that provide individuals with the right mix of guidance and education opportunities to ensure that there are no dead-ends once students have graduated.

Upper secondary graduation rates, by age

Graduation rates also vary according to the age of the graduates. As indicated in the note section above, a student's age at graduation can be related to changes in the education system. For example, opportunities available to complete upper secondary education later on in life or the duration of general and vocational programmes can lead to differences in the typical age of graduates.

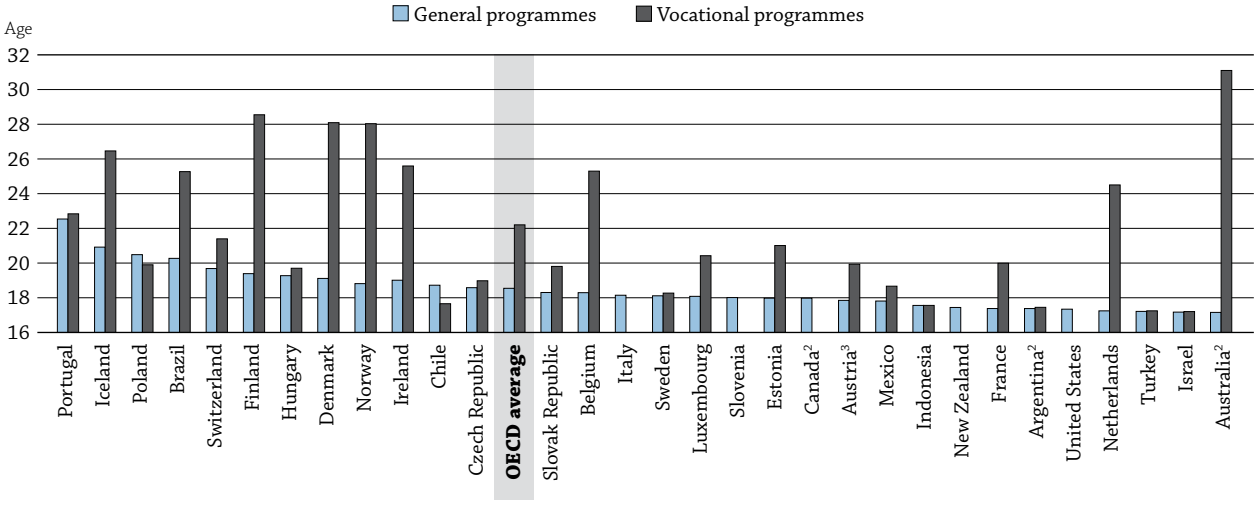
The average age of a first-time upper secondary graduate in OECD countries is 19; more than 90% of first-time graduates are 25 or younger. However, the age at which students graduate from upper secondary education varies between countries, sometimes significantly. In Israel, New Zealand, Turkey and the United States, the average age of a first-time graduate is 17 – the youngest age among all OECD countries. Iceland and Norway are at the opposite extreme, with an average age of 22 or higher (Tables A2.1a and b).

Variations in the age of graduates are found within countries as well. As shown in Chart A2.2, there are marked differences between the ages of students graduating from vocational programmes and those graduating from general programmes within the same country. On average, the age at graduation is higher for vocational graduates (22 years old) than for graduates of general programmes (19 years old). However, in Belgium, Brazil, Denmark, Finland, Iceland, Ireland, the Netherlands and Norway, the average age of graduates from vocational programmes is 25 or older; in Australia, it reaches 31 (Chart A2.2).

The average age of first-time graduates also reflects specific national contexts. In some countries, systems are flexible enough to allow students who left the education system early to re-enter later on. That is why graduation rates for students 25 years or older are relatively high in Denmark, Finland, the Netherlands and Norway, where

at least 10% of graduates are older than 25, while in Iceland, 20% of upper secondary graduates are older than 25. Likewise, the fact that the proportion of graduates outside the typical age at graduation varies between countries and programmes may also be related to the availability of "second-chance" programmes. These types of programmes help to improve skills for the labour market. In Portugal, for example, the "New Opportunities" programme, launched in 2005, was introduced to provide a second chance to individuals who left school early or were at risk of doing so, and to assist those in the labour force who want to acquire further qualifications. As a result of this initiative, graduation rates rose by more than 40 percentage points between 2008 and 2010. In 2010, more than 40% of the students concerned were older than 25.

Chart A2.2. Average age[1] of upper secondary graduation (2012)



1. The average age refers generally to the age of the students at the beginning of the calendar year; students could be one year older than the age indicated when they graduate at the end of the school year.
2. Year of reference 2011.
3. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.
Countries are ranked in descending order of the average age for upper secondary graduation in general programmes in 2012.
Source: OECD. Table A2.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933115274

Upper secondary graduation rates, by gender

In most OECD countries, first-time upper secondary graduation rates also vary significantly between men and women. On average, graduation rates for women (87%) are higher than those for men (81%). In Denmark, Greece, Iceland, Israel and Norway, graduation rates for women are at least 10 percentage points higher than those for men. Only in Austria and Germany is the proportion of male graduates higher than that of female graduates (Table A2.1a).

This tendency is even starker among students younger than 25 who graduate from general programmes. In 2012, graduation rates from general upper secondary programmes were 54% for women and 43% for men, on average across OECD countries. In Austria, the Czech Republic, Italy, Poland, the Slovak Republic and Slovenia, women outnumber men as graduates by at least three to two (Table A2.1b).

Traditionally, men have had higher graduation rates than women for pre-vocational and vocational programmes, although in some countries this is not the case. On average, graduation rates from these programmes are higher for men than for women by 3 percentage points (50% and 46%, respectively). This tendency has been changing in many countries, including Belgium, Denmark, Finland, Ireland, the Netherlands and Spain, where graduation rates for women are at least 5 percentage points higher than those for men. However, vocational programmes are not available to the same extent in all countries, thus graduation rates can differ substantially. Pre-vocational and vocational graduation rates are over 70% in Austria, Finland, France, Ireland, the Netherlands, Slovenia and Switzerland; but in Argentina, Brazil, Canada, Estonia, Hungary, Indonesia, Japan, Korea, Latvia, Mexico and Turkey, the rates are below 30% (Table A2.1a).

Upper secondary graduation and field of education

Gender differences are also apparent in young people's choice of field of study when pursuing vocational education. These differences can be attributed to traditional perceptions of gender roles and identities as well as the cultural values sometimes associated with particular fields of education. On average across OECD countries, the largest share of students in upper secondary vocational education graduates from engineering, manufacturing and construction programmes (34%), and, most of the graduates from those programmes are men (Tables A2.3a and b, available on line). In the Czech Republic, Hungary and Norway, 70% or more of graduates from this field are men. By contrast, female graduates are more dispersed among social sciences, business and law (24%), health and welfare (19%) and services (19%) (Table A2.3a).

Graduation from post-secondary non-tertiary programmes

Various kinds of post-secondary non-tertiary programmes are offered in OECD countries. These programmes straddle upper secondary and post-secondary education and may be considered either as upper secondary or post-secondary programmes, depending on the country concerned. Although the content of these programmes may not be significantly more advanced than upper secondary programmes, they broaden the knowledge of individuals who have already attained an upper secondary qualification.

Students in these programmes tend to be older than those enrolled in upper secondary schools. These programmes usually offer trade and vocational certificates, and include nursery-teacher training in Austria and vocational training in the dual system for those who have attained general upper secondary qualifications in Germany. Apprenticeships designed for students who have already graduated from an upper secondary programme are also included among these programmes (Table A2.1c, available on line).

First-time graduation rates from post-secondary non-tertiary education are low compared with those from upper secondary programmes. On average, it is estimated that 9% of today's young people in OECD countries will complete post-secondary non-tertiary programmes over their lifetime. The rate for women (9%) is slightly higher than that for men (8%). The highest graduation rates for these programmes are in Austria (26%), the Czech Republic (28%) and New Zealand (33%); and in these three countries, graduation rates are considerably higher among women (32%, 32% and 39%, respectively) than men (20%, 24% and 27%, respectively) (Table A2.1c, available on line).

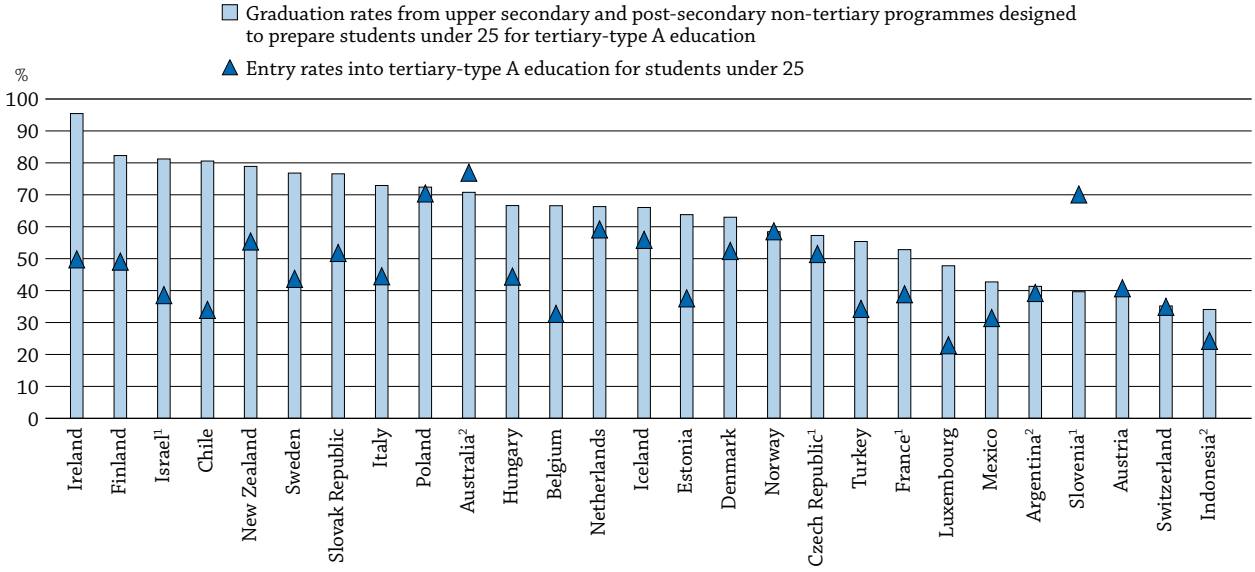
Transitions following upper secondary education or post-secondary non-tertiary programmes

The vast majority of students who graduate from upper secondary education graduate from programmes designed to provide access to tertiary education (ISCED 3A and 3B). Programmes that facilitate direct entry into tertiary-type A education (ISCED 3A) are preferred by students in all countries except Austria, Slovenia and Switzerland, where the education systems are more strongly oriented towards vocational education and thus more young people graduate from an upper secondary education that leads to tertiary-type B programmes. For long upper secondary programmes that lead to the labour market or to post-secondary non-tertiary education (ISCED 3C long), graduation rates in 2012, averaged 18% in OECD countries (Table A2.1a).

Chart A2.3 shows how countries vary when the proportion of students who graduate from programmes designed as preparation for entry into tertiary-type A programmes (ISCED 3A and 4A) are compared with the proportion of students who actually enter these programmes under the age of 25. In Belgium, Chile, Finland, Ireland, Israel and Sweden, there is at least a 30 percentage-point difference between these two groups. This suggests that many students who attain qualifications that would allow them to enter tertiary-type A programmes do not do so, although upper secondary programmes in Belgium and Israel also prepare students for tertiary-type B programmes. Much like the decision to continue on to upper secondary education, students' decision to enter tertiary education might depend on various factors, including the opportunity cost of investing in tertiary education compared to entering the labour market (Zapata, *forthcoming*) (see Indicator A7).

In Finland, upper secondary education includes vocational training, and many graduates enter the labour market immediately after completing this level, without any studies at the tertiary level. There is also a *numerus clausus* system in Finnish higher education, which means that the number of entry places is restricted. Therefore, graduates from upper secondary general education may have to take a break of two to three years before obtaining a place in a university or polytechnic institution. In Ireland, the majority of secondary students take the "Leaving Certificate Examination" (ISCED 3A). Although this is designed to allow students to enter tertiary education, not all of the students who take this examination intend to do so. Until the onset of the global economic crisis, school-leavers in Ireland could benefit from a strong labour market, and this also may have had an impact on the difference.

Chart A2.3. Access to tertiary-type A education for upper secondary and post-secondary non-tertiary graduates under 25 (2012)



1. Data for post-secondary non-tertiary graduates are missing.
2. Year of reference for graduation rates 2011.

Countries are ranked in descending order of graduation rates from upper secondary and post-secondary non-tertiary programmes designed to prepare students under 25 for tertiary-type A education in 2012.

Source: OECD. Tables A2.1b, A2.1c (available on line) and C3.1b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115293

Box A2.1. Completion and graduation: Two different measures

How is completion measured in *Education at a Glance*? "Successful completion" describes the percentage of students who enter an upper secondary programme for the first time and who graduate from it a given number of years after they entered. It is a measure of how efficiently students flow through upper secondary education. It represents the relationship between the graduates of and the new entrants into the same level of education. The calculation is made using the amount of time normally allocated for completing the programme, and after an additional two years (for students who had to repeat a grade or individual courses, who studied part time, etc.). This indicator also includes the percentage of students who do not graduate from an upper secondary programme but are still in education. These might include part-time students who need more time to complete their studies and adults who decide to return to school, perhaps while they are working. Only initial education programmes are covered by this indicator.

This measure should not be confused with upper secondary graduation rates. Graduation rates represent the estimated percentage of people from a certain age cohort that is expected to graduate at some point during their lifetime. It measures the production of graduates from upper secondary education, relative to the country's population, and represents the relationship between all the graduates in a given year and a particular population. For each country, for a given year, the number of students who graduate is broken down into age groups. For example, the number of 15-year-old graduates is divided by the total number of 15-year-olds in the country; the number of 16-year-old graduates is divided by the total number of 16-year-olds in the country, etc. The graduation rate is the sum of these age-specific graduation rates.

A third indicator in *Education at a Glance* uses the notion of educational attainment (see Indicator A1). Attainment measures the percentage of a population that has reached a certain level of education, in this case, those who graduated from upper secondary education. It represents the relationship between all graduates (of the given year and previous years) and the total population.

In contrast, in Slovenia, the upper secondary and post-secondary non-tertiary graduation rate is markedly lower – by 30 percentage points – than entry rates into tertiary-type A programmes. Although many students in Slovenia are more likely to graduate from upper secondary programmes leading to tertiary-type B programmes, some may choose to pursue university studies later, and can do so because of the flexible pathways between the two types of tertiary programmes in the country.

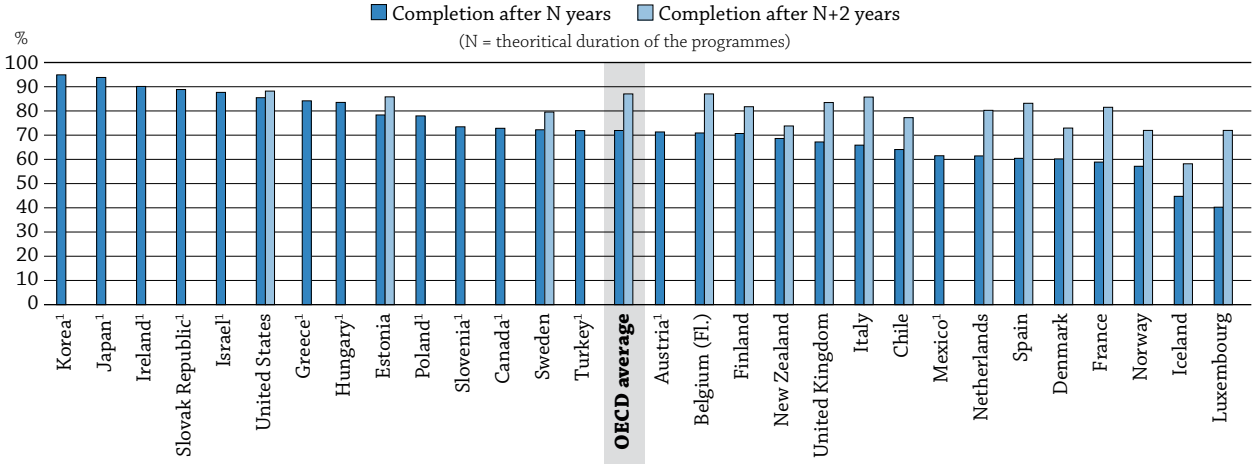
Successful completion of upper secondary programmes

This edition of *Education at a Glance* presents, for the third time, an indicator to measure the successful completion of upper secondary programmes and, thus, the pathways between programmes. The indicator sheds light on the time needed to complete these programmes and the proportion of students still in education after the theoretical duration of programmes. It allows for an estimation of the number of students who drop out and a comparison of completion rates by gender and programme orientation. Thus, like the graduation rate, the completion rate does not indicate the quality of upper secondary education; it does, however indicate to a certain extent the capacity of this education level to engage students to complete upper secondary programmes within a specific period.

The majority of students who start upper secondary education complete the programmes they entered. It is estimated that 72% of young men and women who begin an upper secondary programme graduate within the theoretical duration of the programme. However, in some countries, it is relatively common for students and apprentices to take a break from their studies and leave the education system temporarily. Some return quickly to their studies, while others stay away for longer periods of time, which can increase students' risk of not completing upper secondary education. In other countries, it is also common for students to repeat a grade or to change programmes; by doing so, their graduation is delayed. System-level policies, such as grade repetition, can undermine equity in the education system (OECD, 2012a).

The proportion of students who complete their education in the stipulated time varies considerably among countries, with Korea having the highest share (95%), and Luxembourg the lowest share (40%). In Greece, Hungary, Ireland, Israel, Japan, Korea, the Slovak Republic and the United States, over 80% of students complete their education in the stipulated time. Giving two extra years to students to complete their upper secondary programmes, 87% of students successfully complete programmes two years after the stipulated time of graduation, on average across OECD countries – 15 percentage points more than the proportion of students who complete their programme within its theoretical duration (Table A2.4). With the extra two years, eight more countries pass the upper secondary completion bar of 80%: the Flemish Community of Belgium, Estonia, Finland, France, Italy, the Netherlands, Spain and the United Kingdom. Iceland has the smallest proportion of students (58%) who complete upper secondary education after two extra years.

Chart A2.4. Successful completion of upper secondary programmes



Note: Please refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.
1. N+2 information missing.
Countries are ranked in descending order of the successful completion of upper secondary programmes.
Source: OECD. Table A2.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933115312

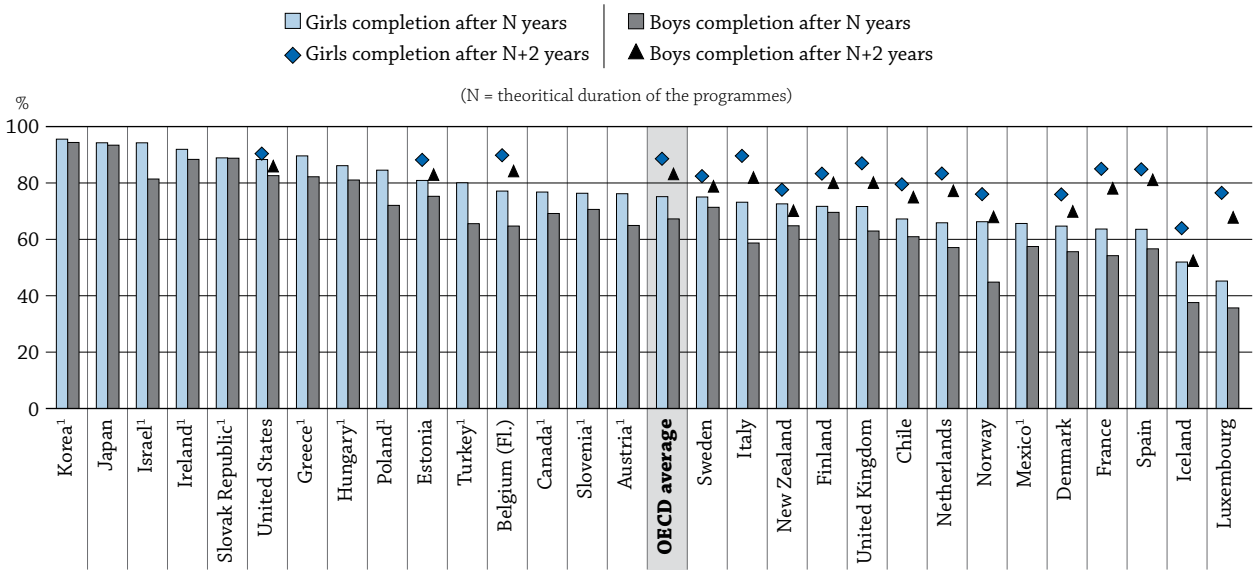
Within countries, the difference in rates between completion within the stipulated time and within two additional years is partly due to the fact that in most OECD countries, students may attend regular educational institutions for additional years to complete their upper secondary education, whereas in some other countries, older students must attend special programmes designed specifically for them. The difference in the proportion of students who completed their programmes within the stipulated time and that of students who completed after two additional years is 32 percentage points in Luxembourg, where it is common for students to repeat one or more years of school. In contrast, among countries with available data, the difference in New Zealand and in the United States is as low as five and three percentage points, respectively (Chart A2.4). In the United States, it is highly unusual for students over the age of 20 to be enrolled in a regular high school programme; students who do not graduate within the stipulated time can obtain an equivalent high school qualification by successfully passing the General Educational Development (GED) test.

Successful completion of upper secondary education also depends on how accessible these programmes are. In all of the countries with available data, except Mexico and Turkey, upper secondary entry rates for students under age 20 are around or over 90%. It is reasonable to expect that a higher percentage of students will graduate from upper secondary education in countries with limited access to this level than in countries that have nearly universal access. In other words, countries where students have to pass an examination or are academically selected to enter upper secondary programmes may have a larger share of higher-achieving students moving on to these programmes, which could produce a higher completion rate (Table A2.4). The selectivity of programmes can hinder equity in the education as access to programmes might be limited.

Successful completion by gender

In all countries with available data, young men are more likely than young women to not complete their upper secondary education on time. On average, 76% of young women complete their upper secondary education within the stipulated time, compared to 68% of young men. Only in Finland, Greece, Ireland, Japan, Korea, the Slovak Republic and Sweden is the difference in the proportions of young men and women who do not complete their upper secondary education less than five percentage points. In Iceland, Italy, Norway and Turkey, young women outnumber young men who successfully completed upper secondary education by more than 14 percentage points (Chart A2.5). The gender differences seen in Norway are likely due to the fact that young women tend to have better academic performance than young men in lower secondary school. Controlling for performance in lower secondary school, there is no gender difference, or just a small advantage for young men (Falch et al., 2010).

Chart A2.5. **Successful completion of upper secondary programmes, by gender**



1. N+2 information missing.

Countries are ranked in descending order of the successful completion of girls in upper secondary programmes (after N years).

Source: OECD. Table A2.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115331

The gender gap narrowed slightly, to an average of five percentage points, when completion was delayed by two years. The difference in completion rates between the stipulated time and the two additional years is larger among young men (16 percentage points) than among young women (13 percentage points). The narrowing of the gender gap could be related to a high incidence of grade repetition or transfer to a different programme, or to economic and socio-cultural factors that could extend the time needed by young men to complete a degree beyond a programme's stipulated duration (OECD, 2012b).

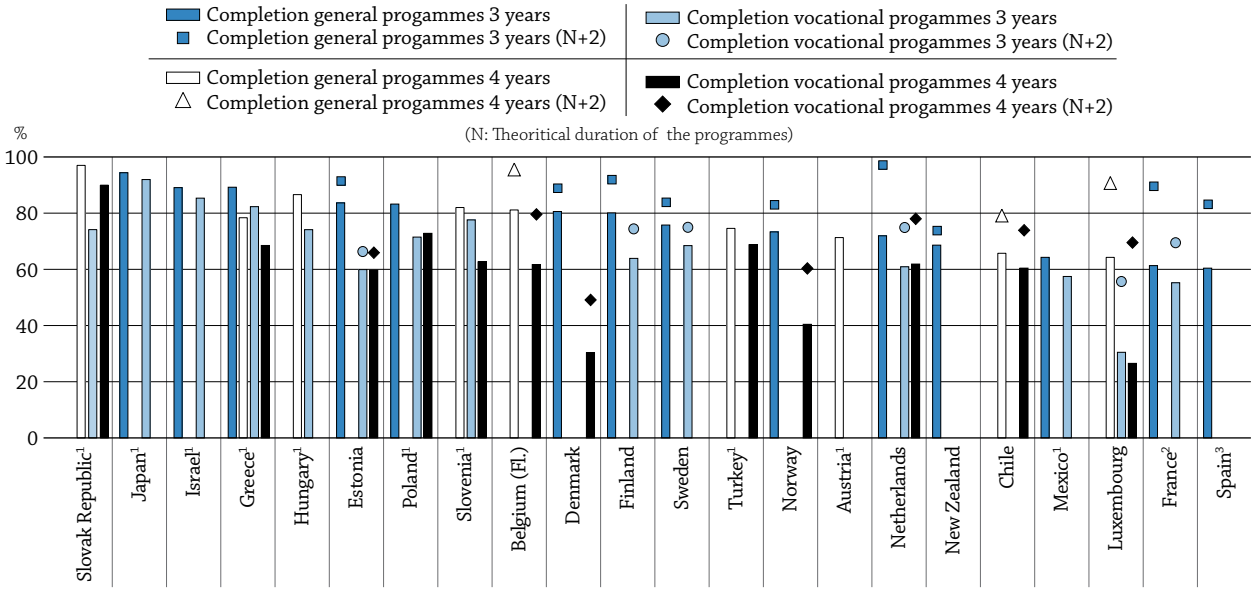
The gender gap also varies depending on the programme: 80% of young women complete general programmes, compared to 73% of young men; 67% of young women complete vocational programmes, compared to 61% of young men. In vocational programmes in Iceland, this gender gap widens to more than 16 percentage points, in favour of young women. Only in Estonia, Greece and the Slovak Republic, young women in vocational programmes are not as successful as young men in completing their upper secondary education within the normal duration of the programmes (Table A2.5).

Many studies, including the OECD Programme for International Student Assessment (PISA) analyses, confirm that young women in OECD countries are more likely to perform better and less likely than young men to leave school early (OECD, 2012a; OECD, 2012b; OECD, 2014). That said, young women who do leave school early tend to have poorer outcomes than their male counterparts, despite their higher average attainment (see Indicators A1 and C5). The completion rate for upper secondary programmes and engagement of students in education are also linked to many other issues, such as social pressures from family and friends, prior academic experiences, and physical and emotional changes (OECD, 2012a; Zapata, forthcoming) as well as to their parents' educational attainment and immigrant background (Box A2.2).

Successful completion by programme orientation

Students enter general or vocational programmes at different points in their educational careers, depending on the country. In countries with a comprehensive system, students follow a common core curriculum until the start of upper secondary education at the age of 16 (e.g. the Nordic countries); in countries with a highly differentiated system, the choice of a particular programme or type of school can be made during lower secondary education from the age of 10-13 onwards (e.g. Luxembourg).

Chart A2.6. Successful completion of upper secondary programmes, by programme orientation and duration



Note: Please refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.
1. N+2 information missing.
2. 2 years programmes instead of 3 for vocational programmes.
3. 2 years programmes instead of 3 for general programmes.
Countries are ranked in descending order of the successful completion of upper secondary general programmes (after N years).
Source: OECD. Table A2.5. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933115350

In several countries, general and vocational programmes are organised separately and students have to opt for one or the other. This is the case for such countries as Germany and France, where upper secondary pathways are clearly differentiated. In other countries, upper secondary education is comprehensive and there is less separation between general and vocational programmes, such as in Sweden. Despite the arrangement of upper secondary programmes, countries offer students opportunities to change pathways, such as in Finland and the Netherlands. Flexibility between vocational and general pathways can accommodate those students who might want to change orientation and pursue a different upper secondary programme (OECD, 2012a).

Students who enter general programmes are more likely to graduate than those who are enrolled in vocational programmes. Among the 26 countries with available data, 76% of students completed their general programme within the theoretical duration of the programme, and that proportion increased by 15 percentage points among students who completed their programme two years after its stipulated duration.

In contrast, only 64% of students completed their vocational programme within the theoretical duration; that proportion increased by 15 percentage points two years after the stipulated time. While the average difference between completion rates for general and vocational upper secondary programmes is 13 percentage points, differences ranges from more than 40 percentage points in Denmark, to 5 percentage points or less in Chile, Israel and Japan (Table A2.5).

The large difference in completion rates between upper secondary general and vocational programmes among countries can be explained by the fact that in some countries, low-achieving students may be oriented (or reoriented) into vocational programmes, while higher-achieving students go into general programmes. Some students may also have difficulty determining which vocational programme is best for them and thus may have to repeat one or more grades at this level of education. They may also face difficulties finding an employer who will agree to offer an apprenticeship programme, may have to wait for a place in such a programme to become available, or may give up trying.

Pathways between these two types of education are well developed in some countries. In Norway, for example, among the 40% of students who entered a vocational programme and graduated within the stipulated time, 45% graduated with a vocational degree and 55% changed programmes and graduated with a general diploma. In Chile, of the 66% of students who entered a general programme and graduated within the stipulated time, 79% graduated with a general degree, and 21% changed programmes and graduated with a vocational diploma (Table A2.5).

Some students who begin a vocational programme may leave the education system to enter the labour market directly. The attractiveness of employment opportunities can play a role in students' disengagement from the education system, particularly those students in the later grades of upper secondary education (Stearns et al., 2006 in Zapata, forthcoming). Access to employment for people with low educational attainment could also affect successful completion rates and the incidence of dropping out.

Among students who do not complete their programmes within the stipulated time, 56% of those who follow a general programme are still in education, compared to only 43% of those who follow a vocational programme. There is large variation among countries: in Belgium (Flemish Community), Finland, France and Luxembourg, 80% or more of students who had not graduated after the theoretical duration of general programmes are still in education, compared to 10% in Israel and only 7% in Korea (Table A2.5).

The picture is slightly different when it comes to completion of upper secondary programmes (general and vocational) by programme duration. The duration of upper secondary programmes varies among countries: from two years in the Netherlands and Spain for general programmes to five years in Luxembourg for vocational programmes (Table A2.5). One would assume that completion rates for programmes of longer duration will be lower than those for programmes of shorter duration. However, Chart A2.6 shows that this assumption does not hold. For example, the duration of general upper secondary programmes in Spain is two years, while in other OECD countries it is between three and four years. With a successful completion rate of 60% after N years, Spain has a low completion rate (which increases substantially after two years to 83%). In contrast, the duration of general programmes in Hungary is four years, and the successful completion rate of 87% for that country is one of the highest. The accessibility of the programmes and the academic selectivity of the education system might explain the high completion rates for programmes of longer duration. The engagement of students and the quality of upper secondary teaching and learning environments are also key for completion.

A2

Box A2.2. Successful completion of upper secondary programmes, by parents' education or immigrant background

Ratio of graduates to new entrants, based on cohorts

		ISCED 3 by parental education			ISCED 3 with imigrant background (first or second generation)	
	N = theoretical duration	ISCED 0-2	ISCED 3	ISCED 5-6	First generation	Second generation
Belgium (Fl.)	within N	58	71	80	m	m
	2 years after N	75	89	94	m	m
Chile	within N	78	82	86	m	m
	2 years after N	87	90	92	m	m
Denmark	within N	44	56	73	46	50
	2 years after N	54	72	84	57	64
Finland	within N	57	68	76	56	62
	2 years after N	67	78	88	70	78
France	within N	50	59	68	46	49
	2 years after N	70	83	92	68	71
Hungary	within N	m	m	m	32	m
	2 years after N	m	m	m	m	m
Iceland	within N	m	m	m	26	20
	2 years after N	m	m	m	31	20
Israel	within N	78	92	95	85	m
	2 years after N	m	m	m	m	m
Netherlands	within N	m	m	m	51	53
	2 years after N	m	m	m	67	73
Norway	within N	36	52	70	39	55
	2 years after N	49	69	83	52	68
Sweden	within N	59	73	80	65	68
	2 years after N	67	80	88	74	76
United Kingdom	within N	49	69	85	m	m
	2 years after N	69	84	93	m	m
United States	within N	68	83	91	80	84
	2 years after N	74	86	92	85	89

Note: Please refer to Annex 3 (*www.oecd.org/edu/eag.htm*) for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

StatLink http://dx.doi.org/10.1787/888933115369

Among the 29 countries that participated in the survey on successful completion of upper secondary programmess, 13 reported completion rates for separate social groups. These rates cannot be directly compared to the overall rates presented above as the cohorts used to calculate them are not the same. A detailed description of the cohort used for each country is presented in Annex 3. The analysis below focuses only on comparing the successful completion of upper secondary programmes as associated with parents' education or an immigrant background.

Ten countries reported completion rates for immigrant students. Differences in the completion rates of first- and second-generation immigrant students are less than five percentage points in Denmark, France, the Netherlands, Sweden and the United States. The exception is Norway, where the completion rates of second-generation immigrant students is 17 percentage points higher than the completion rates of first-generation students. Further data will be needed to determine if immigrant students in Norway are better integrated compared to those in other countries where completion rates are similar between first- and second-generation immigrant students.

Ten countries reported completion rates by parents' education level. The difference in upper secondary completion rates between students from families where parents have a tertiary education and those from families where parents have no more than a lower secondary education ranges from 7 percentage points in Chile to more than 30 percentage points in Norway and the United Kingdom. In Norway, only 36% of students from families with low levels of education complete upper secondary programmes in the stipulated time, compared to 70% of those from highly educated families.

Learning outcomes among students with an immigrant background or from families with low level of education should be an area of focus among education policy makers, particularly in countries where these students show significantly lower completion rates than their peers who do not come from these social groups.

Definition

First-generation students are those who were born outside the country, as were their parents.

Graduates in the reference period can be either first-time graduates or repeat graduates. A **first-time graduate** is a student who has graduated for the first time at a given level of education in the reference period. Thus, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

Net graduation rates represent the estimated percentage of an age group that will complete upper secondary education, based on current patterns of graduation.

Second-generation students are those who were born in the country, but their parents were born outside. More details on the definitions used by countries in Box A2.2 is available in Annex 3.

Successful completion of upper secondary general programmes represents the proportion of new entrants to upper secondary general programmes who graduated at the upper secondary level a specific number of years later (based on cohorts).

Successful completion of upper secondary programmes represents the proportion of new entrants to upper secondary programmes who graduated at the upper secondary level a specific number of years later (based on cohorts).

Successful completion of upper secondary vocational programmes represents the proportion of new entrants to upper secondary general programmes who graduated at the upper secondary level a specific number of years later (based on cohorts).

Methodology

Data refer to the academic year 2011/12 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details, see Annex 3 at *www.oecd.org/edu/eag.htm*).

Data on trends in graduation rates at upper secondary level for the years 1995 and 2000 through 2004 are based on a special survey carried out in January 2007.

Unless otherwise indicated, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

Graduates of ISCED 3A, 3B and 3C (or 4A, 4B, 4C) programmes are not considered as first-time counts. Therefore, graduation rates cannot be added, as some individuals graduate from more than one upper secondary programme and would be counted twice. The same applies for graduation rates according to programme orientation, i.e. general or vocational. In addition, the typical graduation ages are not necessarily the same for the different types of programmes (see Annex 1). Pre-vocational and vocational programmes include both school-based programmes and combined school- and work-based programmes that are recognised as part of the education system. Entirely work-based education and training programmes that are not overseen by a formal education authority are not included.

In Tables A2.4, A2.5 and Box A2.2, data are based on a special survey carried out in December 2013. Successful completion of upper secondary programmes is calculated as the ratio of the number of students who graduate from an upper secondary programme during the reference year to the number of new entrants in this programme N years before (or N+2), with N being the duration of the programme. The calculation of successful completion is defined from a cohort analysis in three quarters of the countries listed in Table A2.4 (true cohort and longitudinal survey). The estimation for the other countries without a real cohort tracking system assumes constant student flows at the upper secondary level, owing to the need for consistency between the graduate cohort in the reference year and the entrant cohort N years before (Proxy cohort data). This assumption may be an oversimplification. A detailed description of the method used for each country is included in Annex 3 (years of new entrants, years of graduates, programmes taken into account, etc.).

Note regarding data from Israel

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

References

Falch T. et al. (2010), *Completion and Dropout in Upper Secondary Education in Norway: Causes and Consequences,* Centre for Economic Research at NTNU, Trondheim, October 2010.

OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, *http://dx.doi.org/ 10.1787/9789264208780-en.*

OECD (2012a), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264130852-en.*

OECD (2012b), *Closing the Gender Gap: Act Now*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264179370-en.*

OECD (2010), *Learning for Jobs,* OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264087460-en.*

Zapata, J. (forthcoming), "Upper Secondary Education: a Literature Review on Provision", OECD Publishing, Paris.

Tables of Indicator A2

StatLink http://dx.doi.org/10.1787/888933115122

	Table A2.1a	Upper secondary graduation rates and average ages (2012)
	Table A2.1b	Upper secondary graduation rates: Under 25 years old (2012)
WEB	Table A2.1c	Post-secondary non-tertiary graduation rates (2012)
	Table A2.2a	Trends in first-time graduation rates at upper secondary level (1995-2012)
WEB	Table A2.2b	Trends in graduation rates (general and pre-vocational/vocational programmes) at upper secondary level (2005-2012)
	Table A2.3a	Distribution of upper secondary vocational graduates, by field of education and gender (2012)
WEB	Table A2.3b	Distribution of upper secondary vocational graduates, by field of education (2012)
	Table A2.4	Successful completion of upper secondary programmes, by gender and programme orientation
	Table A2.5	Successful completion of upper secondary programmes, by programme orientation and duration

A2

Table A2.1a. Upper secondary graduation rates and average ages (2012)

Sum of age-specific graduation rates, by programme destination, programme orientation and gender

		Total (first-time graduates)				General programmes				Pre-vocational/ vocational programmes				ISCED 3A[1]	ISCED 3B[1]	ISCED 3C (long)[1]	ISCED 3C (short)[1]
		M + W	Men	Women	Average age[2]	M + W	Men	Women	Average age[2]	M + W	Men	Women	Average age[2]	M + W	M + W	M + W	M + W
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(17)	(21)	(25)
OECD	Australia[3]	**m**	m	m	*m*	**71**	67	75	*17*	**59**	58	61	*31*	**71**	**a**	**59**	**a**
	Austria	**68**	71	64	*18*	**18**	14	22	*18*	**76**	87	65	*20*	**18**	**55**	**1**	**20**
	Belgium	**m**	m	m	*m*	**35**	31	40	*18*	**66**	61	72	*25*	**59**	**a**	**19**	**23**
	Canada[3]	**88**	85	91	*19*	**84**	81	88	*18*	**4**	4	3	*m*	**84**	**a**	**4**	**a**
	Chile	**84**	81	88	*18*	**55**	52	58	*19*	**30**	30	30	*18*	**84**	**a**	**a**	**a**
	Czech Republic	**82**	81	83	*19*	**24**	18	30	*19*	**58**	63	53	*19*	**58**	**n**	**24**	**a**
	Denmark	**92**	86	99	*21*	**62**	54	70	*19*	**47**	44	49	*28*	**62**	**a**	**46**	**n**
	Estonia	**m**	m	m	*m*	**65**	55	76	*18*	**22**	27	17	*21*	**65**	**20**	**2**	**a**
	Finland	**93**	89	96	*21*	**44**	37	52	*19*	**97**	89	106	*29*	**93**	**a**	**a**	**a**
	France	**m**	m	m	*m*	**53**	46	60	*17*	**75**	77	72	*20*	**53**	**24**	**4**	**47**
	Germany	**95**	95	94	*m*	**49**	44	54	*m*	**46**	51	40	*m*	**49**	**45**	**a**	**1**
	Greece	**71**	64	78	*m*	**71**	64	78	*m*	**33**	39	27	*m*	**71**	**a**	**33**	**x(21)**
	Hungary	**94**	95	94	*19*	**70**	63	77	*19*	**25**	32	18	*20*	**70**	**a**	**25**	**x(21)**
	Iceland	**95**	82	109	*23*	**79**	64	94	*21*	**55**	55	56	*26*	**76**	**3**	**37**	**18**
	Ireland	**93**	92	95	*19*	**69**	70	68	*19*	**80**	61	99	*26*	**97**	**a**	**6**	**46**
	Israel	**87**	82	93	*17*	**53**	48	59	*17*	**34**	35	34	*17*	**81**	**a**	**6**	**a**
	Italy	**84**	82	86	*m*	**36**	27	46	*18*	**64**	72	56	*m*	**75**	**1**	**a**	**24**
	Japan	**93**	92	94	*m*	**71**	68	75	*m*	**22**	24	20	*m*	**71**	**1**	**21**	**x(21)**
	Korea	**92**	92	92	*m*	**71**	70	72	*m*	**21**	22	20	*m*	**71**	**a**	**21**	**a**
	Luxembourg	**69**	66	72	*20*	**31**	27	35	*18*	**47**	46	47	*20*	**47**	**9**	**20**	**1**
	Mexico	**47**	45	50	*18*	**44**	41	46	*18*	**4**	4	4	*19*	**44**	**a**	**4**	**a**
	Netherlands	**94**	91	98	*21*	**42**	38	45	*17*	**78**	79	76	*25*	**70**	**a**	**49**	**a**
	New Zealand	**85**	83	88	*17*	**85**	83	88	*17*	**m**	m	m	*m*	**74**	**m**	**m**	**11**
	Norway	**88**	83	94	*22*	**59**	48	71	*19*	**34**	41	27	*28*	**59**	**a**	**34**	**m**
	Poland	**85**	80	89	*20*	**52**	40	65	*20*	**39**	47	31	*20*	**77**	**a**	**14**	**a**
	Portugal	**m**	m	m	*m*	**47**	40	54	*23*	**50**	50	50	*23*	**a**	**a**	**a**	**a**
	Slovak Republic	**86**	85	89	*19*	**27**	21	33	*18*	**66**	71	62	*20*	**78**	**a**	**14**	**1**
	Slovenia	**96**	92	101	*m*	**35**	28	43	*18*	**73**	79	67	*m*	**39**	**46**	**21**	**2**
	Spain	**93**	90	97	*m*	**52**	46	59	*m*	**50**	49	50	*m*	**52**	**23**	**11**	**16**
	Sweden	**77**	75	80	*18*	**43**	38	48	*18*	**35**	37	32	*18*	**77**	**n**	**n**	**n**
	Switzerland	**m**	m	m	*m*	**34**	27	41	*20*	**71**	77	66	*21*	**30**	**69**	**6**	**x(21)**
	Turkey	**55**	54	57	*17*	**30**	27	32	*17*	**26**	27	25	*17*	**55**	**a**	**a**	**m**
	United Kingdom	**93**	92	95	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**81**	**12**
	United States	**79**	75	82	*17*	**x(1)**	x(2)	x(3)	*x(4)*	**x(1)**	x(2)	x(3)	*x(4)*	**a**	**a**	**a**	**a**
	OECD average	**84**	81	87	*19*	**52**	46	58	*19*	**48**	50	46	*22*	**61**	**10**	**18**	**8**
	EU21 average	**86**	84	89	*20*	**46**	40	53	*19*	**56**	58	54	*22*	**61**	**11**	**18**	**10**
Partners	Argentina[3]	**m**	m	m	*m*	**34**	28	41	*17*	**7**	7	7	*17*	**41**	**a**	**a**	**a**
	Brazil	**m**	m	m	*m*	**63**	51	75	*20*	**12**	10	14	*25*	**64**	**12**	**a**	**a**
	China	**76**	76	77	*m*	**42**	41	44	*m*	**60**	60	59	*m*	**44**	**x(13)**	**33**	**25**
	Colombia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	India	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Indonesia[3]	**m**	m	m	*m*	**36**	32	41	*18*	**25**	29	22	*18*	**36**	**25**	**a**	**a**
	Latvia	**90**	87	93	*20*	**63**	55	70	*19*	**28**	33	23	*20*	**86**	**a**	**4**	**a**
	Russian Federation	**m**	m	m	*m*	**43**	x(5)	x(5)	*m*	**45**	x(9)	x(9)	*m*	**43**	**18**	**22**	**5**
	Saudi Arabia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	South Africa	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	G20 average	**77**	76	78	*m*	**52**	48	58	*m*	**34**	34	31	*m*	**54**	**9**	**16**	**9**

Notes: Columns showing graduation rates for men, women and average age at upper secondary level by programme orientation (i.e. columns 14-16, 18-20, 22-24, 26-28) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated (for instance Luxembourg) and those that are net importers may be overestimated.

1. ISCED 3A (designed to prepare for direct entry to tertiary-type A education).
ISCED 3B (designed to prepare for direct entry to tertiary-type B education).
ISCED 3C (long) similar to duration of typical 3A or 3B programmes.
ISCED 3C (short) shorter than duration of typical 3A or 3B programmes.

2. The average age refers generally to the age of the students at the beginning of the calendar year; students could be one year older than the age indicated when they graduate at the end of the school year. It refers to an average weighted age. Please see Annex 3 to learn how it is calculated.

3. Year of reference 2011.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115141

A2

Table A2.1b. Upper secondary graduation rates: Under 25 years old (2012)

Sum of graduation rates for single year of age, by programme destination, programme orientation and gender

		Total (first-time graduates)				General programmes				Pre-vocational/ vocational programmes				ISCED 3A[1]	ISCED 3B[1]	ISCED 3C (long)[1]	ISCED 3C (short)[1]
		M + W	Men	Women	Share of graduates below 25[2]	M + W	Men	Women	Share of graduates below 25[2]	M + W	Men	Women	Share of graduates below 25[2]	M + W	M + W	M + W	M + W
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(16)	(19)	(22)
OECD	Australia[3]	**m**	m	m	*m*	**71**	67	75	*100*	**27**	28	26	*45*	**71**	**a**	**27**	**a**
	Austria	**65**	68	61	*95*	**18**	14	22	*99*	**68**	78	58	*88*	**18**	**49**	**1**	**18**
	Belgium	**m**	m	m	*m*	**35**	31	40	*100*	**48**	48	49	*71*	**59**	**a**	**19**	**4**
	Canada[3]	**83**	80	86	*95*	**82**	79	86	*97*	**1**	2	1	*34*	**82**	**a**	**1**	**a**
	Chile	**81**	78	83	*96*	**51**	49	53	*94*	**29**	29	30	*99*	**81**	**a**	**a**	**a**
	Czech Republic	**81**	80	82	*98*	**24**	18	30	*100*	**57**	62	51	*97*	**57**	**a**	**23**	**a**
	Denmark	**80**	77	85	*87*	**60**	53	69	*97*	**26**	29	23	*56*	**60**	**a**	**26**	**n**
	Estonia	**m**	m	m	*m*	**64**	54	74	*96*	**20**	25	15	*93*	**64**	**19**	**1**	**a**
	Finland	**82**	80	84	*89*	**44**	36	52	*99*	**53**	55	51	*55*	**82**	**a**	**a**	**a**
	France	**m**	m	m	*m*	**53**	46	60	*100*	**67**	73	61	*90*	**53**	**24**	**3**	**40**
	Germany	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**a**	**m**
	Greece	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**a**	**m**	**m**
	Hungary	**90**	91	89	*94*	**67**	61	73	*94*	**24**	32	16	*96*	**67**	**a**	**24**	**x(19)**
	Iceland	**75**	66	84	*80*	**68**	56	81	*87*	**31**	33	30	*58*	**66**	**2**	**20**	**12**
	Ireland	**92**	91	94	*99*	**67**	68	66	*97*	**59**	51	68	*68*	**95**	**a**	**6**	**25**
	Israel	**87**	78	93	*100*	**53**	48	59	*100*	**34**	35	34	*100*	**81**	**a**	**6**	**a**
	Italy	**m**	m	m	*m*	**36**	27	46	*100*	**m**	m	m	*m*	**73**	**m**	**a**	**m**
	Japan	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Korea	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**a**	**m**	**a**
	Luxembourg	**67**	63	70	*96*	**31**	27	35	*100*	**44**	44	44	*94*	**47**	**9**	**18**	**1**
	Mexico	**46**	44	49	*98*	**43**	40	45	*98*	**3**	3	3	*93*	**43**	**a**	**3**	**a**
	Netherlands	**82**	79	85	*86*	**42**	38	45	*100*	**59**	60	58	*76*	**66**	**a**	**35**	**a**
	New Zealand	**85**	83	88	*100*	**85**	83	88	*100*	**m**	m	m	*m*	**74**	**m**	**m**	**11**
	Norway	**75**	71	80	*85*	**58**	47	69	*98*	**21**	27	13	*59*	**58**	**a**	**21**	**m**
	Poland	**83**	79	87	*97*	**48**	36	60	*90*	**39**	47	31	*99*	**72**	**a**	**14**	**a**
	Portugal	**m**	m	m	*m*	**40**	33	47	*80*	**42**	44	40	*79*	**a**	**a**	**a**	**a**
	Slovak Republic	**84**	83	85	*97*	**27**	21	33	*99*	**63**	69	57	*94*	**76**	**a**	**14**	**n**
	Slovenia	**m**	m	m	*m*	**35**	28	43	*100*	**m**	m	m	*m*	**39**	**m**	**m**	**2**
	Spain	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Sweden	**77**	75	80	*100*	**43**	38	48	*100*	**35**	37	32	*100*	**77**	**m**	**n**	**m**
	Switzerland	**m**	m	m	*m*	**33**	27	40	*99*	**65**	71	60	*91*	**29**	**64**	**5**	**m**
	Turkey	**55**	54	57	*100*	**30**	27	32	*100*	**26**	27	25	*100*	**55**	**a**	**a**	**m**
	United Kingdom	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	United States	**79**	75	82	*100*	**x(1)**	x(2)	x(3)	*x(4)*	**x(1)**	x(2)	x(3)	*x(4)*	**a**	**a**	**a**	**a**
	OECD average	**78**	75	80	*95*	**48**	43	54	*97*	**39**	42	36	*81*	**59**	**6**	**10**	**5**
	EU21 average	**80**	79	82	*94*	**43**	37	49	*97*	**47**	50	44	*84*	**59**	**7**	**11**	**6**
Partners	Argentina[3]	**m**	m	m	*m*	**34**	28	41	*100*	**7**	7	7	*100*	**41**	**a**	**a**	**a**
	Brazil	**m**	m	m	*m*	**56**	48	65	*88*	**7**	6	9	*61*	**56**	**7**	**a**	**a**
	China	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Colombia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	India	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Indonesia[3]	**m**	m	m	*m*	**34**	31	37	*m*	**22**	25	18	*m*	**34**	**m**	**m**	**a**
	Latvia	**89**	86	92	*99*	**63**	55	70	*m*	**27**	32	22	*m*	**86**	**m**	**4**	**a**
	Russian Federation	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	Saudi Arabia	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	South Africa	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**
	G20 average	**m**	m	m	*m*	**m**	m	m	*m*	**m**	m	m	*m*	**m**	**m**	**m**	**m**

Notes: Columns showing graduation rates for men and women at upper secondary level by programme orientation (i.e. columns 14-15, 17-18, 20-21, 23-24) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated (for instance Luxembourg) and those that are net importers may be overestimated.

1. ISCED 3A (designed to prepare for direct entry to tertiary-type A education).
   ISCED 3B (designed to prepare for direct entry to tertiary-type B education).
   ISCED 3C (long) similar to duration of typical 3A or 3B programmes.
   ISCED 3C (short) shorter than duration of typical 3A or 3B programmes.
2. Share of below 25-year-old graduates among the total population of graduates.
3. Year of reference 2011.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115160

A2

Table A2.2a. Trends in first-time graduation rates at upper secondary level (1995-2012)

		1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average annual growth rate 1995-2012[1]
OECD	Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Austria[2]	m	m	m	m	m	m	m	m	m	m	m	m	66	**68**	m
	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Canada	m	m	77	79	83	79	80	81	77	81	81	85	88	**m**	m
	Chile	m	m	m	m	m	79	85	82	82	83	85	83	83	**84**	m
	Czech Republic	78	m	84	83	88	87	89	89	88	85	83	80	78	**82**	0.3%
	Denmark	83	95	95	94	88	88	82	84	85	83	85	86	90	**92**	0.7%
	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Finland	91	91	85	84	90	95	94	94	97	93	95	93	96	**93**	0.1%
	France	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Germany[3]	100	92	92	94	97	99	99	100	100	97	84	87	92	**95**	m
	Greece	80	54	76	85	96	93	100	98	96	91	m	m	m	**71**	-0.7%
	Hungary	m	m	83	82	87	86	84	87	84	78	86	86	86	**94**	m
	Iceland	80	67	70	79	81	87	79	87	86	89	89	88	90	**95**	1.1%
	Ireland	m	74	77	78	91	92	91	87	90	88	91	94	89	**93**	*1.9%*
	Israel	m	m	m	90	89	93	90	90	92	90	89	92	85	**87**	m
	Italy	m	78	81	78	m	82	85	86	84	86	81	83	79	**84**	*0.6%*
	Japan	96	95	93	94	95	96	95	96	96	95	95	96	96	**93**	-0.2%
	Korea	88	96	100	99	92	94	94	93	91	93	89	94	93	**92**	0.3%
	Luxembourg	m	m	m	69	71	69	75	71	75	73	69	70	70	**69**	m
	Mexico	m	33	34	35	37	39	40	42	43	44	45	47	49	**47**	*3.1%*
	Netherlands	m	m	m	m	m	m	m	m	m	m	m	m	92	**94**	m
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Norway	77	99	105	97	92	100	89	88	92	91	91	87	90	**88**	0.8%
	Poland	m	90	93	91	86	79	85	81	84	83	85	84	84	**85**	*-0.5%*
	Portugal[4]	52	52	48	50	60	53	51	54	65	63	96	104	89	**m**	m
	Slovak Republic	85	87	72	60	56	83	85	86	86	82	82	86	85	**86**	0.1%
	Slovenia	m	m	m	m	m	m	85	97	91	85	96	94	99	**96**	m
	Spain	62	60	66	66	67	66	72	72	74	73	74	80	88	**93**	2.4%
	Sweden	m	75	71	72	76	78	76	75	74	74	74	75	75	**77**	*0.2%*
	Switzerland	86	88	91	91	88	87	87	88	88	88	92	94	m	**m**	m
	Turkey	37	37	37	37	41	55	48	52	58	26	45	54	56	**55**	2.4%
	United Kingdom	m	m	m	m	m	m	86	88	89	91	92	93	93	**93**	m
	United States	69	70	71	73	74	75	76	75	75	76	76	77	77	**79**	0.7%
	OECD average	78	76	77	78	79	81	82	82	83	81	83	84	82	**84**	m
	OECD average for countries with available data 2000-2012		*76*	*76*	*75*	*76*	*80*	*79*	*79*	*81*	*79*	*81*	*83*	*83*	*84*	*0.8%*
	EU21 average	79	77	79	77	79	78	81	82	84	84	85	85	83	**83**	m
Partners	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	China	m	m	m	m	m	m	m	m	m	m	m	69	73	**76**	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Latvia	m	m	m	m	m	m	m	m	m	m	m	m	m	**90**	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	**m**	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	71	75	**76**	m

Notes: Up to 2004, graduation rates at upper secondary level were calculated on a gross basis. From 2005 and for countries with available data, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

1. For countries that do not have data for the year 1995, the 2000-12 average annual growth rate is indicated in italics.
2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.
3. Break in the series between 2008 and 2009 due, in Germany, to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B.
4. Year of reference 1997 instead of 1995.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115179

A2

Table A2.3a. Distribution of upper secondary vocational graduates, by field of education and gender (2012)

		Men									Women								
		Pre-vocational/ vocational programmes graduation rates	Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Not known or unspecified	Pre-vocational/ vocational programmes graduation rates	Humanities, arts and education	Health and welfare	Social sciences, business and law	Services	Engineering, manufacturing and construction	Sciences	Agriculture	Not known or unspecified
		(1)	(2)	(5)	(6)	(7)	(8)	(9)	(14)	(15)	(16)	(17)	(20)	(21)	(22)	(23)	(24)	(29)	(30)
OECD	Australia[1]	*58*	2	5	13	12	**59**	2	6	1	*61*	6	**37**	30	16	5	1	2	4
OECD	Austria[2]	*87*	1	1	11	8	**46**	2	8	23	*65*	2	9	**35**	21	7	n	8	19
OECD	Belgium	*61*	15	6	11	7	**32**	3	2	23	*72*	23	23	12	13	2	n	1	**26**
OECD	Canada[1]	*4*	m	m	m	m	m	m	m	m	*3*	m	m	m	m	m	m	m	m
OECD	Chile	*30*	1	2	24	7	**59**	n	6	n	*30*	13	8	**48**	16	12	n	4	n
OECD	Czech Republic	*63*	3	1	10	12	**70**	n	3	n	*53*	8	13	33	30	9	n	5	n
OECD	Denmark	*44*	3	7	17	15	**49**	n	8	n	*49*	1	**50**	31	10	5	n	4	n
OECD	Estonia	*27*	1	n	n	15	**68**	9	7	n	*17*	6	4	8	**52**	19	5	6	n
OECD	Finland	*89*	4	5	10	16	**55**	4	5	n	*106*	7	**31**	20	26	10	1	6	n
OECD	France	*77*	2	3	14	12	**62**	n	7	n	*72*	2	29	**32**	26	7	n	3	n
OECD	Germany	*51*	2	3	27	9	**53**	4	3	n	*40*	3	16	**54**	17	7	1	1	n
OECD	Greece	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
OECD	Hungary	*32*	1	n	4	21	**73**	n	2	n	*18*	3	8	23	**52**	11	n	3	n
OECD	Iceland	*55*	14	1	11	16	**54**	2	2	n	*56*	**24**	21	21	26	6	n	n	2
OECD	Ireland	*61*	m	m	m	m	m	m	m	m	*99*	m	m	m	m	m	m	m	m
OECD	Israel	*35*	m	m	m	m	m	m	m	m	*34*	m	m	m	m	m	m	m	m
OECD	Italy	*72*	m	m	m	m	m	m	m	m	*56*	m	m	m	m	m	m	m	m
OECD	Japan	*24*	n	1	17	2	**56**	n	11	12	*20*	n	10	**40**	12	8	n	12	17
OECD	Korea	*22*	18	n	7	4	**58**	11	2	n	*20*	**34**	1	**26**	5	20	12	1	n
OECD	Luxembourg	*46*	m	m	m	m	m	m	m	m	*47*	m	m	m	m	m	m	m	m
OECD	Mexico	*4*	m	m	m	m	m	m	m	m	*4*	m	m	m	m	m	m	m	m
OECD	Netherlands	*79*	4	8	18	25	**34**	7	4	n	*76*	7	**45**	23	19	3	n	3	n
OECD	New Zealand	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
OECD	Norway	*41*	1	4	2	15	**72**	3	3	n	*27*	4	**48**	12	24	9	n	3	n
OECD	Poland	*47*	1	n	8	13	**62**	13	4	n	*31*	3	n	31	**47**	13	2	3	n
OECD	Portugal	*50*	m	m	m	m	m	m	m	m	*50*	m	m	m	m	m	m	m	m
OECD	Slovak Republic	*71*	4	2	11	19	**61**	n	3	n	*62*	8	13	**35**	33	8	n	3	n
OECD	Slovenia	*79*	3	5	13	13	**54**	7	5	n	*67*	14	21	**33**	21	6	n	5	n
OECD	Spain	*49*	17	5	10	10	**42**	9	4	3	*50*	**29**	24	25	15	3	2	1	1
OECD	Sweden	*37*	8	7	6	10	**65**	n	4	n	*32*	24	**27**	13	18	8	n	10	n
OECD	Switzerland	*77*	2	2	24	6	**54**	4	6	2	*66*	4	23	**48**	12	9	n	3	1
OECD	Turkey	*27*	1	2	11	4	**52**	13	n	17	*25*	4	**26**	17	8	11	10	n	24
OECD	United Kingdom	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
OECD	United States	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
	OECD average	*50*	4	3	11	10	**48**	4	4	17	*47*	9	19	**24**	19	7	2	3	17
	EU21 average	*59*	4	3	11	12	**50**	5	4	12	*56*	8	20	**25**	23	7	1	3	12
Partners	Argentina[1]	*7*	m	m	m	m	m	m	m	m	*7*	m	m	m	m	m	m	m	m
Partners	Brazil	*10*	m	m	m	m	m	m	m	m	*14*	m	m	m	m	m	m	m	m
Partners	China	*60*	m	m	m	m	m	m	m	m	*59*	m	m	m	m	m	m	m	m
Partners	Colombia	*m*	m	m	m	m	m	m	m	m	*60*	m	m	m	m	m	m	m	m
Partners	India	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
Partners	Indonesia[1]	*29*	2	2	**49**	n	39	n	n	8	*22*	2	6	**49**	n	29	n	4	10
Partners	Latvia	*33*	4	n	6	12	**67**	10	2	n	*23*	15	3	34	**34**	9	2	2	n
Partners	Russian Federation	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
Partners	Saudi Arabia	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
Partners	South Africa	*m*	m	m	m	m	m	m	m	m	*m*	m	m	m	m	m	m	m	m
	G20 average	*33*	m	m	m	m	m	m	m	m	*30*	m	m	m	m	m	m	m	m

Notes: Columns showing the breakdown of humanities, arts and education (3, 4, 18 and 19) and sciences (10-13, 25-28) are available for consultation on line (see *StatLink* below). The averages were adjusted to 100% and do not correspond exactly to the average of each column. Columns 1 and 16 show the relative share of pre-vocational/vocational graduates among all upper secondary graduates. Figures in bold highlight the field of education with the larger share of graduates in each country.

1. Year of reference 2011.

2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See annex 3 for notes (www.oecd.org/edu/eag.htm).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115198

A2

Table A2.4. [1/2] Successful completion of upper secondary programmes, by gender and programme orientation

Ratio of graduates to new entrants, based on cohorts

		Method	Year used for new entrants Duration programme (G: general, V: vocational)	N = theoretical duration	Completion of upper secondary programmes M + W	Men	Women	Completion of general programmes [1] M + W	Men	Women	Proportion of vocational programme graduates[3]	Completion of vocational programmes [2] M + W	Men	Women	Proportion of general programmes graduates[4]
OECD	Austria	True cohort	2007-08	within N	71	65	76	71	65	76	3	m	m	m	m
			4 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Belgium (Fl.)	True cohort	2007-08	within N	71	65	77	81	75	86	14	62	57	67	n
			4 years G & V	2 years after N	87	84	90	95	94	97	19	80	77	82	n
	Canada	Proxy cohort data	2008-09	within N	73	69	77	m	m	m	m	m	m	m	m
			3 years	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Chile	True cohort	2007	within N	64	61	67	66	62	69	21	60	58	63	12
			4 years G & V	2 years after N	77	75	80	79	77	81	21	74	72	76	18
	Denmark	True cohort	2004-05	within N	60	56	65	81	78	83	1	35	35	35	2
			3-4 years G & 2-5 years V	2 years after N	73	70	76	89	87	90	3	53	54	53	9
	Estonia	True cohort	2005	within N	78	75	81	84	82	85	1	60	60	59	2
			3 years G & 3-4 years V	2 years after N	86	83	88	91	91	92	3	66	67	66	3
	Finland	True cohort	2006	within N	71	70	72	80	79	81	1	64	64	64	1
			3 years G & V	2 years after N	82	80	83	92	91	93	4	74	74	75	1
	France	Longitudinal sample survey	1999-2005	within N	59	54	64	61	56	66	5	55	52	60	n
			3 years G & 2 years V	2 years after N	82	78	85	90	88	91	6	69	67	73	1
	Greece	Cross cohort	2008-11	within N	85	82	87	89	86	92	m	76	77	76	m
			3-4 years G & 2-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Hungary	Cross cohort	2009-10	within N	84	81	86	87	85	88	m	74	73	77	m
			4 years	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Iceland	True cohort	2004	within N	45	38	52	47	40	53	14	37	32	48	35
			4 years G & V	2 years after N	58	52	64	61	56	65	19	49	44	57	41
	Ireland	True Cohort	2007	within N	90	88	92	m	m	m	m	m	m	m	m
			2-3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Israel	True cohort	2009	within N	88	81	94	89	83	95	9	85	80	92	14
			3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Italy	Cross cohort	2005-06	within N	66	59	73	79	75	82	m	61	58	67	m
			5 years G & V	2 years after N	86	82	90	m	m	m	m	m	m	m	m
	Japan	True cohort	2009	within N	94	93	94	94	94	95	m	92	91	93	m
			3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Korea	Cross cohort	2009	within N	95	94	96	97	96	97	m	90	89	90	m
			3 years G & V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Luxembourg	True cohort	2006-07	within N	40	36	45	64	60	68	3	29	27	32	n
			4 years G & 2-5 years V	2 years after N	72	68	76	90	88	91	9	64	60	68	n
	Mexico	True cohort	2009-2010	within N	62	57	66	64	60	68	a	57	54	62	a
			3 years G & V	2 years after N	m	m	m	m	m	m	a	m	m	m	a
	Netherlands	True cohort	2007	within N	61	57	66	69	66	72	3	57	52	62	n
			2-3 years G & 2-4 years V	2 years after N	80	77	83	94	93	95	4	73	69	76	1
	New Zealand	True cohort	2008	within N	69	65	73	69	65	73	m	m	m	m	m
			3 years G	2 years after N	74	70	78	74	70	78	m	m	m	m	m
	Norway	True cohort	2006	within N	57	49	66	73	68	77	n	40	34	50	55
			3 years G & 4 years V	2 years after N	72	68	76	83	79	87	1	60	59	62	40
	Poland	True cohort	2008-09	within N	78	72	85	83	74	90	m	72	70	76	m
			3 years G & 3-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Slovak Republic	Cross cohort	2006	within N	89	89	89	97	96	98	m	85	87	84	m
			4 years G & 2-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	Cross cohort	2009-11	within N	73	71	76	82	83	81	m	66	64	71	m
			4 years G & 3-4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	Spain	Cross cohort	2008-09	within N	60	57	64	60	57	64	m	m	m	m	m
			2 years G & V	2 years after N	83	81	85	83	81	85	m	m	m	m	m
	Sweden[5]	True cohort	2007	within N	72	71	75	76	74	78	1	68	69	71	2
			3 years G & V	2 years after N	80	79	82	84	82	86	4	75	76	78	3
	Turkey	True cohort	2008-09	within N	72	66	80	75	68	82	5	69	63	77	9
			4-5 years G & 4 years V	2 years after N	m	m	m	m	m	m	m	m	m	m	m
	United Kingdom	True cohort	2006	within N	67	63	72	67	63	72	m	m	m	m	m
			2 years	2 years after N	83	80	87	m	m	m	m	m	m	m	m
	United States	Longitudinal sample survey	2002	within N	85	83	88	m	m	m	m	m	m	m	m
			3 years G & V	2 years after N	88	86	90	m	m	m	m	m	m	m	m
	OECD average[6]			within N	72	68	76	76	73	80	m	64	61	67	m
				2 years after N	87	84	89	91	89	93	m	79	77	81	m

Note: Data presented in this table come from a special survey in which 29 countries participated and only concern initial education programmes. Refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. ISCED 3 general programmes entrants who graduated from either a general or vocational programme.
2. ISCED 3 vocational programmes entrants who graduated from either a general or vocational programme.
3. ISCED 3 general programmes entrants who graduated from a vocational programme.
4. ISCED 3 vocational programme entrants who graduated from a general programme.
5. Excluding students having continued their studies in the adult education system.
6. OECD average for N + 2 corresponds to the OECD average for N + the difference (in percentage points) of the average for countries with N and N + 2 data.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115217

A2

Table A2.4. [2/2] Successful completion of upper secondary programmes, by gender and programme orientation

		Method	Year used for new entrants Duration programme (G: general, V: vocational)	N = theoretical duration	Proportion of students who are still in education among the students who did not graduated (General programmes) M + W	Men	Women	Proportion of students who are still in education among the students who did not graduated (Vocational programmes) M + W	Men	Women	Net entry rates at upper secondary level for students below 20 years old (2012)[5]
OECD	Austria	True cohort	2007-08	within N	76	78	74	m	m	m	100
			4 years G & V	2 years after N	m	m	m	m	m	m	
	Belgium (Fl.)	True cohort	2007-08	within N	88	89	86	67	68	65	m
			4 years G & V	2 years after N	8	10	6	6	6	5	
	Canada	Proxy cohort	2008-09	within N	m	m	m	m	m	m	m
		data	3 years	2 years after N	m	m	m	m	m	m	
	Chile	True cohort	2007	within N	57	58	57	57	58	56	90
			4 years G & V	2 years after N	34	35	33	37	39	35	
	Denmark	True cohort	2004-05	within N	73	75	70	65	66	65	95
			3-4 years G & 2-5 years V	2 years after N	41	44	39	42	42	42	
	Estonia	True cohort	2005	within N	58	54	60	34	31	39	100
			3 years G & 3-4 years V	2 years after N	27	24	30	16	16	24	
	Finland	True cohort	2006	within N	82	81	83	50	49	52	m
			3 years G & V	2 years after N	52	54	50	28	26	31	
	France	Longitudinal	1999-2005	within N	93	93	94	80	81	79	m
		sample survey	3 years G & 2 years V	2 years after N	21	24	19	13	12	15	
	Greece	Cross cohort	2008-11	within N	m	m	m	m	m	m	100
			3-4 years G & 2-4 years V	2 years after N	m	m	m	m	m	m	
	Hungary	Cross cohort	2009-10	within N	m	m	m	m	m	m	100
			4 years	2 years after N	m	m	m	m	m	m	
	Iceland	True cohort	2004	within N	54	55	53	39	38	41	98
			4 years G & V	2 years after N	32	32	33	21	20	24	
	Ireland	True Cohort	2007	within N	m	m	m	m	m	m	100
			2-3 years G & V	2 years after N	m	m	m	m	m	m	
	Israel	True cohort	2009	within N	10	9	12	2	2	4	98
			3 years G & V	2 years after N	m	m	m	m	m	m	
	Italy	Cross cohort	2005-06	within N	m	m	m	m	m	m	m
			5 years G & V	2 years after N	m	m	m	m	m	m	
	Japan	True cohort	2009	within N	m	m	m	m	m	m	100
			3 years G & V	2 years after N	m	m	m	m	m	m	
	Korea	Cross cohort	2009	within N	7	11	n	7	3	12	m
			3 years G & V	2 years after N	m	m	m	m	m	m	
	Luxembourg	True cohort	2006-07	within N	82	84	81	62	63	62	90
			4 years G & 2-5 years V	2 years after N	27	35	17	19	21	17	
	Mexico	True cohort	2009-2010	within N	m	m	m	m	m	m	77
			3 years G & V	2 years after N	m	m	m	m	m	m	
	Netherlands	True cohort	2007	within N	77	75	79	35	35	35	m
			2-3 years G & 2-4 years V	2 years after N	43	43	44	20	21	19	
	New Zealand	True cohort	2008	within N	46	45	48	m	m	m	100
			3 years G	2 years after N	15	14	16	m	m	m	
	Norway	True cohort	2006	within N	37	36	38	37	40	31	99
			3 years G & 4 years V	2 years after N	14	14	15	13	13	14	
	Poland	True cohort	2008-09	within N	m	m	m	m	m	m	88
			3 years G & 3-4 years V	2 years after N	m	m	m	m	m	m	
	Slovak Republic	Cross cohort	2006	within N	m	m	m	m	m	m	92
			4 years G & 2-4 years V	2 years after N	m	m	m	m	m	m	
	Slovenia	Cross cohort	2009-11	within N	m	m	m	m	m	m	100
			4 years G & 3-4 years V	2 years after N	m	m	m	m	m	m	
	Spain	Cross cohort	2008-09	within N	m	m	m	m	m	m	m
			2 years G & V	2 years after N	m	m	m	m	m	m	
	Sweden[5]	True cohort	2007	within N	50	49	50	37	36	38	100
			3 years G & V	2 years after N	1	1	2	1	1	1	
	Turkey	True cohort	2008-09	within N	22	20	25	23	22	26	79
			4-5 years G & 4 years V	2 years after N	m	m	m	m	m	m	
	United Kingdom	True cohort	2006	within N	50	46	54	m	m	m	m
			2 years	2 years after N	m	m	m	m	m	m	
	United States	Longitudinal	2002	within N	m	m	m	m	m	m	98
		sample survey	3 years G & V	2 years after N	m	m	m	m	m	m	
	OECD average[6]			within N	56	56	60	43	42	43	m
				2 years after N	m	m	m	m	m	m	

Note: Data presented in this table come from a special survey in which 29 countries participated and only concern initial education programmes. Refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. ISCED 3 general programmes entrants who graduated from either a general or vocational programme.
2. ISCED 3 vocational programmes entrants who graduated from either a general or vocational programme.
3. ISCED 3 general programmes entrants who graduated from a vocational programme.
4. ISCED 3 vocational programme entrants who graduated from a general programme.
5. Excluding students having continued their studies in the adult education system.
6. OECD average for N + 2 corresponds to the OECD average for N + the difference (in percentage points) of the average for countries with N and N + 2 data.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115217

A2

Table A2.5. Successful completion of upper secondary programmes, by programme orientation and duration

Ratio of graduates to new entrants, based on cohorts

		N = theoretical duration	Completion of general programmes[1]				Completion of vocational programmes[2]				
			Total	2 years	3 years	4 years	Total	2 years	3 years	4 years	5 years
OECD	Austria	within N	71	a	a	71	m	m	m	m	m
		2 years after N	m	a	a	m	m	m	m	m	m
	Belgium (Fl.)	within N	81	a	m	81	62	m	m	62	m
		2 years after N	95	a	m	95	80	m	m	80	m
	Canada	within N	m	a	m	m	m	m	m	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	Chile	within N	66	a	a	66	60	a	a	60	a
		2 years after N	79	a	a	79	74	a	a	74	a
	Denmark	within N	81	a	81	m	35	53	m	30	80
		2 years after N	89	a	89	m	53	69	m	49	97
	Estonia	within N	84	a	84	a	60	a	60	60	a
		2 years after N	91	a	91	a	66	a	66	66	a
	Finland	within N	80	a	80	n	64	n	64	n	n
		2 years after N	92	a	92	n	74	n	74	n	n
	France	within N	61	a	61	a	55	55	a	a	a
		2 years after N	90	a	90	a	69	69	a	a	a
	Greece	within N	89	a	89	78	76	70	82	69	a
		2 years after N	m	a	m	m	m	m	m	m	a
	Hungary	within N	87	a	a	87	74	a	74	a	a
		2 years after N	m	a	a	m	m	a	m	a	a
	Iceland	within N	47	a	m	m	37	m	m	m	m
		2 years after N	61	a	m	m	49	m	m	m	m
	Ireland	within N	m	a	m	m	m	m	m	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	Israel	within N	89	a	89	a	85	a	85	m	a
		2 years after N	m	a	m	a	m	a	m	m	a
	Italy	within N	79	a	m	m	61	m	m	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	Japan	within N	94	a	94	m	92	m	92	m	a
		2 years after N	m	a	m	m	m	m	m	m	a
	Korea	within N	97	a	m	m	90	m	m	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	Luxembourg	within N	64	a	a	64	29	41	30	27	29
		2 years after N	90	a	a	90	64	55	56	70	69
	Mexico	within N	64	a	64	m	57	a	57	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	Netherlands	within N	69	67	72	a	57	51	61	62	a
		2 years after N	94	92	97	a	73	66	75	78	a
	New Zealand	within N	69	a	69	n	m	m	m	m	m
		2 years after N	74	a	74	n	m	m	m	m	m
	Norway	within N	73	a	73	n	40	a	m	40	m
		2 years after N	83	a	83	n	60	a	m	60	m
	Poland	within N	83	a	83	a	72	a	71	73	a
		2 years after N	m	a	m	a	m	a	m	m	a
	Slovak Republic	within N	97	a	a	97	85	63	74	90	a
		2 years after N	m	a	a	m	m	m	m	m	a
	Slovenia	within N	82	a	a	82	66	a	78	63	a
		2 years after N	m	a	a	m	m	a	m	m	a
	Spain	within N	60	60	a	a	m	m	m	m	m
		2 years after N	83	83	a	a	m	m	m	m	m
	Sweden[3]	within N	76	a	76	a	68	a	68	a	a
		2 years after N	84	a	84	a	75	a	75	a	a
	Turkey	within N	75	a	a	75	69	a	a	69	a
		2 years after N	m	a	a	m	m	a	a	m	a
	United Kingdom	within N	67	a	m	m	m	m	m	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	United States	within N	m	a	m	m	m	m	m	m	m
		2 years after N	m	a	m	m	m	m	m	m	m
	OECD average[4]	within N	76	m	79	78	64	m	69	59	m
		2 years after N	91	m	92	95	79	m	82	78	m

Note : Please refer to Annex 3 for details concerning this indicator, including methods used, programmes included/excluded, year of entry, etc.

1. ISCED 3 general programmes entrants who graduated from either a general or vocational programme.
2. ISCED 3 vocational programmes entrants who graduated from either a general or vocational programme.
3. Excluding students having continued their studies in the adult education system.
4. OECD average for N + 2 corresponds to the OECD average for N + the difference (in percentage points) of the average for countries with N and N + 2 data.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

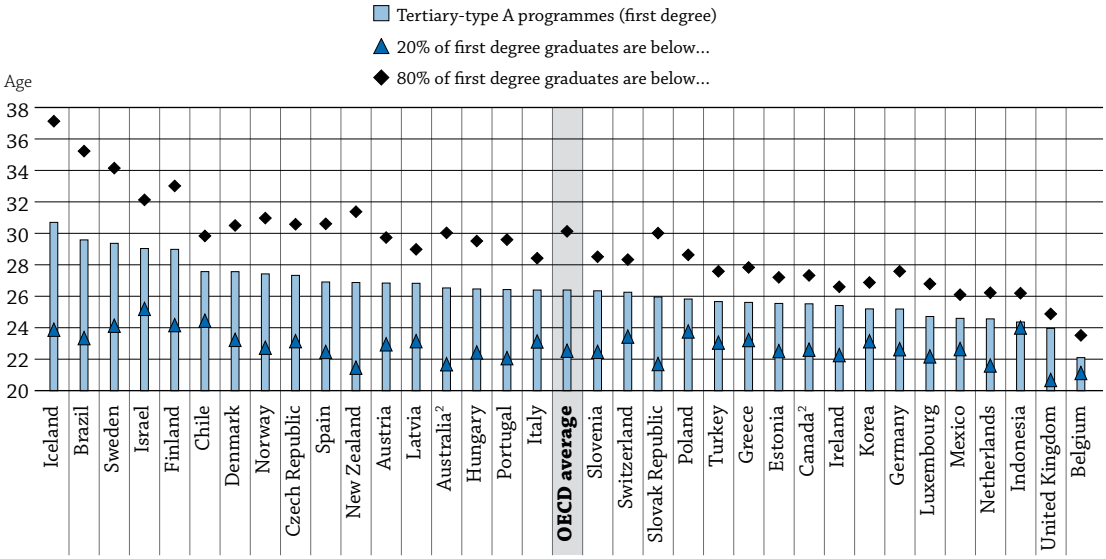
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115236

HOW MANY STUDENTS ARE EXPECTED TO COMPLETE TERTIARY EDUCATION?

- Based on current trends in graduation rates, 39% of today's young adults on average across OECD countries are expected to complete tertiary-type A (university level) education during their lifetime.
- Some 11% of today's young adults on average across OECD countries are expected to complete tertiary-type B (vocationally oriented) education during their lifetime.
- On average across OECD countries, students obtain their first university-level degree at the age of 27, with ages ranging from less than 25 in Belgium, Luxembourg, Mexico, the Netherlands and the United Kingdom to 29 or older in Brazil, Finland, Iceland, Israel and Sweden.

Chart A3.1. Average age[1] of graduates at ISCED 5A level and age distribution (2012)



1. The average age refers to an average weighted age, generally the age of the students at the beginning of the calendar year. Students may be one year older than the age indicated when they graduate at the end of the school year. Please see Annex 3 to learn how the average age is calculated.
2. Year of reference 2011.

Countries are ranked in descending order of the average age of graduates for tertiary-type A education in 2012.

Source: OECD. Table A3.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115464

Context

Tertiary graduation rates illustrate a country's capacity to provide future workers with specialised knowledge and skills. Incentives to obtain a tertiary degree remain strong across OECD countries; from higher salaries to better employment prospects (see Indicators A5 and A6 for further reading on these themes). Tertiary education varies widely in structure and scope among countries, and graduation rates seem to be influenced by the ease of access to and flexibility in completing programmes, as well as the demand that exists for higher skills in the labour market. Expanding access to and linking tertiary education to the demands in the labour market are vital to knowledge-based economies; but these objectives are even more difficult to achieve when budgets are tight.

In recent decades, access to tertiary education has expanded remarkably, involving new types of institutions, which offer more choices and new modes of delivery (OECD, 2008). In parallel, the student population is becoming increasingly heterogeneous, as groups that were traditionally excluded now participate in tertiary education, such as older individuals seeking to upgrade their qualifications to succeed in a more competitive labour market, or as first-time graduates pursue a second degree.

Other findings

- Most graduates of tertiary education programmes are women, except at the doctoral level. Based on current patterns of graduation, it is estimated that **on average 15 percentage points more women than men across OECD countries will complete tertiary-type A education over their lifetime, 47% compared with 31%**.
- On average across OECD countries, **1.6% of young people are expected to complete advanced research programmes**.
- **International students represent a significant share of tertiary graduates in a number of countries**, such as Australia (18%) and New Zealand (11%).

Trends

Over the past 17 years, tertiary-type A graduation rates have risen by 22 percentage points, on average across OECD countries with available data, while rates for tertiary-type B programmes have remained stable. Even though doctorates represent only a small proportion of tertiary programmes, the graduation rate from these programmes has doubled over the same period, from 0.8% to 1.6%.

Notes

Graduation rates represent the estimated percentage of an age cohort that is expected to graduate over their lifetime. This estimate is based on the total number of graduates in 2012 and the age distribution of this group. Therefore, graduation rates are based on the current pattern of graduation, and thus are sensitive to any changes in the education systems, such as the introduction of new programmes or any variation in a programme's duration, like those seen recently in many EU countries with the implementation of the Bologna Process.

In this indicator, 30 is regarded as the upper age limit of the typical first-time graduate from a tertiary-type A or B programme. The upper age limit of the typical graduate from an advanced research programme is set at 35.

Many countries make a clear distinction between first and second university degrees (i.e. undergraduate and postgraduate programmes). However, in some countries, degrees that are internationally comparable to a master's degree are obtained through a single programme of long duration. In order to make accurate comparisons, data presented in this indicator refer to first-time graduates unless otherwise indicated.

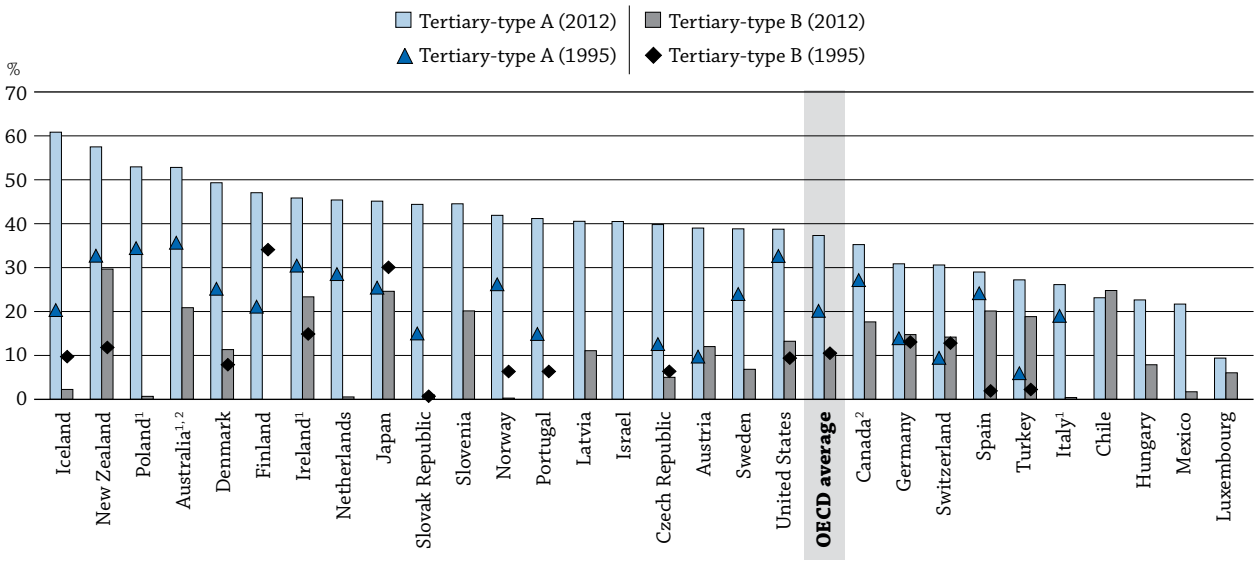
A3

Analysis

Based on current patterns of graduation, 38% of young people, on average across the 26 OECD countries with comparable data for 2012, will graduate for the first time from tertiary-type A programmes during their lifetime. The proportion ranges from less than 25% in Chile, Hungary, Luxembourg and Mexico, to 50% or more in Australia, Iceland, New Zealand and Poland (Chart A3.2).

These programmes, typically offered by universities, are largely theory-based and are designed to provide qualifications for entry into advanced research programmes and professions with high requirements in knowledge and skills.

Chart A3.2. First-time graduation rates in tertiary-type A and B education (1995 and 2012)



1. Year of reference 2000 instead of 1995.
2. Year of reference 2011 instead of 2012.

Countries are ranked in descending order of first-time graduation rates for tertiary-type A education in 2012.

Source: OECD. Table A3.2a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115483

On average across OECD countries, 39% of young people will graduate from tertiary-type A first-degree programmes (often called bachelor's degree) and 18% from tertiary-type A second degree programmes (often called master's degree). For first-degree programmes, the graduation rate equals or exceeds 50% in Australia, Finland, Iceland, New Zealand, Poland and the Russian Federation but is 25% or less in Argentina, Belgium, Chile, China, Estonia, Greece, Indonesia, Luxembourg, Mexico, Saudi Arabia and South Africa. The low graduation rates in Belgium and China are counterbalanced by a higher level of first-degree graduation rates from tertiary-type B (vocationally oriented) programmes. In China, an estimated 15% of young people today will graduate from a tertiary-type A programme, and 18% will graduate from a tertiary-type B, vocational programme, during their lifetime. The graduation rate from second-degree programmes equals or exceeds 30% in Poland, Portugal and the Slovak Republic. With the implementation of the Bologna Process, programmes at this level of education have expanded considerably in many EU countries (Table A3.1a).

The demand for vocationally oriented programmes has not increased as rapidly in recent decades as the demand for university programmes. In 2012, graduation rates for tertiary-type B programmes averaged 11% among the 27 OECD countries with comparable data; 12% of women and 10% of men graduated from such programmes. These programmes are classified at the same academic level as more theory-based programmes, but are often shorter in duration (usually two to three years). They are generally not intended to lead to further university-level degrees, but rather to equip individuals with skills that can be used directly in the labour market and also to respond to employers' needs for specialised skills (Table A3.1a).

Trend data

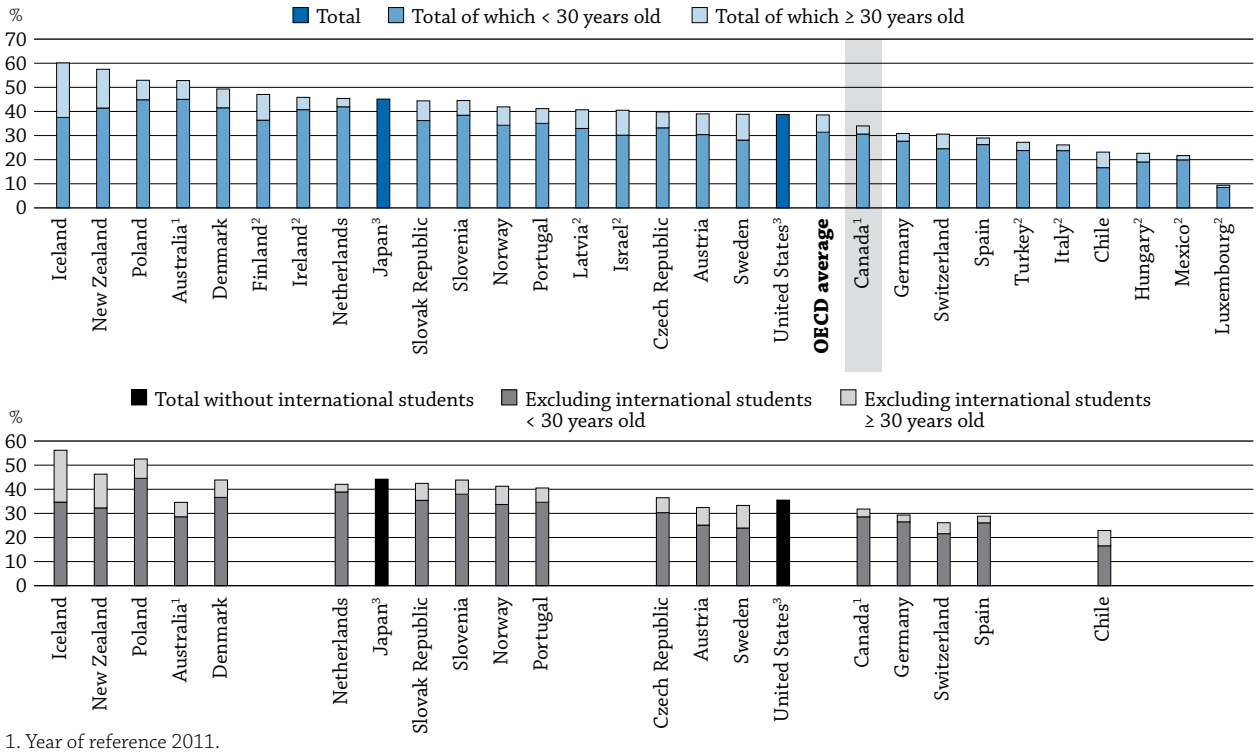
In every country for which comparable data are available, tertiary-type A graduation rates increased between 1995 and 2012. In most of them, the increase was particularly significant between 1995 and 2005, from 20% to 36%, and then levelled off. Over the past five years, tertiary type-A graduation rates have remained relatively stable, at around 38%. As of 1995, or since the year for which data was first available, the expected tertiary graduation rates increased by 20 percentage points or more in Austria, the Czech Republic, Denmark, Finland, Japan, New Zealand, Poland, Portugal, the Slovak Republic, Slovenia, Switzerland and Turkey (Table A3.2a).

The Bologna Process has increased harmonisation among systems of higher education by shifting away from longer programmes in favour of three-year programmes. In result, some countries have seen rapid rises in their graduation rates such as in the Czech Republic between 2004 and 2007, and in Finland and the Slovak Republic between 2007 and 2008.

Trends in tertiary-type B education between 1995 and 2012 varied in some countries, even though the OECD average has been stable. In Spain, the sharp rise in graduation rates from this type of education, from 2% to 20%, can be attributed to the introduction of new advanced-level vocational training programmes; in New Zealand and Turkey, tertiary-type B graduation rates also increased by more than 15 percentage points during this period. By contrast, in Finland, as tertiary-type B programmes are being phased out, graduation rates have fallen sharply while those from academically oriented tertiary education have risen (Chart A3.2).

Trend data by gender show that the growth in tertiary-type A graduation rates has been particularly strong for women in several OECD countries, such as Austria, the Czech Republic and the Slovak Republic, with increases of more than 20 percentage points, and Slovenia, with an increase of almost 40 percentage points between 2005 and 2012. Men's graduation rates in these countries increased too, but by much smaller proportions (Table A3.2b, available on line).

Chart A3.3. Tertiary-type A "first-time" graduation rates, including and excluding international students, by age (2012)



1. Year of reference 2011.
2. Graduates for international students are missing.
3. Graduates by age are missing.

Countries are ranked in descending order of the total graduation rates for tertiary-type A education in 2012.

Source: OECD. Tables A3.1a and b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115502

Graduation rates under the typical age of graduation

On average across OECD countries, a student obtains his/her first university-level degree at the age of 27, but the age at graduation varies greatly among countries. Students in Belgium, Luxembourg, Mexico, the Netherlands and the United Kingdom graduate before their 25th birthday, while students in Brazil, Finland, Iceland, Israel and Sweden receive their first university degree after their 29th birthday (Chart A3.1).

Age differences among graduates may be linked to structural factors, such as graduation from upper secondary education, the length of tertiary education programmes or the obligation to do military service. Age differences may also be linked to economic factors, such as the lack of scholarships and flexibility to combine work and study, or the existence of policies to encourage those who have already gained experience in the workplace to enrol in tertiary education in order to improve or add to their skills. In the current global context of economic turmoil, some young people may have decided to extend their studies in tertiary education as the opportunity cost of entering into an unstable labour market is high in several OECD countries. The fact that these men and women are entering the labour force later has economic repercussions that policy makers should consider, such as higher expenditure per student and foregone tax revenues as a result of these individuals' shorter working lives.

Less than a third of young adults are expected to complete tertiary-type A education before the age of 30, from a high of more than 40% in Australia, Denmark, Ireland, the Netherlands, New Zealand and Poland, to 20% or less in Chile, Hungary, Luxembourg and Mexico (Chart A3.3).

Graduation rates excluding international students

The term "international students" refers to students who have crossed borders expressly with the intention to study. For various reasons, international students have a marked impact on estimated graduation rates. By definition, they are considered first-time graduates, regardless of their previous education in other countries (i.e. an international student who enters and graduates from a second-degree programme will be considered a first-time graduate in the country of destination). Furthermore, as they have crossed borders with the intention to study and not necessarily to work or to stay in the country, they might increase the absolute number of graduates within the population. For countries with a high proportion of international students, such as Australia and New Zealand, graduation rates are thus artificially inflated. For example, when international students are excluded from consideration, first-time tertiary-type A graduation rates for Australia and New Zealand drop by 18 and 11 percentage points, respectively, and first-time tertiary-type B graduation rates drop by 8 percentage points in New Zealand (Table A3.1a).

Graduation rates for advanced research programmes

Doctoral graduates are those who have obtained the highest level of formal education, and typically include researchers who hold a Ph.D. Based on 2012 patterns of graduation, 1.6% of young people, on average across OECD countries, will graduate from advanced research programmes, compared to 1.0% in 2000. Countries with the largest increase in advanced research graduation rates are the Czech Republic, Denmark, Ireland, Italy, New Zealand, Norway, the Slovak Republic and the United Kingdom, where graduation rates increased by at least 1 percentage point between 2000 and 2012 (Table A3.2c, available on line).

Although the graduation rate for women (1.5%) is lower than that for men (1.7%) at the doctoral level, in several countries the estimated proportion of women who will graduate from an advanced research programme is larger than that of men. In Finland, Italy, Latvia, Portugal and the United States, women's graduation rates are at least 0.2 percentage points higher than those for men (Table A3.1a).

Some countries aim to attract international students to study at the doctoral level. For example, the high graduation rates at this level (more than 2.5%) observed in Finland, Germany, Sweden and Switzerland, are partly due to the large proportion of international students at the doctoral level (Table A3.1a). Excluding international students from the calculations reduces graduation rates for these countries from 0.3 percentage points in Finland to 1.6 percentage points in Switzerland, where approximately half of Ph.D. graduates are international students.

On average across OECD countries, graduates from an advanced research programme are 35 years old, but the average age at graduation ranges from 32 or younger in Germany, the Netherlands and the Slovak Republic, to 38 or older in Brazil, Finland, Israel, Korea, Latvia, Norway and Portugal (Table A3.1a).

Gender differences in fields of study

The distribution of graduates by field of study is driven by the relative popularity of these fields among students, the relative number of positions offered in universities and equivalent institutions, and the degree structure of the various disciplines in a particular country.

Tertiary graduates in most fields of study are predominately female. This is especially true in the fields of *education* and *health and welfare*, in which they represent almost 78% and 75%, respectively, of all tertiary students (tertiary-type A and advanced research programmes) who graduated from this field in 2012. In contrast, women are awarded only a small proportion of the degrees in the fields of *engineering, manufacturing and construction* (28%) and *computing* (20%) (Table A3.3, available on line). Only in Argentina, Colombia, Estonia, Iceland, Italy, Luxembourg and Poland was the proportion of women who graduated in the fields of *engineering, manufacturing and construction* in 2012 equal to or higher than one in three graduates.

This situation has changed only slightly since 2000, despite many initiatives to promote gender equality in OECD countries and at the EU level. For example, in 2000, the European Union established a goal to increase the number of tertiary-type A graduates in mathematics, science and technology by at least 15% by 2010, and to reduce the gender imbalance in these subjects. So far, however, progress towards this goal has been marginal. The Czech Republic, Germany, Portugal, the Slovak Republic and Switzerland are the only five countries in which the proportion of women in the broad field of *science* (which includes *life sciences*, *physical sciences*, *mathematics and statistics*, and *computing*) grew by at least 10 percentage points between 2000 and 2012. As a result, these countries are now closer to or even above the OECD average in this respect. Among OECD countries, the proportion of women in these fields has grown slightly from 40% in 2000 to 41% in 2012 – even as the proportion of female graduates in all fields grew from 54% to 58% during that period. Although the proportion of women in *engineering, manufacturing and construction* is small, it also increased slightly, from 23% to 28%, over the past decade (Table A3.3, available on line).

Definitions

A **first degree** programme at tertiary-type A level has a minimum cumulative theoretical duration of three years, full-time equivalent, e.g. the bachelor's degrees in many English-speaking countries, the *Diplom* in many German-speaking countries, and the *licence* in many French-speaking countries.

A **first-time graduate** is a student who has graduated for the first time at a given level of education or, in the case of ISCED 5, from a type A or type B programme, during the reference period. Therefore, if a student has graduated multiple times over the years, he or she is counted as a graduate each year, but as a first-time graduate only once.

International students are those students who left their country of origin and moved to another country for the purpose of study. By definition, they are considered first-time graduates, regardless of their previous education in other countries.

Net graduation rates represent the estimated percentage of people from a specific age cohort who will complete tertiary education over their lifetimes, based on current patterns of graduation.

Second degree and higher theory-based programmes (e.g. master's degree in many countries) are classified as tertiary-type A separately from advanced research qualifications, which have their own classification as ISCED 6.

Tertiary graduates are those who obtain a university degree, vocational qualifications, or advanced research degrees of doctoral standard.

Methodology

Data refer to the academic year 2011/12 and are based on the UOE data collection on education statistics administered by the OECD in 2012 (for details, see Annex 3 at *www.oecd.org/edu/eag.htm*).

Data on the impact of international students on tertiary graduation rates are based on a special survey conducted by the OECD in December 2013.

Data on trends in graduation rates at the tertiary level for the years 1995 and 2000 through 2004 are based on a special survey carried out in January 2007.

To allow for comparisons that are independent of differences in national degree structures, university-level degrees are subdivided according to the total theoretical duration of study, in other words, the standard number of years, established by law or regulations, in which a student can complete the programme. Degrees obtained from programmes of less than three years' duration are not considered equivalent to completing this level of education and are not included in this indicator. Second-degree programmes are classified according to the cumulative duration of the first- and second-degree programmes. Individuals who already hold a first degree are not included in the count of first-time graduates.

Unless otherwise indicated, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

Note regarding data from Israel

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

Tables of Indicator A3

StatLink http://dx.doi.org/10.1787/888933115388

	Table A3.1a	Tertiary graduation rates and average age at graduation (2012)
	Table A3.1b	Tertiary graduation rates among students under the typical age at graduation (2012)
	Table A3.2a	Trends in tertiary graduation rates (1995-2012)
WEB	Table A3.2b	Trends in tertiary graduation rates, by gender (2005-2012)
WEB	Table A3.2c	Trends in net graduation rates at advanced research level (1995-2012)
WEB	Table A3.3	Percentage of tertiary qualifications awarded to women in tertiary-type A and advanced research programmes, by field of education (2000, 2012)

A3

Table A3.1a. Tertiary graduation rates and average age at graduation (2012)

Sum of age-specific graduation rates. by gender and programme destination

		Tertiary-type B programmes (first-time graduates)			Tertiary-type B programmes (first degree)			Tertiary-type A programmes (first-time graduates)			Tertiary-type A programmes (first degree)			Tertiary-type A programmes (second and further degrees)			Advanced research programmes		
		Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]	Total	Adjusted graduation rate (without international/ foreign students)	Average age[1]
		(1)	(4)	(5)	(6)	(9)	(10)	(11)	(14)	(15)	(16)	(19)	(20)	(21)	(24)	(25)	(26)	(29)	(30)
OECD	Australia[2]	**21**	18	*31*	**31**	25	*33*	**53**	35	*25*	**64**	46	*27*	**21**	9	*31*	**2.0**	1.4	*37*
	Austria	**12**	12	*30*	**14**	14	*32*	**39**	32	*28*	**36**	31	*27*	**12**	10	*32*	**2.2**	1.6	*34*
	Belgium	**m**	m	*m*	**32**	30	*25*	**m**	m	*m*	**18**	17	*22*	**26**	22	*m*	**1.7**	1.2	*33*
	Canada[2]	**18**	17	*26*	**21**	19	*27*	**34**	32	*25*	**35**	33	*26*	**12**	11	*32*	**1.3**	1.1	*36*
	Chile	**25**	25	*28*	**26**	26	*28*	**23**	23	*29*	**21**	20	*28*	**7**	7	*37*	**0.2**	0.2	*37*
	Czech Republic	**5**	5	*25*	**5**	5	*25*	**40**	36	*27*	**42**	38	*27*	**25**	23	*29*	**1.6**	1.4	*35*
	Denmark	**11**	10	*27*	**12**	11	*27*	**49**	44	*27*	**48**	45	*28*	**25**	21	*29*	**2.2**	1.7	*35*
	Estonia	**m**	m	*m*	**19**	19	*29*	**m**	m	*m*	**23**	22	*26*	**13**	13	*30*	**1.0**	0.9	*36*
	Finland	**n**	n	*m*	**n**	n	*m*	**47**	m	*28*	**50**	48	*29*	**24**	22	*32*	**2.8**	2.5	*39*
	France[2]	**m**	m	*m*	**27**	26	*m*	**m**	m	*m*	**38**	34	*m*	**18**	15	*m*	**1.7**	1.0	*m*
	Germany	**15**	m	*m*	**15**	m	*m*	**31**	29	*25*	**31**	29	*25*	**7**	6	*27*	**2.7**	2.3	*31*
	Greece	**m**	m	*m*	**15**	m	*26*	**m**	m	*m*	**25**	m	*26*	**9**	m	*m*	**1.0**	m	*m*
	Hungary	**8**	m	*23*	**9**	9	*23*	**23**	m	*26*	**29**	27	*26*	**13**	13	*33*	**0.8**	0.7	*35*
	Iceland	**2**	m	*38*	**2**	2	*37*	**60**	56	*31*	**65**	60	*31*	**26**	23	*35*	**0.9**	0.5	*35*
	Ireland	**23**	m	*30*	**23**	22	*30*	**46**	m	*25*	**46**	44	*25*	**24**	22	*31*	**2.0**	1.6	*34*
	Israel	**m**	m	*m*	**m**	m	*m*	**40**	m	*29*	**42**	42	*29*	**19**	18	*35*	**1.5**	1.5	*38*
	Italy	**n**	m	*m*	**n**	n	*m*	**26**	m	*26*	**32**	31	*26*	**24**	m	*m*	**1.4**	m	*34*
	Japan	**25**	24	*m*	**25**	24	*m*	**45**	44	*m*	**45**	44	*m*	**7**	6	*m*	**1.1**	0.9	*m*
	Korea	**m**	m	*m*	**29**	m	*25*	**m**	m	*m*	**49**	m	*25*	**11**	m	*34*	**1.5**	m	*40*
	Luxembourg	**6**	m	*26*	**6**	4	*26*	**9**	m	*25*	**9**	6	*25*	**2**	2	*m*	**0.7**	n	*33*
	Mexico	**2**	m	*22*	**2**	m	*22*	**22**	m	*25*	**22**	m	*25*	**3**	m	*m*	**0.3**	m	*m*
	Netherlands	**1**	1	*m*	**1**	1	*m*	**45**	42	*24*	**49**	45	*25*	**22**	18	*27*	**2.0**	1.2	*32*
	New Zealand	**30**	22	*29*	**36**	27	*29*	**57**	46	*28*	**60**	51	*27*	**19**	15	*34*	**1.9**	1.1	*37*
	Norway	**n**	m	*m*	**n**	n	*m*	**42**	41	*27*	**46**	45	*27*	**13**	12	*32*	**2.1**	1.9	*38*
	Poland	**1**	m	*m*	**1**	m	*m*	**53**	53	*26*	**53**	53	*26*	**52**	52	*m*	**0.6**	0.6	*33*
	Portugal	**n**	n	*m*	**n**	n	*m*	**41**	41	*26*	**41**	41	*26*	**30**	29	*31*	**1.9**	1.7	*38*
	Slovak Republic	**1**	m	*26*	**1**	m	*26*	**44**	42	*26*	**44**	42	*26*	**39**	39	*28*	**2.5**	2.3	*32*
	Slovenia	**20**	20	*31*	**21**	m	*31*	**45**	44	*26*	**45**	45	*26*	**7**	m	*34*	**1.9**	1.7	*35*
	Spain	**20**	m	*24*	**20**	m	*24*	**29**	29	*25*	**37**	36	*27*	**10**	9	*30*	**1.2**	0.9	*37*
	Sweden	**7**	m	*29*	**7**	7	*29*	**39**	33	*29*	**35**	34	*29*	**12**	6	*32*	**2.8**	2.0	*37*
	Switzerland	**14**	m	*m*	**21**	m	*31*	**31**	26	*28*	**28**	25	*26*	**19**	14	*31*	**3.3**	1.7	*33*
	Turkey	**19**	m	*25*	**19**	19	*25*	**27**	m	*26*	**27**	27	*26*	**2**	2	*30*	**0.4**	0.4	*34*
	United Kingdom	**m**	m	*m*	**15**	m	*31*	**m**	m	*m*	**45**	38	*24*	**28**	15	*30*	**2.4**	1.3	*34*
	United States	**13**	13	*m*	**13**	13	*m*	**39**	35	*m*	**39**	37	*m*	**19**	17	*m*	**1.8**	1.4	*m*
	OECD average	**11**	m	*28*	**14**	m	*28*	**39**	m	*27*	**39**	m	*26*	**18**	m	*31*	**1.6**	m	*35*
	EU21 average	**8**	m	*27*	**12**	m	*28*	**38**	m	*26*	**37**	m	*26*	**20**	m	*30*	**1.8**	m	*35*
Partners	Argentina[2]	**m**	m	*m*	**15**	m	*m*	**m**	m	*m*	**12**	m	*m*	**1**	m	*m*	**0.3**	m	*m*
	Brazil	**m**	m	*m*	**6**	6	*32*	**m**	m	*m*	**28**	28	*30*	**2**	2	*33*	**0.5**	0.5	*38*
	China	**m**	m	*m*	**18**	m	*m*	**m**	m	*m*	**15**	m	*m*	**n**	m	*m*	**m**	m	*m*
	Colombia	**m**	m	*m*	m	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*
	India	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*	**m**	m	*m*
	Indonesia	**m**	m	*m*	**5**	m	*m*	**m**	m	*m*	**15**	m	*m*	**1**	m	*m*	**0.1**	m	*m*
	Latvia	**12**	m	*28*	**12**	m	*28*	**43**	m	*27*	**43**	m	*27*	**17**	m	*30*	**1.0**	m	*38*
	Russian Federation	**m**	m	*m*	**26**	26	*m*	**m**	m	*m*	**60**	59	*m*	**2**	m	*m*	**m**	m	*m*
	Saudi Arabia	**m**	m	*m*	**8**	m	*m*	**m**	m	*m*	**19**	m	*m*	**2**	m	*m*	**0.1**	m	*m*
	South Africa	**m**	m	*m*	**5**	m	*m*	**m**	m	*m*	**6**	m	*m*	**4**	m	*m*	**0.2**	m	*m*
	G20 average	**m**	m	*m*	**15**	m	*m*	**m**	m	*m*	**30**	m	*m*	**11**	m	*m*	**1.0**	m	*m*

Notes: Columns showing graduation rates for men and women (i.e. columns 2, 3, 7, 8, 12, 13, 17, 18, 22, 23, 27, 28) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated, and those that are net importers may be overestimated. The adjusted graduation rates in Tables A3.1a and A3.1b seek to compensate for that.

1. The average age refers to an average weighted age, generally the age of the students at the beginning of the calendar year. Students may be one year older than the age indicated when they graduate at the end of the school year. Please see Annex 3 to learn how the average age is calculated.

2. Year of reference 2011.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115407

A3

Table A3.1b. Tertiary graduation rates among students under the typical age at graduation (2012)

Sum of age-specific graduation rates up to 30 years for tertiary-type A or B, and up to 35 years for advanced research programmes, by gender and programme destination

		Tertiary-type B programmes (first-time graduates)		Tertiary-type B programmes (first degree)		Tertiary-type A programmes (first-time graduates)		Tertiary-type A programmes (first degree)		Tertiary-type A programmes (second and further degrees)		Advanced research programmes	
		Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)	Total	Adjusted graduation rate (without international/ foreign students)
		(1)	(4)	(5)	(8)	(9)	(12)	(13)	(16)	(17)	(20)	(21)	(24)
OECD	Australia[1]	**12**	9	**16**	11	**45**	29	**51**	34	**13**	4	**1.1**	0.7
	Austria	**8**	7	**8**	8	**30**	25	**29**	25	**7**	6	**1.6**	1.2
	Belgium	**m**	m	**28**	m	**m**	m	**18**	m	**24**	m	**1.3**	m
	Canada[1]	**15**	14	**16**	15	**31**	29	**31**	29	**7**	6	**0.8**	0.6
	Chile	**17**	17	**18**	18	**17**	17	**16**	16	**2**	2	**0.2**	0.2
	Czech Republic	**4**	4	**4**	4	**33**	30	**35**	32	**20**	19	**0.8**	0.6
	Denmark	**9**	7	**9**	8	**42**	37	**39**	36	**18**	16	**1.5**	1.1
	Estonia	**m**	m	**13**	m	**m**	m	**19**	m	**9**	m	**0.6**	m
	Finland	**n**	n	**n**	n	**36**	m	**37**	35	**14**	13	**1.1**	0.9
	France[1]	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	Germany	**m**	m	**m**	m	**28**	26	**28**	26	**6**	5	**2.3**	2.0
	Greece	**m**	m	**13**	m	**m**	m	**23**	m	**m**	m	**m**	m
	Hungary	**7**	m	**8**	m	**19**	m	**24**	m	**7**	m	**0.5**	m
	Iceland[1]	**1**	m	**1**	1	**37**	35	**39**	38	**10**	8	**0.7**	0.4
	Ireland	**15**	m	**15**	15	**41**	m	**41**	39	**15**	13	**1.4**	1.1
	Israel	**m**	m	**m**	m	**30**	m	**31**	m	**6**	m	**0.6**	m
	Italy	**m**	m	**m**	m	**24**	m	**28**	m	**m**	m	**1.1**	m
	Japan	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	Korea	**m**	m	**25**	m	**m**	m	**47**	m	**5**	m	**0.6**	m
	Luxembourg	**5**	m	**m**	m	**8**	m	**8**	m	**2**	m	**0.6**	m
	Mexico	**2**	m	**2**	m	**20**	m	**20**	m	**m**	m	**m**	m
	Netherlands	**n**	n	**n**	m	**42**	39	**44**	41	**18**	15	**1.7**	1.1
	New Zealand	**19**	12	**22**	15	**41**	32	**45**	38	**9**	6	**1.0**	0.5
	Norway	**n**	m	**n**	m	**34**	34	**36**	36	**8**	7	**1.1**	1.0
	Poland	**1**	m	**1**	m	**45**	45	**45**	45	**m**	m	**0.5**	m
	Portugal	**n**	n	**n**	n	**35**	35	**35**	35	**20**	20	**1.0**	0.9
	Slovak Republic	**1**	m	**1**	m	**36**	35	**36**	35	**30**	29	**1.9**	1.9
	Slovenia	**12**	12	**12**	m	**38**	38	**39**	39	**3**	m	**1.2**	1.1
	Spain	**18**	m	**18**	m	**26**	26	**31**	31	**7**	6	**0.7**	m
	Sweden	**5**	m	**5**	5	**28**	24	**24**	24	**7**	3	**1.7**	1.1
	Switzerland	**m**	m	**13**	m	**25**	22	**24**	22	**12**	9	**2.6**	1.3
	Turkey	**16**	m	**16**	m	**24**	m	**24**	m	**1**	m	**0.2**	m
	United Kingdom	**m**	m	**8**	7	**m**	m	**40**	33	**18**	8	**1.6**	0.9
	United States	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	OECD average	**8**	m	**10**	m	**31**	m	**32**	m	**11**	m	**1.1**	m
	EU21 average	**6**	m	**9**	m	**32**	m	**31**	m	**13**	m	**1.2**	m
Partners	Argentina[1]	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	Brazil	**m**	m	**3**	m	**m**	m	**18**	m	**1**	m	**0.2**	m
	China	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	Colombia	**m**	m	m	m	**m**	m	**m**	m	**m**	m	**m**	m
	India	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	Indonesia	**m**	m	**1**	m	**m**	m	**13**	m	**1**	m	**0.1**	m
	Latvia	**9**	m	**9**	m	**35**	m	**35**	m	**11**	m	**0.5**	m
	Russian Federation	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	Saudi Arabia	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	South Africa	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m
	G20 average	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m	**m**	m

Notes: Columns showing graduation rates for men and women (i.e. columns 2, 3, 6, 7, 10, 11, 14, 15, 18, 19, 22, 23) are available for consultation on line (see *StatLink* below).

Refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages. Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated, and those that are net importers may be overestimated. The adjusted graduation rates in Tables A3.1a and A3.1b seek to compensate for that.

The averages were adjusted to 100% and do not correspond exactly to the average of each column.

1. Year of reference 2011.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115426

A3

Table A3.2a. Trends in tertiary graduation rates (1995-2012)

Sum of age-specific graduation rates, by programme destination

		Tertiary-type 5A (first-time graduates)						Tertiary-type 5B (first-time graduates)					
		1995	2000	2005	2010	2011	2012	1995	2000	2005	2010	2011	2012
		(1)	(2)	(7)	(12)	(13)	(14)	(15)	(16)	(21)	(26)	(27)	(28)
OECD	Australia	m	36	50	50	53	**m**	m	m	m	17	21	**m**
OECD	Austria	10	15	20	30	35	**39**	m	m	8	12	12	**12**
OECD	Belgium	m	m	m	m	m	**m**	m	m	m	m	m	**m**
OECD	Canada	27	27	32	35	35	**m**	m	m	20	21	18	**m**
OECD	Chile	m	m	m	m	m	**23**	m	m	m	m	m	**25**
OECD	Czech Republic	13	14	23	38	41	**40**	6	5	6	5	5	**5**
OECD	Denmark	25	37	46	50	50	**49**	8	10	10	9	11	**11**
OECD	Estonia	m	m	m	m	m	**m**	m	m	m	m	m	**m**
OECD	Finland	21	40	47	49	47	**47**	34	7	n	n	n	**n**
OECD	France	m	m	m	m	m	**m**	m	m	m	m	m	**m**
OECD	Germany[1]	14	18	20	30	31	**31**	13	11	11	14	14	**15**
OECD	Greece	14	15	25	m	m	**m**	5	6	11	m	m	**m**
OECD	Hungary	m	m	33	31	27	**23**	m	m	4	6	7	**8**
OECD	Iceland	20	33	56	60	61	**60**	10	5	4	2	2	**2**
OECD	Ireland	m	30	38	47	43	**46**	m	15	24	26	24	**23**
OECD	Israel	m	m	35	37	40	**40**	m	m	m	m	m	**m**
OECD	Italy	m	19	41	32	32	**26**	m	n	1	1	m	**m**
OECD	Japan	25	29	37	40	44	**45**	30	30	28	25	25	**25**
OECD	Korea	m	m	m	m	m	**m**	m	m	m	m	m	**m**
OECD	Luxembourg	m	m	m	m	m	**9**	m	m	m	m	m	**6**
OECD	Mexico	m	m	17	20	21	**22**	m	m	1	1	2	**2**
OECD	Netherlands	29	35	42	42	42	**45**	m	m	n	n	n	**1**
OECD	New Zealand	33	50	51	49	53	**57**	12	17	23	27	30	**30**
OECD	Norway	26	37	41	42	43	**42**	6	6	2	n	n	**n**
OECD	Poland	m	34	47	55	58	**53**	m	m	n	1	1	**1**
OECD	Portugal	15	23	32	40	39	**41**	6	8	9	n	n	**n**
OECD	Slovak Republic	15	m	30	49	46	**44**	1	2	2	1	1	**1**
OECD	Slovenia	m	m	18	29	37	**45**	m	m	24	26	27	**20**
OECD	Spain[2]	24	29	30	30	32	**29**	2	8	15	16	18	**20**
OECD	Sweden	24	28	38	37	41	**39**	m	4	5	6	7	**7**
OECD	Switzerland	9	12	27	31	32	**31**	13	14	8	16	15	**14**
OECD	Turkey	6	9	12	23	23	**27**	2	m	m	19	17	**19**
OECD	United Kingdom	m	42	48	50	54	**m**	m	7	11	12	13	**m**
OECD	United States	33	34	34	38	39	**39**	9	8	10	11	12	**13**
	OECD average	20	28	36	*39*	41	**38**	11	9	*9*	11	11	**10**
	OECD average for countries with 1995, 2005 and 2012 data	*20*		*35*			*42*	*11*					*11*
	EU21 average	18	27	34	*40*	41	**38**	9	7	*8*	8	9	**8**
Partners	Argentina	m	m	m	m	m	**m**	m	m	m	m	m	**m**
Partners	Brazil	m	10	m	m	m	**m**	m	m	m	m	m	**m**
Partners	China	m	m	m	m	m	**m**	m	m	m	m	m	**m**
Partners	Colombia	m	m	m	m	m	**m**	m	m	m	m	m	**m**
Partners	India	m	m	m	m	m	**m**	m	m	m	m	m	**m**
Partners	Indonesia	m	m	m	m	m	**m**	m	m	m	m	m	**m**
Partners	Latvia	m	m	m	m	m	**43**	m	m	m	m	m	**12**
Partners	Russian Federation	m	m	m	m	m	**m**	m	m	m	m	m	**m**
Partners	Saudi Arabia	m	13	18	20	20	**m**	n	3	5	8	8	**m**
Partners	South Africa	m	m	m	m	m	**m**	m	m	m	m	m	**m**
	G20 average	m	m	m	m	m	**m**	m	m	m	m	m	**m**

Note: Years 2001, 2002, 2003, 2004, 2006, 2007 are available for consultation on line (see *StatLink* below).

Up to 2004, graduation rates at the tertiary-type A or B levels were calculated on a gross basis. From 2005 and for countries with available data, graduation rates are calculated as net graduation rates (i.e. as the sum of age-specific graduation rates). Please refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

1. Break in the series between 2008 and 2009 due to a partial reallocation of vocational programmes into ISCED 2 and ISCED 5B.

2. Break in time series following methodological change in 2008 for ISCED 5A.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See annex 3 for notes (*www.oecd.org/edu/eag.htm*).

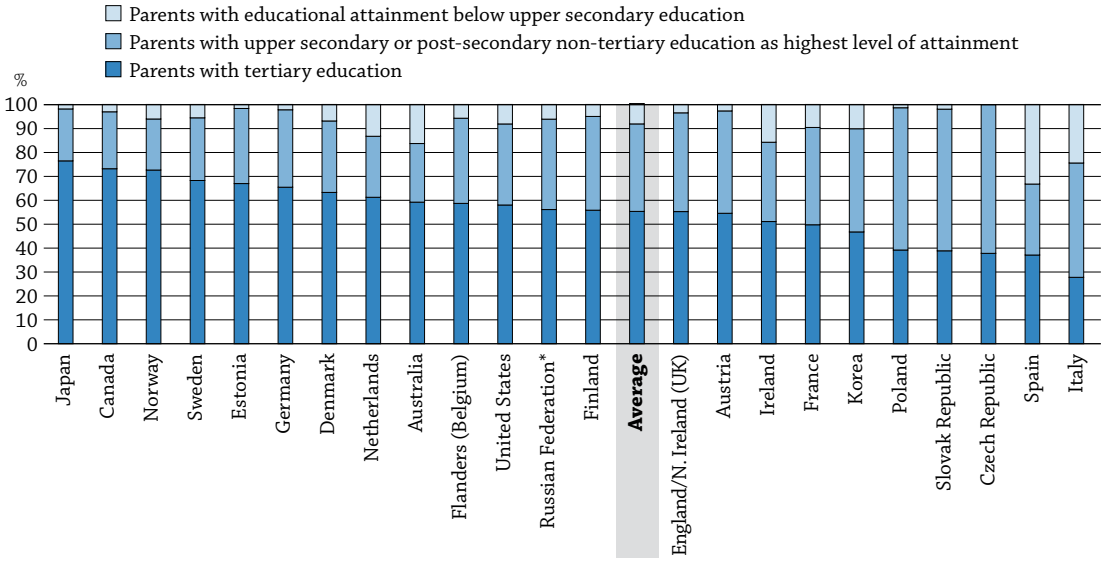
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115445

TO WHAT EXTENT DOES PARENTS' EDUCATION INFLUENCE PARTICIPATION IN TERTIARY EDUCATION?

- Across countries, about 40% of non-student adults (25-64 year-olds) have a higher level of educational attainment than their parents. Intergenerational educational mobility is the highest in Finland, Flanders (Belgium), Korea and the Russian Federation, where more than 55% of non-students have attained a higher level of education than their parents.
- More than 30% of non-student adults whose parents have not attained upper secondary education also ended their schooling before completing upper secondary education. However, over 45% of these adults have an upper secondary or post-secondary non-tertiary education and about 20% have a tertiary education.
- Across participating countries, 25% of adults whose parents have below upper secondary education perform at or below Level 1 in literacy, the lowest level in the Survey of Adult Skills (PIAAC), while only around 5% perform at Level 4 or 5. Among adults whose parents have a tertiary education, more than 20% perform at Level 4 or 5.

Chart A4.1. Percentage of 20-34 year-olds in tertiary education, by parents' educational attainment (2012)



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the participation in tertiary education of 20-34 year-olds that have parents with tertiary attainment.

Source: OECD. Table A4.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115635

Context

Because of its strong links to earnings, employment, overall wealth and the well-being of individuals, education can reduce inequalities in societies, but it can also reproduce them. Giving all young people a fair chance to obtain a quality education is a fundamental part of the social contract. Addressing inequalities in education opportunities is critically important for maintaining social mobility and broadening the pool of candidates for higher education and high-skilled jobs. For the first time, this indicator draws from the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), to analyse the influence of parents' education on their children's participation in tertiary education.

It is crucial for countries to have an educated and skilled workforce if they aim to promote future growth. In today's fast-changing labour markets, the gap in returns between low- and high-qualified workers is growing. On average, less-educated adults have the highest unemployment and inactivity rates and have the lowest and more rapidly declining wages over their working lives (see Indicators A5 and A6).

Having a large population of low-qualified workers may thus lead to a heavier social burden and deepening inequalities that are both difficult and costly to address once people have left initial education.

Results from the 2012 OECD Programme for International Student Assessment (PISA) show that in several countries that designed and implemented policies with a stronger focus on equity, students from disadvantaged backgrounds have improved their performance. A significant number of countries that underperformed in 2003 improved their PISA scores markedly by 2012. In several of these countries, the improvement was mainly due to giving more students higher-quality education (OECD, 2013).

It is important, then, to provide a level playing field in education for all young people, including those from low educational backgrounds. Various policy options, such as maintaining reasonable costs for higher education and funding student support systems can help disadvantaged students. Ensuring access to and success in tertiary education for all is important, but so is addressing inequalities at the earliest stages of schooling.

Other findings

- **In Austria, the Czech Republic, Germany, Italy, Poland, the Slovak Republic, Spain and the United States, more than 50% of non-student adults have the same educational attainment as their parents**.
- **In all countries, at least 35% of 20-34 year-olds in tertiary education have at least one parent who has completed that level of education**. In Canada, Estonia, Germany, Norway and Sweden, at least 65% of these students do.
- **On average, 12% of non-student adults have lower educational attainment than their parents**. In Austria, Denmark, Estonia, Germany, Norway, Sweden and the United States, more than 15% of these populations do.

Trends

The expansion of education systems in many OECD countries, both at the upper secondary or post-secondary non-tertiary and tertiary levels of education, has given young people (25-34 year-olds) an opportunity to attain a higher level of education than their parents. On average across OECD countries participating in the Survey of Adult Skills, 32% of young people have achieved a higher level of education than their parents, while only 16% have not attained their parents' education level. In all countries except Estonia, Germany, Norway and Sweden, absolute upward mobility in education is more common than absolute downward mobility, reflecting the expansion of education systems in most OECD countries. This expansion has been particularly pronounced in France, Ireland, Italy, Korea, Spain and the Russian Federation, where the difference between upward and downward educational mobility is 30 percentage points or more.

A4

Analysis

Mobility indicators and terminology

The literature on mobility typically distinguishes between absolute and relative measures of mobility. Concerning education, absolute mobility refers to the proportion of individuals whose level of education is different from that of their parents: higher in the case of upward mobility, and lower in the case of downward mobility across generations. Measures of absolute mobility are sensitive to the number of educational attainment levels chosen for intergenerational comparisons (more mobility tends to be observed the higher the number of categories) and, more substantially, to changes in the structure of the education system, most notably to its expansion at specific levels. Mobility patterns can be further disaggregated into short-range mobility (involving movements between adjacent categories) and long-range mobility (involving movements between more distant categories) as these may have different implications for individuals. By contrast, immobility in education refers to the situation where children attain the same level of education as their parents.

The analysis of educational mobility also relies on measures of relative mobility, which considers the magnitude of difference in the chance of attaining a given level of education rather than another among people whose parents have different levels of education. One extreme instance of relative mobility would be a lack of difference between individuals from different education backgrounds in their chances of obtaining a given level of education rather than another.

Measures of absolute and relative mobility tend to be interrelated but capture different things. The fact that a country shows more or less absolute mobility than another does not necessarily mean that the opportunities to access a given level of education for individuals from different backgrounds are greater or lesser in one country than in the other.

This indicator examines the chances of accessing tertiary education rather than leaving the education system with a lower level of attainment among individuals whose parents attained different levels of education. The indicator thus provides information about the advantages and disadvantages associated with having parents with different levels of educational attainment.

Inequalities in participation in tertiary education across countries

For some, pursuing higher education is not a viable option. Some young adults may have to enter the labour market earlier than others in order to support themselves and their families. Growing up in a disadvantaged family where the parents have low levels of education often means having less financial support available for continuing studies. This situation is reinforced if the education system does not provide support for students from disadvantaged backgrounds. In the short term, staying in education can involve foregoing earnings from employment. In these cases, it is not surprising to see the extent to which parents' educational attainment and socio-economic background affects students' level of education.

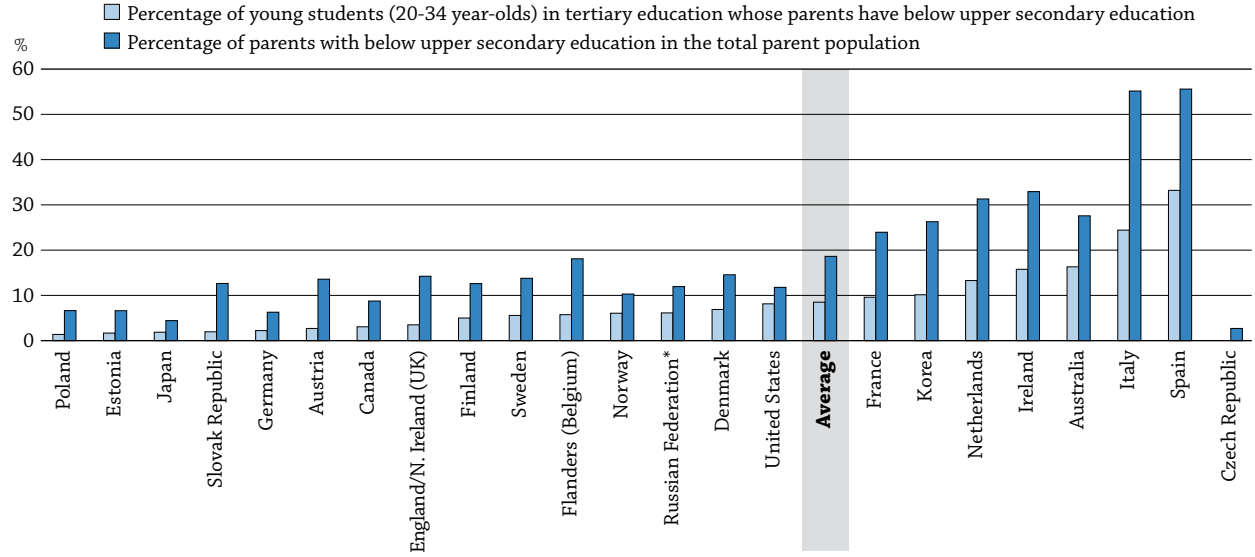
More than half of 20-34 year-olds in tertiary education have at least one parent with that level of education (56%), and slightly more than a third (36%) have at least one parent with upper secondary education as highest level of attainment. By contrast, the proportion of 20-34 year-old tertiary students whose parents have not completed an upper secondary education is small: about one tertiary student in ten has parents with below upper secondary education (9%).

As shown in the introductory chart (Chart A4.1), in all countries, around 35% or more of 20-34 year-old tertiary students have at least one parent who has completed that level of education. In Canada, Estonia, Germany, Japan, Norway and Sweden, 65% or more of these students do. Since data refer to enrolled students, it should be borne in mind that in some countries, including Sweden, some students (for instance, those from an academic family background) may enrol in longer university programmes, and that may inflate enrolment numbers. In all countries with available data, except Spain, the proportion of tertiary-students with parents with upper secondary education is larger than the proportion of these students with parents with below upper secondary education.

Assessing inequalities in access to higher education is a crucial initial step in designing policies to reduce such inequalities. The basic measure of relative mobility is the odds ratio (see *Definitions* section below). Across countries with available data, the likelihood of a student participating in tertiary education, depending on the level of education attained by his or her parents and compared with the likelihood of individuals whose parents attained below upper secondary education, is twice as great if at least one of the parents attained upper secondary or post-secondary non-tertiary education, and 4.5 times as great if the parents attained tertiary education (Table A4.1b).

On average, 9% of all students in tertiary education have parents with low levels of education while 19% of all parents (i.e. parents of students and non-students) have a low level of education. The largest proportions of 20-34 year-olds in tertiary education whose parents have below upper secondary education (among countries with available data) are found in Australia, Ireland, Italy, the Netherlands and Spain (over 10%). But these are also some of the countries where the proportion of parents with below upper secondary education among all parents is the largest (more than 20%) (Chart A4.2).

Chart A4.2. Participation in tertiary education of 20-34 year-old students whose parents have below upper secondary education (2012)



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in ascending order of the proportion of 20-34 year-old students in tertiary education whose parents have below upper secondary education.

Source: OECD. Table A4.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115654

Intergenerational mobility in education

As shown in Indicator A1, tertiary education attainment rates have been growing in recent years, on average, especially among younger generations. Indeed, both the highest tertiary attainment rates (about 40%) and the smallest proportion of people who have not completed at least an upper secondary education (less than 20%) are found among 25-34 year-olds. In addition, the proportion of older adults (55-64 year-olds) with tertiary education reached an historic high (since 2000) of 25% in 2012. Between 2000 and 2012, the average annual growth in tertiary attainment rates among 55-64 year-olds – 4% – was the largest across the generations (see Indicator A1, Table A1.4a).

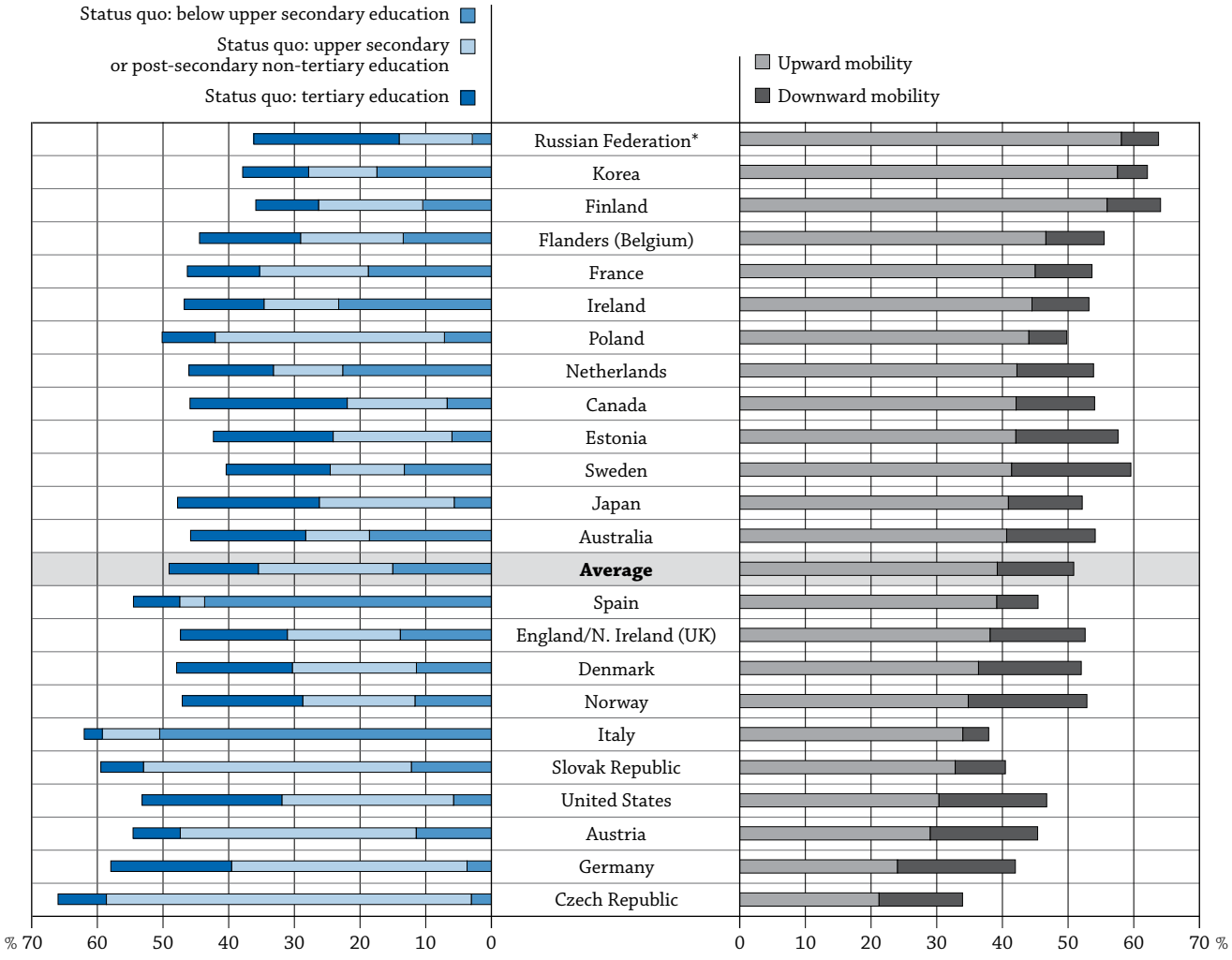
This suggests that in most countries for which information is available, there has been a positive expansion of access to education. On average, about 40% of 25-64 year-olds have a higher level of educational attainment than their parents (upward mobility). However, in most countries, 40% to 50% of non-student adults have the same educational attainment as their parents (*status quo*). This share is even larger in Austria, the Czech Republic, Germany, Italy, the Slovak Republic, Spain and the United States (Table A4.4).

Chart A4.3 shows that across countries about half of adults has attained the same education level as their parents, and the other half have either higher or lower educational attainment than their parents. In all countries, upward mobility (i.e. adults whose educational attainment is higher than that of their parents) is considerably more common than downward mobility. The incidence of intergenerational mobility in education is particularly high in Finland, Flanders (Belgium), Korea and the Russian Federation: more than 55% of adults in these countries have either exceeded or not attained their parents' level of education; in these countries, more than 45% of adults attained higher levels of education than their parents (absolute upward mobility) – the largest proportion among all countries; but in Finland and Flanders (Belgium), a relatively large proportion of adults – about 8% – attained a lower level of education than their parents (downward mobility).

A4

Chart A4.3. Absolute educational mobility (2012)

Percentage of 25-64 year-old non-students whose educational attainment is higher than (upward mobility), lower than (downward mobility) or the same as (status quo) that of their parents



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the proportion of adults with upward mobility with respect to the education attainment of their parents.

Source: OECD. Table A4.4. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115673

In Austria, the Czech Republic, Germany, Italy and the Slovak Republic, more than 55% of adults attained the same education level as their parents. In Italy and Spain, more than 40% of adults with below upper secondary education have parents who attained that level of education. In Austria, the Czech Republic, Germany and the Slovak Republic, more than 35% of adults who attained upper secondary or post-secondary non-tertiary education have parents who also attained that level of education. These countries, together with Hungary, Poland and Slovenia, are the OECD countries with the largest proportions of adults attaining this level of education (over 55% in each country; see Table A1.5a in Indicator A1). In Canada, Japan, the Russian Federation and the United States, more than 20% of adults whose parents have attained tertiary education also attain that level of education (Table A4.4).

The incidence of the absolute upward mobility is somewhat higher among women (40%) than among men (38%), on average. But in some countries, men are considerably more upwardly mobile in educational attainment than women: Austria (25% among women and 33% among men), Germany (21% and 27%, respectively), Korea (53% and 62%, respectively) and the Netherlands (40% and 45%, respectively) (Table A4.4).

Intergenerational mobility varies according to people's education level and context. More than 30% of non-students adults whose parents have not attained upper secondary education also ended their schooling before completing upper secondary education. However, over 45% of these adults have an upper secondary or post-secondary non-tertiary education and about 20% have a tertiary education. In Canada, Finland and the Russian Federation, over 30% of this group of adults have attained tertiary education. In contrast, in Austria, the Czech Republic, Germany, Italy, Poland, the Slovak Republic and the United States, 15% or less of non-student adults whose parents have below upper secondary education have attained a tertiary education (Table A4.2).

Similarly, across countries, over 65% of non-students whose parents have a tertiary education have attained the same level of education, about 30% have an upper secondary or post-secondary non-tertiary education as their highest qualification, and only 5% have ended schooling before completing upper secondary education. In all countries except Austria, which has one of the largest proportions of adults with upper secondary or post-secondary non-tertiary education, over 50% of adults with tertiary-educated parents have also attained tertiary education (Table A4.2).

Access to tertiary education is also affected by inequalities at earlier stages of schooling. One necessary condition for attaining higher levels of education is to have acquired the skills and knowledge required to pursue further studies. Intergenerational mobility in education can be strongly influenced by a student's early schooling, since schools could reinforce socio-economic advantage or disadvantage. Since its first cycle, PISA results have shown that, in many countries, students' socio-economic background is related to their school performance. Very often, students from disadvantaged backgrounds have limited access to quality education. On average, a more socio-economically advantaged student scores 39 points higher in mathematics than a less-advantaged student. This difference represents the equivalent of nearly one year of schooling (OECD, 2013). Providing access to high-quality pre-primary, primary and secondary education is essential for giving every student the chance to enter tertiary education, regardless of their parents' educational attainment, their occupation or their labour market status.

Adult skills in relation to parents' educational attainment

Parents' education also seems to have an effect on individuals' literacy and numeracy proficiency. On average, most of the people with the highest scores in literacy, as measured by the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), are those from families where at least one parent has attained tertiary education. Similarly, most of the adults with the lowest levels of literacy proficiency are those whose parents have below upper secondary education as their highest level of attainment (Table A4.3 [L]).

Chart A4.4 shows the literacy proficiency of adults in relation to the educational attainment of their parents. Across participating countries, 25% of adults whose parents have below upper secondary education perform at or below Level 1, 40% perform at Level 2, less than 30% perform at Level 3, and only about 5% perform at Level 4 or 5. In France, Germany, Italy, Poland, Spain and the United States, more than 30% of these adults perform at or below Level 1 in literacy proficiency while 3%, at most, perform at Level 4 or 5. Similarly small proportions of highly proficient adults are found in Austria, the Czech Republic and the Slovak Republic.

The picture changes significantly when considering adults whose parents have a tertiary education. Across countries, 7% of these adults perform at or below Level 1 in literacy in the Survey of Adult Skills, less than 25% perform at Level 2, over 45% perform at Level 3, and over 20% perform at Level 4 or 5. In most countries, more than 20% of adults with tertiary-educated parents perform at Level 4 or 5 in literacy, and in Australia, Finland, Japan and the Netherlands 30% or more do.

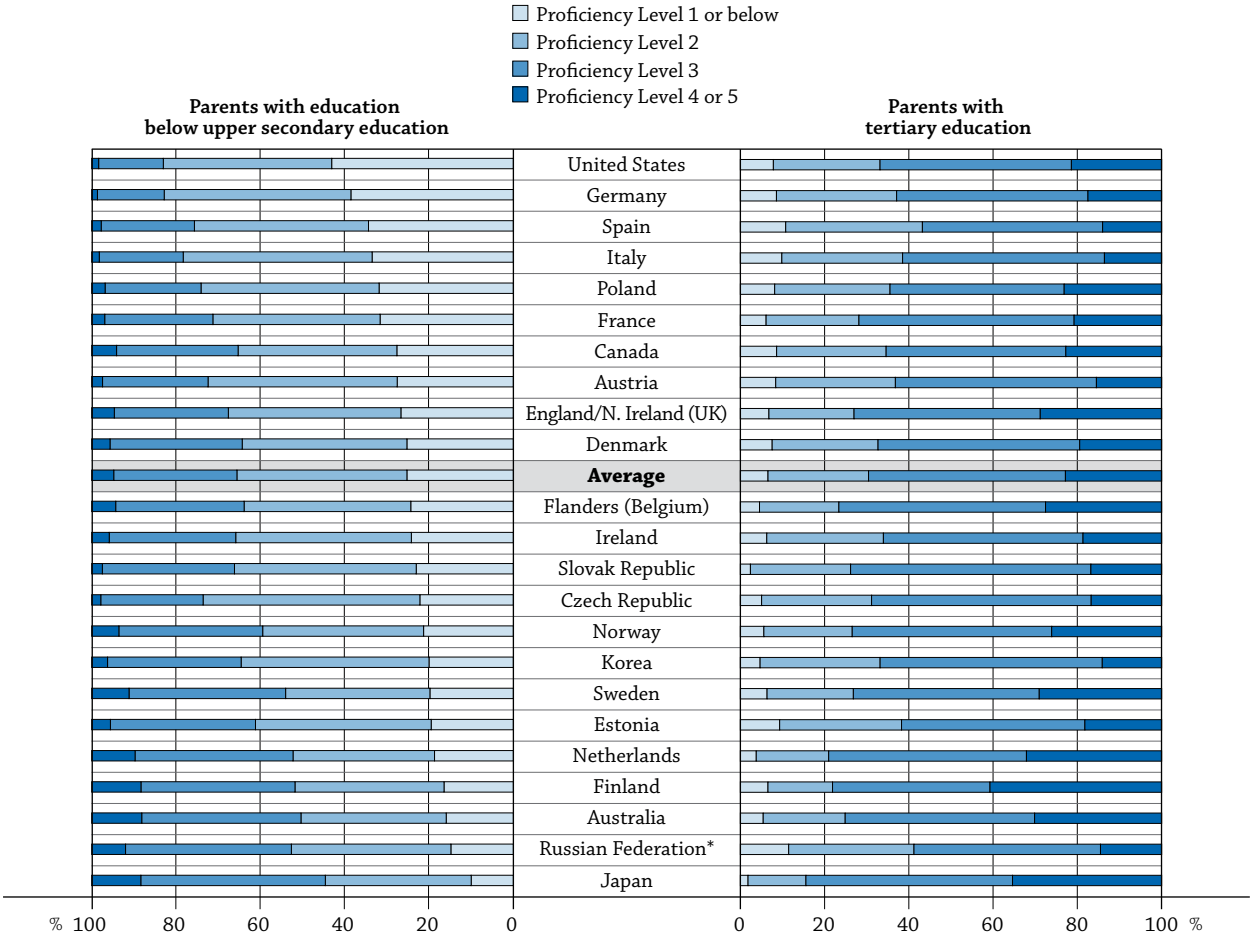
Among adults whose parents have not attained upper secondary education, about one in three have also not attained that level of education while the remainder have attained at least upper secondary education. One in four of these adults score at or below Level 1 in literacy (Tables A4.2 and A4.3 [L]).

Flexibility in intergenerational mobility requires a multifaceted approach. Long-term strategies, including distributing resources and opportunities equally throughout the school system, deploying top-performing teachers and school leaders in underperforming schools, have paid off well in some countries where performance is high and equity is above average, notably Canada, Finland, Japan and Korea (OECD, 2012). In short, all students, regardless of their socio-economic background, should be given the same opportunities to succeed.

A4

Chart A4.4. Literacy proficiency levels and parents' educational attainment (2012)

Survey of Adult Skills, percentage of 25-64 year-old non-students at a given literacy level



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the adults with literacy proficiency Level 1 or below whose parents have attainment below upper secondary education.

Source: OECD. Table A4.3 (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115692

Definitions

Adults refers to 25-64 year-olds.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED levels 3A, 3B, 3C long programmes, and ISCED level 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

Odds ratio reflects the relative likelihood of an event occurring for a particular group relative to a reference group. An odds ratio of 1 represents equal chances of an event occurring for a particular group vis-à-vis the reference group. Coefficients with a value below 1 indicate that there is less chance of an event occurring for a particular group compared to the reference group, and coefficients greater than 1 represent greater chances.

Parents' educational attainment: below upper secondary means that both parents have attained ISCED level 0, 1, 2 or 3C short programmes; **upper secondary or post-secondary non-tertiary** means that at least one parent (whether mother or father) has attained ISCED level 3A, 3B, 3C long programmes, or ISCED level 4; and **tertiary** means that at least one parent (whether mother or father) has attained ISCED level 5A, 5B or 6. See the *Reader's Guide* at the beginning of the book for a presentation of all ISCED levels.

Methodology

All data are based on the Survey of Adult Skills (PIAAC) (2012). PIAAC is the OECD Programme for the International Assessment of Adult Competencies. See *About the Survey of Adult Skills* at the beginning of this publication and Annex 3 (*www.oecd.org/edu/eag.htm*) for additional information.

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, forthcoming).

References

OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, PISA, OECD Publishing, *http://dx.doi.org/10.1787/9789264201132-en.*

OECD (2012), "How pronounced is income inequality around the world – and how can education help reduce it?", *Education Indicators in Focus*, OECD Publishing, Paris, *http://www.oecd.org/edu/50204168.pdf.*

Tables of Indicator A4

StatLink http://dx.doi.org/10.1787/888933115521

	Table A4.1a	Participation of 20-34 year-olds in tertiary education, by gender and parents' educational attainment (2012)
	Table A4.1b	Likelihood of participating in tertiary education, by parents' educational attainment and gender (2012)
	Table A4.2	Educational attainment of non-students, by age group and parents' educational attainment (2012)
	Table A4.3 (L)	Literacy proficiency level among non-students, by age group, gender and parents' educational attainment (2012)
WEB	Table A4.3 (N)	Numeracy proficiency level among non-students, by age group, gender and parents' educational attainment (2012)
	Table A4.4	Educational mobility among non-students, by age group and parents' educational attainment (2012)

A4

Table A4.1a. Participation of 20-34 year-olds in tertiary education, by gender and parents' educational attainment (2012)

Percentage of 20-34 year-olds in tertiary education, by parents' educational attainment, and parents' educational attainment among 20-34 year-olds (students and non-students), by gender

Reading the first row, first column of this table: In Australia, 16% of 20-34 year-olds whose parents have below upper secondary education are students enrolled in tertiary education. Given the survey method, there is a sampling uncertainty in the percentages (%) of twice the standard error (S.E.). For more information, see the Reader's Guide.

		Percentage of students in tertiary education by parents' educational attainment							Parents' educational attainment in the total population (students and non-students)						
		Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		Total	Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		Total
		%	S.E.	%	S.E.	%	S.E.	%	%	S.E.	%	S.E.	%	S.E.	%
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD	**National entities**														
	Australia	16	(2.7)	24	(3.7)	59	(3.6)	100	28	(1.4)	30	(1.5)	42	(1.4)	100
	Austria	3	(1.1)	43	(2.8)	55	(3.0)	100	14	(0.9)	59	(1.4)	28	(1.2)	100
	Canada	3	(0.6)	24	(1.7)	73	(1.7)	100	9	(0.5)	35	(1.0)	56	(1.1)	100
	Czech Republic	c	c	62	(2.7)	38	(2.6)	100	3	(0.5)	75	(1.4)	22	(1.4)	100
	Denmark	7	(1.3)	30	(2.4)	63	(2.5)	100	15	(0.9)	38	(1.3)	47	(1.4)	100
	Estonia	2	(0.6)	31	(2.3)	67	(2.3)	100	7	(0.5)	44	(0.9)	50	(0.9)	100
	Finland	5	(1.1)	39	(2.4)	56	(2.5)	100	13	(0.9)	51	(1.2)	36	(1.2)	100
	France	10	(1.8)	41	(2.7)	50	(2.5)	100	24	(1.0)	48	(1.4)	28	(1.1)	100
	Germany	2	(0.9)	32	(2.8)	65	(2.8)	100	6	(0.8)	48	(1.7)	46	(1.7)	100
	Ireland	16	(2.6)	33	(3.5)	51	(3.7)	100	33	(1.3)	35	(1.4)	32	(1.2)	100
	Italy	24	(3.7)	48	(4.3)	28	(3.6)	100	55	(1.8)	35	(1.7)	10	(1.0)	100
	Japan	2	(1.1)	22	(3.1)	76	(3.2)	100	4	(0.7)	44	(1.6)	51	(1.5)	100
	Korea	10	(1.7)	43	(3.3)	47	(3.6)	100	26	(1.0)	46	(1.4)	28	(1.2)	100
	Netherlands	13	(2.0)	25	(2.3)	61	(2.7)	100	31	(1.4)	31	(1.3)	38	(1.6)	100
	Norway	6	(1.2)	21	(2.3)	73	(2.4)	100	10	(0.9)	38	(1.4)	51	(1.4)	100
	Poland	1	(0.3)	59	(1.7)	39	(1.7)	100	7	(0.7)	72	(0.9)	21	(0.8)	100
	Slovak Republic	2	(1.0)	59	(2.5)	39	(2.6)	100	13	(1.0)	69	(1.2)	19	(1.1)	100
	Spain	33	(3.0)	30	(3.1)	37	(2.8)	100	56	(1.3)	25	(1.2)	19	(1.0)	100
	Sweden	6	(1.4)	26	(3.0)	68	(3.2)	100	14	(0.9)	34	(1.5)	53	(1.7)	100
	United States	8	(1.9)	34	(3.0)	58	(3.1)	100	12	(0.9)	40	(1.4)	48	(1.5)	100
	Sub-national entities														
	Flanders (Belgium)	6	(1.4)	36	(2.9)	59	(3.0)	100	18	(1.0)	42	(1.3)	40	(1.2)	100
	England (UK)	3	(1.6)	41	(5.0)	56	(5.0)	100	14	(1.2)	49	(1.7)	37	(1.8)	100
	Northern Ireland (UK)	13	(3.4)	42	(5.3)	46	(5.0)	100	22	(1.4)	52	(1.8)	26	(1.7)	100
	England/N. Ireland (UK)	4	(1.5)	41	(4.9)	55	(4.9)	100	14	(1.2)	49	(1.6)	37	(1.7)	100
	Average	9	(0.4)	37	(0.6)	55	(0.6)	100	19	(0.2)	45	(0.3)	36	(0.3)	100
Partners	Russian Federation*	6	(1.7)	38	(3.3)	56	(2.9)	100	12	(2.5)	44	(2.3)	44	(2.8)	100

* See note on data for the Russian Federation in the *Methodology* section.

Note: Rows showing data for men and women separately are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115540

Table A4.1b. Likelihood of participating in tertiary education, by parents' educational attainment and gender (2012)

20-34 year-olds; odds ratio

The "odds ratio" reflects the relative likelihood of participating in tertiary education of individuals whose parents have upper secondary or tertiary education compared with that of people whose parents have only below upper secondary education. The latter group are taken as the reference category for the interpretation of the relative likelihood and therefore their odds ratio are set to equal 1. Differences between the groups are statistically significant at 95% if the "p-value" associated with the odds ratio is below 0.5.

Reading the first row: In Australia, a person whose parents have upper secondary education as their highest level of education is almost twice (1.8) as likely to participate in tertiary education as someone whose parents have only below upper secondary education. A person whose parents have tertiary education is about four times (4.3) as likely to participate in tertiary education as someone whose parents have only below upper secondary education.

		Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education or advanced research programmes	
		Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value
		(1)	(2)	(3)	(4)	(5)	(6)
OECD	**National entities**						
	Australia	1	(0.0)	1.8	(0.0)	4.3	(0.0)
	Austria	1	(0.0)	2.1	(0.0)	5.1	(0.0)
	Canada	1	(0.0)	1.6	(0.0)	2.6	(0.0)
	Czech Republic	c	c	c	c	c	c
	Denmark	1	(0.0)	1.6	(0.0)	3.0	(0.0)
	Estonia	1	(0.0)	2.7	(0.0)	4.7	(0.0)
	Finland	1	(0.0)	1.2	(0.4)	1.4	(0.0)
	France	1	(0.0)	1.8	(0.0)	6.0	(0.0)
	Germany	1	(0.0)	2.4	(0.0)	5.1	(0.0)
	Ireland	1	(0.0)	2.0	(0.0)	3.3	(0.0)
	Italy	1	(0.0)	4.6	(0.0)	9.5	(0.0)
	Japan	1	(0.0)	2.0	(0.1)	5.1	(0.0)
	Korea	1	(0.0)	1.0	(1.0)	1.1	(0.7)
	Netherlands	1	(0.0)	1.3	(0.1)	2.8	(0.0)
	Norway	1	(0.0)	1.0	(0.9)	2.0	(0.0)
	Poland	1	(0.0)	3.1	(0.0)	9.5	(0.0)
	Slovak Republic	c	c	c	c	c	(0.0)
	Spain	1	(0.0)	2.0	(0.0)	3.9	(0.0)
	Sweden	1	(0.0)	1.0	(1.0)	2.3	(0.0)
	United States	1	(0.0)	2.9	(0.0)	6.8	(0.0)
	Sub-national entities						
	Flanders (Belgium)	1	(0.0)	2.1	(0.0)	5.7	(0.0)
	England (UK)	1	(0.0)	2.1	(0.0)	6.3	(0.0)
	Northern Ireland (UK)	1	(0.0)	2.9	(0.0)	6.1	(0.0)
	England/N. Ireland (UK)	1	(0.0)	2.2	(0.0)	6.4	(0.0)
	Average	1	(0.0)	2.0	(0.1)	4.5	(0.0)
Partners	Russian Federation*	1	(0.0)	1.6	(0.1)	2.6	(0.0)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Rows showing data for men and women separately are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115559

A4

Table A4.2. [1/4] Educational attainment of non-students, by age group and parents' educational attainment (2012)

25-34 year-olds

This table shows, for each country, the highest qualification attained by 25-34 year-old non-students compared to the educational attainment of their parents. For example, among 25-34 year-old Canadian women who are not students and who have at least one parent who attained a tertiary education, 3% have below upper secondary education, 25% have upper secondary or post-secondary non-tertiary education, and 73% have also attained tertiary education.

		Parents with educational attainment **below upper secondary education**						Parents with **upper secondary or post-secondary non-tertiary education** as highest level of attainment					
		Men		Women		M+W		Men		Women		M+W	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
	Educational attainment	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
OECD	**National entities**												
Australia	Below upper secondary	27	(4.8)	20	(3.6)	23	(2.8)	17	(4.1)	14	(3.9)	16	(2.8)
	Upper secondary or post-secondary non-tertiary	52	(5.7)	47	(5.8)	50	(3.8)	55	(4.6)	38	(5.0)	47	(3.3)
	Tertiary	21	(3.5)	33	(5.3)	27	(2.8)	28	(4.3)	48	(5.4)	38	(3.4)
Austria	Below upper secondary	c	c	c	c	34	(3.5)	9	(1.6)	11	(2.0)	10	(1.3)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	58	(3.9)	75	(2.4)	73	(2.5)	74	(1.8)
	Tertiary	c	c	c	c	8	(2.2)	16	(2.0)	16	(1.8)	16	(1.4)
Canada	Below upper secondary	21	(5.0)	26	(4.7)	24	(3.3)	12	(2.3)	5	(1.1)	9	(1.3)
	Upper secondary or post-secondary non-tertiary	48	(6.5)	34	(4.9)	40	(3.9)	46	(3.6)	39	(2.9)	43	(2.4)
	Tertiary	31	(5.8)	40	(5.3)	36	(3.9)	42	(3.3)	56	(2.8)	49	(2.2)
Czech Republic	Below upper secondary	c	c	c	c	c	c	8	(1.7)	6	(1.8)	7	(1.2)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	c	c	80	(2.2)	65	(3.0)	73	(1.8)
	Tertiary	c	c	c	c	c	c	12	(1.7)	28	(2.4)	19	(1.3)
Denmark	Below upper secondary	c	c	c	c	33	(4.6)	12	(3.1)	12	(3.0)	12	(2.3)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	43	(4.7)	59	(4.6)	33	(3.7)	48	(3.1)
	Tertiary	c	c	c	c	25	(3.7)	30	(3.5)	56	(4.1)	41	(2.5)
Estonia	Below upper secondary	c	c	c	c	38	(5.8)	19	(2.5)	12	(2.2)	15	(1.7)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	44	(4.8)	52	(3.4)	39	(3.0)	46	(2.2)
	Tertiary	c	c	c	c	18	(4.0)	29	(3.0)	49	(2.7)	39	(2.1)
Finland	Below upper secondary	c	c	c	c	7	(2.8)	12	(2.7)	7	(1.9)	9	(1.6)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	58	(4.4)	56	(3.4)	38	(3.2)	47	(2.2)
	Tertiary	c	c	c	c	34	(4.5)	32	(3.1)	55	(3.2)	43	(2.2)
France	Below upper secondary	28	(3.7)	25	(3.3)	26	(2.4)	12	(2.2)	6	(1.5)	9	(1.3)
	Upper secondary or post-secondary non-tertiary	48	(3.9)	49	(4.2)	48	(2.5)	55	(3.4)	45	(3.2)	50	(2.2)
	Tertiary	24	(3.8)	26	(3.5)	25	(2.3)	33	(3.3)	48	(3.3)	41	(2.2)
Germany	Below upper secondary	c	c	c	c	c	c	7	(2.0)	10	(2.4)	8	(1.6)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	c	c	66	(4.3)	65	(3.7)	66	(2.9)
	Tertiary	c	c	c	c	c	c	27	(3.9)	25	(3.1)	26	(2.6)
Ireland	Below upper secondary	25	(3.0)	22	(2.7)	24	(1.9)	11	(2.3)	5	(1.4)	8	(1.3)
	Upper secondary or post-secondary non-tertiary	44	(3.7)	48	(3.0)	46	(2.1)	51	(4.6)	41	(3.7)	46	(2.7)
	Tertiary	31	(3.3)	29	(2.5)	30	(1.7)	38	(4.5)	54	(3.7)	46	(2.8)
Italy	Below upper secondary	49	(3.9)	40	(3.7)	45	(2.6)	c	c	6	(2.6)	10	(2.7)
	Upper secondary or post-secondary non-tertiary	44	(4.0)	49	(3.7)	46	(2.7)	c	c	52	(5.4)	54	(3.5)
	Tertiary	8	(2.1)	11	(2.1)	9	(1.5)	c	c	42	(4.8)	36	(3.3)
Japan	Below upper secondary	c	c	c	c	c	c	9	(2.2)	9	(2.8)	9	(1.6)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	c	c	47	(3.4)	43	(3.6)	45	(2.4)
	Tertiary	c	c	c	c	c	c	44	(3.7)	47	(3.5)	45	(2.6)
Korea	Below upper secondary	6	(1.7)	6	(1.9)	6	(1.2)	1	(0.8)	c	c	1	(0.5)
	Upper secondary or post-secondary non-tertiary	42	(3.0)	40	(3.7)	41	(2.1)	40	(3.0)	31	(2.8)	35	(1.9)
	Tertiary	52	(3.2)	54	(3.4)	53	(2.0)	59	(2.9)	68	(2.9)	64	(1.9)
Netherlands	Below upper secondary	36	(5.3)	19	(3.3)	27	(3.2)	15	(2.6)	14	(3.3)	14	(2.0)
	Upper secondary or post-secondary non-tertiary	41	(5.1)	47	(4.4)	44	(3.3)	49	(5.3)	47	(4.8)	48	(3.2)
	Tertiary	23	(4.7)	34	(4.1)	29	(3.0)	36	(5.7)	39	(4.4)	37	(3.3)
Norway	Below upper secondary	c	c	c	c	c	c	24	(3.5)	17	(3.1)	21	(2.4)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	c	c	50	(3.7)	40	(4.8)	45	(2.8)
	Tertiary	c	c	c	c	c	c	26	(3.5)	43	(4.1)	34	(2.6)
Poland	Below upper secondary	c	c	c	c	18	(4.3)	6	(1.3)	4	(1.2)	5	(0.9)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	67	(5.2)	63	(2.6)	49	(2.7)	56	(2.0)
	Tertiary	c	c	c	c	16	(4.7)	32	(2.6)	47	(2.8)	39	(1.9)
Slovak Republic	Below upper secondary	60	(5.8)	57	(5.8)	58	(4.6)	7	(1.2)	5	(0.9)	6	(0.7)
	Upper secondary or post-secondary non-tertiary	40	(5.8)	39	(5.7)	40	(4.4)	73	(2.5)	67	(2.9)	70	(2.1)
	Tertiary	c	c	4	(2.3)	2	(1.2)	20	(2.6)	28	(2.7)	24	(2.0)
Spain	Below upper secondary	56	(3.1)	45	(3.2)	51	(2.2)	30	(4.5)	14	(3.1)	22	(2.9)
	Upper secondary or post-secondary non-tertiary	25	(2.6)	23	(2.8)	24	(1.7)	37	(5.3)	28	(4.7)	32	(3.7)
	Tertiary	19	(2.2)	32	(2.9)	25	(1.9)	33	(4.2)	58	(5.1)	46	(3.6)
Sweden	Below upper secondary	c	c	c	c	25	(4.5)	19	(4.4)	11	(3.2)	15	(2.8)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	48	(4.2)	57	(5.4)	51	(4.8)	54	(3.9)
	Tertiary	c	c	c	c	27	(3.7)	23	(3.7)	38	(4.6)	31	(3.2)
United States	Below upper secondary	c	c	c	c	35	(4.6)	11	(2.7)	5	(1.5)	8	(1.7)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	61	(4.7)	59	(4.2)	52	(3.7)	56	(2.7)
	Tertiary	c	c	c	c	5	(1.4)	30	(4.1)	43	(3.5)	36	(2.9)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age breakdowns and for all levels of education of the parents combined are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies.
See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115578

Table A4.2. [2/4] Educational attainment of non-students, by age group and parents' educational attainment (2012)

25-34 year-olds

This table shows, for each country, the highest qualification attained by 25-34 year-old non-students compared to the educational attainment of their parents. For example, among 25-34 year-old Canadian women who are not students and who have at least one parent who attained a tertiary education, 3% have below upper secondary education, 25% have upper secondary or post-secondary non-tertiary education, and 73% have also attained tertiary education.

			Parents with educational attainment **below upper secondary education**						Parents with **upper secondary or post-secondary non-tertiary education** as highest level of attainment					
			Men		Women		M+W		Men		Women		M+W	
			%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		Educational attainment	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
OECD	**Sub-national entities**													
	Flanders (Belgium)	**Below upper secondary**	c	c	17	(4.0)	17	(3.3)	8	(2.1)	6	(2.0)	7	(1.4)
		Upper secondary or post-secondary non-tertiary	c	c	54	(5.6)	61	(4.2)	59	(3.9)	47	(3.8)	53	(2.5)
		Tertiary	c	c	29	(4.9)	22	(3.6)	33	(3.5)	47	(3.7)	40	(2.3)
	England (UK)	**Below upper secondary**	c	c	c	c	36	(4.6)	16	(3.1)	12	(2.4)	14	(1.8)
		Upper secondary or post-secondary non-tertiary	c	c	c	c	40	(4.9)	39	(4.7)	41	(3.6)	40	(3.1)
		Tertiary	c	c	c	c	24	(4.8)	45	(4.2)	47	(3.5)	46	(2.7)
	Northern Ireland (UK)	**Below upper secondary**	c	c	40	(6.8)	44	(4.6)	17	(4.4)	12	(3.0)	15	(2.6)
		Upper secondary or post-secondary non-tertiary	c	c	34	(5.1)	36	(4.2)	42	(4.6)	45	(3.9)	44	(2.8)
		Tertiary	c	c	26	(5.0)	20	(3.2)	40	(5.4)	43	(4.3)	42	(2.8)
	England/N. Ireland (UK)	**Below upper secondary**	37	(7.3)	36	(5.3)	36	(4.3)	16	(3.0)	12	(2.3)	14	(1.7)
		Upper secondary or post-secondary non-tertiary	38	(6.7)	41	(5.8)	40	(4.6)	39	(4.5)	41	(3.4)	40	(2.9)
		Tertiary	25	(7.5)	22	(5.2)	24	(4.5)	44	(4.1)	47	(3.4)	46	(2.6)
	Average	**Below upper secondary**	35	(1.5)	29	(1.2)	29	(0.9)	13	(0.6)	9	(0.5)	11	(0.4)
		Upper secondary or post-secondary non-tertiary	42	(1.5)	43	(1.4)	48	(0.9)	56	(0.9)	47	(0.8)	51	(0.6)
		Tertiary	26	(1.4)	29	(1.2)	23	(0.7)	32	(0.8)	45	(0.8)	38	(0.5)
Partners	**Russian Federation***	**Below upper secondary**	c	c	c	c	c	c	14	(3.2)	2	(1.2)	8	(1.5)
		Upper secondary or post-secondary non-tertiary	c	c	c	c	c	c	22	(4.2)	32	(2.6)	27	(2.9)
		Tertiary	c	c	c	c	c	c	64	(5.2)	65	(3.0)	65	(2.9)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age breakdowns and for all levels of education of the parents combined are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115578

A4

Table A4.2. [3/4] Educational attainment of non-students, by age group and parents' educational attainment (2012)

25-34 year-olds

This table shows, for each country, the highest qualification attained by 25-34 year-old non-students compared to the educational attainment of their parents. For example, among 25-34 year-old Canadian women who are not students and who have at least one parent who attained a tertiary education, 3% have below upper secondary education, 25% have upper secondary or post-secondary non-tertiary education, and 73% have also attained tertiary education.

		Parents with **tertiary education**						All levels of education of parents					
		Men		Women		M+W		Men		Women		M+W	
	Educational attainment	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)
OECD	**National entities**												
	Australia												
	Below upper secondary	4	(1.3)	5	(1.7)	4	(1.1)	15	(1.9)	12	(1.4)	14	(1.1)
	Upper secondary or post-secondary non-tertiary	36	(3.9)	16	(2.5)	26	(2.4)	47	(2.6)	32	(2.8)	40	(1.7)
	Tertiary	60	(4.1)	79	(2.8)	70	(2.6)	38	(2.3)	56	(2.7)	47	(1.6)
	Austria												
	Below upper secondary	4	(2.6)	8	(3.1)	6	(2.2)	11	(0.9)	15	(1.2)	13	(0.8)
	Upper secondary or post-secondary non-tertiary	66	(4.5)	55	(4.5)	60	(3.4)	71	(1.5)	65	(1.4)	68	(1.0)
	Tertiary	29	(3.9)	37	(3.6)	34	(2.7)	18	(1.2)	19	(1.0)	19	(0.8)
	Canada												
	Below upper secondary	3	(1.0)	3	(0.8)	3	(0.6)	9	(1.2)	7	(0.8)	8	(0.7)
	Upper secondary or post-secondary non-tertiary	29	(2.6)	25	(2.5)	27	(1.8)	38	(2.1)	31	(1.4)	35	(1.3)
	Tertiary	67	(2.6)	73	(2.5)	70	(1.9)	53	(1.8)	62	(1.5)	58	(1.1)
	Czech Republic												
	Below upper secondary	c	c	c	c	3	(0.9)	8	(1.4)	5	(1.5)	7	(1.0)
	Upper secondary or post-secondary non-tertiary	35	(6.5)	22	(7.0)	29	(4.2)	71	(2.2)	58	(2.5)	65	(1.7)
	Tertiary	60	(6.7)	78	(7.0)	69	(4.1)	21	(1.9)	37	(2.1)	28	(1.2)
	Denmark												
	Below upper secondary	8	(2.5)	9	(3.4)	9	(2.0)	14	(2.1)	14	(2.1)	14	(1.5)
	Upper secondary or post-secondary non-tertiary	31	(4.4)	14	(3.1)	22	(2.5)	46	(3.0)	26	(2.4)	36	(1.9)
	Tertiary	61	(4.3)	76	(3.9)	69	(2.7)	40	(2.7)	60	(2.6)	50	(1.7)
	Estonia												
	Below upper secondary	10	(2.0)	6	(1.6)	8	(1.2)	16	(1.6)	11	(1.5)	14	(1.1)
	Upper secondary or post-secondary non-tertiary	46	(3.1)	25	(2.9)	36	(2.2)	48	(2.3)	34	(2.2)	41	(1.5)
	Tertiary	44	(3.5)	70	(3.2)	56	(2.4)	35	(2.1)	55	(2.1)	45	(1.6)
	Finland												
	Below upper secondary	5	(2.3)	4	(2.2)	4	(1.6)	10	(1.9)	5	(1.3)	8	(1.1)
	Upper secondary or post-secondary non-tertiary	44	(4.8)	18	(3.6)	31	(2.9)	55	(2.4)	34	(2.4)	44	(1.6)
	Tertiary	51	(4.9)	79	(4.1)	65	(3.2)	35	(2.3)	61	(2.4)	48	(1.6)
	France												
	Below upper secondary	4	(1.5)	4	(2.2)	4	(1.3)	14	(1.4)	12	(1.5)	13	(1.1)
	Upper secondary or post-secondary non-tertiary	26	(4.0)	13	(2.5)	20	(2.5)	45	(2.0)	39	(2.4)	42	(1.4)
	Tertiary	70	(4.2)	83	(3.2)	76	(2.7)	41	(2.2)	49	(2.3)	45	(1.3)
	Germany												
	Below upper secondary	8	(2.8)	8	(3.5)	8	(2.2)	9	(1.8)	10	(2.0)	10	(1.3)
	Upper secondary or post-secondary non-tertiary	48	(4.4)	34	(4.3)	41	(3.1)	58	(3.2)	52	(2.9)	55	(2.1)
	Tertiary	44	(3.8)	59	(4.4)	51	(3.0)	33	(2.7)	38	(2.6)	35	(1.9)
	Ireland												
	Below upper secondary	6	(1.9)	2	(1.4)	4	(1.2)	15	(1.0)	11	(1.1)	13	(0.5)
	Upper secondary or post-secondary non-tertiary	33	(3.9)	24	(4.0)	28	(2.7)	44	(2.2)	39	(1.8)	41	(1.2)
	Tertiary	61	(3.9)	74	(4.1)	68	(2.8)	41	(2.2)	51	(1.8)	46	(1.1)
	Italy												
	Below upper secondary	c	c	c	c	c	c	36	(3.3)	26	(2.7)	31	(2.0)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	c	c	46	(3.2)	48	(2.8)	47	(1.9)
	Tertiary	c	c	c	c	c	c	17	(2.1)	26	(2.2)	22	(1.4)
	Japan												
	Below upper secondary	4	(1.7)	4	(1.5)	4	(1.1)	8	(1.5)	7	(1.6)	8	(1.0)
	Upper secondary or post-secondary non-tertiary	26	(3.4)	21	(3.2)	23	(2.3)	37	(2.2)	32	(2.4)	35	(1.8)
	Tertiary	70	(3.7)	75	(3.3)	73	(2.4)	55	(2.2)	60	(2.2)	58	(1.7)
	Korea												
	Below upper secondary	c	c	c	c	c	c	3	(0.6)	2	(0.7)	3	(0.5)
	Upper secondary or post-secondary non-tertiary	17	(4.1)	12	(3.3)	15	(2.6)	36	(1.5)	30	(1.9)	33	(0.8)
	Tertiary	83	(4.1)	87	(3.5)	85	(2.6)	61	(1.5)	68	(1.9)	64	(0.7)
	Netherlands												
	Below upper secondary	12	(3.5)	11	(3.4)	12	(2.3)	21	(2.4)	15	(2.1)	18	(1.5)
	Upper secondary or post-secondary non-tertiary	28	(4.7)	25	(4.3)	27	(3.1)	39	(2.8)	40	(2.9)	40	(2.0)
	Tertiary	60	(4.8)	64	(5.1)	62	(3.4)	40	(3.1)	45	(2.8)	42	(1.9)
	Norway												
	Below upper secondary	14	(3.3)	4	(1.7)	9	(1.9)	20	(2.2)	13	(1.7)	17	(1.4)
	Upper secondary or post-secondary non-tertiary	36	(3.9)	25	(3.6)	30	(3.0)	43	(2.5)	31	(2.5)	37	(1.8)
	Tertiary	50	(4.3)	71	(3.7)	61	(3.1)	37	(2.4)	55	(2.2)	46	(1.6)
	Poland												
	Below upper secondary	2	(1.5)	c	c	1	(0.8)	7	(1.3)	4	(1.0)	5	(0.8)
	Upper secondary or post-secondary non-tertiary	19	(3.8)	16	(4.6)	18	(3.3)	54	(2.0)	46	(2.4)	50	(1.7)
	Tertiary	79	(4.0)	83	(4.6)	81	(3.3)	39	(2.2)	51	(2.5)	45	(1.7)
	Slovak Republic												
	Below upper secondary	c	c	c	c	c	c	13	(1.2)	12	(1.5)	13	(1.0)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	37	(3.7)	64	(2.0)	57	(2.3)	60	(1.6)
	Tertiary	c	c	c	c	63	(3.7)	23	(1.8)	31	(2.2)	27	(1.6)
	Spain												
	Below upper secondary	c	c	c	c	11	(2.3)	43	(2.2)	32	(2.1)	38	(1.5)
	Upper secondary or post-secondary non-tertiary	c	c	c	c	22	(3.4)	27	(2.3)	25	(2.0)	26	(1.4)
	Tertiary	c	c	c	c	67	(3.6)	30	(1.8)	43	(2.1)	36	(1.2)
	Sweden												
	Below upper secondary	10	(2.8)	4	(1.9)	7	(1.7)	15	(2.2)	12	(2.1)	13	(1.5)
	Upper secondary or post-secondary non-tertiary	48	(3.5)	33	(3.8)	41	(2.5)	51	(2.6)	42	(2.3)	47	(1.6)
	Tertiary	42	(2.7)	63	(3.9)	51	(2.4)	34	(1.7)	46	(2.2)	40	(1.4)
	United States												
	Below upper secondary	8	(2.7)	2	(0.9)	5	(1.4)	12	(2.1)	8	(1.2)	10	(1.1)
	Upper secondary or post-secondary non-tertiary	45	(3.1)	31	(4.6)	38	(2.8)	53	(2.4)	44	(2.5)	48	(1.5)
	Tertiary	47	(3.7)	67	(4.7)	57	(3.1)	35	(2.3)	48	(2.3)	42	(1.6)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age breakdowns and for all levels of education of the parents combined are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115578

Table A4.2. [4/4] Educational attainment of non-students, by age group and parents' educational attainment (2012)

25-34 year-olds

This table shows, for each country, the highest qualification attained by 25-34 year-old non-students compared to the educational attainment of their parents. For example, among 25-34 year-old Canadian women who are not students and who have at least one parent who attained a tertiary education, 3% have below upper secondary education, 25% have upper secondary or post-secondary non-tertiary education, and 73% have also attained tertiary education.

			Parents with **tertiary education**						All levels of education of parents					
			Men		Women		M+W		Men		Women		M+W	
			%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		Educational attainment	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)
OECD	**Sub-national entities**													
	Flanders (Belgium)	**Below upper secondary**	2	(1.4)	2	(1.1)	2	(0.9)	7	(1.4)	7	(1.3)	7	(1.0)
		Upper secondary or post-secondary non-tertiary	36	(4.6)	16	(3.1)	26	(2.8)	53	(2.8)	37	(2.6)	45	(1.8)
		Tertiary	62	(4.8)	82	(3.3)	72	(2.9)	40	(2.6)	55	(2.6)	48	(1.8)
	England (UK)	**Below upper secondary**	4	(2.4)	6	(2.4)	5	(1.7)	15	(2.2)	14	(1.8)	14	(1.3)
		Upper secondary or post-secondary non-tertiary	20	(3.8)	20	(3.9)	20	(2.5)	32	(2.8)	34	(2.5)	33	(1.8)
		Tertiary	76	(4.5)	74	(4.7)	75	(3.0)	53	(2.7)	52	(2.4)	53	(1.5)
	Northern Ireland (UK)	**Below upper secondary**	c	c	c	c	c	c	22	(3.1)	16	(2.3)	19	(1.9)
		Upper secondary or post-secondary non-tertiary	c	c	c	c	22	(5.2)	37	(3.4)	37	(2.7)	37	(2.0)
		Tertiary	c	c	c	c	76	(5.3)	41	(3.3)	48	(2.9)	44	(1.9)
	England/N. Ireland (UK)	**Below upper secondary**	4	(2.3)	6	(2.3)	5	(1.7)	15	(2.2)	14	(1.7)	15	(1.3)
		Upper secondary or post-secondary non-tertiary	20	(3.7)	20	(3.8)	20	(2.4)	32	(2.7)	34	(2.3)	33	(1.7)
		Tertiary	76	(4.3)	74	(4.6)	75	(3.0)	53	(2.6)	52	(2.3)	52	(1.4)
	Average	**Below upper secondary**	6	(0.6)	5	(0.6)	6	(0.4)	15	(0.4)	12	(0.3)	13	(0.3)
		Upper secondary or post-secondary non-tertiary	35	(0.9)	23	(0.9)	29	(0.6)	48	(0.5)	40	(0.5)	44	(0.3)
		Tertiary	59	(1.0)	72	(0.9)	65	(0.7)	37	(0.5)	49	(0.5)	43	(0.3)
Partners	**Russian Federation***	**Below upper secondary**	n	n	3	(2.6)	2	(1.3)	9	(2.4)	4	(1.3)	7	(1.0)
		Upper secondary or post-secondary non-tertiary	26	(6.5)	6	(2.6)	16	(3.7)	24	(3.3)	25	(2.1)	25	(1.5)
		Tertiary	74	(6.5)	90	(4.0)	82	(4.6)	67	(4.5)	71	(2.2)	69	(2.3)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age breakdowns and for all levels of education of the parents combined are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies.See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115578

A4

Table A4.3 (L). [1/2] Literacy proficiency level among non-students, by age group, gender and parents' educational attainment (2012)

Literacy proficiency in the Survey of Adult Skills, 25-34 year-olds

		Proficiency level	Parents with educational attainment **below upper secondary education**			Parents with **upper secondary or post-secondary non-tertiary education** as highest level of attainment			Parents with **tertiary education**			All levels of education of parents		
			Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W
			% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.
			(25) (26)	(27) (28)	(29) (30)	(31) (32)	(33) (34)	(35) (36)	(37) (38)	(39) (40)	(41) (42)	(43) (44)	(45) (46)	(47) (48)
OECD	**National entities**													
	Australia	0/1	18 (4.8)	14 (3.9)	16 (3.0)	11 (3.0)	12 (4.2)	11 (2.7)	3 (1.9)	4 (1.8)	4 (1.3)	10 (1.8)	9 (1.7)	10 (1.2)
		2	32 (5.6)	35 (5.9)	34 (4.2)	28 (5.0)	24 (5.5)	26 (3.9)	19 (4.5)	18 (3.7)	18 (2.8)	26 (2.8)	25 (2.9)	26 (2.2)
		3	39 (5.9)	37 (6.2)	38 (4.6)	44 (5.8)	47 (6.5)	45 (4.7)	48 (5.9)	43 (4.0)	45 (3.4)	44 (3.7)	42 (3.5)	43 (2.8)
		4/5	10 (2.8)	14 (3.5)	12 (2.2)	17 (4.6)	18 (5.7)	18 (4.1)	29 (4.4)	35 (3.9)	32 (2.9)	19 (2.3)	23 (2.7)	21 (1.9)
	Austria	0/1	c c	c c	29 (4.5)	8 (2.8)	9 (2.6)	9 (2.1)	c c	c c	7 (2.7)	11 (2.4)	12 (2.1)	12 (1.5)
		2	c c	c c	44 (5.6)	35 (4.8)	37 (4.2)	36 (3.2)	c c	c c	19 (4.0)	33 (3.5)	33 (3.1)	33 (2.2)
		3	c c	c c	23 (5.1)	46 (4.0)	46 (4.5)	46 (3.0)	c c	c c	54 (5.2)	44 (3.2)	44 (3.1)	44 (2.2)
		4/5	c c	c c	4 (2.0)	10 (2.2)	9 (2.2)	9 (1.6)	c c	c c	20 (3.4)	12 (1.8)	10 (1.7)	11 (1.2)
	Canada	0/1	24 (4.5)	28 (5.6)	26 (3.7)	14 (2.9)	14 (2.4)	14 (1.8)	7 (1.8)	6 (1.3)	7 (1.1)	12 (1.5)	12 (1.4)	12 (1.0)
		2	40 (7.0)	31 (6.2)	35 (4.8)	33 (4.5)	31 (3.5)	32 (2.9)	24 (3.3)	27 (3.3)	26 (2.3)	29 (2.3)	29 (2.5)	29 (1.8)
		3	32 (7.9)	32 (6.4)	32 (5.0)	36 (4.7)	40 (3.3)	38 (3.1)	42 (3.5)	43 (4.2)	42 (3.1)	39 (3.0)	40 (2.7)	39 (2.3)
		4/5	4 (4.0)	9 (3.5)	7 (2.6)	17 (3.1)	15 (2.4)	16 (2.0)	27 (3.4)	24 (2.7)	25 (2.3)	20 (2.2)	19 (1.6)	20 (1.5)
	Czech Republic	0/1	c c	c c	c c	9 (2.8)	8 (2.3)	8 (1.8)	c c	c c	2 (1.9)	8 (2.2)	7 (1.8)	7 (1.4)
		2	c c	c c	c c	33 (4.3)	31 (4.4)	32 (3.4)	c c	13 (7.3)	16 (5.2)	30 (3.8)	29 (3.6)	30 (3.0)
		3	c c	c c	c c	47 (4.3)	49 (5.2)	48 (3.3)	c c	56 (9.9)	57 (6.6)	49 (4.1)	49 (4.5)	49 (3.0)
		4/5	c c	c c	c c	11 (2.7)	12 (3.1)	12 (2.1)	c c	29 (9.4)	26 (5.7)	13 (2.5)	15 (3.0)	14 (1.8)
	Denmark	0/1	c c	c c	29 (4.8)	12 (3.3)	11 (3.0)	12 (2.3)	8 (2.3)	7 (2.3)	8 (1.7)	14 (2.1)	13 (2.0)	13 (1.4)
		2	c c	c c	37 (6.2)	30 (4.5)	32 (6.0)	31 (3.9)	19 (3.8)	23 (4.6)	21 (3.1)	26 (2.8)	29 (3.6)	28 (2.3)
		3	c c	c c	27 (4.9)	47 (5.0)	47 (6.6)	47 (4.2)	47 (4.7)	47 (4.9)	47 (3.5)	43 (3.3)	44 (3.5)	43 (2.5)
		4/5	c c	c c	7 (2.7)	11 (3.1)	10 (3.8)	11 (2.5)	27 (4.4)	22 (4.2)	24 (2.9)	17 (2.3)	15 (2.8)	16 (1.9)
	Estonia	0/1	c c	c c	c c	10 (2.3)	12 (2.4)	11 (1.7)	8 (2.4)	7 (2.0)	8 (1.5)	10 (1.7)	10 (1.5)	10 (1.2)
		2	c c	c c	c c	35 (3.8)	33 (4.3)	34 (3.0)	26 (3.2)	20 (3.8)	24 (2.4)	31 (2.5)	29 (2.9)	30 (1.8)
		3	c c	c c	c c	46 (3.7)	46 (4.5)	46 (2.9)	43 (4.0)	48 (4.7)	45 (3.2)	44 (2.5)	46 (3.3)	45 (2.1)
		4/5	c c	c c	c c	10 (2.7)	9 (3.1)	10 (2.3)	23 (3.0)	24 (3.3)	23 (2.4)	15 (2.1)	15 (2.2)	15 (1.7)
	Finland	0/1	c c	c c	9 (3.3)	5 (2.1)	2 (1.1)	3 (1.2)	c c	c c	4 (1.9)	7 (1.8)	2 (1.1)	5 (1.1)
		2	c c	c c	21 (5.1)	24 (3.6)	14 (3.2)	19 (2.6)	c c	c c	9 (2.8)	20 (2.7)	13 (2.6)	17 (2.0)
		3	c c	c c	44 (5.3)	43 (4.5)	49 (4.6)	46 (3.4)	c c	c c	38 (4.4)	40 (3.0)	47 (3.3)	43 (2.3)
		4/5	c c	c c	26 (4.7)	27 (3.7)	35 (4.2)	31 (3.0)	c c	c c	49 (4.0)	33 (2.6)	37 (2.9)	35 (2.0)
	France	0/1	c c	21 (3.6)	21 (2.5)	10 (2.3)	6 (1.7)	8 (1.5)	5 (1.9)	c c	5 (1.6)	11 (1.6)	11 (1.6)	11 (1.2)
		2	c c	39 (4.3)	39 (3.8)	34 (3.9)	33 (3.8)	34 (2.9)	14 (3.7)	c c	15 (2.9)	30 (2.5)	31 (2.2)	30 (1.8)
		3	c c	34 (4.2)	34 (4.3)	44 (4.2)	48 (4.0)	46 (2.8)	50 (5.2)	c c	52 (3.9)	43 (3.3)	45 (2.6)	44 (2.2)
		4/5	c c	5 (2.0)	6 (1.8)	12 (3.1)	12 (2.6)	12 (1.7)	32 (4.7)	c c	28 (3.5)	16 (2.1)	13 (1.8)	14 (1.2)
	Germany	0/1	c c	c c	c c	14 (3.9)	17 (3.6)	15 (2.5)	8 (2.9)	7 (2.9)	7 (1.9)	13 (2.5)	14 (2.3)	14 (1.6)
		2	c c	c c	c c	32 (4.9)	30 (4.8)	31 (3.5)	24 (4.3)	20 (3.9)	22 (2.7)	30 (2.9)	28 (2.8)	29 (2.0)
		3	c c	c c	c c	42 (5.1)	43 (4.7)	42 (3.3)	45 (5.3)	51 (5.3)	48 (3.5)	41 (3.7)	44 (3.3)	42 (2.3)
		4/5	c c	c c	c c	12 (3.3)	9 (2.9)	11 (1.9)	23 (4.6)	22 (4.2)	23 (3.2)	16 (2.7)	14 (2.3)	15 (1.7)
	Ireland	0/1	20 (3.8)	17 (2.8)	18 (2.5)	10 (3.5)	10 (2.4)	10 (2.2)	8 (3.0)	6 (2.9)	7 (2.1)	13 (2.0)	11 (1.5)	12 (1.3)
		2	36 (4.5)	46 (4.7)	41 (3.3)	35 (5.2)	39 (4.9)	37 (3.4)	29 (5.1)	30 (4.3)	29 (3.1)	34 (2.6)	39 (2.4)	36 (1.7)
		3	35 (4.6)	33 (5.2)	34 (3.2)	39 (4.8)	41 (4.3)	40 (3.0)	44 (5.3)	47 (5.4)	46 (3.8)	39 (3.0)	40 (3.0)	39 (2.0)
		4/5	10 (3.3)	4 (1.7)	7 (1.5)	15 (3.6)	10 (3.0)	13 (2.6)	19 (4.6)	17 (4.2)	18 (3.3)	14 (2.5)	10 (2.0)	12 (1.5)
	Italy	0/1	30 (3.8)	30 (4.6)	30 (3.1)	c c	c c	16 (3.4)	c c	c c	c c	25 (2.9)	24 (3.7)	24 (2.5)
		2	45 (4.9)	40 (4.9)	42 (3.4)	c c	c c	35 (4.2)	c c	c c	c c	38 (3.5)	40 (3.6)	39 (2.6)
		3	22 (4.2)	27 (4.1)	24 (3.1)	c c	c c	42 (4.5)	c c	c c	c c	31 (3.5)	33 (3.4)	32 (2.5)
		4/5	3 (1.5)	3 (1.7)	3 (1.1)	c c	c c	7 (3.1)	c c	c c	c c	6 (2.1)	4 (1.5)	5 (1.2)
	Japan	0/1	c c	c c	c c	3 (1.4)	2 (1.5)	3 (1.0)	c c	c c	1 (0.6)	2 (0.9)	2 (0.8)	2 (0.6)
		2	c c	c c	c c	13 (3.1)	17 (3.4)	15 (2.5)	10 (2.7)	11 (2.6)	10 (1.9)	12 (1.9)	14 (2.3)	13 (1.7)
		3	c c	c c	c c	55 (4.9)	53 (4.7)	54 (3.3)	48 (5.0)	52 (4.2)	50 (3.2)	52 (3.0)	52 (3.3)	52 (1.9)
		4/5	c c	c c	c c	29 (4.2)	28 (4.5)	29 (2.9)	40 (5.0)	36 (3.8)	38 (3.3)	33 (3.1)	32 (3.2)	33 (1.9)
	Korea	0/1	9 (2.6)	7 (2.3)	8 (1.7)	3 (1.5)	3 (1.2)	3 (0.9)	c c	c c	c c	5 (1.2)	4 (0.9)	4 (0.7)
		2	35 (4.8)	36 (5.4)	36 (3.4)	28 (3.9)	29 (4.6)	29 (2.8)	c c	19 (3.9)	17 (2.7)	28 (2.5)	29 (3.0)	29 (1.8)
		3	48 (5.2)	50 (5.5)	49 (3.8)	53 (4.6)	55 (4.3)	54 (3.1)	c c	62 (5.6)	60 (4.3)	52 (2.9)	55 (3.0)	53 (1.9)
		4/5	8 (2.8)	7 (2.3)	7 (1.9)	16 (3.0)	13 (2.7)	14 (2.2)	c c	17 (4.4)	22 (3.6)	15 (1.9)	12 (1.7)	13 (1.4)
	Netherlands	0/1	c c	14 (4.0)	16 (3.3)	c c	c c	4 (1.7)	c c	c c	4 (1.8)	8 (2.0)	8 (1.9)	8 (1.4)
		2	c c	24 (5.3)	24 (3.4)	c c	c c	24 (3.2)	c c	c c	12 (2.8)	19 (2.8)	21 (3.1)	20 (1.7)
		3	c c	46 (5.7)	44 (4.2)	c c	c c	45 (4.6)	c c	c c	47 (4.6)	45 (3.4)	46 (3.8)	45 (2.5)
		4/5	c c	15 (4.0)	16 (3.0)	c c	c c	27 (3.7)	c c	c c	37 (4.5)	28 (3.1)	25 (3.2)	26 (2.3)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age breakdowns are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115597

A4

Table A4.3 (L). [2/2] Literacy proficiency level among non-students, by age group, gender and parents' educational attainment (2012)

Literacy proficiency in the Survey of Adult Skills, 25-34 year-olds

		Proficiency level	Parents with educational attainment **below upper secondary education**			Parents with **upper secondary or post-secondary non-tertiary education** as highest level of attainment			Parents with **tertiary education**			All levels of education of parents		
			Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W
			% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.	% S.E.
			(25) (26)	(27) (28)	(29) (30)	(31) (32)	(33) (34)	(35) (36)	(37) (38)	(39) (40)	(41) (42)	(43) (44)	(45) (46)	(47) (48)
OECD	**National entities**													
	Norway	0/1	c c	c c	c c	10 (2.9)	11 (3.2)	10 (2.2)	7 (2.3)	5 (2.0)	6 (1.5)	13 (1.8)	10 (2.0)	11 (1.4)
		2	c c	c c	c c	25 (4.5)	28 (4.3)	27 (3.0)	17 (3.5)	16 (3.3)	17 (2.4)	21 (2.6)	22 (2.6)	22 (1.9)
		3	c c	c c	c c	47 (5.3)	49 (4.9)	48 (3.6)	45 (4.8)	51 (5.2)	48 (3.9)	44 (3.3)	48 (3.4)	46 (2.6)
		4/5	c c	c c	c c	19 (4.0)	12 (3.1)	15 (2.7)	31 (4.1)	28 (3.8)	29 (2.9)	23 (2.8)	20 (2.5)	21 (2.0)
	Poland	0/1	c c	c c	c c	17 (2.4)	13 (2.4)	15 (1.8)	3 (1.9)	7 (4.3)	5 (2.2)	15 (2.0)	13 (1.9)	14 (1.5)
		2	c c	c c	c c	39 (3.9)	34 (3.2)	37 (2.6)	21 (5.1)	24 (6.7)	22 (3.9)	37 (3.6)	33 (2.3)	35 (2.2)
		3	c c	c c	c c	37 (3.8)	39 (3.2)	38 (2.6)	45 (7.3)	44 (6.2)	44 (4.8)	37 (3.3)	39 (2.7)	38 (2.2)
		4/5	c c	c c	c c	7 (2.0)	14 (2.4)	11 (1.5)	32 (6.8)	25 (5.9)	29 (4.4)	12 (1.9)	15 (2.1)	13 (1.4)
	Slovak Republic	0/1	c c	c c	40 (5.0)	7 (1.7)	8 (1.7)	7 (1.2)	c c	c c	c c	12 (1.4)	11 (1.8)	11 (1.2)
		2	c c	c c	40 (4.7)	35 (3.4)	32 (2.6)	34 (2.1)	c c	c c	20 (4.7)	34 (2.6)	31 (2.2)	33 (1.7)
		3	c c	c c	18 (3.2)	49 (3.6)	50 (2.9)	49 (2.4)	c c	c c	59 (5.6)	44 (2.6)	48 (2.5)	46 (1.8)
		4/5	c c	c c	c c	9 (2.2)	10 (1.9)	10 (1.5)	c c	c c	19 (4.3)	10 (1.7)	10 (1.8)	10 (1.2)
	Spain	0/1	26 (3.0)	29 (3.5)	28 (2.4)	c c	14 (4.4)	14 (3.3)	c c	c c	9 (3.3)	21 (2.3)	22 (2.6)	22 (1.8)
		2	47 (3.9)	44 (4.1)	46 (2.9)	c c	44 (6.6)	43 (4.3)	c c	c c	34 (5.7)	43 (3.1)	43 (3.6)	43 (2.2)
		3	25 (3.1)	24 (3.1)	25 (2.1)	c c	37 (5.1)	37 (4.2)	c c	c c	47 (4.7)	31 (2.9)	31 (2.8)	31 (1.9)
		4/5	2 (1.2)	2 (1.3)	2 (1.0)	c c	5 (2.5)	6 (1.9)	c c	c c	10 (3.4)	5 (1.4)	4 (1.0)	4 (0.9)
	Sweden	0/1	c c	c c	c c	c c	c c	8 (2.3)	6 (2.0)	5 (2.1)	6 (1.5)	8 (1.8)	12 (1.9)	10 (1.3)
		2	c c	c c	c c	c c	c c	22 (3.7)	17 (4.0)	17 (4.0)	17 (2.7)	20 (2.9)	19 (3.1)	20 (2.0)
		3	c c	c c	c c	c c	c c	48 (3.9)	46 (4.9)	46 (5.3)	46 (3.6)	46 (3.7)	45 (3.3)	46 (2.4)
		4/5	c c	c c	c c	c c	c c	22 (3.3)	32 (4.5)	32 (4.7)	32 (3.3)	26 (2.7)	24 (2.8)	25 (2.0)
	United States	0/1	c c	c c	c c	22 (5.1)	11 (3.7)	17 (3.0)	10 (3.5)	4 (1.9)	7 (2.0)	21 (2.9)	13 (2.3)	17 (1.8)
		2	c c	c c	c c	36 (5.3)	41 (5.9)	38 (3.7)	26 (5.3)	26 (3.7)	26 (3.4)	30 (3.5)	34 (3.1)	32 (2.3)
		3	c c	c c	c c	33 (4.8)	35 (6.0)	34 (3.6)	41 (5.7)	49 (4.7)	45 (3.7)	35 (2.9)	38 (3.1)	37 (2.2)
		4/5	c c	c c	c c	10 (3.2)	13 (3.2)	11 (2.5)	23 (4.3)	21 (4.1)	22 (2.9)	15 (2.2)	14 (2.2)	15 (1.6)
	Sub-national entities													
	Flanders (Belgium)	0/1	c c	c c	22 (3.9)	4 (1.6)	6 (1.9)	5 (1.3)	4 (1.9)	3 (1.8)	3 (1.3)	8 (1.7)	8 (1.5)	8 (1.1)
		2	c c	c c	36 (5.1)	28 (4.3)	27 (4.6)	27 (2.8)	12 (3.9)	13 (3.9)	13 (2.4)	24 (2.9)	23 (3.3)	24 (1.9)
		3	c c	c c	32 (5.5)	49 (5.1)	53 (4.6)	51 (3.4)	48 (7.0)	53 (6.6)	51 (4.1)	44 (4.1)	50 (3.5)	47 (2.5)
		4/5	c c	c c	11 (3.7)	19 (3.8)	14 (3.7)	17 (2.6)	36 (5.9)	31 (5.8)	33 (4.2)	24 (2.9)	20 (2.9)	22 (2.1)
	England (UK)	0/1	c c	c c	34 (5.9)	10 (3.0)	10 (2.7)	10 (2.2)	c c	6 (2.8)	6 (2.3)	12 (2.5)	13 (2.3)	13 (1.7)
		2	c c	c c	42 (8.2)	32 (4.9)	25 (4.0)	28 (3.3)	c c	21 (5.0)	19 (3.6)	28 (3.6)	27 (2.8)	27 (2.4)
		3	c c	c c	21 (5.1)	42 (5.4)	46 (4.9)	44 (3.8)	c c	48 (5.6)	44 (4.1)	39 (3.6)	42 (3.4)	40 (2.4)
		4/5	c c	c c	3 (2.0)	16 (4.1)	19 (3.6)	18 (2.8)	c c	25 (5.3)	31 (3.6)	21 (3.0)	18 (2.7)	20 (1.9)
	Northern Ireland (UK)	0/1	c c	c c	32 (5.5)	c c	12 (3.6)	11 (2.9)	c c	c c	4 (3.4)	13 (3.4)	15 (2.8)	14 (2.2)
		2	c c	c c	35 (6.0)	c c	34 (4.9)	31 (4.5)	c c	c c	24 (6.6)	29 (5.1)	32 (3.5)	31 (3.0)
		3	c c	c c	27 (5.8)	c c	42 (5.2)	43 (4.4)	c c	c c	50 (6.7)	41 (5.1)	40 (3.5)	41 (3.4)
		4/5	c c	c c	5 (3.3)	c c	12 (3.3)	15 (3.0)	c c	c c	21 (4.2)	16 (3.6)	12 (2.1)	14 (2.0)
	England/N. Ireland (UK)	0/1	c c	34 (6.6)	34 (5.6)	10 (2.9)	10 (2.6)	10 (2.1)	6 (3.3)	6 (2.8)	6 (2.3)	12 (2.4)	13 (2.2)	13 (1.7)
		2	c c	42 (6.5)	41 (7.7)	31 (4.7)	25 (3.9)	28 (3.2)	17 (5.0)	21 (4.8)	19 (3.6)	28 (3.5)	27 (2.7)	27 (2.3)
		3	c c	20 (5.6)	22 (4.8)	42 (5.2)	46 (4.7)	44 (3.7)	41 (7.0)	48 (5.5)	44 (4.0)	39 (3.5)	42 (3.3)	40 (2.4)
		4/5	c c	4 (2.4)	3 (1.9)	16 (4.0)	19 (3.4)	18 (2.7)	36 (5.8)	25 (5.2)	31 (3.6)	21 (2.9)	18 (2.6)	20 (1.9)
	Average	0/1	c c	c c	23 (1.0)	10 (0.7)	9 (0.6)	10 (0.5)	6 (0.7)	6 (0.7)	5 (0.4)	12 (0.4)	11 (0.4)	11 (0.3)
		2	c c	c c	37 (1.3)	31 (1.0)	31 (1.0)	30 (0.7)	20 (1.1)	20 (1.1)	19 (0.7)	28 (0.6)	28 (0.6)	28 (0.4)
		3	c c	c c	32 (1.2)	44 (1.1)	46 (1.1)	45 (0.8)	45 (1.5)	49 (1.5)	48 (0.9)	42 (0.7)	44 (0.7)	43 (0.5)
		4/5	c c	c c	8 (0.7)	15 (0.8)	14 (0.8)	15 (0.5)	29 (1.3)	26 (1.3)	27 (0.8)	18 (0.5)	17 (0.5)	17 (0.4)
Partners	Russian Federation*	0/1	c c	c c	c c	c c	14 (5.3)	17 (4.8)	c c	10 (2.7)	11 (2.4)	19 (3.8)	11 (3.1)	15 (2.7)
		2	c c	c c	c c	c c	37 (5.6)	37 (4.0)	c c	27 (5.3)	32 (4.6)	36 (4.5)	34 (3.8)	35 (3.3)
		3	c c	c c	c c	c c	38 (6.8)	38 (6.1)	c c	48 (4.8)	43 (4.3)	36 (5.2)	42 (4.1)	39 (3.9)
		4/5	c c	c c	c c	c c	11 (3.6)	9 (2.6)	c c	15 (3.7)	14 (4.0)	9 (3.1)	12 (2.5)	11 (2.3)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for other age breakdowns are available for consultation on line (see *StatLink* below)

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115597

A4

Table A4.4. Educational mobility among non-students, by age group and parents' educational attainment (2012)

25-34 year-olds, non-students whose educational attainment is lower than (downward mobility), higher than (upward mobility), or the same as (status quo) that of their parents

Reading the rows relating to 25-34 year-old women who are not students: in Denmark, 15% of these women have lower educational attainment than their parents, 33% have higher educational attainment than their parents, and the remainder have attained the same level of education as their parents – 5% have attained below upper secondary education, as their parents have, 11% have attained upper secondary or post-secondary non-tertiary education, as their parents have, and 35% have attained tertiary education, as their parents have.

			Downward mobility		Upward mobility		Status quo							
							Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		All levels of education	
			%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
			(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
OECD	**National entities**													
	Australia	Men	20	(2.2)	33	(2.7)	9	(1.7)	16	(2.0)	22	(1.9)	47	(2.8)
		Women	12	(1.5)	39	(2.7)	6	(1.3)	11	(1.4)	31	(2.2)	49	(2.6)
	Austria	Men	21	(1.9)	21	(2.0)	5	(0.9)	46	(2.6)	7	(1.0)	58	(2.6)
		Women	21	(2.2)	21	(1.9)	7	(1.0)	41	(2.3)	9	(1.0)	57	(2.5)
	Canada	Men	21	(1.6)	24	(2.0)	2	(0.6)	18	(1.8)	34	(1.9)	54	(2.1)
		Women	16	(1.4)	30	(1.8)	3	(0.7)	15	(1.3)	36	(1.8)	54	(2.0)
	Czech Republic	Men	14	(2.2)	10	(1.4)	1	(0.5)	63	(2.4)	12	(1.8)	76	(2.3)
		Women	9	(2.1)	25	(2.0)	1	(0.4)	50	(3.1)	15	(1.8)	66	(3.0)
	Denmark	Men	20	(2.4)	23	(2.0)	6	(1.5)	27	(2.7)	24	(2.2)	56	(2.9)
		Women	15	(2.2)	33	(2.2)	5	(1.2)	11	(1.7)	35	(2.4)	52	(2.3)
	Estonia	Men	35	(2.0)	17	(1.7)	3	(0.7)	25	(1.9)	21	(1.9)	48	(2.3)
		Women	18	(1.7)	30	(1.7)	3	(0.8)	19	(1.8)	29	(1.9)	51	(2.0)
	Finland	Men	20	(2.4)	33	(2.4)	2	(0.9)	31	(2.3)	14	(1.6)	47	(2.6)
		Women	10	(1.7)	46	(2.8)	c	c	21	(1.9)	22	(2.0)	44	(2.7)
	France	Men	14	(1.7)	34	(2.2)	7	(1.1)	26	(2.1)	19	(1.7)	52	(2.4)
		Women	7	(1.1)	46	(2.0)	8	(1.2)	20	(1.9)	19	(1.7)	47	(1.9)
	Germany	Men	26	(2.6)	20	(2.4)	2	(1.0)	34	(3.2)	18	(1.9)	54	(2.9)
		Women	22	(2.6)	18	(2.3)	2	(0.9)	34	(2.6)	24	(2.1)	60	(2.9)
	Ireland	Men	14	(1.4)	42	(2.6)	9	(1.3)	19	(2.1)	16	(1.6)	44	(2.6)
		Women	9	(1.5)	47	(2.0)	8	(1.1)	14	(1.6)	21	(1.4)	44	(1.9)
	Italy	Men	8	(2.0)	41	(2.9)	32	(3.2)	15	(1.9)	5	(1.3)	51	(3.1)
		Women	3	(1.3)	50	(2.9)	24	(2.6)	18	(2.4)	5	(1.4)	47	(3.0)
	Japan	Men	19	(2.0)	24	(2.5)	2	(1.0)	23	(1.9)	33	(2.5)	58	(2.8)
		Women	17	(2.0)	25	(1.9)	1	(0.6)	19	(2.0)	38	(2.3)	58	(2.4)
	Korea	Men	4	(0.9)	59	(2.2)	2	(0.6)	17	(1.7)	17	(1.7)	36	(2.3)
		Women	3	(0.7)	63	(2.2)	2	(0.6)	15	(1.7)	17	(1.6)	34	(2.2)
	Netherlands	Men	18	(2.1)	33	(3.2)	12	(2.2)	16	(2.4)	20	(2.4)	48	(3.1)
		Women	16	(2.1)	43	(2.8)	7	(1.4)	14	(1.9)	20	(2.2)	41	(2.8)
	Norway	Men	32	(2.4)	21	(1.9)	4	(1.3)	20	(2.0)	22	(2.2)	47	(2.9)
		Women	21	(2.4)	24	(2.1)	4	(1.0)	16	(2.2)	34	(2.3)	55	(3.2)
	Poland	Men	8	(1.3)	30	(2.4)	2	(0.7)	45	(2.1)	15	(1.8)	62	(2.5)
		Women	6	(1.3)	43	(2.5)	1	(0.4)	37	(2.1)	14	(1.5)	52	(2.4)
	Slovak Republic	Men	13	(1.3)	19	(2.0)	9	(1.1)	50	(2.1)	9	(1.1)	68	(2.1)
		Women	7	(1.0)	27	(2.4)	9	(1.3)	47	(2.4)	10	(1.7)	66	(2.5)
	Spain	Men	13	(1.6)	34	(2.3)	34	(2.3)	8	(1.5)	11	(1.4)	53	(2.5)
		Women	8	(1.2)	48	(2.5)	27	(2.1)	7	(1.4)	9	(1.4)	44	(2.3)
	Sweden	Men	36	(2.5)	19	(2.2)	4	(1.2)	19	(2.4)	22	(1.5)	44	(2.6)
		Women	20	(2.1)	30	(2.9)	6	(1.6)	17	(2.1)	27	(2.4)	50	(3.1)
	United States	Men	29	(2.3)	20	(2.4)	4	(1.5)	25	(2.3)	22	(1.9)	51	(2.7)
		Women	17	(2.6)	27	(2.3)	6	(1.1)	20	(1.9)	31	(2.3)	56	(3.0)
	Sub-national entities													
	Flanders (Belgium)	Men	18	(2.3)	30	(2.3)	3	(0.9)	27	(2.3)	22	(2.1)	52	(2.8)
		Women	9	(1.5)	39	(2.2)	4	(1.0)	19	(1.9)	29	(2.2)	52	(2.4)
	England (UK)	Men	16	(2.1)	31	(2.9)	6	(1.5)	18	(2.4)	28	(3.0)	52	(3.3)
		Women	16	(1.8)	34	(2.7)	6	(1.1)	20	(2.1)	24	(2.5)	50	(2.8)
	Northern Ireland (UK)	Men	15	(2.9)	35	(3.6)	12	(2.4)	21	(2.8)	16	(2.9)	50	(3.8)
		Women	11	(2.0)	37	(3.1)	9	(1.7)	25	(2.4)	18	(2.1)	52	(3.1)
	England/N. Ireland (UK)	Men	16	(2.0)	31	(2.8)	6	(1.5)	18	(2.3)	28	(3.0)	52	(3.2)
		Women	16	(1.8)	34	(2.6)	6	(1.0)	20	(2.0)	24	(2.4)	50	(2.7)
	Average	Men	19	(0.4)	28	(0.5)	7	(0.3)	27	(0.5)	19	(0.4)	53	(0.6)
		Women	13	(0.4)	36	(0.5)	7	(0.3)	22	(0.4)	23	(0.4)	51	(0.5)
Partners	Russian Federation*	Men	17	(3.8)	41	(6.2)	2	(1.2)	11	(1.8)	29	(4.3)	42	(5.1)
		Women	5	(1.3)	46	(2.7)	2	(0.8)	14	(1.8)	33	(2.4)	49	(3.4)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Rows showing data for both genders together (i.e. men plus women) and columns showing other age breakdowns are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

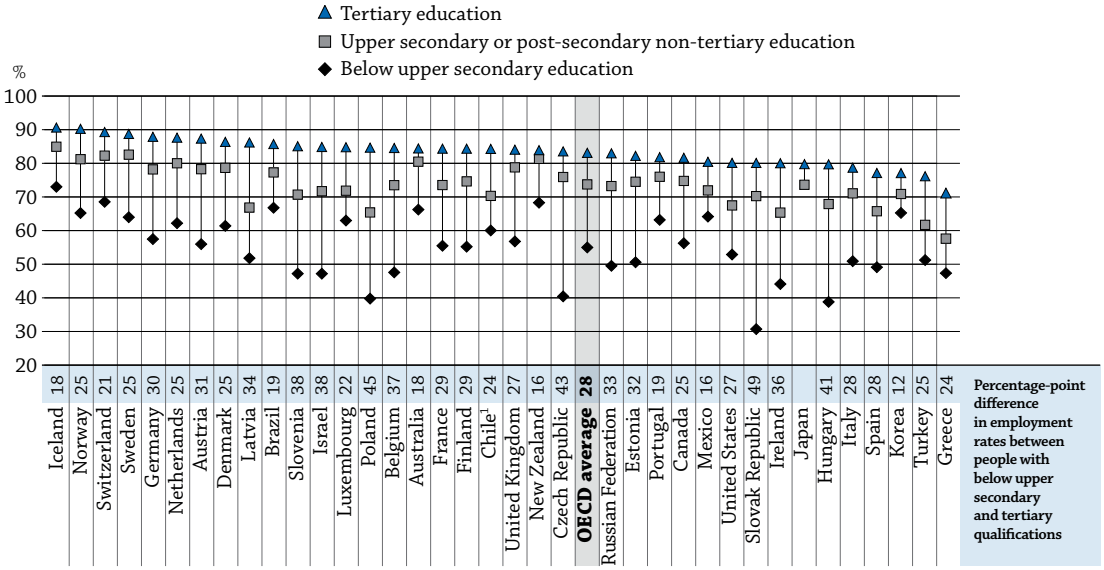
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115616

HOW DOES EDUCATIONAL ATTAINMENT AFFECT PARTICIPATION IN THE LABOUR MARKET?

- On average, over 80% of tertiary-educated people are employed compared with over 70% of people with an upper secondary or post-secondary non-tertiary education and less than 60% of people with below upper secondary education.
- Tertiary-educated younger adults have higher unemployment rates than tertiary-educated older adults: about 7% and 4%, respectively.
- Among employed adults, 74% of those with a tertiary degree work full time, compared with 71% of those with an upper secondary education. Some 64% of employed adults without an upper secondary education work full time.

Chart A5.1. Employment rates among 25-64 year-olds, by educational attainment (2012)



1. Year of reference 2011.

Countries are ranked in descending order of the employment rate of tertiary-educated 25-64 year-olds.

Source: OECD. Table A5.3a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115958

Context

The economies of OECD countries depend upon a sufficient supply of high-skilled workers. Educational qualifications are frequently used to measure human capital and the level of an individual's skills. In most OECD countries people with high qualifications have the highest employment rates. At the same time, people with the lowest educational qualifications are at greater risk of being unemployed. Given the technological advances that have been transforming the needs of the global labour market, people with higher or specific skills are in strong demand.

For the first time, this indicator draws from both the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), and the OECD data collections to show how well the supply of people with certain education qualifications and basic skills matches the demands of the labour market. While qualifications are used as a proxy for certain sets of skills that workers are expected to have, proficiency in basic skills, like literacy and numeracy, has been measured separately.

Even if these basic skills are generally acquired through schooling, they are not developed through formal education alone. Indeed, basic skills are well developed in education and maintained throughout a lifetime when they are used, notably in the workplace.

Still, as shown in Indicator A1, schooling does have a significant impact on individuals' proficiency in foundation skills: people with low levels of education tend to have lower scores in literacy or numeracy, as measured by the Survey of Adult Skills, than people with high levels of education. Thus, education qualifications and proficiency in certain skills are considered together in analysing labour market outcomes.

Other findings

- **On average across countries, 87% of people who perform at the highest levels of literacy proficiency – Level 4 or 5 – in the Survey of Adult Skills are employed**, 3.5% are unemployed and 10% are inactive in the labour market. In Estonia, Flanders (Belgium), Germany, the Netherlands, Norway and Sweden, 90% or more of high-skilled people are employed.
- In Austria, Belgium, the Czech Republic, Estonia, Germany, Hungary, Ireland, Israel, Poland, the Russian Federation, the Slovak Republic and Slovenia**, employment rates among tertiary-educated adults are at least 30 percentage points higher than the rates among adults with only below upper secondary education**.
- **Unemployment rates are generally lower among individuals with vocational upper secondary or post-secondary non-tertiary education (8%) than those for adults with a general upper secondary education (9%)**.

Trends

Data on employment and unemployment rates over time provide a basis for assessing the long-term trends and variations in labour-market risks among men and women with different levels of education and at different ages. Over the past 15 years, employment rates across OECD countries have been consistently higher for people with a tertiary education than for those without that level of education. Conversely, unemployment rates among lower-educated men and women have been higher than among those who have attained a tertiary education. Overall, younger adults struggle the most, and unemployment rates are highest among those who have only below upper secondary education; in 2012, about 20% of young adults in OECD countries were unemployed, the highest rate registered in more than a decade.

A5

Analysis

Labour market outcomes, by educational attainment, age group and gender

Employment, by educational attainment and age group

Skills are one of the major drivers of economic growth, and labour markets reward highly skilled workers (see Indicator A6). Thus, having a tertiary education increases the likelihood of being employed. As shown in Chart A5.1, this finding holds true across all OECD and G20 countries for which data are available. On average, over 80% of tertiary-educated people are employed compared with over 70% of people with an upper secondary or post-secondary non-tertiary education and less than 60% of people with below upper secondary education. In some countries, the gap in employment rates between people who hold a tertiary qualification and those whose highest qualification is below upper secondary education is large. In Austria, Belgium, the Czech Republic, Estonia, Germany, Hungary, Ireland, Israel, Poland, the Russian Federation, the Slovak Republic and Slovenia, for example, there is a difference in employment rates between these two groups of at least 30 percentage points (Table A5.3a).

There are also significant differences in employment rates between younger and older adults. Not only are younger adults attaining higher levels of education than older adults (see Indicator A1), they are also more likely to be employed. The proportion of 25-34 year-olds with upper secondary or post-secondary non-tertiary education who are employed is, on average, 20 percentage points larger than that of 55-64 year-olds who have attained the same level of education (75% and 55%, respectively). Some 60% of younger adults with below upper secondary education are employed compared to only about 40% of older adults with that same level of education; while among tertiary-educated adults, more than 80% of younger adults are employed compared to less than 70% of older adults (Table A5.3a).

The largest gap between age groups and educational attainment are seen in Austria, Luxembourg, the Russian Federation, Slovenia and Turkey. In Slovenia, for example, 80% of younger adults with upper secondary or post-secondary non-tertiary education are employed while only 30% of older adults with the same level of education are (Table A5.3a).

Employment, by gender

Across all OECD countries and education levels, gender differences in employment persist. Only 65% of women are employed compared with 80% of men. The gender gap in employment rates is the largest among those adults with the least education: the gap is around 20 percentage points between men and women with lower secondary education (68% for men and 48% for women); around 15 percentage points among men and women with an upper secondary education (80% for men and 64% for women at ISCED 3C (long programme)/3B level; 80% for men and 65% for women at ISCED 3A level); and around 10 percentage points between men and women with a tertiary education (86% for men and 76% for women at ISCED 5B level; 89% for men and 80% for women at ISCED 5A/6 level). Although the gap between men's and women's employment rates narrows as educational attainment increases, the employment rate among tertiary-educated women across OECD countries is still considerably lower than that of men – despite the fact that in 2012 a slightly higher proportion of women (34%) than men (31%) in OECD countries had a tertiary education (Table A5.1b, and see Table A1.1b, available on line).

The difference in employment rates between men and women with a tertiary-type A qualification or an advanced research degree is particularly large in the Czech Republic, Japan, Korea, Mexico and Turkey, where it exceeds 15 percentage points. In Iceland, Norway, Portugal and Sweden, the difference in employment rates between the genders is less than 3 percentage points (Table A5.1b).

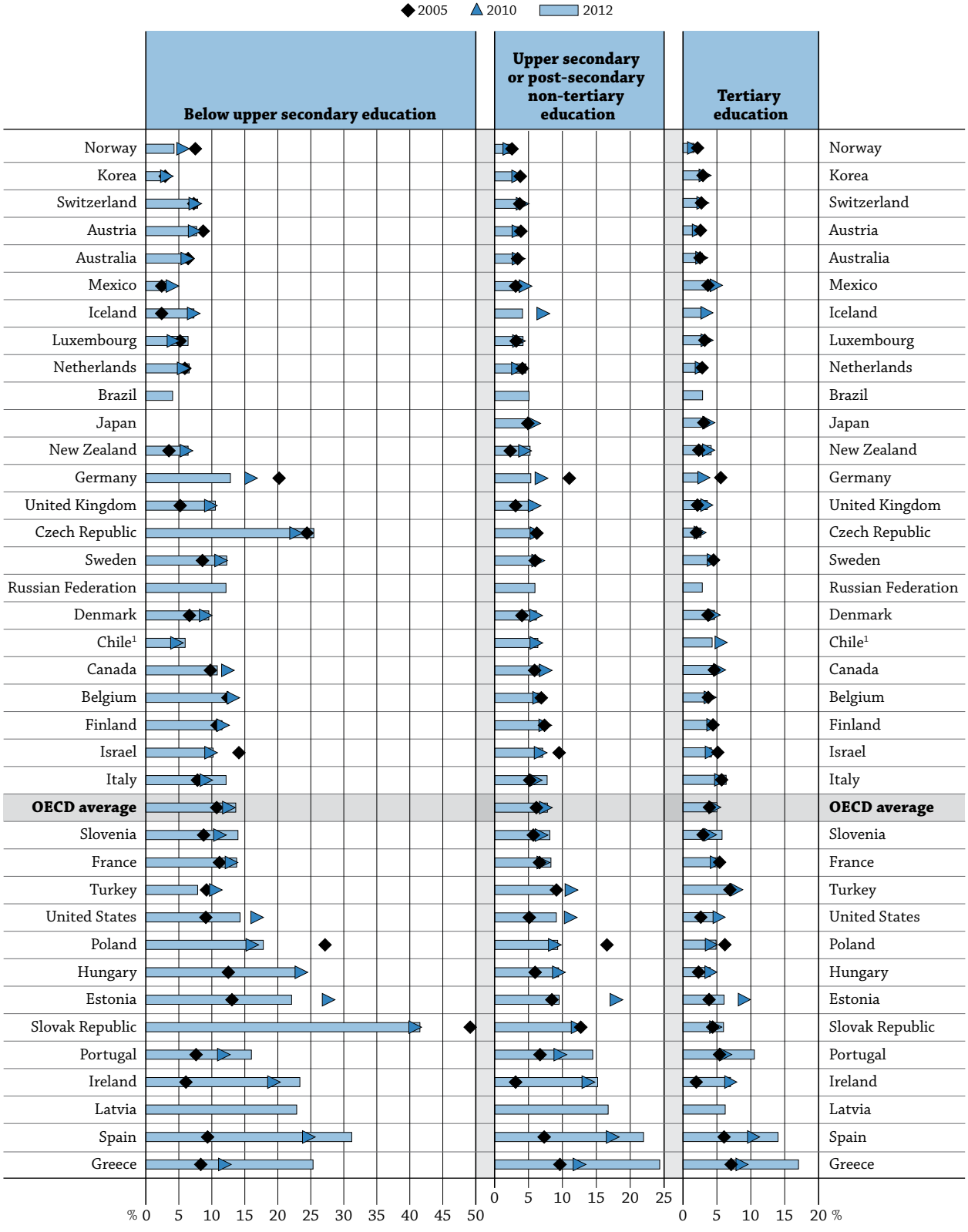
Unemployment, by educational attainment and age group

The risk of being unemployed is also closely related to educational attainment: those with higher educational attainment are less likely to be unemployed. As shown in Chart A5.2, across OECD countries, an average of 14% of adults with below upper secondary education were unemployed in 2012. This proportion remained largely unchanged between 2005 and 2012 (11% in 2005 and 14% in 2012). However, some countries reported significant changes. In Greece, Hungary, Ireland and Spain unemployment rates for people with low attainment increased considerably – by more than 10 percentage points – during this period. Between 2010 and 2012, unemployment rates dropped significantly in Canada, Estonia, Germany, Turkey and the United States (Table A5.4a).

Some 8% of adults who have attained upper secondary or post-secondary non-tertiary education were unemployed across OECD countries in 2012. Unemployment rates among adults with this level of education vary considerably by country, ranging from only 2% in Norway to about 24% in Greece. Across OECD countries, 5% of adults with a tertiary education were unemployed; only in Greece, Portugal and Spain did unemployment rates among tertiary-educated adults exceed 10% (Chart A5.2).

A5

Chart A5.2. Unemployment rates among 25-64 year-olds, by educational attainment (2005, 2010 and 2012)



1. Year of reference 2011.

Countries are ranked in ascending order of 2012 unemployment rates among 25-64 year-olds with upper secondary or post-secondary non-tertiary education.

Source: OECD. Table A5.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115977

In some countries, the difference in unemployment rates between adults with high and low levels of education is narrow or even inverted. In Brazil, Korea, Mexico and Turkey, for example, unemployment rates are higher among people with an upper secondary or post-secondary non-tertiary education than for people with below upper secondary education. In Mexico, unemployment rates among adults who do not have an upper secondary or post-secondary non-tertiary education are lower than those among tertiary-educated adults (Table A5.4a).

Unemployment seems to hit the younger generations hardest. Unemployment rates are higher among younger adults than among older adults at all levels of education. On average across OECD countries, about 10% of older adults who have not attained upper secondary education are unemployed compared with an unemployment rate of 20% among younger adults with a similar level of education. Similarly, 10% of younger adults with an upper secondary or post-secondary non-tertiary education are unemployed, compared to 7% of older adults with similar education. The gap between the two age groups is smallest among tertiary-educated adults: 7% of younger adults in this group are unemployed compared to 4% of older adults. This indicates the growing importance of attaining a tertiary education. The fact that younger adults have both higher unemployment rates and higher employment rates than older adults is closely related to the higher inactivity rates among older adults (Table A5.4a).

Unemployment, by gender

Gender differences in unemployment rates are, on average, less pronounced than they are in employment rates. Among adults with below upper secondary education, unemployment rates are very similar for women and men (13% for women and 14% for men). Among adults who have an upper secondary or post-secondary non-tertiary education, unemployment rates are higher among women than among men (9% for women and 7% for men). This is true, too, among tertiary-educated adults, where the unemployment rate is about 5% among both women and men (Tables A5.4b and c, available on line).

Gender differences in unemployment rates are particularly large in Greece and Turkey. For instance, in Turkey, 11% of tertiary-educated women were unemployed in 2012 compared to only 6% of tertiary-educated men (in Greece, 20% and 14%, respectively). These differences were even more pronounced among adults with upper secondary education: 17% of women were unemployed compared with 7% of men (in Greece, 30% and 21%, respectively) (Tables A5.4b and c, available on line).

Unemployment, by field of education at the tertiary level

Even if tertiary-educated workers have lower unemployment rates compared to workers with less than tertiary education, this does not mean that all tertiary-educated individuals enjoy this advantage, or that the lower unemployment rates are consistently observed for graduates from all types of tertiary programmes. In the United States and other countries, a considerable range of employment outcomes has been observed for workers who completed ISCED 5A first degrees in various tertiary programmes. For example, in the United States, the earnings data for 25-29 year-olds show relatively high earnings for graduates in engineering and computer fields, and lower earnings for graduates in education and social services.

However, the US unemployment rate data did not show consistently low unemployment rates that might be associated with high-demand, highly paid fields of study. For example, the unemployment rate among graduates from the high-paying field of computer and information systems (5%) was higher than the unemployment rates among graduates of the relatively low-paying secondary teaching programmes (2%), which had one of the lowest unemployment figures of any programme. Moreover, a study of 2005 tertiary graduates in Canada found that the 2007 unemployment rates for ISCED 5A graduates ranged from 3% for those in agriculture, health, and engineering, to 8% for those in education. These findings illustrate the complexity and diversity in outcomes for tertiary graduates entering the labour force (see Box A5.1 in OECD, 2013a).

Labour force status, by programme orientation (vocational or general)

The International Standard Classification of Education (ISCED-97) defines vocational education and training (VET) as "education which is mainly designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade or class of occupations or trades. Successful completion of such programmes leads to a labour-market relevant vocational qualification recognised by the competent authorities in the country in which it is obtained" (UNESCO, 1997).

Vocational education and training is generally geared towards students with upper secondary or post-secondary non-tertiary education. In some countries, reforms have it made easier for VET graduates to directly access tertiary education; in others, VET programmes are also offered at the tertiary level.

In some systems, school-based learning is widely combined with workplace learning. Examples of this type of "dual system" can be found in Austria, Germany, Luxembourg, the Netherlands and Switzerland. One of the strengths of this practice is that it forms a series of public-private partnerships, allowing social partners and employers to get involved in the development of VET programmes, often including the definition of curricular frameworks. In many of these systems, employers invest significantly in VET programmes by financing apprenticeships, assuming the costs of instructors, materials and/or equipment.

Among other positive effects, combining school-based and workplace learning in an integrated formal education supports the incorporation of VET students into the labour market. Research has shown that VET can yield good economic returns on public investment, and some countries with strong VET systems, like Germany, have been relatively successful in tackling the problem of youth unemployment (CEDEFOP, 2011).

Across OECD countries for which data are available, 75% of individuals with a vocational upper secondary or post-secondary non-tertiary qualification are employed – a rate that is 5 percentage points higher than that among individuals with a general upper secondary education as their highest qualification.

Unemployment rates are generally lower among individuals with vocational upper secondary or post-secondary non-tertiary education: 8% on average compared with 9% among adults with a general upper secondary education. In Denmark and Slovenia, unemployment rates among individuals with vocational upper secondary or post-secondary non-tertiary education are at least 3 percentage points lower than those of individuals with a general upper secondary or post-secondary non-tertiary degree. The opposite pattern is observed in Greece and Ireland (Table A5.5a).

A potential drawback is that the skills that individuals acquire through VET might be of limited use in a rapidly changing labour market. Likewise, VET graduates usually face other disadvantages. As shown in Indicator A1, people with upper secondary VET qualifications generally have lower levels of literacy proficiency, as measured in the Survey of Adult Skills, than people with general upper secondary education. This is not surprising, given that the survey measures skills that are emphasised more in general programmes than in VET programmes, while VET-specific skills are not measured. Yet this finding signals the importance of fostering information-processing skills, like literacy and numeracy, to increase the adaptability of VET graduates in the labour market (OECD, 2013b).

Full-time earners among tertiary-educated adults

Not only does the likelihood of being employed rise with educational attainment, so does the likelihood of being employed full time. Across OECD countries, 70% of earners at all education levels work full time. Among employed adults, 71% of those with upper secondary education work full time, compared with 74% of those with a tertiary degree. Some 64% of those with below upper secondary education are employed full time (Table A5.6). The definition of full time varies among countries: in some countries the term is defined by the respondent; in others, there is an official minimum number of hours. The minimum number of hours ranges from 30 hours per week in the Czech Republic, Greece and New Zealand, to 44 hours per week in Chile. For further information on the specific definitions, see the *Definitions* section in Indicator A6 and Annex 3 (*www.oecd.org/edu/eag.htm*).

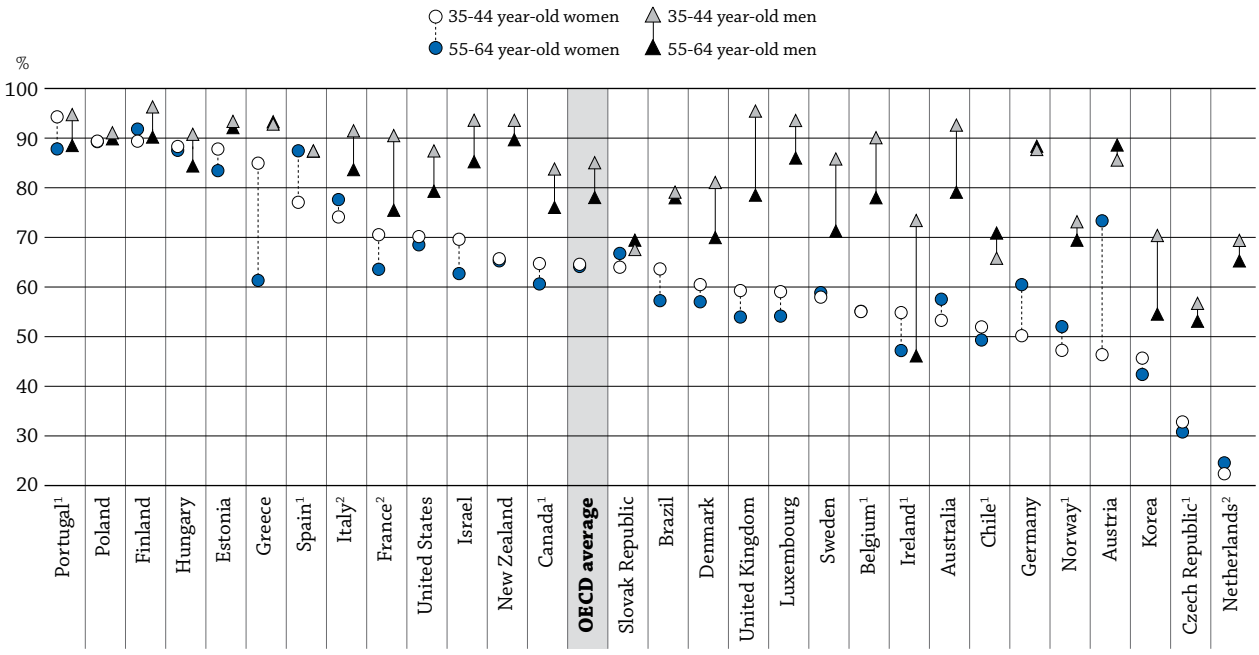
In most OECD countries, the share of 35-44 year-old men who work full time is considerably larger than the share of 55-64 year-old men who do so. No such pattern is evident among women. In fact, the share of 55-64 year-old women working full time is similar to that of 35-44 year-old women with the same educational attainment, at each level of education (Table A5.6).

Chart A5.3 shows the proportion of full-time earners among tertiary-educated men and women aged 35-44 and 55-64. The length of the black lines indicates the difference in the share of men from the two age groups who work full time; the length of the dashed lines indicates the difference in the share of women from the two age groups who work full time.

Many women aged 35-44 have young children and often work part time. In Austria, Germany and Spain, for example, the share of tertiary-educated older women who work full time is significantly larger than the share of tertiary-educated younger women who do. In other countries, like France, Greece, Ireland, Israel, Luxembourg, Portugal and the United Kingdom, a larger share of younger women than older women works full time. The difference between the two age groups in the share of women who work full time is minimal in Belgium, the Czech Republic, Finland, Hungary, the Netherlands, New Zealand, Poland, Sweden and the United States. Still, in all OECD countries, the proportion of tertiary-educated women who work full time is considerably smaller than the share of men with the same level of education who do, although in Estonia, Finland, Hungary, Poland and Portugal, more than 80% of tertiary-educated women and men of both age groups work full time (Table A5.6).

Chart A5.3. Tertiary-educated workers, by gender and age group (2012)

Percentage of full-time, full-year earners



1. Year of reference 2011.
2. Year of reference 2010.

Countries are ranked in descending order of the proportion of full-time earners among tertiary-educated 35-44 year-old women.

Source: OECD. Table A5.6. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933115996

Moreover, students and parents of young children typically have to choose between working part time or not working at all. As shown in Indicator A6, an average of 10% of tertiary-educated adults (tertiary-type A or advanced research programmes) do not have earnings from employment, and this proportion is higher among women (12%) than among men (7%) (see Indicator A6, Table A6.4, available on line).

Labour market outcomes and literacy and numeracy skills

Assessing the relationship between individuals' skills and their labour force status is one of the central objectives of the Survey of Adult Skills (OECD, 2013c). Nevertheless, even if literacy, numeracy and problem-solving competencies – the skills that are explicitly tested in the survey – are important elements of people's overall skills set, they represent only some of the abilities that workers bring to the workplace (OECD, 2013b).

On average across countries, 87% of people who perform at Level 4 or 5 in literacy, the highest levels, as measured by the Survey of Adult Skills, are employed, 3.5% are unemployed and 10% are inactive. In Estonia, Flanders (Belgium), Germany, the Netherlands, Norway and Sweden, 90% of high-skilled people are employed (Table A5.9a [L]).

Employment and literacy skills

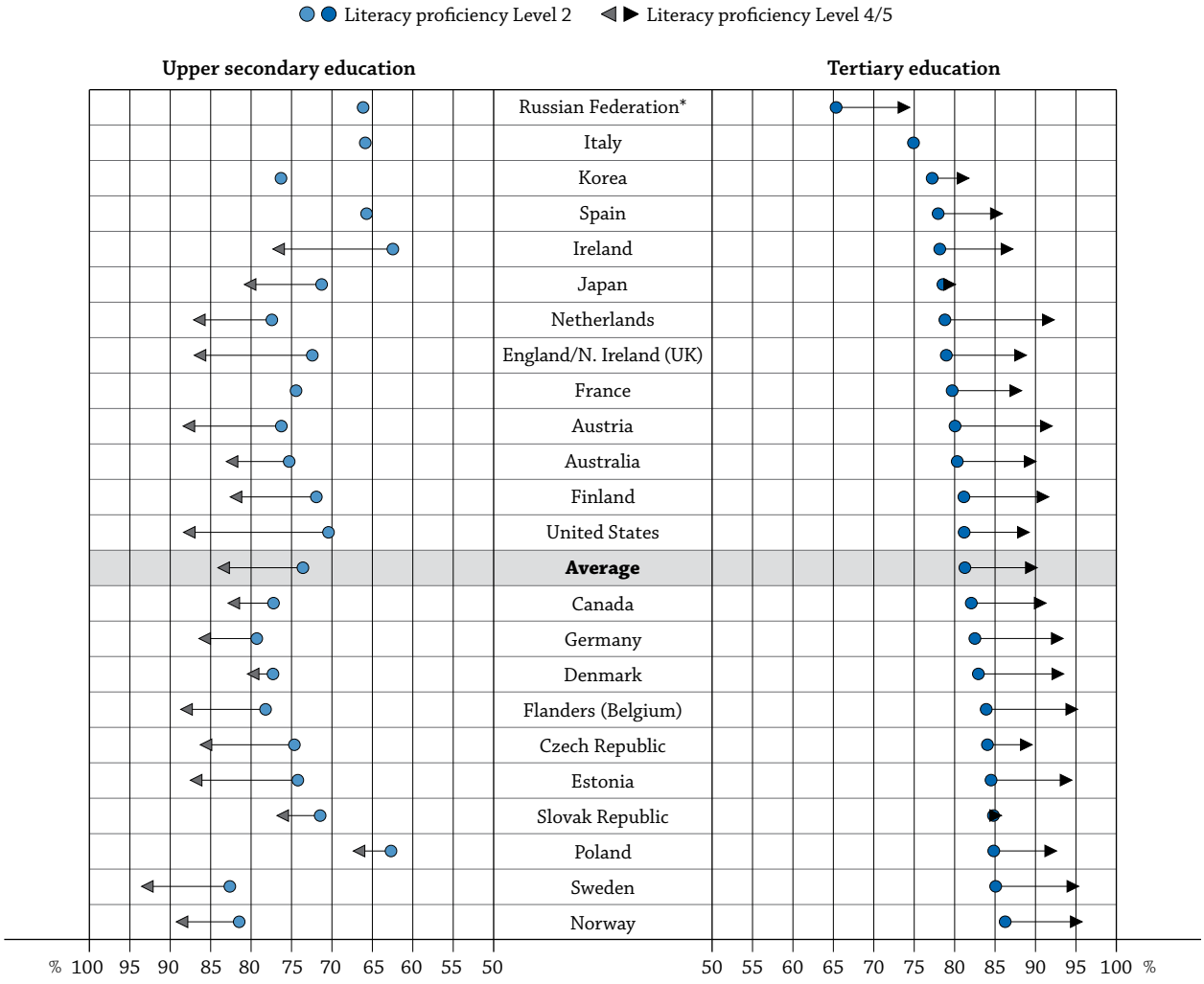
As shown in Chart A5.4, higher proficiency levels (triangles) are associated with higher employment rates in almost all countries where information is available. This is as true among people with tertiary education as among those with upper secondary qualifications (Table A5.7a [L]).

As shown in Indicator A1, the proportion of people who hold an upper secondary qualification and perform at literacy proficiency Level 4 or 5 in the Survey of Adult Skills is very small (below 5% in France, Italy, Korea, Poland and Spain). Among tertiary-educated adults, these proportions are larger than 10% on average (see Indicator A1).

This analysis indicates that the labour market rewards people with high levels of proficiency in literacy, which is generally associated with the attainment of higher levels of formal education – even in countries like Australia, Finland, Japan, the Netherlands and Sweden, where about one in three adults with a tertiary education performs at Level 4 or 5 in literacy (see Table A1.6a [L]).

Chart A5.4. Employed adults at literacy proficiency Level 2 or Level 4/5, by educational attainment (2012)

Survey of Adult Skills, percentage of 25-64 year-olds



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in ascending order of the proportion of employed adults with tertiary education who score at literacy proficiency Level 2.

Source: OECD. Table A5.7a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116015

Chart A5.4 also shows that in Austria, Finland, Flanders (Belgium) and Sweden, employment rates are more than 10 percentage points higher among individuals scoring at literacy proficiency Level 4 or 5 in the Survey of Adult Skills than among those scoring at Level 2, regardless of their educational attainment. However, labour markets in different countries seem to give different weight to qualifications and skills. In some contexts, educational qualifications have more of an impact on employment than skills proficiency does. For example, among tertiary-educated adults in Japan, Korea and the Slovak Republic, or among adults with upper secondary or post-secondary non-tertiary education (including VET qualifications) in Denmark and Poland, differences in employment rates related to literacy proficiency levels are very small (Table A5.7a [L]).

Unemployment and inactivity, and literacy skills

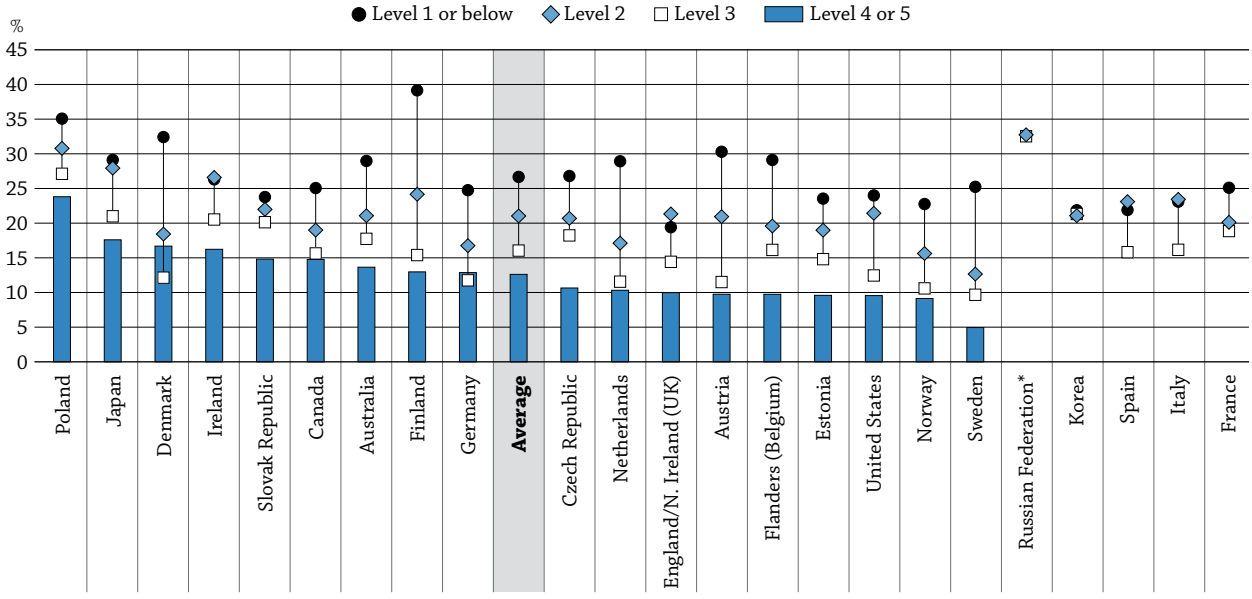
Overall, there is a relatively large pool of skilled individuals who are either unemployed or inactive. There may be several reasons for this. While some unemployed individuals may have scores in literacy, numeracy and problem solving in technology-rich environments that are similar to those of employed individuals, they may lack other key skills needed to get a job, such as job-specific skills or generic skills frequently required at work.

Some inactivity might be voluntary and/or temporary, such as among young people who are still engaged in full-time education or people taking care of family members. At the same time, to the extent that literacy is a proxy for a more comprehensive set of competencies, the relatively high proficiency found among unemployed individuals is important for labour market policy. Mismatches between people's skills and the skill requirements of jobs, in addition to various institutional constraints, are likely to be preventing skilled people from engaging in employment or looking for work (OECD, 2013b).

Across OECD countries, 20% of adults who have upper secondary or post-secondary non-tertiary education as their highest level of attainment, regardless of the orientation of the programme, were inactive and some 8% were unemployed in 2012 (Table A5.5a). Data show that the lower the level of skills proficiency, the higher the unemployment and inactivity rates. However, as shown in Chart A5.5, in most countries there is a large pool of skilled adults that is not being tapped. This is shown in the large proportions of inactive people with high levels of proficiency, particularly people who have already completed compulsory education and who hold an upper secondary or post-secondary non-tertiary qualification. In Denmark, Ireland, Japan and Poland, more than 15% of adults with an upper secondary qualification and who perform at Level 4 or 5 in literacy are inactive (Table A5.7a [L]).

Chart A5.5. Inactive adults with lower than tertiary education, by literacy proficiency level (2012)

Survey of Adult Skills, percentage of 25-64 year-olds with upper secondary or post-secondary non-tertiary education as the highest level of attainment



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in descending order of the percentage of adults with upper secondary education and who perform at literacy proficiency Level 4 or 5 who are inactive.

Source: OECD. Table A5.7a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116034

Definitions

Active population (labour force) is the total number of employed and unemployed persons, in accordance with the definition in the Labour Force Survey.

Age groups: Adults refers to 25-64 year-olds; **younger adults** refers to 25-34 year-olds; and **older adults** refers to 55-64 year-olds. The **working-age population** is the total population aged 25-64.

Employed individuals are those who, during the survey reference week: *i)* work for pay (employees) or profit (self-employed and unpaid family workers) for at least one hour; or *ii)* have a job but are temporarily not at work (through injury, illness, holiday, strike or lock-out, educational or training leave, maternity or parental leave, etc.).

The **employment rate** refers to the number of persons in employment as a percentage of the working-age population (the number of employed people is divided by the number of all working-age people). Employment rates by gender, age, educational attainment, programme orientation and age groups are calculated within each of these categories; for example the employment rate among women is calculated by dividing the number of employed women by the total number of working-age women.

Full-time basis refers to people who have worked all year long and at least 30 hours per week. The length of the reference period varies from one week to one year. Self-employed people are excluded in some countries. Data for Table A5.10 are taken from the Survey of Adult Skills. A person is considered to be working full time if the working hours per week are equal to or greater than 30. For national definitions of full-time employment, see the *Methodology* section in Indicator A6 and Annex 3 (*www.oecd.org/edu/eag.htm*).

Inactive individuals are those who are, during the survey reference week, neither employed nor unemployed, i.e. individuals who are not looking for a job. The number of inactive individuals is calculated by subtracting the number of active people (labour force) from the number of all working-age people.

The **inactive rate** refers to inactive persons as a percentage of the population (i.e. the number of inactive people is divided by the number of all working-age people). Inactive rates by gender, age, educational attainment, programme orientation and age groups are calculated within each of these categories; for example, the inactive rate among individuals with a tertiary education degree is calculated by dividing the number of inactive individuals with tertiary education by the total number of working-age people with tertiary education.

Levels of education: Below upper secondary education level corresponds to ISCED levels 0, 1, 2 and 3C short programmes. **Upper secondary or post-secondary non-tertiary** education level corresponds to ISCED levels 3C long programmes, and levels 3B, 3A and 4. **Tertiary education** corresponds to ISCED levels 5B, 5A and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

The **unemployment rate** refers to unemployed persons as a percentage of the labour force (i.e. the number of unemployed people is divided by the sum of employed and unemployed people). Unemployment rates by gender, age, educational attainment, programme orientation and age groups are calculated within each of these categories; for example, the unemployment rate among women is calculated by dividing the number of unemployed women by the total number of women who are active in the labour force.

Unemployed individuals are those who are, during the survey reference week, without work (i.e. neither had a job nor were at work for one hour or more in paid employment or self-employment), actively seeking employment (i.e. had taken specific steps during the four weeks prior to the reference week to seek paid employment or self-employment), and currently available to start work (i.e. were available for paid employment or self-employment before the end of the two weeks following the reference week).

Methodology

Data on population, educational attainment and labour-market status for most countries are taken from OECD and Eurostat databases, which are compiled from National Labour Force Surveys by the OECD LSO (Labour Market and Social Outcomes of Learning) Network. Data on educational attainment for Argentina, China, Colombia, Indonesia, Saudi Arabia and South Africa are taken from the UNESCO Institute of Statistics (UIS) database on educational attainment of the population aged 25 and older. Data on earnings are taken from a special data collection carried out by the OECD LSO Network on the earnings of those working full time and full year. For national definitions of full-time employment, see the *Methodology* section in Indicator A6. Data on proficiency levels and mean scores are based on the Survey of Adult Skills (PIAAC) (2012). PIAAC is the OECD Programme for the International Assessment of Adult Competencies. See *About the Survey of Adult Skills* at the beginning of this publication and Annex 3 (*www.oecd.org/edu/eag.htm*) for additional information.

Note regarding data from Israel

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

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, forthcoming).

References

European Centre for the Development of Vocational Training (CEDEFOP) (2011), *The Benefits of Vocational Education and Training*, Publications Office of the European Union, Luxembourg.

OECD (2013a), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2013-en*.

OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204256-en*.

OECD (2013c), *The Survey of Adult Skills: Reader's Companion*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204027-en*.

UNESCO (1997), "International Standard Classification of Education: ISCED 1997", *www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm*.

Tables of Indicator A5

StatLink http://dx.doi.org/10.1787/888933115711

	Table A5.1a	Employment rates, by educational attainment (2012)
	Table A5.1b	Employment rates, by educational attainment and gender (2012)
	Table A5.2a	Unemployment rates, by educational attainment (2012)
	Table A5.2b	Unemployment rates, by educational attainment and gender (2012)
	Table A5.3a	Trends in employment rates, by educational attainment and age group (2000, 2005-12)
WEB	Table A5.3b	Trends in employment rates among men, by educational attainment and age group (2000, 2005-12)
WEB	Table A5.3c	Trends in employment rates among women, by educational attainment and age group (2000, 2005-12)
	Table A5.4a	Trends in unemployment rates, by educational attainment and age group (2000, 2005-12)
WEB	Table A5.4b	Trends in unemployment rates among men, by educational attainment and age group (2000, 2005-12)
WEB	Table A5.4c	Trends in unemployment rates among women, by educational attainment and age group (2000, 2005-12)
	Table A5.5a	Distribution of adults with upper secondary or post-secondary non-tertiary education, by labour market status and programme orientation (2012)
WEB	Table A5.5b	Distribution of adults by labour market status, educational attainment, programme orientation and gender (2012)
WEB	Table A5.5c	Distribution of adults by labour market status, educational attainment, programme orientation and age (2012)
	Table A5.6	Percentage of full-time, full-year earners among all earners, by educational attainment and age group (2012)
	Table A5.7a (L)	Labour market status, by educational attainment and literacy proficiency level (2012)
WEB	Table A5.7a (N)	Labour market status, by educational attainment and numeracy proficiency level (2012)
WEB	Table A5.7b (L)	Labour market status, by educational attainment, literacy proficiency level and gender (2012)
WEB	Table A5.7b (N)	Labour market status, by educational attainment, numeracy proficiency level and gender (2012)
WEB	Table A5.7c (L)	Labour market status, by educational attainment, literacy proficiency level and age group (2012)
WEB	Table A5.7c (N)	Labour market status, by educational attainment, numeracy proficiency level and age group (2012)

...

	Table A5.8 (L)	Mean literacy score among adults with upper secondary or post-secondary non-tertiary education, by labour market status and programme orientation (2012)
WEB	Table A5.8 (N)	Mean numeracy score among adults with upper secondary or post-secondary non-tertiary education, by labour market status and programme orientation (2012)
	Table A5.9a (L)	Distribution of the adult population by literacy proficiency levels and labour market status (2012)
WEB	Table A5.9a (N)	Distribution of the adult population by numeracy proficiency levels and labour market status (2012)
WEB	Table A5.9b (L)	Mean literacy score, by educational attainment and labour market status (2012)
WEB	Table A5.9b (N)	Mean numeracy score, by educational attainment and labour market status (2012)
	Table A5.10a (L)	Distribution of people working full time/part time by literacy proficiency level and age group (2012)
WEB	Table A5.10a (N)	Distribution of people working full time/part time by numeracy proficiency level and age group (2012)
WEB	Table A5.10b (L)	Distribution of people working full time/part time by literacy proficiency level, age group and gender (2012)
WEB	Table A5.10b (N)	Distribution of people working full time/part time by numeracy proficiency level, age group and gender (2012)

A5

Table A5.1a. Employment rates, by educational attainment (2012)

Percentage of employed 25-64 year-olds among all 25-64 year-olds

		Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A or advanced research programmes	All levels of education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	52	71	a	83	76	86	82	86	79
	Austria	x(2)	55	67	77	76	84	85	89	76
	Belgium	36	56	a	71	74	82	84	85	70
	Canada	44	61	a	x(5)	73	79	81	83	76
	Chile[1]	52	66	a	x(5)	70	a	80	86	68
	Czech Republic	c	41	a	73	79	x(5)	x(8)	84	75
	Denmark	47	61	74	80	74	c	85	87	78
	Estonia	28r	52	a	73	75	76	78	84	75
	Finland	41	63	a	a	74	92	82	85	76
	France	42	63	a	73	74	c	85	84	72
	Germany	48	60	a	78	62	84	88	88	78
	Greece	43	55	x(4)	64	55	60	66	74	58
	Hungary	14	41	a	66	70	71	79	80	65
	Iceland	72	76	77	88	76	91	87	91	83
	Ireland	32	51	60	x(5)	66	65	75	83	66
	Israel	39	60	a	78	70	a	81	87	74
	Italy	29	57	62	69	71	73	71	79	64
	Japan	x(5)	x(5)	x(5)	x(5)	74	a	74	85	76
	Korea	61	68	a	x(5)	71	a	75	78	72
	Luxembourg	62	61	68	69	73	76	80	87	75
	Mexico	61	69	a	66	74	a	78	81	69
	Netherlands	51	67	x(4)	77	83	81	80	88	78
	New Zealand	x(2)	65	77	77	81	88	81	86	79
	Norway	c	66	a	82	78	86	93	90	82
	Poland	x(2)	40	a	62	69	69	x(8)	85	67
	Portugal	59	72	x(5)	x(5)	76	67	x(8)	82	69
	Slovak Republic	c	32	x(4)	65	75	x(5)	76	80	69
	Slovenia	18	50	a	68	73	a	82	88	71
	Spain	37	56	a	66	66	67	73	79	62
	Sweden	48	70	a	x(5)	83	83	85	90	82
	Switzerland	66	69	69	83	75	86	92	88	83
	Turkey	49	60	a	65	59	a	x(8)	76	57
	United Kingdom	c	44	66	79	78	a	82	85	76
	United States	55	52	x(5)	x(5)	67	x(5)	76	82	71
	OECD average	46	59	m	73	73	78	81	84	73
	EU21 average	40	55	m	71	73	75	80	84	72
Partners	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	65	72	x(5)	x(5)	77	a	x(8)	86	73
	China	m	m	m	m	m	m	m	m	m
	Colombia	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m
	Latvia	24	53	x(4)	66	66	x(4)	92	86	71
	Russian Federation	26	53	x(4)	78	69	x(4)	79	87	77
	Saudi Arabia	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

1. Year of reference 2011.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115730

A5

Table A5.1b. [1/2] Employment rates, by educational attainment and gender (2012)

Percentage of employed 25-64 year-olds among all 25-64 year-olds

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A or advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	Men	67	81	a	88	86	92	90	91	87
		Women	39	62	a	71	68	80	76	81	71
	Austria	Men	x(2)	63	86	81	81	88	88	92	82
		Women	x(2)	50	60	72	72	81	81	85	71
	Belgium	Men	46	65	a	78	80	88	86	88	76
		Women	27	46	a	64	67	74	82	83	64
	Canada	Men	54	68	a	x(5)	79	82	84	86	80
		Women	34	50	a	x(5)	67	73	78	80	72
	Chile[1]	Men	77	88	a	x(5)	86	a	90	92	86
		Women	33	45	a	x(5)	56	a	72	81	53
	Czech Republic	Men	c	51	a	81	89	x(5)	x(8)	91	84
		Women	c	36	a	62	71	x(5)	x(8)	76	66
	Denmark	Men	51[r]	67	74	82	78	c	88	90	81
		Women	45	54	74	76	69	c	81	85	74
	Estonia	Men	c	57	a	76	81	83	79	90	78
		Women	c	45	a	67	69	72	78	81	72
	Finland	Men	43	68	a	a	77	92	81	89	77
		Women	40	56	a	a	71	91	83	82	74
	France	Men	49	71	a	77	79	c	89	87	77
		Women	36	56	a	68	71	c	82	81	67
	Germany	Men	60	70	a	83	67	87	91	92	84
		Women	38	54	a	73	56	82	84	84	73
	Greece	Men	56	68	x(4)	70	69	71	71	78	68
		Women	31	40	x(4)	47	44	51	60	69	47
	Hungary	Men	22	50	a	70	77	80	90	86	72
		Women	c	34	a	57	65	61	75	75	59
	Iceland	Men	77	80	c	90	80	91	91	92	87
		Women	67	73	66	82	74	91	86	90	80
	Ireland	Men	39	61	66	x(5)	73	71	81	86	71
		Women	25	38	55	x(5)	58	59	71	80	61
	Israel	Men	56	72	a	84	75	a	88	90	80
		Women	24	42	a	68	65	a	75	84	69
	Italy	Men	47	71	76	80	80	82	81	84	75
		Women	16	41	55	58	62	68	64	75	53
	Japan	Men	x(5)	x(5)	x(5)	x(5)	85	a	92	92	88
		Women	x(5)	x(5)	x(5)	x(5)	62	a	67	69	64
	Korea	Men	71	81	a	x(5)	84	a	91	90	86
		Women	56	59	a	x(5)	57	a	60	62	59
	Luxembourg	Men	68	76	77	79	80	78	87	91	83
		Women	57	49	60	58	68	74	74	82	67
	Mexico	Men	87	91	a	90	91	a	89	88	89
		Women	41	49	a	58	55	a	73	72	51
	Netherlands	Men	64	78	x(4)	82	87	85	84	90	84
		Women	40	56	x(4)	72	79	76	76	86	72
	New Zealand	Men	x(2)	74	86	84	88	91	88	90	86
		Women	x(2)	56	71	71	75	74	76	82	73
	Norway	Men	c	70	a	86	83	88	94	91	85
		Women	c	61	a	77	73	82	91	89	79

1. Year of reference 2011.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115749

A5

Table A5.1b. [2/2] Employment rates, by educational attainment and gender (2012)

Percentage of employed 25-64 year-olds among all 25-64 year-olds

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A or advanced research programmes	All levels of education
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Poland	Men	x(2)	50	a	70	80	81	x(8)	89	75
		Women	x(2)	30	a	50	58	64	x(8)	82	60
	Portugal	Men	66	76	x(5)	x(5)	78	67	x(8)	82	73
		Women	51	68	x(5)	x(5)	74	68	x(8)	82	66
	Slovak Republic	Men	c	38	x(4)	73	85	x(5)	79	86	77
		Women	c	28	x(4)	54	67	x(5)	75	76	61
	Slovenia	Men	22	59	a	72	77	a	84	90	75
		Women	14	41	a	61	69	a	80	86	67
	Spain	Men	45	63	a	72	71	c	78	82	68
		Women	29	48	a	60	60	c	67	76	56
	Sweden	Men	58	77	a	x(5)	86	86	86	91	85
		Women	38	60	a	x(5)	79	78	83	90	80
	Switzerland	Men	76	78	77	90	78	90	95	93	90
		Women	58	62	67	76	73	83	87	82	76
	Turkey	Men	74	79	a	83	79	a	x(8)	84	78
		Women	27	25	a	32	30	a	x(8)	65	33
	United Kingdom	Men	c	54	76	84	83	a	88	89	82
		Women	c	35	59	73	73	a	76	80	70
	United States	Men	68	60	x(5)	x(5)	73	x(5)	79	87	77
		Women	40	42	x(5)	x(5)	62	x(5)	73	77	66
	OECD average	Men	58	68	m	80	80	84	86	89	80
		Women	38	48	m	64	65	74	76	80	65
	EU21 average	Men	51	64	m	78	79	82	85	88	78
		Women	36	47	m	64	67	72	77	81	66
Partners	Argentina		m	m	m	m	m	m	m	m	m
	Brazil	Men	82	87	x(5)	x(5)	89	a	x(8)	92	86
		Women	48	57	x(5)	x(5)	67	a	x(8)	81	60
	China		m	m	m	m	m	m	m	m	m
	Colombia		m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m
	Latvia	Men	34	60	x(4)	63	71	x(4)	94	87	73
		Women	c	42	x(4)	72	61	x(4)	91	85	69
	Russian Federation	Men	c	61	x(4)	83	77	x(4)	86	91	83
		Women	c	43	x(4)	71	60	x(4)	75	83	72
	Saudi Arabia		m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m

1. Year of reference 2011.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115749

Table A5.2a. Unemployment rates, by educational attainment (2012)

Percentage of unemployed 25-64 year-olds among 25-64 year-olds in the labour force

		Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education: ISCED 3C (long programme)/ 3B	Upper secondary education: ISCED 3A	Post-secondary non-tertiary education	Tertiary education: Type B	Tertiary education: Type A or advanced research programmes	All levels of education
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	8.5	5.7	a	3.7	3.9	3.3	3.3	2.7	3.9
OECD	Austria	x(2)	8.2	c	3.4	4.7	3.1	c	2.6	3.7
OECD	Belgium	14.6	10.8	a	7.7	6.4	5.7r	3.0	3.8	6.5
OECD	Canada	12.6	10.4	a	x(5)	6.7	6.3	5.2	4.8	6.1
OECD	Chile[1]	5.9	6.0	a	x(5)	6.4	a	4.6	4.2	5.8
OECD	Czech Republic	c	25.5	a	7.3	4.0	x(5)	x(8)	2.6	6.1
OECD	Denmark	c	9.8	c	5.8	8.4	c	5.1	4.6	6.2
OECD	Estonia	c	21.6	a	11.9	8.6	8.9	8.6	4.8	9.1
OECD	Finland	10.9	11.8	a	a	7.2	c	3.8	4.0	6.2
OECD	France	14.6	13.4	a	8.3	8.2	c	4.8	5.2	8.4
OECD	Germany	16.7	11.8	a	5.5	7.0	3.7	2.0	2.6	5.2
OECD	Greece	24.9	26.0	x(4)	25.9	23.0	26.9	21.1	15.1	22.4
OECD	Hungary	44.5	21.9	a	11.3	7.6	9.6	c	3.9	9.7
OECD	Iceland	8.0	c	c	4.4	c	c	c	2.9	4.5
OECD	Ireland	26.4	22.4	19.1	x(5)	13.5	17.8	9.1	5.8	13.1
OECD	Israel	11.0	9.3	a	6.6	7.2	a	4.9	3.9	5.9
OECD	Italy	16.2	11.5	14.4	7.6	7.7	10.9	9.2	6.3	9.0
OECD	Japan	x(5)	x(5)	x(5)	x(5)	5.1	a	3.7	2.8	4.2
OECD	Korea	2.4	2.7	a	x(5)	3.0	a	3.2	2.7	2.9
OECD	Luxembourg	7.5r	4.9r	7.1r	5.1	3.8	c	3.4r	3.4	4.2
OECD	Mexico	3.3	3.8	a	2.8	4.4	a	3.7	4.6	3.8
OECD	Netherlands	7.7	6.2	x(4)	4.8	4.3	3.7	5.0	2.9	4.4
OECD	New Zealand	m	7.2	4.5	7.6	4.3	3.2	6.0	3.1	5.0
OECD	Norway	c	4.1	a	2.0	2.9	c	c	1.7	2.3
OECD	Poland	m	17.8	a	10.9	7.8	9.5	x(8)	4.9	8.6
OECD	Portugal	16.1	15.8	x(5)	x(5)	14.2	24.4	x(8)	10.5	14.5
OECD	Slovak Republic	2.0	40.9	x(4)	15.2	8.8	a	c	6.1	12.2
OECD	Slovenia	30.5r	13.4	a	8.5	7.9	a	6.4	5.3	8.1
OECD	Spain	35.8	29.3	a	22.8	21.5	c	17.6	12.5	22.8
OECD	Sweden	19.8	10.0	a	m	5.6	6.3	5.0	3.7	5.8
OECD	Switzerland	7.2	8.1	7.5r	3.2	5.4	2.7	2.0	3.0	3.6
OECD	Turkey	7.3	9.8	a	7.6	9.6	a	x(8)	7.5	7.9
OECD	United Kingdom	c	13.7	8.9	5.7	5.1	a	3.6	3.6	5.6
OECD	United States	11.2	16.2	x(5)	x(5)	9.1	x(5)	6.5	4.1	7.4
	OECD average	14.6	13.4	m	8.2	7.7	9.1	6.0	4.8	7.5
	EU21 average	19.2	16.5	m	9.9	8.8	10.9	7.2	5.4	9.1
Partners	Argentina	m	m	m	m	m	m	m	m	m
Partners	Brazil	3.7	4.9	x(5)	x(5)	5.1	a	x(8)	2.9	4.2
Partners	China	m	m	m	m	m	m	m	m	m
Partners	Colombia	m	m	m	m	m	m	m	m	m
Partners	India	m	m	m	m	m	m	m	m	m
Partners	Indonesia	m	m	m	m	m	m	m	m	m
Partners	Latvia	42.1	22.2	x(4)	14.9	17.5	x(4)	c	6.4	13.9
Partners	Russian Federation	c	11.7	x(4)	5.1	6.8	x(4)	3.4	2.3	4.4
Partners	Saudi Arabia	m	m	m	m	m	m	m	m	m
Partners	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

1. Year of reference 2011.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115768

A5

Table A5.2b. [1/2] Unemployment rates, by educational attainment and gender (2012)

Percentage of unemployed 25-64 year-olds among 25-64 year-olds in the labour force

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A or advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	Men	7.7	5.8	a	3.5	3.3	2.0[r]	2.7	2.4	3.5
		Women	9.8	5.6	a	4.3	4.6	4.7	3.9	3.0	4.2
	Austria	Men	x(2)	10.0	c	3.5	4.3[r]	3.5	c	2.3	3.7
		Women	x(2)	6.8	c	3.4	5.0[r]	2.7	c	3.0	3.7
	Belgium	Men	15.0	10.3	a	7.6	5.5	c	3.1	3.9	6.5
		Women	13.8	11.7	a	7.9	7.6	c	3.0	3.7	6.4
	Canada	Men	12.0	10.4	a	x(5)	6.9	6.3	5.4	4.9	6.3
		Women	13.4	10.2	a	x(5)	6.5	6.4	5.0	4.7	5.8
	Chile[1]	Men	4.9	4.5	a	x(5)	4.8	a	4.7	4.2	4.7
		Women	7.8	8.5	a	x(5)	8.4	a	4.4	4.1	7.3
	Czech Republic	Men	n	26.8	a	5.7	2.9	x(5)	x(8)	2.3	4.9
		Women	c	24.5	a	10.3	5.1	x(5)	x(8)	3.1	7.5
	Denmark	Men	c	10.0	c	5.8	7.6	c	4.0[r]	4.3	6.3
		Women	c	9.6	c	5.8	9.4	n	6.5	4.7	6.1
	Estonia	Men	c	23.3	a	11.2	8.3	8.7[r]	9.5	4.0	9.7
		Women	c	18.2	a	13.2	9.0	9.0[r]	8.0	5.4	8.6
	Finland	Men	10.4	10.9	a	a	7.6	c	5.7	4.0	6.9
		Women	11.5[r]	13.4	a	a	6.5	c	2.6	3.9	5.5
	France	Men	14.6	13.1	a	7.6	8.0	c	4.8	5.1	8.2
		Women	14.7	13.8	a	9.3	8.3	c	4.9	5.3	8.6
	Germany	Men	17.8	13.4	a	5.8	7.2	4.3	1.8	2.4	5.4
		Women	15.0	10.4	a	5.3	6.7	3.1	2.1	2.9	5.0
	Greece	Men	25.3	22.9	x(4)	22.1	19.5	21.9	17.7	12.5	19.9
		Women	24.2	31.8	x(4)	39.0	27.3	31.9	25.1	17.9	25.7
	Hungary	Men	c	21.9	a	11.0	7.9	c	c	3.9	10.0
		Women	c	22.0	a	11.9	7.3	13.5	c	3.9	9.4
	Iceland	Men	7.7	c	n	c	c	c	c	3.8	4.7
		Women	c	c	c	c	c	c	c	2.2	4.3
	Ireland	Men	31.6	25.2	23.1	x(5)	16.1	20.1	10.2	6.3	16.0
		Women	14.4	15.8	c	x(5)	10.0	14.5	8.2	5.4	9.4
	Israel	Men	11.5	8.9	a	6.0	6.9	a	4.2	3.8	5.9
		Women	10.1	10.2	a	7.9	7.6	a	5.6	4.0	5.9
	Italy	Men	16.0	10.3	13.2	6.3	6.7	8.8	8.9	5.2	8.3
		Women	16.8	13.8	15.2	9.1	9.0	12.4	9.5	7.2	10.1
	Japan	Men	x(5)	x(5)	x(5)	x(5)	5.5	a	4.2	2.9	4.4
		Women	x(5)	x(5)	x(5)	x(5)	4.5	a	3.4	2.7	3.9
	Korea	Men	3.8	3.3	a	x(5)	3.4	a	3.2	2.7	3.2
		Women	1.3	2.1	a	x(5)	2.5	a	3.1	2.7	2.5
	Luxembourg	Men	8.3[r]	c	c	3.1[r]	3.4[r]	c	3.3[r]	2.8[r]	3.6
		Women	6.6[r]	8.1[r]	c	8.2[r]	4.2[r]	c	3.4[r]	4.2[r]	5.0
	Mexico	Men	3.5	3.4	a	2.4	4.2	a	3.7	4.6	3.8
		Women	3.0	4.4	a	3.0	4.7	a	3.7	4.7	3.9
	Netherlands	Men	8.6	6.2	x(4)	5.1	4.5	3.3[r]	4.7	3.0	4.6
		Women	6.5	6.1	x(4)	4.5	4.2	4.1[r]	5.2	2.7	4.1
	New Zealand	Men	x(2)	6.8	4.6	7.1	4.5	3.1	5.4	2.9	4.7
		Women	x(2)	7.8	4.4	8.0	4.1	4.3	6.4	3.3	5.5
	Norway	Men	c	4.4	a	2.2	c	c	n	2.3	2.6
		Women	n	3.9	a	c	c	c	c	1.2	1.9

1. Year of reference 2011.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115787

A5

Table A5.2b. [2/2] Unemployment rates, by educational attainment and gender (2012)

Percentage of unemployed 25-64 year-olds among 25-64 year-olds in the labour force

			Pre-primary and primary education	Lower secondary education	ISCED 3C (short programme)	Upper secondary education		Post-secondary non-tertiary education	Tertiary education		All levels of education
						ISCED 3C (long programme)/ 3B	ISCED 3A		Type B	Type A or advanced research programmes	
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Poland	Men	x(2)	17.2	a	9.9	6.1	8.1	x(8)	4.3	8.0
		Women	x(2)	18.7	a	12.9	9.8	10.2	x(8)	5.3	9.3
	Portugal	Men	17.0	15.2	x(5)	x(5)	12.6	c	x(8)	10.8	14.8
		Women	14.9	16.6	x(5)	x(5)	15.8	c	x(8)	10.3	14.3
	Slovak Republic	Men	c	43.6	x(4)	13.9	7.3	a	c	5.3	11.4
		Women	c	38.4	x(4)	17.8	10.3	a	c	6.9	13.2
	Slovenia	Men	32.6	13.1	a	7.5	7.5	a	5.1	3.9	7.5
		Women	26.4	13.8	a	10.8	8.3	a	7.3	6.3	8.7
	Spain	Men	36.0	28.4	a	21.4	20.2	c	15.3	11.2	22.5
		Women	35.7	30.5	a	24.2	23.0	c	20.9	13.5	23.2
	Sweden	Men	18.5	9.4	a	x(5)	5.6	5.8	5.9	4.2	6.0
		Women	21.4	11.3	a	x(5)	5.7	7.1	4.3	3.4	5.5
	Switzerland	Men	5.6[r]	8.2	11.1[r]	3.1	6.2[r]	2.8[r]	1.9	2.6	3.3
		Women	8.7[r]	8.1	6.1[r]	3.3	4.8[r]	2.6[r]	2.2[r]	3.8	4.0
	Turkey	Men	7.8	8.7	a	5.6	7.4	a	x(8)	5.6	7.3
		Women	6.3	15.7	a	16.0	16.9	a	x(8)	10.8	9.8
	United Kingdom	Men	c	14.3	9.2	5.6	5.1	a	3.2	3.7	5.6
		Women	c	12.9	8.6	5.9	5.0	a	3.9	3.5	5.5
	United States	Men	10.2	15.8	x(5)	x(5)	9.7	x(5)	6.9	4.3	8.0
		Women	12.9	16.7	x(5)	x(5)	8.4	x(5)	6.1	3.8	6.8
	OECD average	Men	13.6	13.7	m	7.6	7.4	7.6	5.6	4.5	7.0
		Women	12.8	13.8	m	10.5	8.5	8.4	6.3	5.1	7.2
	EU21 average	Men	17.1	16.8	m	8.7	8.2	8.7	6.6	4.9	8.8
		Women	16.5	16.2	m	11.3	9.2	9.3	7.3	5.7	9.0
Partners	Argentina		m	m	m	m	m	m	m	m	m
	Brazil	Men	2.8	3.4	x(5)	x(5)	3.4	a	x(8)	2.2	3.0
		Women	5.3	7.1	x(5)	x(5)	7.0	a	x(8)	3.5	5.8
	China		m	m	m	m	m	m	m	m	m
	Colombia		m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m
	Latvia	Men	c	19.2	x(4)	17.9	17.4	x(4)	c	7.4	15.0
		Women	c	28.6	x(4)	c	17.6	x(4)	c	5.8	12.8
	Russian Federation	Men	c	12.2	x(4)	5.0	6.6	x(4)	3.6	2.4	4.7
		Women	c	11.0	x(4)	5.2	7.1	x(4)	3.3	2.3	4.1
	Saudi Arabia		m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m

1. Year of reference 2011.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115787

A5

Table A5.3a. [1/2] Trends in employment rates, by educational attainment and age group (2000, 2005-12)

Percentage of employed 25-64 year-olds/25-34 year-olds/55-64 year-olds among all 25-64 year-olds/25-34 year-olds/55-64 year-olds

		Educational attainment	Employment rates of 25-64 year-olds				Employment rates of 25-34 year-olds				Employment rates of 55-64 year-olds			
			2000	2005	2010	2012	2000	2005	2010	2012	2000	2005	2010	2012
			(1)	(2)	(7)	(9)	(11)	(12)	(17)	(19)	(41)	(42)	(47)	(49)
OECD	Australia	Below upper secondary	61	63	65	**66**	64	64	61	**62**	39	46	53	**56**
		Upper secondary or post-secondary non-tertiary	77	80	80	**80**	80	81	78	**81**	53	62	71	**72**
		Tertiary	83	84	84	**84**	84	85	85	**84**	65	69	75	**76**
	Austria	Below upper secondary	54	53	56	**56**	70	61	61	**65**	19	24	31	**30**
		Upper secondary or post-secondary non-tertiary	75	74	78	**78**	84	84	84	**86**	29	31	41	**42**
		Tertiary	87	85	86	**87**	92	87	87	**89**	59	54	64	**67**
	Belgium	Below upper secondary	51	49	49	**48**	64	57	56	**54**	19	21	26	**26**
		Upper secondary or post-secondary non-tertiary	75	74	74	**73**	84	81	80	**78**	31	38	41	**44**
		Tertiary	85	84	84	**85**	92	90	89	**89**	46	49	53	**57**
	Canada	Below upper secondary	55	56	55	**56**	60	62	58	**59**	37	41	43	**44**
		Upper secondary or post-secondary non-tertiary	76	76	74	**75**	79	80	77	**79**	52	57	58	**60**
		Tertiary	83	82	81	**82**	86	85	84	**84**	57	62	65	**65**
	Chile	Below upper secondary	m	m	62	**m**	m	m	59	**m**	m	m	55	**m**
		Upper secondary or post-secondary non-tertiary	m	m	72	**m**	m	m	74	**m**	m	m	59	**m**
		Tertiary	m	m	79	**m**	m	m	75	**m**	m	m	74	**m**
	Czech Republic	Below upper secondary	47	41	43	**40**	51	43	47	**43**	17	20	26	**27**
		Upper secondary or post-secondary non-tertiary	76	75	74	**76**	77	78	76	**77**	39	47	46	**49**
		Tertiary	87	86	83	**84**	83	81	77	**75**	66	69	71	**76**
	Denmark	Below upper secondary	62	62	63	**61**	70	64	65	**62**	41	42	46	**47**
		Upper secondary or post-secondary non-tertiary	81	80	79	**79**	85	83	82	**79**	57	61	59	**63**
		Tertiary	88	86	86	**86**	88	87	86	**85**	73	73	71	**73**
	Estonia[1]	Below upper secondary	42	50	45	**51**	53	60	51	**57**	24	36	30	**34**
		Upper secondary or post-secondary non-tertiary	70	74	69	**75**	74	77	70	**77**	46	53	54	**58**
		Tertiary	83	84	80	**82**	85	84	81	**79**	62	74	66	**73**
	Finland	Below upper secondary	60	58	55	**55**	69	63	59	**56**	33	43	44	**44**
		Upper secondary or post-secondary non-tertiary	75	75	74	**75**	76	77	76	**76**	42	53	55	**58**
		Tertiary	84	84	84	**84**	84	86	84	**83**	60	66	70	**70**
	France	Below upper secondary	56	59	55	**55**	61	63	57	**56**	24	32	32	**36**
		Upper secondary or post-secondary non-tertiary	75	76	74	**74**	80	80	79	**77**	31	40	41	**45**
		Tertiary	83	83	84	**84**	85	86	87	**86**	50	56	55	**61**
	Germany	Below upper secondary	51	52	55	**57**	60	52	55	**56**	26	32	40	**44**
		Upper secondary or post-secondary non-tertiary	70	71	76	**78**	79	74	78	**81**	37	43	56	**60**
		Tertiary	83	83	87	**88**	89	85	88	**89**	58	63	73	**75**
	Greece	Below upper secondary	58	59	57	**47**	67	72	64	**51**	39	39	40	**33**
		Upper secondary or post-secondary non-tertiary	65	69	67	**58**	69	73	71	**58**	31	38	37	**33**
		Tertiary	81	82	80	**71**	79	79	77	**65**	50	59	57	**50**
	Hungary	Below upper secondary	36	38	38	**39**	50	49	40	**43**	12	16	20	**21**
		Upper secondary or post-secondary non-tertiary	72	70	66	**68**	75	75	71	**72**	29	39	35	**38**
		Tertiary	82	83	79	**80**	83	83	79	**79**	52	60	54	**57**
	Iceland	Below upper secondary	89	83	76	**73**	89	81	68	**72**	83	82	75	**70**
		Upper secondary or post-secondary non-tertiary	89	88	82	**85**	82	81	71	**77**	89	86	82	**84**
		Tertiary	97	92	89	**91**	96	92	86	**87**	92	89	88	**89**
	Ireland	Below upper secondary	56	58	48	**44**	68	64	44	**40**	39	45	41	**38**
		Upper secondary or post-secondary non-tertiary	77	77	66	**65**	85	83	67	**65**	48	56	55	**56**
		Tertiary	88	87	81	**80**	91	89	83	**83**	67	70	66	**61**
	Israel	Below upper secondary	m	41	45	**47**	m	43	45	**50**	m	32	38	**41**
		Upper secondary or post-secondary non-tertiary	m	67	70	**72**	m	65	68	**70**	m	52	62	**65**
		Tertiary	m	80	82	**85**	m	80	82	**86**	m	68	71	**73**
	Italy	Below upper secondary	49	52	50	**51**	60	65	57	**56**	23	24	26	**29**
		Upper secondary or post-secondary non-tertiary	71	74	73	**71**	68	72	69	**67**	40	44	48	**51**
		Tertiary	82	80	78	**79**	73	69	67	**67**	58	67	67	**70**
	Japan	Below upper secondary	67	m	m	**m**	70	m	m	**m**	59	m	m	**m**
		Upper secondary or post-secondary non-tertiary	74	72	73	**74**	74	76	76	**76**	61	62	64	**63**
		Tertiary	79	79	80	**80**	78	78	81	**81**	72	72	70	**70**
	Korea	Below upper secondary	68	66	65	**65**	65	62	57	**59**	59	58	59	**61**
		Upper secondary or post-secondary non-tertiary	69	70	71	**71**	64	64	64	**63**	53	59	62	**64**
		Tertiary	75	77	76	**77**	74	74	74	**75**	57	61	64	**68**
	Luxembourg	Below upper secondary	58	62	62	**63**	78	79	78	**78**	15	22	25	**29**
		Upper secondary or post-secondary non-tertiary	73	72	72	**72**	85	82	83	**80**	32	30	35	**35**
		Tertiary	84	84	85	**85**	83	87	87	**87**	65	60	67	**65**
	Mexico	Below upper secondary	61	62	63	**64**	63	63	63	**65**	51	52	53	**54**
		Upper secondary or post-secondary non-tertiary	71	71	72	**72**	71	71	73	**72**	48	46	50	**53**
		Tertiary	82	82	81	**80**	80	79	80	**79**	69	68	67	**66**
	Netherlands	Below upper secondary	58	60	61	**62**	73	70	70	**69**	27	35	42	**47**
		Upper secondary or post-secondary non-tertiary	79	78	80	**80**	88	86	87	**85**	43	49	57	**60**
		Tertiary	86	86	87	**88**	94	92	92	**91**	54	62	68	**73**

Note: Columns showing additional years and additional age groups are available for consultation on line (see *StatLink* below).

1. Figures for 2012 for Estonia and Slovenia in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115806

A5

Table A5.3a. [2/2] Trends in employment rates, by educational attainment and age group (2000, 2005-12)

Percentage of employed 25-64 year-olds/25-34 year-olds/55-64 year-olds among all 25-64 year-olds/25-34 year-olds/55-64 year-olds

		Educational attainment	Employment rates of 25-64 year-olds				Employment rates of 25-34 year-olds				Employment rates of 55-64 year-olds			
			2000	2005	2010	2012	2000	2005	2010	2012	2000	2005	2010	2012
			(1)	(2)	(7)	(9)	(11)	(12)	(17)	(19)	(41)	(42)	(47)	(49)
OECD	New Zealand	Below upper secondary	65	70	68	**68**	63	68	64	**63**	49	61	64	**65**
		Upper secondary or post-secondary non-tertiary	80	84	82	**81**	78	82	77	**77**	65	75	78	**80**
		Tertiary	82	84	84	**84**	82	81	81	**82**	67	78	82	**81**
	Norway[2]	Below upper secondary	65	64	64	**65**	67	66	64	**67**	53	48	51	**53**
		Upper secondary or post-secondary non-tertiary	83	82	82	**81**	84	84	85	**82**	68	70	68	**69**
		Tertiary	90	89	90	**90**	87	86	89	**89**	86	85	84	**85**
	Poland	Below upper secondary	43	38	40	**40**	50	45	49	**47**	24	21	22	**24**
		Upper secondary or post-secondary non-tertiary	67	62	65	**65**	71	68	74	**73**	28	28	34	**38**
		Tertiary	85	83	85	**85**	87	83	86	**84**	51	55	56	**62**
	Portugal	Below upper secondary	73	71	68	**63**	83	81	75	**71**	50	50	48	**44**
		Upper secondary or post-secondary non-tertiary	83	79	80	**76**	83	78	80	**75**	51	48	51	**52**
		Tertiary	91	87	85	**82**	91	87	85	**78**	69	61	58	**62**
	Slovak Republic	Below upper secondary	31	26	30	**31**	29	16	21	**30**	7	9	21	**20**
		Upper secondary or post-secondary non-tertiary	71	71	70	**70**	72	73	72	**72**	27	34	41	**43**
		Tertiary	86	84	82	**80**	83	84	78	**75**	54	54	66	**65**
	Slovenia[1]	Below upper secondary	53	56	51	**47**	75	70	60	**52**	20	27	28	**25**
		Upper secondary or post-secondary non-tertiary	74	75	73	**71**	86	84	81	**80**	18	27	32	**30**
		Tertiary	86	87	87	**85**	92	91	88	**84**	48	51	57	**55**
	Spain	Below upper secondary	54	59	53	**49**	65	71	58	**53**	33	38	36	**36**
		Upper secondary or post-secondary non-tertiary	72	75	69	**66**	73	77	68	**63**	51	51	53	**53**
		Tertiary	80	82	80	**77**	75	81	78	**73**	64	65	64	**65**
	Sweden	Below upper secondary	68	66	63	**64**	67	65	60	**59**	56	59	60	**61**
		Upper secondary or post-secondary non-tertiary	82	81	81	**83**	83	81	80	**80**	66	69	70	**73**
		Tertiary	87	87	88	**89**	82	84	85	**86**	79	83	81	**83**
	Switzerland	Below upper secondary	64	65	69	**69**	68	68	70	**69**	47	51	54	**54**
		Upper secondary or post-secondary non-tertiary	81	80	81	**82**	84	83	84	**84**	66	65	67	**70**
		Tertiary	90	90	88	**89**	91	91	87	**89**	78	79	79	**81**
	Turkey	Below upper secondary	53	47	49	**51**	55	49	51	**54**	38	30	31	**34**
		Upper secondary or post-secondary non-tertiary	64	62	60	**62**	67	64	64	**65**	20	24	24	**27**
		Tertiary	78	75	76	**76**	83	79	77	**77**	37	34	38	**40**
	United Kingdom	Below upper secondary	65	65	56	**57**	66	64	56	**56**	51	56	44	**44**
		Upper secondary or post-secondary non-tertiary	81	82	78	**79**	83	81	79	**80**	65	69	63	**65**
		Tertiary	88	88	84	**84**	91	90	87	**86**	66	72	65	**66**
	United States	Below upper secondary	58	57	52	**53**	64	62	55	**56**	40	39	40	**39**
		Upper secondary or post-secondary non-tertiary	77	73	68	**67**	80	74	68	**68**	58	58	57	**57**
		Tertiary	85	82	80	**80**	87	83	82	**82**	70	72	70	**71**
	OECD average	Below upper secondary	57	57	56	**55**	64	61	58	**57**	36	38	41	**41**
		Upper secondary or post-secondary non-tertiary	75	75	74	**74**	78	77	75	**75**	46	50	53	**55**
		Tertiary	85	84	83	**83**	85	84	83	**82**	63	66	67	**68**
	OECD average for countries with data available for all reference years	Below upper secondary	57	57	56	**55**	64	62	58	**57**	35	39	40	**41**
		Upper secondary or post-secondary non-tertiary	75	75	74	**74**	78	78	76	**75**	46	50	52	**54**
		Tertiary education	85	84	83	**83**	86	85	83	**82**	62	65	67	**68**
	EU21 average	Below upper secondary	53	54	52	**51**	63	61	56	**55**	29	33	35	**35**
		Upper secondary or post-secondary non-tertiary	74	74	73	**73**	79	78	77	**75**	40	45	48	**50**
		Tertiary education	85	85	84	**83**	86	85	83	**82**	60	63	64	**66**
Partners	Argentina		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Brazil	Below upper secondary	m	m	m	**67**	m	m	m	**71**	m	m	m	**50**
		Upper secondary or post-secondary non-tertiary	m	m	m	**77**	m	m	m	**79**	m	m	m	**55**
		Tertiary education	m	m	m	**86**	m	m	m	**89**	m	m	m	**65**
	China		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Colombia		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	India		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Indonesia		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Latvia	Below upper secondary	m	m	m	**52**	m	m	m	**56**	m	m	m	**33**
		Upper secondary or post-secondary non-tertiary	m	m	m	**67**	m	m	m	**72**	m	m	m	**50**
		Tertiary education	m	m	m	**86**	m	m	m	**87**	m	m	m	**73**
	Russian Federation	Below upper secondary	m	m	m	**50**	m	m	m	**59**	m	m	m	**28**
		Upper secondary or post-secondary non-tertiary	m	m	m	**73**	m	m	m	**80**	m	m	m	**44**
		Tertiary education	m	m	m	**83**	m	m	m	**89**	m	m	m	**53**
	Saudi Arabia		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	South Africa		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	G20 average	Below upper secondary	m	m	m	**m**	m	m	m	**m**	m	m	m	**m**

Note: Columns showing additional years and additional age groups are available for consultation on line (see *StatLink* below).

1. Figures for 2012 for Estonia and Slovenia in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115806

A5

Table A5.4a. [1/2] Trends in unemployment rates, by educational attainment and age group (2000, 2005-12)

Percentage of unemployed 25-64 year-olds/25-34 year-olds/55-64 year-olds among 25-64 year-olds/25-34 year-olds/55-64 year-olds in the labour force

		Educational attainment	Unemployment rates of 25-64 year-olds				Unemployment rates of 25-34 year-olds				Unemployment rates of 55-64 year-olds			
			2000	2005	2010	2012	2000	2005	2010	2012	2000	2005	2010	2012
			(1)	(2)	(7)	(9)	(11)	(12)	(17)	(19)	(41)	(42)	(47)	(49)
OECD	Australia	Below upper secondary	7.5	6.3	6.2	**6.2**	11.4	12.3	14.3	**10.6**	4.9	3.7	3.8	**3.9**
		Upper secondary or post-secondary non-tertiary	4.5	3.4	3.6	**3.7**	5.3	4.0	5.0	**4.1**	4.1	3.4	2.5	**3.3**
		Tertiary	3.6	2.5	2.8	**2.8**	3.8	2.8	3.1	**3.7**	3.5	2.6	1.8	**2.1**
	Austria	Below upper secondary	6.2	8.6	7.3	**7.7**	8.1	14.9	14.1	**14.0**	6.4	5.0	2.7[r]	**c**
		Upper secondary or post-secondary non-tertiary	2.9	3.9	3.5	**3.5**	2.7	4.5	5.0	**4.3**	6.0	3.8	2.5	**3.4**
		Tertiary	1.5	2.6	2.3	**2.1**	c	3.9	3.4	**2.7**	c	c	c	**c**
	Belgium	Below upper secondary	9.8	12.4	13.2	**12.1**	17.5	23.0	23.4	**22.1**	3.8[r]	6.1	6.4	**6.6**
		Upper secondary or post-secondary non-tertiary	5.3	6.9	6.6	**6.7**	6.7	9.4	10.2	**10.9**	3.5[r]	4.1	4.1	**4.0[r]**
		Tertiary	2.7	3.7	4.0	**3.4**	3.3	4.9	5.1	**4.3**	c	2.8[r]	3.5	**3.2[r]**
	Canada	Below upper secondary	10.2	9.7	12.4	**10.8**	15.0	13.3	17.5	**15.4**	7.2	7.9	10.1	**8.7**
		Upper secondary or post-secondary non-tertiary	5.9	5.9	7.5	**6.6**	6.8	6.7	9.1	**7.7**	5.5	5.3	7.1	**6.7**
		Tertiary	4.1	4.6	5.4	**5.0**	4.5	5.2	5.9	**5.5**	4.0	4.2	5.3	**5.3**
	Chile	Below upper secondary	m	m	4.6	**m**	m	m	8.0	**m**	m	m	3.5	**m**
		Upper secondary or post-secondary non-tertiary	m	m	6.2	**m**	m	m	8.1	**m**	m	m	4.3	**m**
		Tertiary	m	m	5.6	**m**	m	m	9.5	**m**	m	m	3.1	**m**
	Czech Republic	Below upper secondary	19.3	24.4	22.7	**25.5**	28.3	35.5	28.9	**32.8**	8.1	13.7	14.7	**14.7**
		Upper secondary or post-secondary non-tertiary	6.7	6.2	6.2	**5.7**	8.7	7.0	7.4	**7.2**	5.3	4.9	6.5	**5.7**
		Tertiary	2.5	2.0	2.5	**2.6**	3.4	2.4	3.9	**4.0**	2.2	2.3	2.3	**2.5**
	Denmark	Below upper secondary	6.3	6.5	9.0	**9.6**	10.6	9.7	14.0	**14.8**	3.1	6.5	6.5	**8.1**
		Upper secondary or post-secondary non-tertiary	3.9	4.0	6.1	**6.2**	3.9	4.3	7.6	**8.7**	4.9	5.7	6.3	**4.8**
		Tertiary	2.6	3.7	4.6	**4.7**	4.2	5.0	7.2	**7.7**	2.9	3.6	3.5	**4.3**
	Estonia[1]	Below upper secondary	21.8	13.0	27.7	**22.1**	29.0	17.0	33.6	**25.8**	23.4	c	17.5[r]	**c**
		Upper secondary or post-secondary non-tertiary	14.5	8.4	18.0	**9.5**	15.4	7.2	19.4	**10.6**	3.9[r]	5.9	17.3	**7.8**
		Tertiary	4.6	3.8	9.1	**6.1**	4.1[r]	3.1[r]	5.3	**6.6**	3.7	c	14.4	**5.3[r]**
	Finland	Below upper secondary	11.9	10.7	11.6	**11.6**	16.4	17.4	16.4	**16.6**	11.5	9.0	8.5	**9.2**
		Upper secondary or post-secondary non-tertiary	8.8	7.4	7.5	**7.1**	10.4	8.0	8.1	**8.7**	9.7	7.0	7.5	**7.0**
		Tertiary	4.9	4.4	4.4	**3.9**	6.7	4.8	5.6	**4.5**	6.5	4.6	4.1	**4.8**
	France	Below upper secondary	13.8	11.1	12.9	**13.8**	21.7	18.8	23.8	**23.2**	8.5	6.3	8.3	**9.5**
		Upper secondary or post-secondary non-tertiary	8.0	6.6	7.2	**8.3**	10.3	9.3	10.8	**12.4**	7.7	4.6	6.4	**7.0**
		Tertiary	5.1	5.4	4.9	**5.1**	6.6	6.4	6.3	**6.8**	4.3	4.3	4.5	**4.1**
	Germany	Below upper secondary	13.7	20.1	15.9	**12.8**	14.6	25.6	21.7	**18.8**	15.8	18.3	13.4	**10.2**
		Upper secondary or post-secondary non-tertiary	7.8	11.0	6.9	**5.3**	6.2	10.9	7.4	**5.4**	13.7	13.9	8.4	**6.6**
		Tertiary	4.0	5.6	3.1	**2.4**	2.7	5.9	3.5	**2.8**	7.5	7.8	4.3	**3.1**
	Greece	Below upper secondary	8.2	8.3	11.9	**25.3**	14.0	11.1	17.2	**35.7**	4.0	4.5	7.0	**16.6**
		Upper secondary or post-secondary non-tertiary	11.2	9.6	12.5	**24.4**	15.6	13.1	16.3	**32.4**	5.0	c	7.5	**14.9**
		Tertiary	7.5	7.1	8.7	**17.0**	13.7	13.3	16.9	**30.0**	c	c	c	**6.7**
	Hungary	Below upper secondary	9.9	12.4	23.5	**22.8**	14.1	16.7	32.6	**27.9**	3.9	6.4	16.2	**15.2**
		Upper secondary or post-secondary non-tertiary	5.3	6.0	9.5	**9.4**	6.8	7.3	11.4	**12.7**	3.6	4.0	7.9	**7.4**
		Tertiary	1.3	2.3	4.1	**4.0**	1.6	3.1	6.3	**5.7**	c	1.8	2.0	**4.1**
	Iceland	Below upper secondary	2.0	2.3	7.2	**7.3**	c	c	15.6	**c**	c	c	c	**c**
		Upper secondary or post-secondary non-tertiary	c	c	7.2	**4.1**	c	c	12.5	**c**	c	c	c	**c**
		Tertiary	c	c	3.5	**2.9**	c	c	c	**c**	0.0	c	c	**c**
	Ireland	Below upper secondary	7.1	6.0	19.4	**23.3**	9.8	10.4	32.0	**37.3**	3.0	3.1	11.4	**14.7**
		Upper secondary or post-secondary non-tertiary	2.6	3.1	13.8	**15.2**	2.7	3.7	18.7	**20.4**	c	c	8.6	**9.4**
		Tertiary	1.6	2.0	7.0	**7.0**	2.0	2.4	8.2	**7.9**	c	c	4.5	**6.3**
	Israel	Below upper secondary	m	14.0	9.8	**10.2**	m	14.2	12.2	**13.8**	m	10.3	8.0	**8.4**
		Upper secondary or post-secondary non-tertiary	m	9.5	6.8	**7.1**	m	10.9	8.0	**9.0**	m	10.0	5.2	**5.5**
		Tertiary	m	5.1	4.2	**4.2**	m	5.7	5.6	**5.5**	m	5.1	3.6	**3.4**
	Italy	Below upper secondary	9.8	7.8	9.1	**12.2**	15.1	11.8	15.0	**19.0**	5.8	4.8	5.6	**8.5**
		Upper secondary or post-secondary non-tertiary	7.4	5.2	6.1	**7.7**	12.3	8.1	10.1	**13.3**	1.8	2.4	2.5	**3.7**
		Tertiary	5.9	5.7	5.6	**6.4**	15.5	13.8	12.8	**13.7**	0.7	1.0	0.8	**1.2**
	Japan	Below upper secondary	6.0	m	m	**m**	9.6	m	m	**m**	6.5	m	m	**m**
		Upper secondary or post-secondary non-tertiary	4.7	4.9	5.8	**5.1**	6.6	7.0	7.8	**7.4**	5.5	4.5	5.5	**4.5**
		Tertiary	3.5	3.1	3.8	**3.2**	4.4	4.6	5.0	**4.1**	4.8	2.4	3.9	**3.2**
	Korea	Below upper secondary	3.7	2.9	3.1	**2.6**	7.3	8.1	9.4	**6.5**	2.7	2.3	3.2	**2.5**
		Upper secondary or post-secondary non-tertiary	4.1	3.8	3.5	**3.0**	5.0	5.7	6.2	**5.4**	3.7	3.3	2.7	**2.6**
		Tertiary	3.6	2.9	3.3	**2.9**	4.6	4.2	5.0	**4.4**	3.1	1.8	2.2	**2.3**
	Luxembourg	Below upper secondary	3.1	5.1	4.1	**6.4**	5.4[r]	8.1[r]	7.6[r]	**11.3[r]**	c	c	c	**c**
		Upper secondary or post-secondary non-tertiary	1.6[r]	3.2	3.6	**4.2**	2.2[r]	4.0[r]	4.8[r]	**6.4[r]**	c	c	c	**c**
		Tertiary	c	3.2	3.6	**3.4**	c	2.7[r]	4.1[r]	**4.5**	c	c	c	**c**
	Mexico	Below upper secondary	1.5	2.3	4.0	**3.5**	1.8	2.8	5.5	**4.5**	1.2	1.9	2.8	**2.7**
		Upper secondary or post-secondary non-tertiary	2.2	3.1	4.6	**4.0**	2.5	4.1	5.8	**5.6**	2.6	2.4	4.0	**2.7**
		Tertiary	2.4	3.7	4.9	**4.6**	3.5	5.5	6.7	**6.7**	2.2	3.1	4.4	**2.9**
	Netherlands	Below upper secondary	3.4	5.8	5.7	**6.6**	4.5	8.7	9.1	**9.4**	c	4.5	4.6	**5.1**
		Upper secondary or post-secondary non-tertiary	1.9	4.1	3.4	**4.6**	1.6	3.9	3.7	**5.1**	1.9	4.6	4.0	**5.6**
		Tertiary	1.7	2.8	2.7	**3.0**	1.5	2.6	2.5	**3.3**	c	3.1	3.6	**3.5**

Note: Columns showing additional years and additional age groups are available for consultation on line (see *StatLink* below).

1. Figures for 2012 for Estonia and Slovenia in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115825

A5

Table A5.4a. [2/2] Trends in unemployment rates, by educational attainment and age group (2000, 2005-12)

Percentage of unemployed 25-64 year-olds/25-34 year-olds/55-64 year-olds among 25-64 year-olds/25-34 year-olds/55-64 year-olds in the labour force

		Educational attainment	Unemployment rates of 25-64 year-olds				Unemployment rates of 25-34 year-olds				Unemployment rates of 55-64 year-olds			
			2000	2005	2010	2012	2000	2005	2010	2012	2000	2005	2010	2012
			(1)	(2)	(7)	(9)	(11)	(12)	(17)	(19)	(41)	(42)	(47)	(49)
OECD	New Zealand	Below upper secondary	6.6	3.4	6.1	**6.4**	9.0	5.5	8.9	**10.7**	5.4	1.8	4.0	**4.5**
		Upper secondary or post-secondary non-tertiary	3.9	2.3	4.5	**5.2**	4.7	3.0	7.2	**7.5**	3.8	1.7	3.4	**3.6**
		Tertiary	3.3	2.3	3.8	**4.2**	3.6	3.3	5.5	**4.8**	3.9	1.9	2.7	**3.6**
	Norway[2]	Below upper secondary	2.2	7.4	5.6	**4.3**	c	14.4	12.3	**6.7**[r]	c	c	c	**c**
		Upper secondary or post-secondary non-tertiary	2.6	2.6	2.2	**2.3**	3.7	4.1	3.8	**3.2**	c	c	c	**c**
		Tertiary	1.9	2.1	1.6	**1.6**	2.7	3.1	2.3	**2.6**	c	c	c	**c**
	Poland	Below upper secondary	20.6	27.1	16.1	**17.8**	32.4	38.3	22.6	**25.4**	7.7	13.6	11.4	**12.2**
		Upper secondary or post-secondary non-tertiary	13.9	16.6	8.9	**9.3**	16.8	19.9	11.5	**12.2**	11.6	13.0	7.8	**8.0**
		Tertiary	4.3	6.2	4.2	**4.9**	7.4	9.8	6.5	**7.6**	6.7	4.5	2.0[r]	**2.4**[r]
	Portugal	Below upper secondary	3.6	7.5	11.8	**16.0**	4.2	9.0	15.3	**19.9**	3.3	6.4	9.7	**14.2**
		Upper secondary or post-secondary non-tertiary	3.5	6.7	9.7	**14.5**	3.5	8.3	11.5	**16.8**	c	c	7.1	**13.6**
		Tertiary	2.7	5.4	6.3	**10.5**	4.3	9.2	9.4	**17.1**	c	c	3.4	**c**
	Slovak Republic	Below upper secondary	36.3	49.2	40.8	**41.5**	55.7	73.8	63.8	**53.3**	30.6	36.5	22.8	**30.8**
		Upper secondary or post-secondary non-tertiary	14.3	12.7	12.3	**11.7**	17.7	13.8	14.6	**15.4**	10.1	11.6	9.9	**11.0**
		Tertiary	4.6	4.4	4.8	**6.0**	7.0	5.3	6.3	**9.5**	6.2	7.7	4.3	**3.2**
	Slovenia[1]	Below upper secondary	9.8	8.7	11.2	**14.0**	11.3	16.1	18.9	**c**	c	2.9	4.2	**5.6**
		Upper secondary or post-secondary non-tertiary	5.7	5.7	6.9	**8.1**	5.8	6.7	10.2	**10.8**	10.9	6.3	5.0	**7.3**
		Tertiary	2.1	3.0	4.1	**5.8**	3.8	5.1	7.9	**11.0**	c	c	c	**4.3**
	Spain	Below upper secondary	13.7	9.3	24.7	**31.2**	17.8	11.4	31.7	**38.4**	10.8	6.9	18.3	**23.2**
		Upper secondary or post-secondary non-tertiary	10.9	7.3	17.4	**22.0**	12.9	9.0	22.0	**27.9**	6.4	6.6	11.5	**14.8**
		Tertiary	9.5	6.1	10.4	**14.0**	14.5	8.5	14.2	**19.8**	4.1	3.5	5.4	**8.1**
	Sweden	Below upper secondary	8.0	8.5	11.3	**12.3**	13.1	17.8	19.6	**21.4**	8.1	5.2	7.7	**7.8**
		Upper secondary or post-secondary non-tertiary	5.3	6.0	6.4	**5.7**	5.6	8.5	8.4	**8.1**	6.6	5.4	6.3	**5.6**
		Tertiary	3.0	4.5	4.5	**4.0**	3.2	7.1	5.8	**5.4**	2.9	2.3	3.5	**3.2**
	Switzerland	Below upper secondary	4.8	7.2	7.4	**7.9**	c	11.8	13.3	**14.4**	7.0	6.0	5.4	**5.8**
		Upper secondary or post-secondary non-tertiary	2.2	3.7	4.1	**3.3**	2.8	4.7	5.4	**4.3**	1.8	3.7	3.6	**2.9**
		Tertiary	1.4	2.7	2.9	**2.7**	c	3.4	4.0	**3.7**	c	2.3	2.4	**2.1**[r]
	Turkey	Below upper secondary	4.6	9.1	10.6	**7.9**	5.7	11.3	12.6	**9.7**	2.4	4.2	6.4	**4.9**
		Upper secondary or post-secondary non-tertiary	5.5	9.1	11.3	**8.6**	7.1	11.9	13.3	**10.3**	0.0	4.5	10.7	**7.1**
		Tertiary	3.9	6.9	7.9	**7.5**	6.5	10.9	11.9	**11.1**	3.3	4.3	3.8	**4.5**
	United Kingdom	Below upper secondary	6.6	5.1	9.8	**10.5**	9.1	7.8	15.5	**17.2**	5.6	3.2	5.0	**6.9**
		Upper secondary or post-secondary non-tertiary	4.0	3.1	5.9	**5.6**	4.7	4.1	8.1	**7.8**	4.0	2.4	5.0	**4.8**
		Tertiary	2.1	2.1	3.5	**3.6**	2.0	2.4	4.1	**4.2**	3.7	2.8	3.8	**3.4**
	United States	Below upper secondary	7.9	9.0	16.8	**14.3**	10.3	11.7	20.3	**16.8**	5.2	7.5	10.1	**11.5**
		Upper secondary or post-secondary non-tertiary	3.6	5.1	11.2	**9.1**	4.4	6.9	14.3	**12.2**	3.1	4.2	8.8	**7.3**
		Tertiary	1.8	2.6	5.3	**4.6**	2.0	3.0	5.3	**4.9**	1.5	2.3	5.5	**5.1**
	OECD average	Below upper secondary	9.4	10.7	12.5	**13.6**	14.6	16.4	19.0	**19.8**	7.6	7.5	8.6	**10.1**
		Upper secondary or post-secondary non-tertiary	5.9	6.2	7.6	**7.8**	7.1	7.5	9.8	**10.4**	5.4	5.5	6.4	**6.6**
		Tertiary	3.5	3.9	4.7	**5.0**	5.1	5.4	6.5	**7.4**	3.7	3.4	3.9	**3.9**
	OECD average for countries with data available for all reference years	Below upper secondary	9.5	10.6	12.9	**13.7**	14.7	16.5	19.6	**20.0**	7.7	7.3	8.8	**10.1**
		Upper secondary or post-secondary non-tertiary	6.0	6.1	7.7	**7.9**	7.2	7.4	10.0	**10.6**	5.4	5.4	6.6	**6.7**
		Tertiary education	3.4	3.9	4.7	**5.1**	5.1	5.4	6.5	**7.5**	3.6	3.4	3.9	**3.9**
	EU21 average	Below upper secondary	11.6	12.8	15.2	**16.9**	16.8	19.2	22.7	**24.2**	9.1	8.6	10.1	**12.2**
		Upper secondary or post-secondary non-tertiary	6.9	6.8	8.5	**9.3**	8.2	8.1	10.8	**12.3**	6.5	6.3	7.1	**7.6**
		Tertiary education	3.7	4.1	5.0	**5.7**	5.7	5.8	6.9	**8.5**	4.3	3.7	4.1	**4.1**
Partners	Argentina		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Brazil	Below upper secondary	m	m	m	**4.1**	m	m	m	**6.5**	m	m	m	**2.3**
		Upper secondary or post-secondary non-tertiary	m	m	m	**5.1**	m	m	m	**6.9**	m	m	m	**2.8**
		Tertiary education	m	m	m	**2.9**	m	m	m	**4.0**	m	m	m	**1.7**
	China		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Colombia		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	India		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Indonesia		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Latvia	Below upper secondary	m	m	m	**23**	m	m	m	**24**	m	m	m	**23**
		Upper secondary or post-secondary non-tertiary	m	m	m	**12.2**	m	m	m	**15.5**	m	m	m	**c**
		Tertiary education	m	m	m	**5.9**	m	m	m	**7.4**	m	m	m	**4.0**
	Russian Federation	Below upper secondary	m	m	m	**2.8**	m	m	m	**3.5**	m	m	m	**2.6**
		Upper secondary or post-secondary non-tertiary	m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
		Tertiary education	m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	Saudi Arabia		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	South Africa		m	m	m	**m**	m	m	m	**m**	m	m	m	**m**
	G20 average	Below upper secondary	m	m	m	**m**	m	m	m	**m**	m	m	m	**m**

Note: Columns showing additional years and additional age groups are available for consultation on line (see *StatLink* below).

1. Figures for 2011 for Estonia and Slovenia in this table may differ from figures in other tables of Indicator A5 because the source of the figures is different. This table uses EU-LFS for all years.

2. Figures for 2000 are not comparable with more recent years as in 2000 the former classification of educational attainment was used.

Sources: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data and the "r" symbol next to some figures.

StatLink http://dx.doi.org/10.1787/888933115825

A5

Table A5.5a. Distribution of adults with upper secondary or post-secondary non-tertiary education, by labour market status and programme orientation (2012)

25-64 year-olds with upper secondary or post-secondary non-tertiary education as the highest level of attainment

		Employment rate			Unemployment rate			Inactivity rate		
		Vocational	General	Total[1]	Vocational	General	Total[1]	Vocational	General	Total[1]
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	84	76	80	3.6	3.9	3.7	13	20	16
	Austria	78	76	78	3.4	4.7	3.5	19	20	19
	Belgium	76	69	73	5.9	8.7	6.7	20	25	21
	Canada	79	73	75	6.3	6.7	6.6	16	22	20
	Chile[2]	74	69	70	6.9	6.2	6.4	20	26	25
	Czech Republic	76	72	76	5.7	c	5.7	19	c	19
	Denmark	79	61	79	5.9	12.5	6.2	16	30	16
	Estonia	76	72	75	9.1	10.1	9.5	17	19	18
	Finland	75	73	75	6.8	8.2	7.1	20	21	20
	France	73	74	74	8.3	8.3	8.3	20	19	20
	Germany	79	62	78	5.3	7.0	5.3	17	34	17
	Greece	62	55	58	26.4	23.0	24.4	16	28	24
	Hungary	69	63	68	9.4	9.4	9.4	24	30	25
	Iceland	88	76	85	3.7	c	4.1	9	19	11
	Ireland	66	65	65	17.8	13.9	15.2	20	25	23
	Israel	79	69	72	6.2	7.4	7.1	16	25	23
	Italy	74	63	71	7.4	8.9	7.7	21	31	23
	Japan	x(3)	x(3)	74	x(6)	x(6)	5,1	x(9)	x(9)	22
	Korea	x(3)	x(3)	71	x(6)	x(6)	3,0	x(9)	x(9)	27
	Luxembourg	72	67	72	4.5	c	4.2	25	30	25
	Mexico	x(3)	x(3)	72	x(6)	x(6)	4,0	x(9)	x(9)	25
	Netherlands	81	77	80	4.3	5.3	4.6	15	18	16
	New Zealand	82	81	81	5.5	4.3	5.2	14	16	14
	Norway	x(3)	x(3)	81	x(6)	x(6)	2,3	x(9)	x(9)	17
	Poland	x(3)	x(3)	65	x(6)	x(6)	9,3	x(9)	x(9)	28
	Portugal	x(3)	x(3)	76	x(6)	x(6)	14,5	x(9)	x(9)	11
	Slovak Republic	71	66	70	11.6	13.9	11.7	20	24	20
	Slovenia	71	66	71	7.9	11.0	8.1	23	25	23
	Spain	66	66	66	22.8	21.5	22.0	15	16	16
	Sweden	84	87	83	5.1	3.5	5.7	11	9	12
	Switzerland	83	76	82	3.2	5.1	3.3	15	20	15
	Turkey	65	59	62	7.6	9.6	8.6	29	35	32
	United Kingdom	x(3)	x(3)	79	x(6)	x(6)	5,6	x(9)	x(9)	17
	United States	x(3)	x(3)	67	x(6)	x(6)	9,1	x(9)	x(9)	26
	OECD average	75	70	74	8.1	9.3	7.7	18	24	20
	EU21 average	76	70	74	8.8	10.0	8.7	17	23	19
Partners	Argentina	m	m	m	m	m	m	m	m	m
	Brazil	x(3)	x(3)	77	x(6)	x(6)	5,1	x(9)	x(9)	19
	China	m	m	m	m	m	m	m	m	m
	Colombia	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m
	Latvia	69	64	67	15.0	19.3	16.7	19	21	20
	Russian Federation	78	69	73	5.1	6.8	5.9	18	26	22
	Saudi Arabia	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m

1. "Total" refers to the weighted averages of the employment/unemployment/inactivity rate of individuals at ISCED 3/4 level.
2. Year of reference 2011.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115844

A5

Table A5.6. [1/2] Percentage of full-time, full-year earners among all earners, by educational attainment and age group (2012)[1]

How to read this table: In Australia, 86% of 25-64 year-old men with below upper secondary education that have earnings from employment work full time. Among 25-64 year-old women, 46% of those that have income from employment work full time.

				Below upper secondary education			Upper secondary or post-secondary non-tertiary education			Tertiary education			All levels of education		
				25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2012	Men	**86**	90	78	**90**	93	84	**89**	93	79	**89**	92	81
			Women	**46**	42	44	**52**	45	48	**61**	53	58	**56**	49	51
			M+W	**68**	68	62	**76**	74	72	**74**	72	68	**74**	72	67
	Austria	2012	Men	**62**	60	69	**76**	77	80	**83**	86	89	**76**	77	81
			Women	**36**	33	41	**41**	35	47	**54**	46	73	**43**	37	52
			M+W	**47**	44	53	**60**	56	68	**69**	68	82	**60**	57	69
	Belgium	2011	Men	**77**	m	69	**64**	64	60	**86**	90	78	**83**	88	73
			Women	**32**	m	m	**57**	55	55	**58**	55	55	**49**	45	46
			M+W	**59**	66	55	**65**	65	60	**72**	72	69	**67**	68	62
	Canada	2011	Men	**74**	70	68	**78**	79	75	**71**	84	76	**74**	80	74
			Women	**69**	50	50	**53**	60	55	**61**	65	61	**59**	62	58
			M+W	**73**	63	61	**68**	71	66	**66**	74	68	**67**	72	67
	Chile	2011	Men	**55**	52	60	**64**	69	70	**65**	66	71	**61**	62	65
			Women	**38**	34	43	**51**	49	53	**53**	52	49	**47**	45	48
			M+W	**49**	46	55	**58**	60	63	**59**	59	62	**55**	55	59
	Czech Republic	2011	Men	**53**	54	54	**61**	64	57	**57**	57	53	**60**	62	56
			Women	**40**	41	40	**46**	48	42	**35**	32	30	**43**	45	39
			M+W	**46**	48	46	**55**	57	51	**47**	46	45	**52**	54	49
	Denmark	2012	Men	**50**	50	51	**58**	62	55	**74**	81	70	**61**	66	58
			Women	**43**	41	45	**51**	52	46	**58**	60	57	**52**	54	50
			M+W	**47**	47	48	**55**	57	51	**65**	69	63	**57**	60	54
	Estonia	2012	Men	**98**	95	98	**98**	99	95	**94**	93	92	**97**	97	95
			Women	**84**	79	69	**89**	90	83	**88**	88	83	**88**	88	82
			M+W	**93**	89	85	**93**	94	88	**90**	90	86	**92**	92	87
	Finland	2012	Men	**92**	94	90	**93**	95	91	**95**	96	90	**94**	96	91
			Women	**88**	88	90	**92**	93	93	**91**	89	92	**91**	90	92
			M+W	**90**	92	90	**93**	94	92	**93**	92	91	**93**	93	91
	France	2010	Men	**72**	78	59	**81**	86	62	**87**	90	75	**81**	86	64
			Women	**46**	49	39	**59**	60	59	**69**	71	64	**61**	63	53
			M+W	**59**	64	48	**71**	74	60	**77**	80	70	**71**	75	59
	Germany	2012	Men	**85**	90	90	**84**	89	82	**86**	88	88	**84**	88	85
			Women	**38**	30	35	**44**	40	41	**56**	50	60	**47**	42	46
			M+W	**61**	61	59	**64**	64	61	**72**	70	77	**66**	65	66
	Greece	2012	Men	**74**	68	75	**81**	86	76	**91**	93	93	**82**	84	80
			Women	**59**	52	67	**70**	72	68	**80**	85	61	**72**	75	66
			M+W	**69**	63	72	**77**	81	72	**86**	89	84	**78**	80	75
	Hungary	2012	Men	**76**	78	73	**84**	85	81	**89**	91	84	**84**	86	81
			Women	**75**	78	66	**79**	79	75	**89**	88	88	**81**	82	77
			M+W	**76**	78	69	**82**	83	79	**89**	89	86	**83**	84	79
	Iceland			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Ireland	2011	Men	**41**	44	32	**50**	54	43	**67**	73	46	**55**	63	39
			Women	**24**	31	21	**38**	35	38	**58**	55	47	**46**	46	36
			M+W	**35**	39	29	**44**	45	40	**63**	64	47	**51**	55	37
	Israel	2012	Men	**86**	88	81	**90**	91	88	**87**	94	85	**88**	92	85
			Women	**46**	50	41	**65**	70	55	**66**	70	63	**66**	70	59
			M+W	**74**	80	67	**80**	82	74	**77**	82	74	**78**	82	73
	Italy	2010	Men	**78**	82	67	**85**	89	78	**88**	91	84	**82**	86	74
			Women	**48**	45	46	**62**	58	72	**72**	74	78	**60**	58	62
			M+W	**67**	69	59	**75**	75	75	**80**	82	81	**73**	74	69
	Japan			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Korea	2012	Men	**74**	77	70	**79**	81	75	**68**	70	55	**73**	74	68
			Women	**64**	66	62	**63**	63	58	**50**	46	42	**58**	55	60
			M+W	**68**	71	65	**72**	73	70	**62**	62	53	**67**	67	65
	Luxembourg	2012	Men	**84**	89	66	**90**	92	70	**91**	94	86	**88**	92	75
			Women	**44**	46	39	**56**	58	60	**65**	59	54	**55**	55	50
			M+W	**65**	69	52	**76**	78	66	**79**	78	76	**74**	75	64

Note: The length of the reference period varies from one week to one year. Self-employed individuals are excluded in some countries.

1. Full-time basis refers to people who have worked all year long and at least 30 hours per week. See Indicator A6 and Annex 3 for details.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115863

A5

Table A5.6. [2/2] Percentage of full-time, full-year earners among all earners, by educational attainment and age group (2012)[1]

How to read this table: In Australia, 86% of 25-64 year-old men with below upper secondary education that have earnings from employment work full time. Among 25-64 year-old women, 46% of those that have income from employment work full time.

				Below upper secondary education			Upper secondary and post-secondary non-tertiary education			Tertiary education			All levels of education		
				25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64
				(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Mexico			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Netherlands	2010	Men	**71**	72	70	**70**	73	69	**68**	69	65	**70**	71	68
			Women	**15**	14	11	**19**	15	17	**29**	22	25	**22**	17	17
			M+W	**46**	46	42	**45**	43	48	**49**	46	50	**47**	45	47
	New Zealand	2012	Men	**90**	92	86	**93**	94	89	**92**	94	90	**92**	94	88
			Women	**63**	64	58	**64**	57	63	**71**	66	65	**67**	63	63
			M+W	**77**	80	72	**82**	79	80	**81**	79	76	**80**	79	76
	Norway	2011	Men	**52**	53	49	**66**	69	60	**69**	73	69	**63**	67	61
			Women	**28**	28	26	**37**	37	34	**47**	47	52	**39**	41	39
			M+W	**41**	42	38	**53**	56	48	**56**	59	61	**52**	55	51
	Poland	2012	Men	**96**	97	94	**97**	98	95	**91**	91	90	**95**	95	93
			Women	**89**	90	88	**92**	92	91	**89**	89	89	**91**	91	90
			M+W	**93**	94	92	**95**	95	93	**90**	90	90	**93**	93	92
	Portugal	2011	Men	**98**	98	98	**96**	98	96	**94**	95	88	**97**	97	97
			Women	**90**	92	86	**93**	95	93	**93**	94	88	**92**	93	86
			M+W	**95**	95	93	**95**	96	95	**94**	94	88	**94**	95	93
	Slovak Republic	2012	Men	**52**	51	58	**64**	66	65	**66**	68	69	**63**	64	64
			Women	**49**	46	51	**59**	59	61	**62**	64	67	**58**	59	60
			M+W	**50**	48	53	**62**	63	63	**64**	66	68	**60**	62	62
	Slovenia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Spain	2011	Men	**75**	73	77	**78**	77	83	**84**	87	87	**79**	79	81
			Women	**51**	43	61	**63**	64	76	**75**	77	87	**65**	64	72
			M+W	**66**	62	71	**72**	71	80	**79**	82	87	**72**	73	78
	Sweden	2010	Men	**74**	77	69	**79**	84	63	**79**	86	71	**78**	84	67
			Women	**37**	46	30	**48**	49	43	**60**	58	59	**52**	53	47
			M+W	**60**	65	55	**65**	69	53	**68**	70	64	**66**	69	57
	Switzerland			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Turkey	2012	Men	**61**	64	58	**75**	79	71	**82**	91	80	**69**	73	64
			Women	**47**	46	59	**70**	74	63	**76**	86	90	**62**	63	62
			M+W	**58**	60	58	**74**	78	70	**80**	90	80	**67**	71	63
	United Kingdom	2012	Men	**83**	82	84	**92**	95	83	**92**	95	78	**91**	94	82
			Women	**43**	40	41	**54**	50	50	**65**	59	54	**59**	54	50
			M+W	**66**	67	62	**74**	73	68	**79**	78	67	**76**	76	68
	United States	2012	Men	**66**	68	66	**76**	78	75	**84**	87	79	**79**	81	76
			Women	**52**	55	55	**64**	65	65	**70**	70	68	**66**	67	66
			M+W	**61**	64	61	**71**	73	70	**77**	79	74	**73**	75	71
	OECD average		Men	**74**	75	71	**79**	82	75	**82**	85	78	**79**	82	75
			Women	**51**	51	50	**60**	59	59	**66**	65	64	**60**	60	58
			M+W	**64**	65	61	**71**	72	68	**74**	75	72	**70**	71	67
	EU21 average		Men	**74**	75	72	**79**	82	74	**83**	86	79	**80**	83	75
			Women	**52**	52	51	**61**	60	60	**67**	66	66	**61**	61	59
			M+W	**65**	65	62	**71**	72	68	**75**	76	74	**71**	72	68
Partners	Argentina			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Brazil	2012	Men	**73**	75	74	**79**	82	80	**78**	79	78	**76**	77	76
			Women	**48**	50	44	**64**	65	60	**63**	64	57	**57**	58	49
			M+W	**64**	65	63	**72**	74	72	**70**	70	68	**67**	69	65
	China			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Colombia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	India			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Indonesia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Latvia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Russian Federation			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	Saudi Arabia			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	South Africa			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m
	G20 average			**m**	m	m	**m**	m	m	**m**	m	m	**m**	m	m

Note: The length of the reference period varies from one week to one year. Self-employed individuals are excluded in some countries.
1. Full-time basis refers to people who have worked all year long and at least 30 hours per week. See Indicator A6 and Annex 3 for details.
Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
StatLink http://dx.doi.org/10.1787/888933115863

A5

Table A5.7a (L). [1/2] Labour market status, by educational attainment and literacy proficiency level (2012)

Literacy proficiency in the Survey of Adult Skills, percentage of 25-64 year-olds

			Employed						Unemployed						Inactive					
			Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education	
		Proficiency level	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
			(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(17)	(18)	(19)	(20)	(21)	(22)
OECD	**National entities**																			
	Australia	0/1	50	(3.4)	66	(3.7)	70	(5.7)	3.4	(1.3)	5.3	(2.3)	5.2	(3.7)	47	(3.5)	29	(3.9)	25	(5.2)
		2	65	(3.0)	75	(2.2)	80	(2.5)	3.6	(1.2)	3.7	(1.0)	4.2	(1.6)	32	(2.9)	21	(2.0)	16	(2.5)
		3	73	(2.8)	79	(1.8)	85	(1.5)	3.2	(1.7)	3.3	(0.9)	3.0	(0.8)	24	(2.5)	18	(1.8)	12	(1.3)
		4/5	c	c	82	(4.1)	89	(1.5)	c	c	3.9	(2.4)	2.2	(0.8)	c	c	14	(3.7)	8	(1.4)
	Austria	0/1	54	(3.5)	67	(2.9)	c	c	6.9	(1.9)	3.1	(1.1)	c	c	39	(3.4)	30	(2.7)	c	c
		2	59	(3.4)	76	(1.5)	80	(3.6)	3.9	(1.3)	2.8	(0.7)	2.8	(1.7)	38	(3.3)	21	(1.5)	17	(3.3)
		3	68	(4.6)	86	(1.4)	89	(1.9)	2.6	(1.6)	2.6	(0.7)	2.0	(0.9)	29	(4.8)	11	(1.3)	9	(1.7)
		4/5	c	c	88	(3.4)	91	(2.4)	c	c	2.5	(1.6)	c	c	c	c	10	(2.8)	7	(2.3)
	Canada	0/1	54	(2.3)	70	(2.0)	75	(2.9)	4.5	(1.1)	4.7	(1.1)	4.3	(1.4)	42	(2.4)	25	(1.8)	21	(2.6)
		2	61	(3.3)	77	(1.4)	82	(1.5)	4.7	(1.5)	3.8	(0.7)	3.3	(0.7)	35	(3.0)	19	(1.3)	15	(1.4)
		3	68	(5.1)	81	(1.4)	87	(0.9)	5.1	(3.1)	2.9	(0.6)	2.7	(0.5)	26	(4.6)	16	(1.2)	10	(0.8)
		4/5	c	c	82	(3.8)	91	(1.1)	c	c	3.0	(2.0)	2.3	(0.6)	c	c	15	(3.5)	7	(1.0)
	Czech Republic	0/1	39	(7.0)	70	(4.1)	c	c	13.8	(5.6)	2.8	(0.9)	c	c	48	(6.8)	27	(4.1)	c	c
		2	47	(5.8)	75	(1.8)	84	(4.3)	15.0	(3.7)	4.7	(1.0)	2.4	(1.8)	38	(5.9)	21	(1.7)	14	(4.0)
		3	c	c	78	(1.9)	83	(3.4)	c	c	3.3	(1.0)	3.3	(1.6)	c	c	18	(1.7)	14	(3.0)
		4/5	c	c	86	(5.3)	89	(4.1)	c	c	3.7	(2.4)	0.7	(0.5)	c	c	11	(4.6)	10	(4.0)
	Denmark	0/1	52	(2.8)	62	(2.9)	69	(4.0)	7.1	(1.5)	5.4	(1.7)	4.5	(1.8)	41	(2.6)	32	(2.6)	26	(3.7)
		2	65	(3.4)	77	(1.7)	83	(1.8)	5.7	(1.7)	4.3	(0.8)	3.8	(1.1)	29	(3.1)	18	(1.6)	13	(1.5)
		3	76	(5.0)	82	(1.7)	89	(1.0)	7.1	(2.5)	5.4	(1.0)	3.3	(0.7)	17	(4.2)	12	(1.3)	8	(0.8)
		4/5	c	c	80	(5.4)	93	(1.7)	c	c	3.5	(3.0)	3.0	(1.2)	c	c	17	(5.0)	4	(1.2)
	Estonia	0/1	49	(3.4)	68	(2.7)	79	(4.2)	8.7	(2.3)	8.1	(1.5)	5.7	(1.9)	42	(3.6)	24	(2.5)	15	(3.7)
		2	56	(3.2)	74	(1.5)	85	(1.6)	11.3	(2.0)	6.8	(0.8)	3.9	(0.8)	32	(3.2)	19	(1.3)	12	(1.4)
		3	65	(4.4)	80	(1.5)	88	(1.0)	6.5	(2.2)	5.6	(0.8)	3.9	(0.6)	28	(4.5)	15	(1.3)	8	(0.9)
		4/5	c	c	87	(3.0)	94	(1.3)	c	c	3.5	(1.8)	1.9	(0.7)	c	c	10	(2.7)	4	(1.2)
	Finland	0/1	39	(4.4)	55	(3.9)	c	c	3.1	(1.7)	6.1	(1.9)	c	c	58	(4.6)	39	(3.9)	c	c
		2	57	(3.9)	72	(2.0)	81	(2.3)	3.9	(1.4)	3.9	(1.1)	2.6	(1.0)	39	(3.7)	24	(2.1)	16	(2.0)
		3	68	(6.0)	80	(1.6)	89	(1.3)	5.3	(2.3)	4.7	(1.0)	2.4	(0.6)	27	(5.2)	15	(1.6)	9	(1.1)
		4/5	c	c	82	(2.6)	91	(1.2)	c	c	5.1	(1.6)	3.0	(0.6)	c	c	13	(2.3)	6	(1.0)
	France	0/1	50	(1.8)	68	(2.5)	65	(4.6)	6.5	(1.1)	7.3	(1.1)	8.1	(2.9)	44	(1.8)	25	(2.2)	27	(4.2)
		2	57	(2.2)	74	(1.5)	80	(2.0)	6.4	(1.1)	5.5	(0.7)	4.1	(1.0)	37	(2.1)	20	(1.4)	16	(1.8)
		3	61	(3.8)	75	(1.7)	87	(1.0)	7.1	(2.2)	6.3	(0.9)	3.0	(0.6)	32	(3.8)	19	(1.6)	10	(1.0)
		4/5	c	c	c	c	88	(2.3)	c	c	c	c	4.6	(1.4)	c	c	c	c	8	(1.9)
	Germany	0/1	52	(3.9)	70	(2.6)	c	c	9.3	(2.6)	5.1	(1.2)	c	c	38	(3.9)	25	(2.4)	c	c
		2	60	(5.4)	79	(1.7)	83	(2.4)	8.3	(3.7)	4.0	(0.9)	3.0	(1.1)	32	(5.0)	17	(1.6)	15	(2.3)
		3	c	c	84	(1.7)	91	(1.4)	c	c	4.3	(1.0)	2.1	(0.6)	c	c	12	(1.5)	7	(1.2)
		4/5	c	c	86	(3.4)	93	(2.1)	c	c	c	c	1.7	(0.8)	c	c	13	(3.2)	6	(1.9)
	Ireland	0/1	41	(3.2)	60	(4.4)	72	(5.9)	9.1	(1.7)	13.4	(2.6)	5.0	(2.6)	50	(3.6)	26	(3.8)	23	(5.7)
		2	52	(2.9)	62	(1.8)	78	(2.2)	11.2	(2.0)	11.0	(1.2)	5.9	(1.2)	36	(2.9)	27	(1.8)	16	(2.0)
		3	56	(4.9)	70	(2.2)	82	(1.6)	6.4	(2.7)	9.4	(1.5)	4.1	(0.8)	38	(4.7)	21	(1.6)	14	(1.3)
		4/5	c	c	77	(5.7)	86	(2.9)	c	c	7.1	(3.7)	2.4	(1.2)	c	c	16	(4.6)	11	(2.3)
	Italy	0/1	50	(2.4)	69	(4.3)	c	c	11.2	(1.5)	8.2	(2.2)	c	c	39	(2.2)	23	(3.4)	c	c
		2	54	(2.3)	66	(2.5)	75	(3.8)	7.6	(1.5)	10.7	(1.7)	9.2	(3.0)	38	(2.1)	23	(2.1)	16	(3.1)
		3	63	(4.6)	75	(2.7)	83	(2.8)	7.8	(2.5)	8.6	(1.7)	5.1	(2.2)	30	(4.0)	16	(2.1)	11	(2.4)
		4/5	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
	Japan	0/1	65	(5.9)	71	(6.6)	c	c	c	c	c	c	c	c	33	(5.7)	29	(6.6)	c	c
		2	66	(4.0)	71	(2.4)	79	(3.1)	c	c	c	c	c	c	34	(4.0)	28	(2.4)	21	(3.0)
		3	77	(5.1)	76	(1.5)	80	(1.4)	c	c	2.5	(0.7)	1.4	(0.5)	20	(4.8)	21	(1.6)	19	(1.3)
		4/5	c	c	80	(3.8)	79	(1.6)	c	c	2.2	(1.8)	3.0	(0.7)	c	c	18	(4.0)	18	(1.6)
	Korea	0/1	61	(2.6)	76	(3.4)	c	c	2.1	(0.9)	1.9	(1.0)	c	c	37	(2.7)	22	(3.4)	c	c
		2	65	(2.4)	76	(1.4)	77	(1.7)	1.7	(0.8)	2.6	(0.6)	2.3	(0.7)	33	(2.4)	21	(1.5)	21	(1.6)
		3	69	(5.5)	76	(2.0)	80	(1.2)	2.9	(1.7)	3.1	(0.8)	2.3	(0.6)	28	(5.7)	21	(1.9)	18	(1.3)
		4/5	c	c	c	c	81	(2.6)	c	c	c	c	4.2	(1.7)	c	c	c	c	15	(2.6)
	Netherlands	0/1	54	(3.3)	68	(5.6)	c	c	6.8	(1.8)	3.5	(2.1)	c	c	39	(3.4)	29	(5.0)	c	c
		2	64	(2.8)	77	(2.1)	79	(3.7)	3.6	(1.2)	5.5	(1.3)	c	c	33	(2.7)	17	(2.0)	19	(3.5)
		3	76	(3.3)	85	(1.4)	90	(1.5)	1.8	(1.0)	3.1	(0.7)	2.5	(0.8)	22	(3.0)	12	(1.4)	8	(1.2)
		4/5	c	c	86	(3.7)	92	(1.5)	c	c	3.2	(1.6)	3.0	(1.0)	c	c	10	(3.1)	5	(1.2)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for all levels of education combined are available for consultation on line (see *StatLink* below)

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115882

A5

Table A5.7a (L). [2/2] Labour market status, by educational attainment and literacy proficiency level (2012)

Literacy proficiency in the Survey of Adult Skills, percentage of 25-64 year-olds

		Proficiency level	Employed						Unemployed						Inactive					
			Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education		Below upper secondary education		Upper secondary or post-secondary non-tertiary education		Tertiary education	
			%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
			(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(17)	(18)	(19)	(20)	(21)	(22)
OECD	**National entities**																			
	Norway	0/1	57	(4.5)	72	(3.6)	c	c	4.2	(1.7)	4.8	(2.0)	c	c	39	(4.1)	23	(3.6)	c	c
		2	72	(3.3)	81	(2.0)	86	(2.3)	2.8	(1.3)	2.9	(0.9)	2.2	(1.0)	26	(3.1)	16	(1.8)	12	(2.3)
		3	78	(3.6)	87	(1.7)	93	(0.9)	3.0	(1.3)	2.8	(0.8)	1.6	(0.4)	19	(3.3)	11	(1.6)	5	(0.8)
		4/5	c	c	89	(3.4)	95	(1.0)	c	c	c	c	0.7	(0.4)	c	c	9	(3.4)	4	(0.9)
	Poland	0/1	37	(4.1)	57	(2.7)	c	c	9.5	(2.5)	7.5	(1.5)	c	c	53	(4.2)	35	(2.4)	c	c
		2	45	(4.7)	63	(2.0)	85	(2.6)	13.2	(3.6)	6.5	(1.0)	3.1	(1.2)	41	(4.6)	31	(2.1)	12	(2.2)
		3	c	c	67	(2.1)	87	(1.5)	c	c	5.5	(1.1)	3.5	(0.8)	c	c	27	(2.2)	9	(1.4)
		4/5	c	c	67	(6.4)	92	(2.0)	c	c	9.5	(4.3)	2.0	(0.9)	c	c	24	(5.0)	6	(1.7)
	Slovak Republic	0/1	25	(3.4)	65	(3.9)	c	c	13.6	(2.2)	11.3	(2.3)	c	c	c	c	24	(3.4)	c	c
		2	36	(3.2)	71	(1.6)	85	(2.9)	12.1	(1.9)	6.6	(0.9)	2.1	(1.1)	51	(3.1)	22	(1.4)	13	(2.8)
		3	43	(5.3)	73	(1.6)	88	(1.9)	10.1	(3.1)	6.7	(0.9)	3.9	(1.0)	46	(5.4)	20	(1.4)	9	(1.6)
		4/5	c	c	76	(4.5)	85	(4.4)	c	c	9.0	(3.1)	2.3	(1.4)	c	c	15	(3.5)	13	(4.0)
	Spain	0/1	43	(1.4)	66	(4.5)	73	(4.5)	18.4	(1.3)	12.1	(2.9)	8.3	(2.7)	38	(1.6)	22	(3.4)	19	(4.0)
		2	54	(1.7)	66	(2.8)	78	(2.3)	16.8	(1.6)	11.2	(1.9)	9.5	(1.5)	29	(1.9)	23	(2.5)	13	(1.8)
		3	63	(3.7)	72	(3.4)	81	(1.7)	14.4	(2.7)	12.5	(2.4)	8.8	(1.1)	23	(3.2)	16	(2.8)	10	(1.3)
		4/5	c	c	c	c	85	(3.4)	c	c	c	c	5.7	(1.9)	c	c	c	c	9	(2.7)
	Sweden	0/1	50	(4.3)	67	(4.0)	c	c	11.7	(2.8)	7.6	(1.9)	c	c	38	(4.1)	25	(3.7)	c	c
		2	69	(3.3)	83	(2.1)	85	(3.0)	6.7	(2.4)	4.7	(1.1)	3.3	(1.5)	24	(2.8)	13	(1.8)	12	(2.6)
		3	79	(5.6)	87	(1.4)	92	(1.2)	7.5	(3.6)	3.0	(0.8)	2.8	(0.8)	14	(4.3)	10	(1.2)	6	(1.0)
		4/5	c	c	93	(2.8)	95	(1.3)	c	c	2.2	(1.4)	1.2	(0.7)	c	c	5	(2.3)	4	(1.1)
	United States	0/1	61	(3.5)	67	(3.1)	c	c	7.3	(1.7)	8.8	(1.6)	c	c	31	(3.2)	24	(2.9)	c	c
		2	63	(6.0)	70	(2.0)	81	(2.3)	9.2	(3.5)	8.2	(1.1)	5.0	(1.4)	28	(5.0)	21	(1.9)	14	(2.0)
		3	c	c	81	(1.7)	86	(1.2)	c	c	6.2	(1.2)	4.8	(0.8)	c	c	12	(1.5)	9	(1.1)
		4/5	c	c	88	(3.7)	88	(1.9)	c	c	2.7	(1.9)	2.6	(0.7)	c	c	10	(3.6)	9	(1.8)
	Sub-national entities																			
	Flanders (Belgium)	0/1	45	(3.3)	69	(2.8)	c	c	2.0	(0.8)	2.4	(1.0)	c	c	53	(3.4)	29	(2.8)	c	c
		2	57	(3.6)	78	(1.7)	84	(2.6)	2.3	(0.9)	2.2	(0.6)	1.4	(0.8)	41	(3.6)	20	(1.7)	15	(2.6)
		3	63	(6.3)	83	(1.7)	89	(1.2)	c	c	1.0	(0.5)	1.4	(0.4)	36	(6.4)	16	(1.7)	9	(1.1)
		4/5	c	c	88	(3.3)	94	(1.3)	c	c	c	c	0.8	(0.5)	c	c	10	(3.5)	5	(1.2)
	England (UK)	0/1	51	(2.9)	72	(4.5)	73	(7.0)	9.8	(1.9)	9.0	(2.5)	5.3	(2.4)	40	(2.7)	19	(3.9)	22	(6.3)
		2	65	(2.6)	72	(2.2)	79	(2.7)	7.2	(1.5)	6.3	(1.4)	4.0	(1.4)	28	(2.4)	21	(2.1)	17	(2.4)
		3	68	(4.1)	81	(1.8)	86	(1.3)	2.4	(1.6)	4.3	(1.0)	2.6	(0.6)	30	(3.9)	14	(1.7)	12	(1.2)
		4/5	c	c	86	(3.2)	88	(1.8)	c	c	3.7	(1.9)	1.9	(0.7)	c	c	10	(2.6)	10	(1.6)
	Northern Ireland (UK)	0/1	47	(3.5)	63	(4.9)	c	c	3.7	(1.0)	9.2	(3.4)	c	c	49	(3.4)	28	(4.8)	c	c
		2	58	(2.9)	71	(2.9)	78	(3.4)	2.9	(1.1)	5.7	(1.6)	3.4	(1.4)	39	(2.8)	23	(2.7)	18	(3.1)
		3	60	(4.8)	78	(2.9)	87	(1.7)	4.4	(2.1)	4.1	(1.8)	2.5	(1.0)	36	(4.9)	18	(2.5)	11	(1.5)
		4/5	c	c	c	c	90	(3.5)	c	c	c	c	3.9	(2.6)	c	c	c	c	6	(2.3)
	England/N. Ireland (UK)	0/1	50	(2.8)	72	(4.3)	73	(6.8)	9.5	(1.8)	9.0	(2.4)	5.4	(2.3)	40	(2.6)	19	(3.8)	22	(6.1)
		2	64	(2.5)	72	(2.1)	79	(2.6)	7.0	(1.4)	6.3	(1.3)	3.9	(1.3)	29	(2.3)	21	(2.0)	17	(2.3)
		3	67	(3.9)	81	(1.8)	86	(1.2)	2.5	(1.5)	4.3	(1.0)	2.6	(0.5)	30	(3.7)	14	(1.6)	12	(1.2)
		4/5	c	c	86	(3.1)	88	(1.7)	c	c	3.6	(1.9)	2.0	(0.7)	c	c	10	(2.6)	10	(1.6)
	Average	0/1	49	(0.8)	67	(0.8)	72	(1.8)	8.0	(0.5)	6.6	(0.4)	5.8	(0.9)	42	(0.8)	27	(0.8)	22	(1.6)
		2	59	(0.8)	74	(0.4)	81	(0.6)	7.5	(0.5)	5.6	(0.2)	3.9	(0.3)	34	(0.7)	21	(0.4)	15	(0.5)
		3	67	(1.1)	79	(0.4)	87	(0.3)	5.8	(0.6)	4.9	(0.2)	3.2	(0.2)	27	(1.0)	16	(0.4)	10	(0.3)
		4/5	c	c	83	(1.0)	89	(0.5)	c	c	4.3	(0.6)	2.5	(0.2)	c	c	13	(0.9)	8	(0.4)
Partners	**Russian Federation***	0/1	c	c	c	c	53	(4.7)	c	c	c	c	2.5	(1.8)	c	c	c	c	44	(4.5)
		2	c	c	66	(4.1)	65	(2.5)	c	c	c	c	2.4	(1.1)	c	c	33	(4.5)	32	(2.2)
		3	c	c	63	(6.4)	72	(2.3)	c	c	4.1	(2.2)	2.6	(0.9)	c	c	33	(5.5)	25	(2.3)
		4/5	c	c	c	c	74	(4.2)	c	c	c	c	4.3	(2.0)	c	c	c	c	22	(4.8)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for all levels of education combined are available for consultation on line (see *StatLink* below)

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115882

A5

Table A5.8 (L). Mean literacy score among adults with upper secondary or post-secondary non-tertiary education, by labour market status and programme orientation (2012)

Mean literacy score in the Survey of Adult Skills, 25-64 year-olds

		Employed						Unemployed						Inactive					
		Vocational		General		Total		Vocational		General		Total		Vocational		General		Total	
		Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD	**National entities**																		
	Australia	279	(1.7)	285	(2.8)	282	(1.7)	265	(10.5)	c	c	272	(9.7)	268	(4.7)	269	(4.9)	269	(3.8)
	Austria	269	(1.1)	290	(3.6)	272	(1.1)	258	(6.0)	c	c	263	(6.0)	251	(2.2)	274	(9.0)	253	(2.2)
	Canada	272	(1.6)	265	(1.6)	268	(1.2)	273	(9.9)	249	(6.6)	258	(5.4)	255	(4.0)	255	(3.5)	255	(2.6)
	Czech Republic	269	(1.2)	291	(5.0)	271	(1.1)	266	(4.4)	c	c	270	(4.6)	258	(2.8)	294	(5.7)	263	(2.7)
	Denmark	264	(1.3)	286	(3.2)	268	(1.2)	258	(6.2)	c	c	264	(5.5)	243	(3.1)	277	(7.1)	250	(2.8)
	Estonia	266	(1.3)	274	(1.8)	270	(1.1)	257	(4.4)	262	(5.0)	259	(3.7)	257	(3.1)	255	(3.3)	257	(2.5)
	Finland	278	(1.5)	308	(4.0)	282	(1.5)	271	(6.3)	c	c	275	(6.9)	250	(3.4)	303	(7.5)	259	(3.3)
	France	254	(1.1)	278	(1.7)	260	(1.0)	254	(4.4)	259	(7.6)	256	(4.0)	250	(2.0)	269	(3.7)	254	(1.9)
	Germany	264	(1.2)	295	(6.7)	265	(1.2)	255	(4.7)	c	c	256	(4.5)	247	(2.6)	273	(17.7)	249	(2.4)
	Ireland	269	(2.5)	270	(2.0)	269	(1.7)	255	(5.4)	267	(5.5)	261	(4.2)	264	(2.9)	260	(4.1)	262	(2.6)
	Italy	253	(3.0)	c	c	266	(1.6)	251	(5.1)	c	c	261	(3.7)	251	(4.5)	c	c	256	(2.6)
	Japan	287	(2.1)	288	(1.6)	289	(1.2)	c	c	c	c	c	c	280	(3.6)	279	(2.9)	281	(2.3)
	Korea	267	(1.4)	263	(1.5)	265	(1.0)	c	c	269	(7.3)	270	(6.1)	268	(3.2)	265	(2.9)	266	(2.4)
	Netherlands	281	(1.4)	305	(2.7)	286	(1.3)	271	(6.9)	c	c	277	(6.3)	259	(3.3)	288	(7.7)	269	(3.8)
	Norway	269	(1.4)	286	(2.5)	274	(1.5)	259	(10.0)	c	c	265	(7.6)	255	(3.9)	273	(6.4)	259	(3.7)
	Poland	256	(1.3)	272	(3.5)	258	(1.2)	248	(5.2)	272	(8.3)	252	(4.6)	248	(1.9)	259	(4.6)	249	(1.8)
	Slovak Republic	267	(1.4)	283	(1.4)	277	(1.0)	265	(4.6)	279	(6.0)	273	(3.8)	260	(2.2)	281	(2.4)	272	(1.9)
	Spain	246	(4.9)	261	(1.9)	259	(1.8)	c	c	260	(5.2)	258	(4.8)	c	c	254	(3.5)	254	(3.2)
	Sweden	276	(1.9)	284	(2.2)	281	(1.3)	c	c	c	c	256	(6.3)	249	(6.1)	260	(6.3)	256	(3.8)
	United States	271	(2.8)	251	(2.1)	263	(1.6)	c	c	242	(4.4)	251	(3.5)	252	(6.0)	241	(3.8)	246	(2.8)
	Sub-national entities																		
	Flanders (Belgium)	251	(2.2)	c	c	268	(1.3)	c	c	c	c	257	(8.9)	239	(3.5)	c	c	255	(2.7)
	England (UK)	267	(3.7)	278	(2.1)	277	(1.7)	c	c	256	(7.0)	259	(6.0)	254	(6.4)	264	(3.5)	265	(3.5)
	Northern Ireland (UK)	269	(4.3)	271	(2.9)	273	(2.9)	c	c	c	c	257	(8.1)	258	(5.5)	263	(3.9)	262	(3.7)
	England/N. Ireland (UK)	267	(3.6)	278	(2.0)	276	(1.7)	251	(9.8)	257	(6.9)	259	(5.9)	254	(6.1)	264	(3.3)	265	(3.3)
	Average	267	(0.5)	281	(0.7)	271	(0.3)	260	(1.7)	262	(2.0)	262	(1.3)	255	(0.8)	270	(1.4)	259	(0.6)
Partners	Russian Federation*	274	(3.4)	264	(5.7)	270	(3.5)	c	c	c	c	c	c	271	(11.2)	273	(8.3)	272	(7.6)

* See note on data for the Russian Federation in the *Methodology* section.

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115901

A5

Table A5.9a (L). Distribution of the adult population by literacy proficiency levels and labour market status (2012)

Literacy proficiency in the Survey of Adult Skills, percentage of 25-64 year-olds

		Employed								Unemployed							
		Level 0/1		Level 2		Level 3		Level 4/5		Level 0/1		Level 2		Level 3		Level 4/5	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD	**National entities**																
	Australia	57	(2.2)	73	(1.4)	80	(1.0)	86	(1.6)	4.2	(1.0)	3.8	(0.7)	3.1	(0.6)	2.9	(0.9)
	Austria	61	(2.2)	73	(1.4)	85	(1.3)	89	(1.9)	c	c	c	c	c	c	c	c
	Canada	66	(1.3)	77	(0.9)	84	(0.7)	89	(1.1)	4.5	(0.7)	3.7	(0.4)	2.9	(0.4)	2.5	(0.6)
	Czech Republic	62	(3.7)	72	(1.6)	78	(1.8)	87	(3.3)	5.9	(1.9)	5.7	(0.8)	3.6	(0.7)	2.1	(1.2)
	Denmark	58	(1.8)	76	(1.2)	85	(0.9)	90	(1.8)	6.1	(1.0)	4.5	(0.6)	4.5	(0.6)	3.4	(1.3)
	Estonia	65	(2.1)	75	(1.2)	83	(0.9)	92	(1.2)	7.8	(1.1)	6.5	(0.6)	4.8	(0.5)	2.5	(0.7)
	Finland	50	(2.7)	71	(1.5)	83	(1.0)	88	(1.1)	4.2	(1.2)	3.6	(0.6)	3.6	(0.5)	3.6	(0.6)
	France	58	(1.4)	71	(1.0)	79	(0.8)	84	(1.8)	6.9	(0.7)	5.4	(0.5)	4.8	(0.6)	4.5	(1.2)
	Germany	65	(2.1)	78	(1.3)	87	(1.0)	90	(1.7)	6.4	(1.1)	4.1	(0.7)	3.4	(0.6)	1.6	(0.7)
	Ireland	50	(2.3)	63	(1.2)	74	(1.4)	84	(2.5)	9.9	(1.2)	9.8	(0.9)	6.5	(0.8)	3.7	(1.2)
	Italy	55	(2.0)	61	(1.4)	74	(1.8)	86	(4.7)	10.4	(1.3)	8.9	(0.9)	7.5	(1.1)	5.9	(3.1)
	Japan	69	(4.3)	72	(1.7)	78	(0.9)	79	(1.6)	c	c	c	c	c	c	c	c
	Korea	69	(2.2)	74	(0.9)	78	(1.1)	78	(2.8)	1.9	(0.6)	2.3	(0.4)	2.6	(0.5)	3.7	(1.4)
	Netherlands	59	(2.6)	72	(1.6)	85	(0.9)	90	(1.4)	5.6	(1.4)	4.1	(0.7)	2.7	(0.5)	3.0	(0.8)
	Norway	66	(2.7)	80	(1.4)	89	(0.9)	93	(1.2)	c	c	c	c	c	c	c	c
	Poland	55	(2.2)	65	(1.7)	75	(1.3)	85	(2.2)	7.5	(1.1)	6.6	(0.8)	4.9	(0.7)	4.0	(1.4)
	Slovak Republic	46	(3.0)	66	(1.4)	75	(1.2)	80	(3.4)	11.8	(1.5)	7.0	(0.8)	6.1	(0.7)	5.7	(1.8)
	Spain	50	(1.4)	63	(1.4)	75	(1.5)	83	(3.3)	16.5	(1.1)	13.5	(1.1)	10.8	(1.0)	7.2	(2.1)
	Sweden	58	(2.5)	79	(1.3)	88	(1.0)	94	(1.3)	10.1	(1.5)	5.0	(0.9)	3.4	(0.6)	1.5	(0.7)
	United States	66	(2.4)	73	(1.6)	83	(1.1)	88	(1.6)	8.1	(1.1)	7.4	(0.9)	5.6	(0.8)	2.6	(0.7)
	Sub-national entities																
	Flanders (Belgium)	58	(2.0)	75	(1.2)	85	(1.0)	93	(1.2)	c	c	c	c	c	c	c	c
	England (UK)	61	(2.2)	72	(1.6)	82	(1.1)	87	(1.7)	8.8	(1.2)	5.9	(0.7)	3.2	(0.5)	2.5	(0.7)
	Northern Ireland (UK)	53	(2.9)	67	(1.6)	79	(1.3)	88	(2.7)	5.5	(1.2)	4.0	(0.7)	3.4	(0.8)	3.7	(2.0)
	England/N. Ireland (UK)	61	(2.1)	72	(1.5)	82	(1.1)	87	(1.6)	8.7	(1.1)	5.8	(0.7)	3.2	(0.5)	2.5	(0.7)
	Average	59	(0.5)	72	(0.3)	81	(0.2)	87	(0.5)	7.6	(0.3)	6.0	(0.2)	4.7	(0.2)	3.5	(0.3)
Partners	Russian Federation*	55	(3.8)	64	(2.3)	68	(2.6)	69	(5.6)	c	c	c	c	c	c	c	c

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for all literacy proficiency levels combined and for inactivity rates by literacy proficiency levels are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933115920

A5

Table A5.10a (L). Distribution of people working full time/part time by literacy proficiency level and age group (2012)

Literacy proficiency in the Survey of Adult Skills

		Work intensity	25-34 year-olds								55-64 year-olds							
			Level 0/1		Level 2		Level 3		Level 4/5		Level 0/1		Level 2		Level 3		Level 4/5	
			%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
OECD	**National entities**																	
	Australia	Part-time	13	(3.1)	26	(4.0)	39	(4.4)	23	(3.7)	16	(3.1)	35	(4.1)	40	(4.5)	9	(2.1)
		Full-time	7	(1.3)	23	(1.8)	45	(3.0)	24	(2.3)	15	(1.8)	33	(3.0)	39	(2.7)	13	(2.2)
	Austria	Part-time	13	(3.8)	28	(5.0)	46	(5.8)	13	(3.7)	c	c	c	c	c	c	c	c
		Full-time	8	(1.6)	31	(2.6)	47	(2.8)	14	(1.8)	17	(2.8)	50	(4.1)	30	(3.4)	4	(1.4)
	Canada	Part-time	7	(2.2)	29	(4.0)	41	(4.4)	23	(3.4)	15	(2.5)	39	(3.7)	35	(3.5)	10	(2.4)
		Full-time	9	(1.1)	27	(2.0)	42	(2.6)	22	(1.6)	21	(1.4)	35	(1.7)	33	(1.6)	10	(1.1)
	Czech Republic	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	6	(1.4)	26	(3.2)	51	(3.4)	16	(2.4)	15	(2.7)	42	(5.3)	37	(4.4)	6	(2.4)
	Denmark	Part-time	c	c	c	c	c	c	c	c	25	(3.5)	45	(4.5)	27	(3.6)	3	(1.2)
		Full-time	9	(1.2)	27	(2.5)	46	(2.8)	18	(2.2)	17	(1.3)	43	(1.7)	36	(1.8)	4	(0.8)
	Estonia	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	8	(1.2)	28	(1.7)	46	(2.0)	18	(1.8)	15	(1.5)	40	(2.3)	37	(2.3)	7	(1.2)
	Finland	Part-time	c	c	c	c	c	c	c	c	9	(3.3)	51	(6.3)	32	(5.8)	8	(3.2)
		Full-time	4	(1.0)	15	(2.1)	42	(2.3)	39	(1.9)	14	(1.6)	38	(2.2)	40	(2.1)	8	(1.1)
	France	Part-time	c	c	c	c	c	c	c	c	36	(4.0)	38	(4.5)	25	(3.9)	2	(1.1)
		Full-time	9	(1.2)	31	(1.9)	45	(2.3)	15	(1.2)	30	(1.9)	42	(2.1)	25	(1.7)	3	(0.8)
	Germany	Part-time	12	(3.5)	25	(3.9)	44	(6.2)	20	(4.8)	23	(4.6)	45	(6.8)	29	(4.8)	3	(1.7)
		Full-time	12	(1.8)	29	(2.3)	43	(2.5)	16	(1.8)	16	(2.9)	44	(3.5)	35	(2.8)	5	(1.4)
	Ireland	Part-time	12	(3.3)	41	(4.6)	38	(4.5)	9	(3.0)	22	(3.9)	43	(5.2)	31	(5.1)	3	(1.5)
		Full-time	8	(1.2)	31	(2.2)	45	(2.4)	16	(2.1)	24	(3.6)	41	(4.3)	31	(3.1)	4	(1.9)
	Italy	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	20	(2.8)	35	(3.3)	38	(3.3)	7	(1.6)	35	(4.8)	43	(5.3)	21	(3.8)	2	(1.1)
	Japan	Part-time	c	c	c	c	c	c	c	c	15	(3.1)	36	(4.0)	40	(4.2)	9	(2.3)
		Full-time	2	(0.7)	12	(1.7)	53	(2.3)	33	(2.4)	11	(1.7)	36	(2.8)	43	(2.8)	10	(1.7)
	Korea	Part-time	c	c	c	c	c	c	c	c	36	(4.5)	45	(5.5)	18	(4.3)	c	c
		Full-time	4	(0.9)	28	(2.2)	54	(2.3)	14	(1.7)	28	(2.3)	47	(2.9)	23	(2.6)	2	(0.9)
	Netherlands	Part-time	8	(2.4)	21	(3.8)	46	(4.8)	25	(3.6)	19	(2.9)	39	(3.8)	36	(4.0)	5	(2.0)
		Full-time	5	(1.2)	17	(2.0)	47	(3.1)	32	(3.3)	16	(2.7)	34	(3.6)	40	(3.0)	10	(2.1)
	Norway	Part-time	18	(4.2)	20	(4.7)	43	(5.6)	19	(4.1)	24	(4.7)	46	(5.4)	27	(5.2)	3	(2.0)
		Full-time	9	(1.3)	20	(2.0)	48	(2.6)	24	(2.1)	12	(1.9)	40	(3.1)	41	(2.7)	7	(1.4)
	Poland	Part-time	6	(3.5)	30	(5.7)	48	(7.5)	16	(5.3)	c	c	c	c	c	c	c	c
		Full-time	12	(1.5)	33	(2.8)	38	(2.7)	16	(1.6)	20	(2.5)	42	(3.9)	32	(3.5)	6	(2.1)
	Slovak Republic	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	6	(1.1)	30	(2.1)	52	(2.3)	12	(1.7)	11	(2.1)	41	(3.4)	44	(2.9)	4	(1.2)
	Spain	Part-time	12	(3.4)	33	(4.7)	45	(4.9)	10	(3.8)	c	c	c	c	c	c	c	c
		Full-time	18	(2.1)	42	(2.6)	34	(2.2)	7	(1.3)	39	(3.0)	38	(3.1)	21	(3.0)	2	(1.1)
	Sweden	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	6	(1.2)	20	(2.1)	45	(2.6)	28	(2.2)	13	(1.5)	36	(2.8)	41	(2.9)	9	(1.5)
	United States	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	16	(1.8)	29	(2.8)	37	(2.5)	18	(2.2)	18	(2.4)	34	(3.0)	38	(2.6)	10	(1.4)
	Sub-national entities																	
	Flanders (Belgium)	Part-time	c	c	c	c	c	c	c	c	20	(4.7)	46	(6.3)	28	(5.4)	5	(3.2)
		Full-time	5	(1.0)	22	(2.1)	49	(2.8)	24	(2.3)	18	(2.7)	37	(3.4)	37	(3.6)	8	(1.9)
	England (UK)	Part-time	17	(4.3)	29	(4.7)	38	(5.0)	16	(4.2)	16	(3.6)	36	(5.9)	39	(4.8)	9	(3.4)
		Full-time	8	(1.6)	28	(2.4)	42	(2.7)	21	(2.1)	17	(3.2)	38	(3.4)	33	(3.6)	12	(2.4)
	Northern Ireland (UK)	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	9	(2.5)	28	(3.8)	46	(3.7)	17	(2.2)	20	(4.7)	38	(5.0)	32	(4.5)	9	(2.7)
	England/N. Ireland (UK)	Part-time	17	(4.1)	29	(4.7)	38	(4.9)	16	(4.1)	16	(3.5)	37	(5.8)	39	(4.7)	9	(3.4)
		Full-time	8	(1.5)	28	(2.4)	43	(2.6)	21	(2.1)	17	(3.2)	38	(3.3)	33	(3.5)	12	(2.3)
	Average	Part-time	12	(1.1)	28	(1.4)	43	(1.7)	17	(1.3)	21	(1.1)	42	(1.5)	32	(1.3)	6	(0.7)
		Full-time	9	(0.3)	26	(0.5)	45	(0.6)	20	(0.4)	19	(0.5)	40	(0.7)	34	(0.6)	7	(0.3)
Partners	Russian Federation*	Part-time	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
		Full-time	12	(2.2)	34	(3.9)	44	(3.8)	10	(2.4)	8	(3.2)	34	(6.8)	44	(7.2)	13	(4.1)

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for age groups 35-44, 45-54 and 25-64 are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

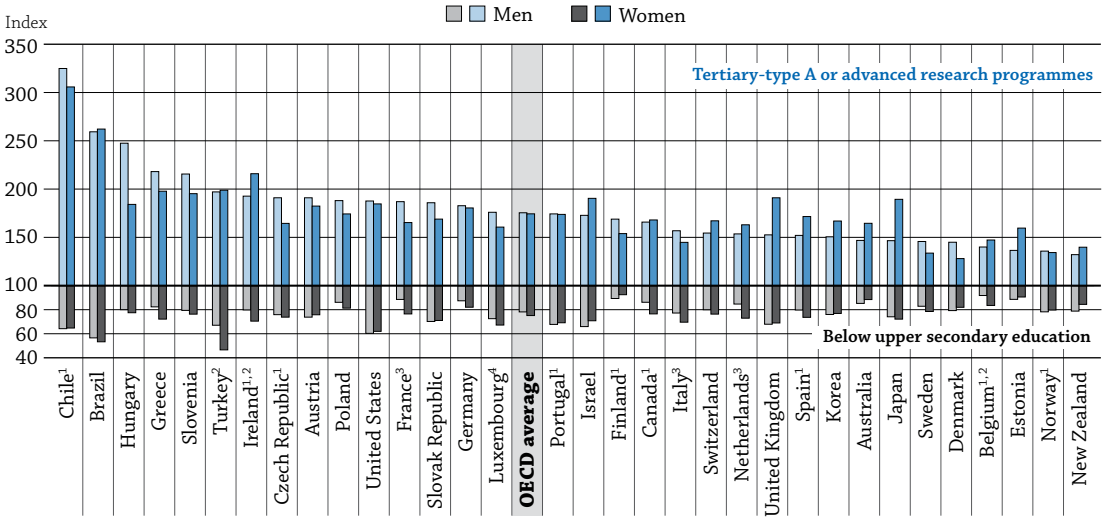
StatLink http://dx.doi.org/10.1787/888933115939

WHAT ARE THE EARNINGS ADVANTAGES FROM EDUCATION?

- In all OECD countries, adults with tertiary education earn more than adults with upper secondary or post-secondary non-tertiary education, who, in turn, earn more than adults without upper secondary education.
- Across OECD countries, compared with adults with upper secondary education who have income from employment, those without this qualification earn about 20% less, those with post-secondary non-tertiary education about 10% more, those with tertiary-type B (vocationally oriented) education about 30% more, and those with tertiary-type A (academically oriented) education or advanced research earn about 70% more.
- Across OECD countries, a tertiary-educated woman earns about 75% of what a similarly educated man earns. Only in Belgium, Slovenia, Spain and Turkey do the earnings of tertiary-educated women amount to 80% or more of men's earnings. In Brazil, Chile and Hungary, women with a tertiary degree earn 65% or less of what tertiary-educated men earn.
- On average, a tertiary graduate who performs at Level 4 or 5 in literacy proficiency, as measured by the Survey of Adult Skills (PIAAC), earns about 45% more than a similarly educated adult who performs at or below Level 1 in literacy proficiency; among adults with upper secondary education, there is a difference in earnings of around 30% between those with high literacy proficiency and those with low proficiency.

Chart A6.1. Relative earnings of workers, by educational attainment and gender (2012)

25-64 year-olds with income from employment; upper secondary education = 100



1. Year of reference 2011.
2. Earnings net of income tax.
3. Year of reference 2010.
4. Data refer to all tertiary education.

Countries are ranked in descending order of the relative earnings of 25-64 year-old men with tertiary-type A or advanced research programmes education.

Source: OECD. Table A6.1b, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116205

Context

Even if having better jobs is only one among many of the positive social and individual outcomes of attaining higher qualifications, data show that higher levels of education usually translate into better chances of employment (see Indicator A5) and higher earnings. In fact, in all OECD countries for which information is available, the higher the level of education, the greater the relative earnings.

This also seems to hold true for skills levels: individuals with high literacy proficiency, as measured by the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), report having the highest wages, while those with low skills proficiency generally report the lowest income.

The potential to earn more and see those earnings increase over time, along with other social benefits, is an incentive for individuals to pursue education and training; this is true even though the economic rewards vary, according to the chosen field of education (see Box A6.1 in *Education at a Glance 2013* [OECD, 2013]). While relative earnings for individuals with higher educational attainment tend to increase with age, relative earnings for people with below upper secondary education tend to decrease. "Relative earnings" are percentages of the earnings of adults with levels of education other than upper secondary relative to the earnings of those with upper secondary education.

Variations in relative earnings among countries reflect a number of factors, including the demand for skills in the labour market, the supply of workers at various levels of educational attainment, minimum wage laws, the strength of labour unions, the coverage of collective-bargaining agreements, relative incidence of part-time and seasonal work or the age composition of the labour force.

Information in this indicator shows that earnings advantages increase or decrease according to education, age, gender and skills proficiency. Each of these factors seems to play a role in individuals' earnings advantages to different extents. The higher the qualification attained, the better-placed individuals are to earn higher wages and to see increases in those wages over time. In addition, high skills proficiency seems to pay off in the labour market, not only in employment rates but also in mean earnings. However, in many countries, gender gaps in earnings persist, regardless of the levels of education and skills.

Other findings

- **Only about 10% of those with tertiary education are in the low-earnings category, and in general tertiary-educated individuals are substantially more likely to earn twice as much as the median worker.** About 30% of tertiary-educated workers earn twice as much as the median worker and are substantially less likely to be in the low-earnings category than those with below upper secondary education (3% earn more than twice the median and about 30% earn at or below half of the median).
- **In Brazil, Turkey and the United States, adults without upper secondary education are the most penalised in their wages, earning, at best, 35% less than people with that qualification**. In Chile, Brazil and Hungary, those with tertiary education are, comparatively, the most highly rewarded, earning more than double the income of a person with upper secondary education.
- **About 65% of the 15-24 year-old non-students have earnings from employment, while fewer than half of students do (about 40%).** In OECD countries, about 50% of 15-24 year-olds have income from employment.
- **Women with either tertiary education or with below upper secondary education aged 55-64 can expect to earn about 75% of what men of a similar age and education level earn**, while women of that age who have upper secondary education can expect to earn about 80% of what men of the same age and education level earn.

Trends

In all OECD countries, adults with tertiary education earn considerably more than adults with below upper secondary education. Between 2005 and 2012, in countries with available data for both years, the relative earnings of adults without upper secondary education either remained stable or fell, to some degree, when compared with earnings of adults with upper secondary education. In addition, in most of these countries, earnings of tertiary-educated adults relative to earnings of adults with upper secondary education increased or remained stable during the same period; the only exceptions are Hungary and the United States.

These differences suggest that the demand for higher-level and updated skills have grown, and that individuals with lower levels of skills are even more vulnerable today.

Analysis

Educational attainment and relative earnings

The higher the level of education, the higher the relative earnings. "Relative earnings" refers to the earnings of adults with income from employment who have an educational attainment other than upper secondary, relative to the earnings of those with upper secondary education.

In all OECD countries, adults with tertiary education earn more than adults with upper secondary education, who, in turn, earn more than adults with below upper secondary education. In many countries, upper secondary education is the level beyond which further education and training implies high relative earnings. As such, upper secondary education can be considered the benchmark against which earnings related to educational attainment can be measured. Since private investment costs beyond upper secondary education rise considerably in most countries, a high earnings premium is an important incentive for individuals to invest time and money in further education (Table A6.1a).

Earnings differentials between adults with tertiary education and those with upper secondary education are generally more pronounced than the differentials between upper secondary and below upper secondary education. Across OECD countries, compared with adults with income from employment with upper secondary education, those without this qualification earn about 20% less, those with post-secondary non-tertiary education about 10% more, those with tertiary-type B education about 30% more and those with tertiary-type A education or advanced research earn about 70% more.

Chile, Brazil, Hungary, Turkey and the United States show the largest differences in earnings related to the level of education. In Brazil, Turkey and the United States, those without upper secondary education are the most penalised, as they earn at least 35% less than people with this qualification. In Chile, Brazil and Hungary, those with tertiary education are the most highly rewarded, relative to persons with less education, as they earn more than double the income of a person with upper secondary education (Table A6.1a).

Relative earnings, by gender

Across OECD countries, relative earnings are affected by educational attainment to various degrees. Chart A6.1 shows that, on average across OECD countries, there are no large differences related to educational attainment between the genders in the relative earnings of adults with income from employment. A man or a woman with tertiary education (including only ISCED level 5A or 6 in Chart A6.1) earns about 70% more than a person of the same gender with upper secondary education. Nevertheless, there are large differences among countries. In Chile and Brazil (for both men and women), in Greece, Hungary and Slovenia (for men), and in Ireland (for women), tertiary-educated adults earns more than twice as much as those with upper secondary education (Table A6.1b, available on line).

Among tertiary-educated adults, differences in relative earnings (i.e. compared with the earnings of adults with upper secondary education) between men and women vary among countries. In Australia, Estonia, Ireland, Israel, Japan, Korea, Spain, Switzerland and the United Kingdom, women's relative earnings are more than 10 percentage points higher compared to men's relative earnings, while in Chile, the Czech Republic, Denmark, Finland, France, Greece, Hungary, Italy, Luxembourg, Poland, the Slovak Republic, Slovenia and Sweden, men's earnings are more than 10 percentage points higher than women's. In both cases, the differences are relative to the earnings of members of the same gender with upper secondary education who have income from employment. When comparing the genders, it should be borne in mind that there may be large differences between the two in the proportion of people with income from employment (Table A6.1b, available on line).

Relative earnings, by age

Higher educational attainment is associated with higher earnings during a person's working life. On average across OECD countries, earnings increase with the level of educational attainment, but this increase is particularly large for older workers. People with higher levels of education are more likely to be employed, and remain employed, and have more opportunities to gain experience on the job.

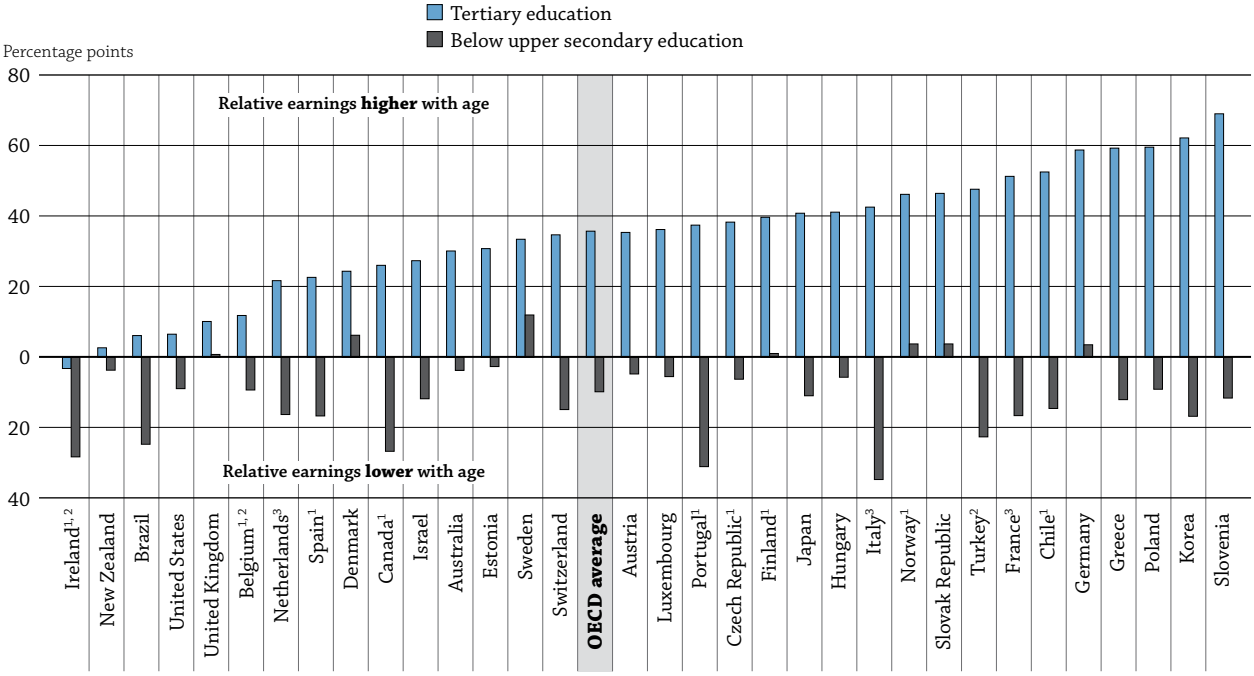
In Chart A6.2, the difference in relative earnings of older workers (55-64 year-olds) is subtracted from the difference in relative earnings of younger workers (25-34 year-olds). In both cases, the differences are relative to the earnings of members of the same age group with upper secondary education who have income from employment. The result is the percentage-point difference in relative earnings between the two age groups. Taking the OECD average as an example, young adults with below upper secondary education earn about 80% of what young adults with

upper secondary education earn. This proportion is 70% for older adults (Table A6.1a). Chart A6.2 shows the difference between these two age groups, i.e. about 10 percentage points. For workers with tertiary-type A education or an advanced research qualification (ISCED level 5A or 6), the difference in relative earnings between the two age groups is calculated the same way, and averages around 35 percentage points.

The relative earnings for tertiary-educated older adults are higher than those of younger adults in most OECD and G20 countries, with the exception of Ireland. On average, the differential between the two groups is up to 35 percentage points. For those with only below upper secondary education, the relative earnings disadvantage increases for older workers in all countries except Denmark, Finland, Germany, Norway, the Slovak Republic, Sweden and the United Kingdom. The increase in this disadvantage is not as marked as the increase in the earnings advantage for those with a tertiary education – an indication that tertiary education is key to higher earnings at older ages (Table A6.1a).

Chart A6.2. Differences in relative earnings between older and younger workers, by educational attainment (2012)

55-64 and 25-34 year-olds with income from employment, percentage-point difference, earnings relative to workers with upper secondary education



1. Year of reference 2011.
2. Earnings net of income tax.
3. Year of reference 2010.

Countries are ranked in ascending order of the difference in relative earnings among 55-64 year-olds and 25-34 year-olds with tertiary education.

Source: OECD. Table A6.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116224

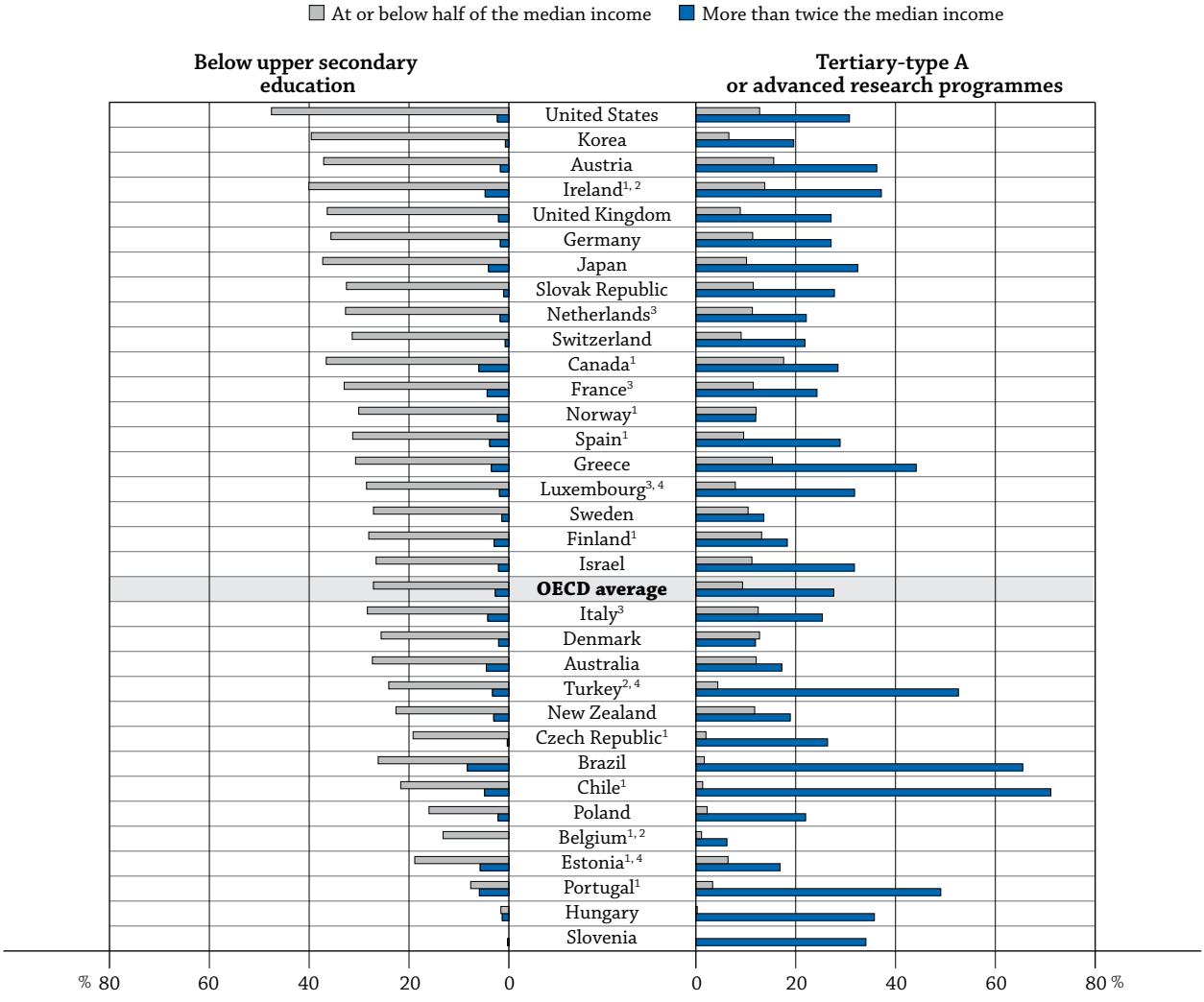
Trends in relative earnings, by educational attainment

Between 2005 and 2012, in countries with available data for both years, the relative earnings of adults with below upper secondary education who have income from employment either remained stable or fell, to some degree, when compared with earnings of adults with upper secondary education. In most countries, except Hungary and the United States, relative earnings for tertiary-educated adults increased between 2005 and 2012. Nonetheless, relative earnings have undergone large fluctuations in several countries. In addition, data on earnings' trends are relative to the changes in earnings of people with upper secondary qualifications in each country. For this reason it is difficult to assess the average evolution of relative earnings for the different levels of education throughout the years (see *Methodology* section for further information) (Table A6.2a).

A6

Chart A6.3. Differences in relative earnings of workers, by educational attainment (2012)

25-64 year-olds with income from employment



1. Year of reference 2011.
2. Earnings net of income tax.
3. Year of reference 2010.
4. Data refer to all tertiary education.

Countries are ranked in descending order of the difference in proportion of 25-64 year-olds at or below half the median and the proportion of the population earning more than twice the median, at below upper secondary education.

Source: OECD. Table A6.4, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116243

Differences in earnings between female and male workers, by educational attainment

Regardless of the level of education, the gender gap in earnings persists. The available data on full-time, full-year earners show that the largest gender gap in earnings is among workers with tertiary education. Across OECD countries, a tertiary-educated woman earns about 75% of what a tertiary educated man earns. Only in Belgium, Slovenia, Spain and Turkey do the earnings of tertiary-educated women amount to 80% or more of men's earnings. In Brazil, Chile and Hungary, women with a tertiary degree earn 65% or less of what tertiary-educated men earn (Table A6.3a).

On average, only women with an upper secondary or post-secondary non-tertiary education working full time show an increase in earnings, relative to men, as they grow older. Women with tertiary education and women with below upper secondary education show no increase in earnings, relative to men's earnings, as they age. Tertiary-educated

women or women with below upper secondary education aged 55-64 can expect to earn about 75% of what men of a similar age and education level earn, while women that age who have upper secondary education can expect to earn about 80% of what men of the same age and education level earn (Table A6.3a).

Distribution of earnings within levels of educational attainment

Data on the distribution of earnings within groups with different levels of education can show how tightly earnings centre around the country median. In addition to providing information on equity in earnings, these data indicate the risks associated with investing in education, as risk is typically measured by the variation in outcomes. Data on the distribution of earnings (Table A6.4, available on line) include earnings from all employed individuals, and this limits the analysis as the hours worked influences earnings, in general, and the distribution of earnings, in particular (see *Methodology* section for further information).

For people with income from employment, the five earnings categories reported range from "At or below half the median" income to "More than twice the median" income, while the proportion of people without earnings from work is reported in a separate column. Chart A6.3 contrasts the results for those with below upper secondary education with those who have completed a tertiary-type A or an advanced research programme (ISCED 5A or 6) by comparing the proportion of wage-earners at or below one-half of the median to those at more than twice the median. As expected, there is a large difference between these two educational categories. On average, tertiary-educated individuals are substantially more likely to earn twice as much as the median worker (about 30% of these individuals do) and are substantially less likely to be in the low-earnings category (about 10% are) than those with below upper secondary education (3% earn more than twice the median and about 30% earn at or below half of the median) (Table A6.4, available on line).

There are some notable differences in how well tertiary-educated individuals fare in different countries. In Brazil and Chile, 65% or more of those with a degree from a tertiary-type A or advanced research programme earn twice as much as the median worker; in Austria, Canada and Greece, 15% or more of those with such a degree are found in the lowest-earnings category (at or below half of the median); and in Denmark and Norway, an individual with such a degree is roughly as likely to fall into the lowest and highest earnings categories (Chart A6.3).

In all countries, individuals who remain with low qualifications through their working life (below upper secondary education) usually face large earnings disadvantages. On average across OECD countries, less than 5% of those with below upper secondary education earn twice the national median. Only in Brazil, Canada, Estonia and Portugal is this proportion larger than 5%. On average, over 25% of those with below upper secondary education earn less than half the national median; in the United States, more than 45% of this group do (Chart A6.3).

Relative earnings of students

In OECD countries, about 50% of 15-24 year-olds have income from employment. In this age group, a majority of non-students (about 65%) has earnings from employment, while less than half of students do (about 40%). In Belgium, Chile, Greece and Spain, less than 10% of 15-24 year-old students have earnings from employment. It is important to consider that, in some countries, such as Switzerland, a proportion of students enrolled in upper secondary education has earnings based on apprenticeship contracts but these students are not included in these calculations. Data on students' earnings show that female students at this age are about 5 percentage points more likely to work than their male counterparts (Table A6.5b and Table A6.5c, available on line).

On average, among students with income from employment, those who have attained upper secondary or post-secondary non-tertiary education have higher earnings than students with below upper secondary attainment, relative to non-students (Table A6.5a).

These findings support the widespread notion that schooling beyond compulsory education implies a loss of income, even when combining studying and work. This loss of income, together with tuition fees and the need to repay loans, may discourage some individuals from studying while being active in the labour market.

Mean monthly earnings and literacy proficiency levels in the Survey of Adult Skills

The higher the proficiency in literacy, as measured by the Survey of Adult Skills, the higher the monthly earnings. Conversely, those with low literacy proficiency have generally the lowest monthly earnings. Chart A6.4 shows that across countries, mean monthly earnings in USD are higher as both the educational attainment level and the literacy proficiency level increase (right side of chart). In all countries with available data, mean monthly earnings are lowest

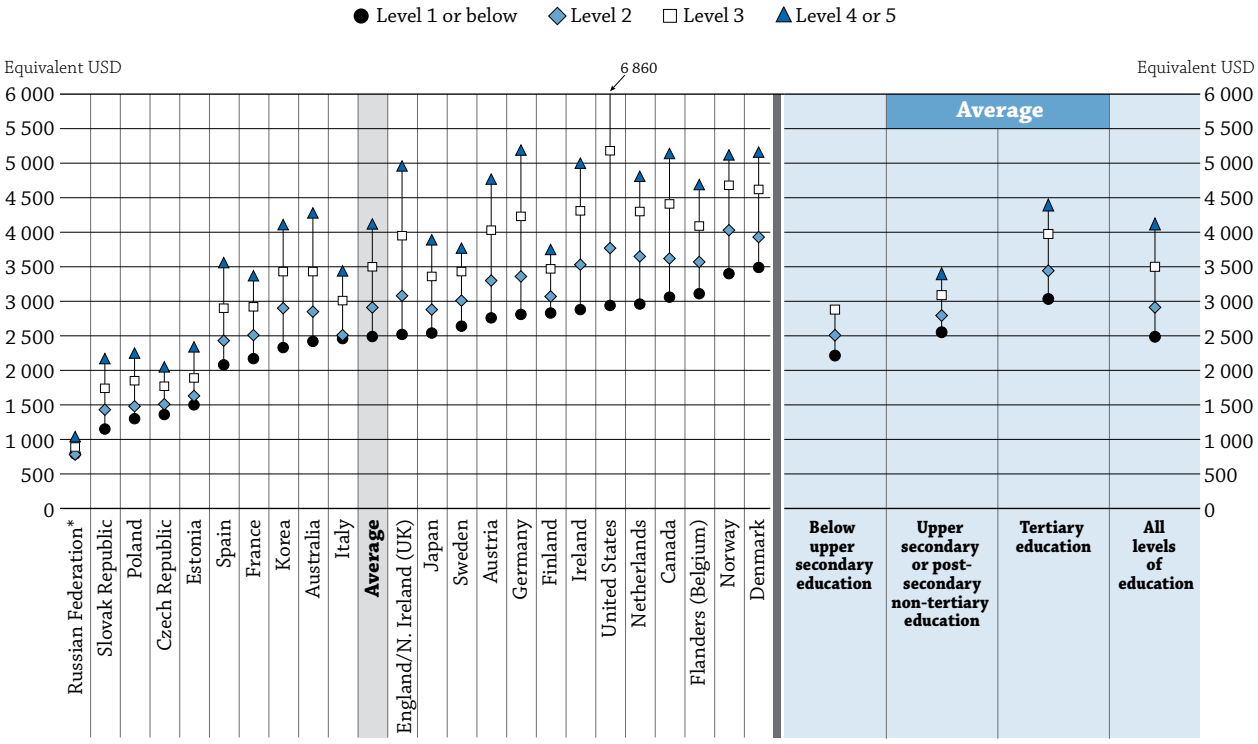
A6

for those who perform at or below Level 1 in literacy proficiency and highest for those who perform at Level 4 or 5 (left side of chart). On average across countries, an individual at literacy proficiency Level 4 or 5 earns about 65% more than an individual at Level 1 or below.

Nonetheless, the difference in mean monthly earnings between people at each literacy proficiency level varies widely among countries. As proficiency increases, differences in returns range from less than 50% in Denmark, Finland, Italy, the Russian Federation and Sweden, to over 100% in the United States.

Chart A6.4. Mean monthly earnings, by literacy proficiency level (2012)

Survey of Adult Skills, 25-64 year-olds with income from employment working full time (i.e. 30 or more hours per week)



* See note on data for the Russian Federation in the *Methodology* section.

Countries are ranked in ascending order of mean monthly earnings by literacy proficiency Level 1 or below.

Source: OECD. Table A6.6a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116262

In addition, the right section of the chart shows the average impact of skills and educational attainment on mean monthly earnings. At all levels of education combined, earnings advantages are larger at higher levels of proficiency. On average, a tertiary graduate who performs at Level 4 or 5 in literacy proficiency, as measured by the Survey of Adult Skills, earns about 45% more than a similarly educated adult who performs at or below Level 1 in literacy proficiency; among adults with upper secondary education, there is a differences in earnings of around 30% between those with high literacy proficiency and those with low proficiency.

Definitions

Age groups: adults refers to 25-64 year-olds; **younger adults** refers to 25-34 year-olds; **older adults** refers to 55-64 year-olds. The **working-age population** is the total population aged 25-64.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED levels 3A, 3B, 3C long programmes, and ISCED level 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the *Reader's Guide* at the beginning of the book for a presentation of all ISCED levels.

Methodology

The indicator is based on two different data collections. One is the regular data collection by the OECD LSO (Labour Market and Social Outcomes of Learning) Network that takes account of earnings from work for all individuals during the reference period, even if the individual has worked part time or part year; this database contains data on student versus non-student earnings. It also gathers information on the earnings of those working full time and full year, for Table A6.3a. The second data collection is the Survey of Adult Skills, for Tables A6.6a, b and c and A6.7. Data on proficiency levels are based on the Survey of Adult Skills (PIAAC) (2012). PIAAC is the OECD Programme for the International Assessment of Adult Competencies. See *About the Survey of Adult Skills* at the beginning of this publication and Annex 3 (*www.oecd.org/edu/eag.htm*) for additional information.

Regular earnings data collection

Regular earnings data collection (used in all tables except Tables A6.6 and A6.7) provides information based on an annual, monthly or weekly reference period, depending on the country. The length of the reference period for earnings also differs. Australia, New Zealand and the United Kingdom reported data on weekly earnings; Belgium, Brazil, Chile, Estonia, Finland, Israel (three months), Korea, Portugal and Switzerland reported monthly data; and all other countries reported annual data. France reported annual data from 2008 onwards, and monthly data up to and including 2007. Data on earnings are before income tax, except for Belgium, Korea and Turkey, where earnings reported are net of income tax. Data on earnings for individuals in part-time work are excluded in the regular data collection for the Czech Republic, Hungary, Portugal and Slovenia; and data on part-year earnings are excluded for the Czech Republic, Hungary and Portugal. Earnings of self-employed people are excluded for many countries and, in general, there is no simple and comparable method to separate earnings from employment and returns to capital invested in the business.

Since earnings data differ across countries in a number of ways, the results should be interpreted with caution. For example, in countries reporting annual earnings, differences in the incidence of seasonal work among individuals with different levels of educational attainment will have an effect on relative earnings that is not similarly reflected in the data for countries reporting weekly or monthly earnings. In addition, data available in Tables A6.2a and b concern relative earnings and therefore should be used with caution to assess the evolution of relative earnings for different levels of education. For Tables A6.5a and b, differences between countries could be the result of differences in data sources and in the length of the reference period. For further details, see Annex 3.

The total (men plus women, i.e. M+W) average for earnings is not the simple average of the earnings figures for men and women, but the average based on earnings of the total population. This overall average weights the average earnings figure separately for men and women by the share of men and women at different levels of attainment.

Full-time and full-year data collection

Full-time and full-year data collection supplies the data for Table A6.3a (gender differences in full-time earnings) and Table A5.6 (differences in full-time earnings by educational attainment).

For the definition of full-time earnings (in Tables A6.3a and A5.6), countries were asked whether they had applied a self-designated full-time status or a threshold value of typical number of hours worked per week. Belgium, France, Italy, Luxembourg, Portugal, Spain, Sweden and the United Kingdom reported self-designated full-time status; the other countries defined the full-time status by the number of working hours per week. The threshold was 44/45 hours per week in Chile, 37 hours per week in the Slovak Republic, 36 hours in Hungary and Slovenia, 35 hours in Australia, Canada, Estonia, Germany, Israel, Korea, Norway and the United States, and 30 hours in the Czech Republic, Greece and New Zealand. Other participating countries did not report a minimum normal number of working hours for full-time work. For some countries, data on full-time, full-year earnings are based on the European Survey on Income and Living Conditions (EU-SILC), which uses a self-designated approach in establishing full-time status.

Survey of Adult Skills

Data for Tables A6.6 and A6.7 are taken from the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC).

"Monthly earnings" includes bonuses for wage and salary earners and self-employed individuals, PPP corrected USD. The wage distribution was trimmed to eliminate the 1st and 99th percentiles.

Only people working full time are taken into account; a person is considered to be working full time if the working hours per week are greater than or equal to 30.

Note regarding data from Israel

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

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, forthcoming).

Reference

OECD (2013), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2013-en*.

Tables of Indicator A6

StatLink http://dx.doi.org/10.1787/888933116053

	Table A6.1a	Relative earnings of workers, by educational attainment and age group (2012)
WEB	Table A6.1b	Relative earnings of workers, by educational attainment, age group and gender (2012)
	Table A6.2a	Trends in relative earnings of workers, by educational attainment and gender (2000, 2005, 2010, 2011, 2012)
WEB	Table A6.2b	Trends in relative earnings of workers, by educational attainment and gender (2000-12)
	Table A6.3a	Differences in earnings between female and male workers, by educational attainment and age group (2012)
	Table A6.3b	Trends in the differences in earnings between female and male workers, by educational attainment (2000, 2005, 2010, 2011 and 2012)
WEB	Table A6.3c	Trends in the differences in earnings between female and male workers, by educational attainment (2000-12)
WEB	Table A6.4	Distribution of 25-64 year-olds, by gender, educational attainment and level of earnings relative to median earnings (2012)
	Table A6.5a	Relative earnings of 15-24 year-old students with income from employment, by educational attainment and gender (2012)
	Table A6.5b	Percentage of 15-29 year-olds with income from employment among all 15-29 year-olds, by age group and student status (2012)
WEB	Table A6.5c	Percentage of 15-29 year-olds with income from employment among all 15-29 year-olds, by age group, student status and gender (2012)
	Table A6.6a (L)	Mean monthly earnings of workers, by educational attainment and literacy proficiency level (2012)
WEB	Table A6.6a (N)	Mean monthly earnings of workers, by educational attainment and numeracy proficiency level (2012)
WEB	Table A6.6b (L)	Mean monthly earnings of workers, by educational attainment, literacy proficiency level and gender (2012)
WEB	Table A6.6b (N)	Mean monthly earnings of workers, by educational attainment, numeracy proficiency level and gender (2012)
WEB	Table A6.6c (L)	Mean monthly earnings of workers, by educational attainment, literacy proficiency level and age (2012)
WEB	Table A6.6c (N)	Mean monthly earnings of workers, by educational attainment, numeracy proficiency level and age (2012)
WEB	Table A6.7 (L)	Mean monthly earnings of workers, by educational attainment, literacy proficiency level and years since obtained most recent qualification (2012)
WEB	Table A6.7 (N)	Mean monthly earnings of workers, by educational attainment, numeracy proficiency level and years since obtained most recent qualification (2012)

A6

Table A6.1a. Relative earnings of workers, by educational attainment and age group (2012)

Adults with income from employment; upper secondary education = 100

			Below upper secondary education			Post-secondary non-tertiary education			Tertiary-type B education			Tertiary-type A or advanced research programmes			All tertiary education		
			25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64	25-64	25-34	55-64
		Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	2012	83	88	84	99	95	108	114	111	129	142	121	159	134	119	149
	Austria	2012	70	70	66	127	112	162	143	120	144	185	143	194	171	138	173
	Belgium[1]	2011	90	92	83	95	101	89	116	113	117	142	132	153	128	123	135
	Canada	2011	87	103	76	111	125	105	113	110	111	163	133	185	139	123	149
	Chile	2011	66	70	56	m	m	m	151	133	143	309	261	323	260	227	279
	Czech Republic	2011	73	78	71	m	m	m	117	114	118	181	154	190	176	149	187
	Denmark	2012	81	78	84	61	42	104	117	116	113	130	112	142	128	112	137
	Estonia	2012	94	93	91	m	m	m	m	m	m	134	116	147	134	116	147
	Finland	2011	92	92	93	m	m	m	128	118	127	157	127	205	147	126	166
	France	2010	82	89	72	m	m	m	127	126	136	170	145	212	154	138	189
	Germany	2012	84	84	87	114	118	114	146	145	141	183	149	227	174	148	207
	Greece	2012	79	94	82	99	111	77	151	127	185	198	140	267	152	127	187
	Hungary	2012	78	81	76	122	116	127	127	121	157	209	182	223	208	181	222
	Iceland		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Ireland[1]	2011	84	104	76	99	99	108	131	123	109	201	186	185	175	165	162
	Israel	2012	71	76	64	109	91	94	112	96	109	170	133	174	152	123	151
	Italy	2010	77	94	59	m	m	m	m	m	m	147	125	167	147	125	167
	Japan	2012	78	87	76	m	m	m	91	99	99	172	144	203	152	136	177
	Korea	2012	71	82	65	m	m	m	116	113	144	161	133	196	147	126	188
	Luxembourg	2012	70	68	63	119	86	71	m	m	m	m	m	m	168	148	184
	Mexico		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Netherlands	2010	83	90	74	m	m	m	145	134	145	157	137	160	156	137	159
	New Zealand	2012	82	85	82	110	115	101	105	107	100	134	126	146	123	121	123
	Norway	2011	78	76	80	128	125	137	155	136	169	128	107	152	130	108	154
	Poland	2012	85	89	80	107	99	112	m	m	m	172	146	205	172	146	205
	Portugal	2011	70	82	51	104	109	96	161	141	154	171	157	204	170	156	193
	Slovak Republic	2012	67	66	70	m	m	m	126	116	134	175	145	193	173	144	190
	Slovenia	2012	78	85	73	m	m	m	152	130	165	200	150	240	180	142	211
	Spain	2011	80	87	70	c	c	c	106	105	103	156	139	160	141	127	150
	Sweden	2012	82	76	88	121	79	138	107	92	115	135	115	158	128	110	143
	Switzerland	2012	77	84	70	107	102	117	141	131	143	165	135	182	158	134	169
	Turkey[1]	2012	63	68	46	a	a	a	m	m	m	191	186	234	191	186	234
	United Kingdom	2012	70	68	69	m	m	m	130	127	136	164	153	170	156	149	159
	United States	2012	63	70	61	m	m	m	109	112	100	182	170	180	174	165	172
	OECD average		78	83	73	108	102	110	127	119	131	170	145	191	159	140	176
	EU21 average		79	84	75	106	98	109	131	122	135	168	143	190	159	138	175
Partners	Argentina		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	2012	58	65	41	m	m	m	m	m	m	247	235	241	247	235	241
	China		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Colombia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Latvia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Earnings net of income tax.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116072

A6

Table A6.2a. [1/2] Trends in relative earnings of workers, by educational attainment and gender (2000, 2005, 2010, 2011, 2012)

25-64 year-olds with income from employment; upper secondary education = 100

			2000			2005			2010			2011			2012		
		Educational attainment	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	Below upper secondary	m	m	m	88	88	81	m	m	m	m	m	m	85	88	83
		Tertiary	m	m	m	141	148	134	m	m	m	m	m	m	141	153	134
	Austria	Below upper secondary	m	m	m	80	78	74	73	75	69	71	78	69	74	76	70
		Tertiary	m	m	m	157	165	158	163	173	165	164	174	166	171	174	171
	Belgium[1]	Below upper secondary	93	83	92	91	82	89	92	86	91	92	84	90	m	m	m
		Tertiary	128	133	128	137	134	133	132	135	131	129	134	128	m	m	m
	Canada	Below upper secondary	84	72	83	80	70	80	81	79	83	86	77	87	m	m	m
		Tertiary	149	139	143	140	140	138	146	154	145	144	142	139	m	m	m
	Chile	Below upper secondary	m	m	m	m	m	m	m	m	m	64	65	66	m	m	m
		Tertiary	m	m	m	m	m	m	m	m	m	271	262	260	m	m	m
	Czech Republic	Below upper secondary	m	m	m	79	72	72	76	74	73	76	74	73	m	m	m
		Tertiary	m	m	m	190	161	181	195	163	182	187	160	176	m	m	m
	Denmark	Below upper secondary	m	m	m	82	84	82	80	83	81	79	83	81	79	82	81
		Tertiary	m	m	m	133	126	125	141	126	129	138	126	128	138	126	128
	Estonia	Below upper secondary	m	m	m	m	m	m	m	m	m	81	81	87	89	91	94
		Tertiary	m	m	m	m	m	m	m	m	m	146	148	135	137	160	134
	Finland	Below upper secondary	92	99	95	91	98	94	90	93	92	89	92	92	m	m	m
		Tertiary	169	146	153	162	145	149	160	147	148	159	147	147	m	m	m
	France[2]	Below upper secondary	m	m	m	90	81	86	89	76	82	m	m	m	m	m	m
		Tertiary	m	m	m	152	142	144	162	155	154	m	m	m	m	m	m
	Germany	Below upper secondary	81	74	76	95	80	89	97	77	88	91	85	88	87	82	84
		Tertiary	143	141	145	153	156	159	176	159	172	166	163	169	171	172	174
	Greece	Below upper secondary	m	m	m	m	m	m	m	m	m	69	52	62	82	72	79
		Tertiary	m	m	m	m	m	m	m	m	m	151	231	171	169	140	152
	Hungary	Below upper secondary	81	77	77	80	77	78	80	75	77	79	75	76	80	77	78
		Tertiary	252	179	210	269	202	229	259	198	221	256	193	217	246	184	208
	Iceland		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Ireland[1]	Below upper secondary	82	64	87	83	67	84	76	78	81	80	70	84	m	m	m
		Tertiary	135	161	149	187	190	192	168	177	165	169	190	175	m	m	m
	Israel	Below upper secondary	m	m	m	74	72	79	68	63	72	69	66	72	66	71	71
		Tertiary	m	m	m	160	158	151	164	150	152	159	152	151	153	171	152
	Italy	Below upper secondary	71	84	78	m	m	m	77	70	77	m	m	m	m	m	m
		Tertiary	143	137	138	m	m	m	157	145	147	m	m	m	m	m	m
	Japan	Below upper secondary	m	m	m	m	m	m	m	m	m	m	m	m	74	72	78
		Tertiary	m	m	m	m	m	m	m	m	m	m	m	m	144	160	152
	Korea	Below upper secondary	m	m	m	73	76	68	71	77	69	72	78	71	76	77	71
		Tertiary	m	m	m	139	160	149	143	155	151	137	153	147	140	152	147
	Luxembourg	Below upper secondary	m	m	m	m	m	m	69	68	67	m	m	m	73	67	70
		Tertiary	m	m	m	m	m	m	166	166	161	m	m	m	176	161	168
	Mexico		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Netherlands	Below upper secondary	m	m	m	m	m	m	85	73	83	m	m	m	m	m	m
		Tertiary	m	m	m	m	m	m	153	162	156	m	m	m	m	m	m
	New Zealand	Below upper secondary	79	86	82	79	78	81	81	83	83	80	85	83	79	84	82
		Tertiary	128	126	127	122	121	125	130	132	131	124	129	125	122	127	123
	Norway	Below upper secondary	81	82	80	79	81	79	78	79	78	78	80	78	m	m	m
		Tertiary	134	134	131	136	136	131	137	136	131	137	135	130	m	m	m
	Poland	Below upper secondary	m	m	m	m	m	m	87	79	83	m	m	m	86	81	85
		Tertiary	m	m	m	m	m	m	187	172	171	m	m	m	188	174	172
	Portugal	Below upper secondary	m	m	m	64	66	67	67	68	69	68	69	70	m	m	m
		Tertiary	m	m	m	183	173	177	173	172	170	173	172	170	m	m	m

1. Earnings net of income tax.
2. Break in the series between 2007 and 2008, change in the data source.
3. Averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116091

Table A6.2a. [2/2] Trends in relative earnings of workers, by educational attainment and gender (2000, 2005, 2010, 2011, 2012)

25-64 year-olds with income from employment; upper secondary education = 100

			2000			2005			2010			2011			2012		
		Educational attainment	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W	Men	Women	M+W
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Slovak Republic	Below upper secondary	m	m	m	m	m	m	70	71	67	69	71	67	70	71	67
		Tertiary	m	m	m	m	m	m	188	172	179	185	169	175	185	167	173
	Slovenia	Below upper secondary	m	m	m	m	m	m	75	74	75	77	76	76	79	76	78
		Tertiary	m	m	m	m	m	m	201	181	186	197	180	183	192	177	180
	Spain	Below upper secondary	m	m	m	79	72	80	81	74	80	80	74	80	m	m	m
		Tertiary	m	m	m	132	155	137	134	157	140	136	155	141	m	m	m
	Sweden	Below upper secondary	m	m	m	87	87	88	84	81	84	83	80	83	83	79	82
		Tertiary	m	m	m	140	127	130	138	128	129	137	128	128	136	129	128
	Switzerland	Below upper secondary	79	72	75	81	77	76	78	78	76	80	77	77	80	76	77
		Tertiary	135	144	152	142	150	157	144	151	155	144	159	157	145	159	158
	Turkey[1]	Below upper secondary	m	m	m	72	43	69	m	m	m	m	m	m	67	47	63
		Tertiary	m	m	m	153	154	149	m	m	m	m	m	m	197	199	191
	United Kingdom	Below upper secondary	74	69	69	72	71	71	64	69	67	67	69	69	68	69	70
		Tertiary	152	176	160	146	181	158	162	177	165	151	182	157	147	178	156
	United States	Below upper secondary	65	66	68	69	67	71	64	61	66	64	58	64	60	62	63
		Tertiary	181	169	176	196	178	186	184	175	177	182	181	177	180	177	174
	OECD average[3]	Below upper secondary	80	77	80	80	76	79	78	76	77	77	75	77	77	75	76
		Tertiary	154	149	151	158	155	154	164	158	158	164	165	161	164	162	159
	EU21 average[3]	Below upper secondary	82	78	82	82	78	81	80	76	78	78	76	78	79	77	78
		Tertiary	160	153	155	165	158	159	169	161	162	165	166	160	171	162	162
Partners	Argentina		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	Below upper secondary	m	m	m	m	m	m	m	m	m	57	50	58	57	53	58
		Tertiary	m	m	m	m	m	m	m	m	m	273	269	257	259	262	247
	China		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Colombia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Latvia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Earnings net of income tax.
2. Break in the series between 2007 and 2008, change in the data source.
3. Averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116091

A6

Table A6.3a. Differences in earnings between female and male workers, by educational attainment and age group (2012)

Adults with income from employment; average annual full-time, full-year earnings of women as a percentage of men's earnings

		Year	Below upper secondary education			Upper secondary or post-secondary non-tertiary education			Tertiary education		
			25-64	35-44	55-64	25-64	35-44	55-64	25-64	35-44	55-64
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	2012	79	80	81	75	74	78	75	75	69
OECD	Austria	2012	76	74	77	76	76	80	76	80	79
OECD	Belgium[1]	2011	80	m	m	98	96	99	86	86	81
OECD	Canada	2011	65	70	73	70	71	70	69	68	70
OECD	Chile	2011	76	79	70	69	68	71	62	70	53
OECD	Czech Republic	2011	79	78	80	80	74	87	70	64	85
OECD	Denmark	2012	83	80	82	80	78	83	75	76	73
OECD	Estonia	2012	64	60	88	59	59	66	68	64	69
OECD	Finland	2012	79	75	79	79	76	79	76	75	74
OECD	France	2010	74	69	76	79	75	75	73	77	70
OECD	Germany	2012	82	79	92	82	83	86	72	73	73
OECD	Greece	2012	76	75	65	84	86	69	70	75	66
OECD	Hungary	2012	81	81	78	84	81	90	63	57	70
OECD	Iceland		m	m	m	m	m	m	m	m	m
OECD	Ireland[1]	2011	73	84	71	77	76	75	76	86	80
OECD	Israel	2012	77	57	87	66	68	60	72	70	80
OECD	Italy	2010	78	79	72	78	78	77	69	77	68
OECD	Japan	2012	m	m	m	m	m	m	m	m	m
OECD	Korea	2012	65	67	63	64	62	67	68	67	69
OECD	Luxembourg	2012	82	85	71	83	88	66	72	89	65
OECD	Mexico		m	m	m	m	m	m	m	m	m
OECD	Netherlands	2010	77	79	76	79	85	79	74	83	74
OECD	New Zealand	2012	84	90	78	83	85	83	79	76	80
OECD	Norway	2011	82	80	82	79	78	78	74	75	72
OECD	Poland	2012	73	69	74	79	72	89	71	66	76
OECD	Portugal	2011	75	75	74	72	72	69	70	74	68
OECD	Slovak Republic	2012	73	74	72	75	71	83	67	59	73
OECD	Slovenia	2012	85	84	85	88	84	99	82	80	87
OECD	Spain	2011	78	86	75	79	78	90	86	83	92
OECD	Sweden		m	m	m	m	m	m	m	m	m
OECD	Switzerland		m	m	m	m	m	m	m	m	m
OECD	Turkey[1]	2012	67	64	59	83	74	148	82	85	69
OECD	United Kingdom	2012	75	73	79	72	71	66	80	82	76
OECD	United States	2012	75	90	72	70	69	67	69	70	69
	OECD average		76	76	76	77	76	80	73	75	73
	EU21 average		77	77	77	79	78	80	74	75	75
Partners	Argentina		m	m	m	m	m	m	m	m	m
Partners	Brazil	2012	68	69	64	62	60	58	63	63	66
Partners	China		m	m	m	m	m	m	m	m	m
Partners	Colombia		m	m	m	m	m	m	m	m	m
Partners	India		m	m	m	m	m	m	m	m	m
Partners	Indonesia		m	m	m	m	m	m	m	m	m
Partners	Latvia		m	m	m	m	m	m	m	m	m
Partners	Russian Federation		m	m	m	m	m	m	m	m	m
Partners	Saudi Arabia		m	m	m	m	m	m	m	m	m
Partners	South Africa		m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m

Note: Columns showing the relative earnings for all levels of education combined are available for consultation on line (see *StatLink* below).

1. Earnings net of income tax.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116110

A6

Table A6.3b. Trends in the differences in earnings between female and male workers, by educational attainment (2000, 2005, 2010, 2011 and 2012)

25-64 year-olds with income from employment, average annual earnings of women as a percentage of men's earnings

		Below upper secondary education					Upper secondary or post-secondary non-tertiary education					Tertiary education				
		2000	2005	2010	2011	2012	2000	2005	2010	2011	2012	2000	2005	2010	2011	2012
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OECD	Australia	m	61	m	m	62	m	61	m	m	61	m	64	m	m	65
	Austria	m	57	61	65	62	m	60	60	59	60	m	62	63	63	62
	Belgium[1]	64	67	72	70	m	72	75	77	77	m	74	73	79	80	m
	Canada	53	55	61	57	m	61	61	62	61	m	57	62	67	64	m
	Chile	m	m	m	66	m	m	m	m	65	m	m	m	m	63	m
	Czech Republic	m	74	79	79	m	m	80	82	81	m	m	68	68	69	m
	Denmark	m	73	80	78	77	m	71	76	75	74	m	67	68	68	68
	Estonia	m	m	59	62	58	m	m	60	62	56	m	m	62	63	66
	Finland	76	78	77	76	m	71	73	74	74	m	61	65	68	68	m
	France[2]	m	68	61	m	m	m	75	71	m	m	m	70	68	m	m
	Germany	56	52	49	56	56	63	62	62	61	62	61	62	56	59	60
	Greece	m	m	m	32	70	m	m	m	44	79	m	m	m	65	66
	Hungary	83	88	83	84	84	88	93	89	88	85	62	69	68	67	64
	Iceland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Ireland[1]	46	49	60	56	m	60	63	64	65	m	71	62	63	71	m
	Israel	m	57	60	62	61	m	59	65	66	58	m	58	60	63	63
	Italy	76	m	62	m	m	65	m	69	m	m	62	m	64	m	m
	Japan	m	m	m	m	42	m	m	m	m	43	m	m	m	m	48
	Korea	m	61	64	63	60	m	59	59	58	60	m	67	64	65	65
	Luxembourg	m	m	63	m	66	m	m	64	m	71	m	m	64	m	65
	Mexico	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Netherlands	m	m	49	m	m	m	m	57	m	m	m	m	60	m	m
	New Zealand	67	61	69	70	70	64	64	65	64	67	61	61	68	68	69
	Norway	63	65	68	68	m	62	63	66	66	m	62	63	65	66	m
	Poland	m	m	72	m	73	m	m	81	m	79	m	m	72	m	72
	Portugal	m	73	71	72	m	m	71	71	71	m	m	67	70	70	m
	Slovak Republic	m	m	73	75	73	m	m	73	72	72	m	m	67	66	65
	Slovenia	m	m	85	85	85	m	m	87	86	88	m	m	79	79	82
	Spain	m	58	66	67	m	m	64	71	72	m	m	75	84	82	m
	Sweden	m	74	73	72	72	m	73	74	74	75	m	68	71	71	72
	Switzerland	53	54	58	55	55	58	57	59	58	58	62	60	61	63	63
	Turkey[1]	m	47	m	m	55	m	78	m	m	79	m	78	m	m	80
	United Kingdom	50	55	70	50	58	54	56	65	48	57	63	69	71	58	69
	United States	60	63	63	58	66	60	65	66	64	64	56	59	63	63	63
	OECD average[3]	62	63	67	65	65	65	67	69	67	67	63	66	67	67	66
	EU21 average[3]	65	67	68	67	69	68	70	71	69	72	65	68	68	69	68
Partners	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Brazil	m	m	m	51	55	m	m	m	59	58	m	m	m	58	59
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Latvia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

1. Earnings net of income tax.
2. Break in the series between 2007 and 2008, change in the data source.
3. Averages cannot be compared throughout the years as the number of countries used to calculate those averages is different every year.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116129

A6

Table A6.5a. Relative earnings of 15-24 year-old students with income from employment, by educational attainment and gender (2012)[1]

Earnings of 15-24 year-old students with income from employment compared with earnings of 15-24 year-old non-students with income from employment; non-students with income from employment = 100

		Year	Below upper secondary education			Upper secondary or post-secondary non-tertiary education			Tertiary education		
			Men	Women	M + W	Men	Women	M + W	Men	Women	M + W
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD	Australia	2012	c	c	29	51	57	52	c	c	68
	Austria	2012	57	54	55	37	32	33	c	c	c
	Belgium	2010	56	57	54	78	63	67	79	83	82
	Canada	2011	34	47	37	47	57	49	51	55	53
	Chile	2011	123	78	112	121	93	111	c	c	c
	Czech Republic		m	m	m	m	m	m	m	m	m
	Denmark	2012	45	46	44	42	55	47	c	c	c
	Estonia	2012	c	c	c	c	c	c	c	c	c
	Finland	2011	33	48	c	55	58	c	c	c	c
	France	2010	53	46	50	46	47	45	c	c	c
	Germany	2012	38	48	41	34	48	40	c	c	c
	Greece	2012	c	c	c	58	121	92	c	c	c
	Hungary		m	m	m	m	m	m	m	m	m
	Iceland		m	m	m	m	m	m	m	m	m
	Ireland	2011	21	c	17	57	60	57	c	c	c
	Israel	2012	c	c	c	63	22	44	c	c	c
	Italy	2010	45	45	43	45	79	59	c	c	c
	Japan		m	m	m	m	m	m	m	m	m
	Korea	2012	41	40	40	64	53	57	c	c	c
	Luxembourg		m	m	m	m	m	m	m	m	m
	Mexico		m	m	m	m	m	m	m	m	m
	Netherlands		m	m	m	m	m	m	m	m	m
	New Zealand	2010	42	29	35	62	47	53	c	c	c
	Norway	2011	38	34	36	38	46	40	c	c	c
	Poland		m	m	m	m	m	m	m	m	m
	Portugal		m	m	m	m	m	m	m	m	m
	Slovak Republic		m	m	m	m	m	m	m	m	m
	Slovenia		m	m	m	m	m	m	m	m	m
	Spain	2011	49	71	56	45	32	39	c	c	c
	Sweden	2009	11	12	11	46	58	50	30	44	38
	Switzerland	2012	36	47	43	63	50	56	c	c	c
	Turkey	2012	81	99	83	100	64	84	c	c	c
	United Kingdom	2012	31	57	48	51	51	49	79	76	78
	United States	2012	24	34	26	50	66	56	64	73	68
	OECD average		45	50	45	57	57	56	c	c	c
	EU21 average		40	48	42	49	59	53	c	c	c
Partners	Argentina		m	m	m	m	m	m	m	m	m
	Brazil	2012	59	74	62	114	115	112	m	m	m
	China		m	m	m	m	m	m	m	m	m
	Colombia		m	m	m	m	m	m	m	m	m
	India		m	m	m	m	m	m	m	m	m
	Indonesia		m	m	m	m	m	m	m	m	m
	Latvia		m	m	m	m	m	m	m	m	m
	Russian Federation		m	m	m	m	m	m	m	m	m
	Saudi Arabia		m	m	m	m	m	m	m	m	m
	South Africa		m	m	m	m	m	m	m	m	m
	G20 average		m	m	m	m	m	m	m	m	m

Note: Columns showing the relative earnings for all levels of education combined are available for consultation on line (see *StatLink* below).

1. For some countries in this table the age breakdown is 16-24 year-olds.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116148

Table A6.5b. Percentage of 15-29 year-olds with income from employment among all 15-29 year-olds, by age group and student status (2012)

How to read this table: In Australia, 70% of all 15-24 year-old non-students have income from employment; and 47% of all 15-24 year-old students. Among all 15-24 year-olds, 56% have income from employment

			15-24 year-olds[1]			25-29 year-olds		
			Non-students	Students	Total	Non-students	Students	Total
		Year	(1)	(2)	(3)	(4)	(5)	(6)
OECD	Australia	2012	70	47	56	79	71	77
OECD	Austria	2012	87	64	73	91	81	89
OECD	Belgium	2010	60	6	24	73	41	71
OECD	Canada	2011	86	68	75	89	77	87
OECD	Chile	2011	50	10	27	70	45	66
OECD	Czech Republic		m	m	m	m	m	m
OECD	Denmark	2012	71	71	71	81	82	82
OECD	Estonia	2012	c	13	22	c	c	49
OECD	Finland	2011	c	c	c	c	c	c
OECD	France	2010	78	35	56	91	79	90
OECD	Germany	2012	66	37	46	70	62	68
OECD	Greece	2012	32	5	15	58	30	55
OECD	Hungary		m	m	m	m	m	m
OECD	Iceland		m	m	m	m	m	m
OECD	Ireland	2011	35	26	30	69	36	65
OECD	Israel	2012	63	18	42	76	68	74
OECD	Italy	2010	56	12	33	79	38	74
OECD	Japan		m	m	m	m	m	m
OECD	Korea	2012	54	10	24	71	32	68
OECD	Luxembourg		m	m	m	m	m	m
OECD	Mexico		m	m	m	m	m	m
OECD	Netherlands		m	m	m	m	m	m
OECD	New Zealand	2010	69	33	48	75	61	73
OECD	Norway	2011	71	76	74	89	90	90
OECD	Poland		m	m	m	m	m	m
OECD	Portugal		m	m	m	m	m	m
OECD	Slovak Republic		m	m	m	m	m	m
OECD	Slovenia		m	m	m	m	m	m
OECD	Spain	2011	53	10	26	73	54	70
OECD	Sweden	2009	100	100	100	99	100	99
OECD	Switzerland	2012	70	17	36	82	60	78
OECD	Turkey	2012	76	77	76	86	88	86
OECD	United Kingdom	2012	65	33	51	79	62	77
OECD	United States	2012	72	41	54	c	c	c
	OECD average		66	37	48	79	63	76
	EU21 average		64	34	46	79	60	74
Partners	Argentina		m	m	m	m	m	m
Partners	Brazil	2012	64	34	50	76	73	75
Partners	China		m	m	m	m	m	m
Partners	Colombia		m	m	m	m	m	m
Partners	India		m	m	m	m	m	m
Partners	Indonesia		m	m	m	m	m	m
Partners	Latvia		m	m	m	m	m	m
Partners	Russian Federation		m	m	m	m	m	m
Partners	Saudi Arabia		m	m	m	m	m	m
Partners	South Africa		m	m	m	m	m	m
	G20 average		m	m	m	m	m	m

1. For some countries in this table the age breakdown is 16-24 year-olds.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116167

A6

Table A6.6a (L). [1/2] Mean monthly earnings of workers, by educational attainment and literacy proficiency level (2012)

Literacy proficiency in the Survey of Adult Skills, 25-64 year-olds with income from employment working full time (i.e. 30 or more hours per week), in equivalent USD converted using PPPs for private consumption

		Below upper secondary education						Upper secondary or post-secondary non-tertiary education							
		Level 0/1		Level 2		Level 3		Level 0/1		Level 2		Level 3		Level 4/5	
		Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
OECD	**National entities**														
	Australia	2 160	(125)	2 570	(155)	2 790	(179)	2 680	(157)	2 870	(127)	3 140	(105)	3 710	(259)
	Austria	2 170	(106)	2 400	(105)	2 860	(224)	2 910	(121)	3 310	(83)	3 810	(91)	4 310	(313)
	Canada	2 790	(148)	3 170	(196)	3 720	(417)	3 040	(155)	3 410	(99)	3 740	(116)	3 970	(224)
	Czech Republic	950	(78)	1 230	(49)	c	c	1 440	(72)	1 500	(44)	1 600	(45)	1 740	(138)
	Denmark	3 020	(126)	3 480	(110)	3 840	(175)	3 770	(145)	3 880	(72)	4 160	(84)	4 420	(248)
	Estonia	1 490	(213)	1 620	(153)	1 720	(166)	1 510	(100)	1 530	(63)	1 710	(65)	1 940	(173)
	Finland	2 630	(132)	2 900	(154)	2 920	(169)	2 810	(136)	2 910	(62)	3 110	(59)	3 360	(133)
	France	1 960	(52)	2 250	(80)	2 570	(122)	2 270	(62)	2 390	(41)	2 490	(52)	2 520	(179)
	Germany	2 290	(178)	2 590	(218)	c	c	2 820	(130)	3 170	(87)	3 500	(99)	3 990	(346)
	Ireland	2 820	(240)	3 290	(223)	3 330	(303)	2 650	(143)	3 230	(119)	3 680	(167)	4 180	(410)
	Italy	2 470	(135)	2 300	(112)	2 640	(191)	2 310	(127)	2 630	(84)	2 850	(87)	3 200	(294)
	Japan	2 140	(216)	2 410	(150)	3 000	(238)	2 870	(333)	2 870	(131)	3 010	(94)	3 050	(178)
	Korea	2 060	(120)	2 330	(130)	2 460	(264)	2 470	(156)	2 750	(81)	2 950	(105)	2 960	(319)
	Netherlands	2 830	(155)	3 420	(138)	3 590	(159)	2 990	(220)	3 480	(138)	3 800	(94)	4 070	(192)
	Norway	3 160	(181)	3 670	(125)	3 920	(170)	3 440	(180)	3 950	(98)	4 350	(93)	4 630	(277)
	Poland	1 210	(171)	1 180	(172)	c	c	1 260	(62)	1 350	(49)	1 530	(57)	1 620	(147)
	Slovak Republic	960	(75)	990	(55)	1 130	(92)	1 170	(85)	1 390	(49)	1 520	(51)	1 630	(147)
	Spain	1 870	(64)	1 980	(69)	2 200	(122)	2 200	(143)	2 250	(106)	2 510	(131)	c	c
	Sweden	2 550	(127)	2 870	(87)	2 970	(160)	2 660	(110)	3 000	(57)	3 270	(57)	3 440	(125)
	United States	1 990	(71)	2 500	(208)	c	c	3 200	(223)	3 330	(130)	4 150	(182)	4 770	(472)
	Sub-national entities														
	Flanders (Belgium)	2 790	(135)	3 330	(152)	3 320	(195)	3 130	(161)	3 410	(80)	3 600	(77)	3 740	(250)
	England (UK)	2 420	(176)	2 710	(108)	2 850	(229)	2 550	(135)	2 880	(128)	3 490	(146)	4 150	(331)
	Northern Ireland (UK)	2 020	(107)	2 230	(107)	2 550	(259)	2 210	(198)	2 560	(178)	3 260	(227)	3 660	(455)
	England/N. Ireland (UK)	2 400	(168)	2 690	(103)	2 840	(218)	2 540	(132)	2 870	(124)	3 480	(142)	4 140	(323)
	Average	2 210	(31)	2 510	(30)	2 880	(50)	2 550	(33)	2 790	(20)	3 090	(21)	3 400	(57)
Partners	Russian Federation*	c	c	c	c	c	c	c	c	690	(72)	880	(105)	c	c

* See note on data for the Russian Federation in the *Methodology* section.

Notes: For below upper secondary education, literacy proficiency Level 4/5 are available only on line as for many countries there are too few observations to provide reliable estimates. The values of the means in this table have been rounded up to the nearest ten. Values not rounded up are available on line.

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116186

Table A6.6a (L). [2/2] Mean monthly earnings of workers, by educational attainment and literacy proficiency level (2012)

Literacy proficiency in the Survey of Adult Skills, 25-64 year-olds with income from employment working full time (i.e. 30 or more hours per week), in equivalent USD converted using PPPs for private consumption

		Tertiary education								All levels of education							
		Level 0/1		Level 2		Level 3		Level 4/5		Level 0/1		Level 2		Level 3		Level 4/5	
		Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
		(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
OECD	**National entities**																
	Australia	2 660	(275)	3 180	(174)	3 940	(108)	4 610	(131)	2 420	(90)	2 850	(88)	3 430	(68)	4 280	(110)
	Austria	c	c	4 170	(220)	4 800	(161)	5 180	(251)	2 760	(101)	3 300	(76)	4 030	(80)	4 770	(195)
	Canada	3 320	(186)	3 900	(107)	4 770	(88)	5 370	(144)	3 060	(96)	3 620	(71)	4 410	(65)	5 140	(127)
	Czech Republic	c	c	1 900	(201)	2 190	(95)	2 290	(136)	1 360	(67)	1 510	(44)	1 770	(45)	2 050	(101)
	Denmark	3 830	(210)	4 280	(115)	5 010	(72)	5 370	(157)	3 490	(98)	3 930	(56)	4 620	(55)	5 160	(131)
	Estonia	1 460	(145)	1 770	(83)	2 060	(65)	2 500	(107)	1 500	(79)	1 630	(45)	1 890	(44)	2 340	(91)
	Finland	c	c	3 440	(107)	3 830	(54)	3 890	(67)	2 830	(127)	3 070	(59)	3 470	(43)	3 750	(57)
	France	2 760	(217)	3 110	(92)	3 300	(51)	3 600	(96)	2 170	(45)	2 510	(36)	2 920	(35)	3 370	(88)
	Germany	3 750	(475)	4 070	(183)	4 990	(137)	5 650	(215)	2 810	(110)	3 360	(77)	4 230	(84)	5 190	(188)
	Ireland	3 690	(393)	4 030	(145)	4 830	(127)	5 240	(269)	2 880	(139)	3 530	(88)	4 310	(103)	5 000	(227)
	Italy	c	c	3 130	(215)	3 590	(185)	3 650	(432)	2 460	(107)	2 510	(70)	3 010	(78)	3 440	(264)
	Japan	c	c	3 260	(208)	3 740	(100)	4 170	(129)	2 540	(204)	2 880	(96)	3 360	(67)	3 890	(100)
	Korea	3 070	(384)	3 470	(125)	3 800	(78)	4 370	(162)	2 330	(102)	2 900	(65)	3 430	(65)	4 110	(150)
	Netherlands	c	c	4 480	(324)	5 000	(133)	5 140	(123)	2 960	(135)	3 650	(101)	4 300	(73)	4 810	(96)
	Norway	3 710	(238)	4 550	(161)	5 090	(87)	5 270	(107)	3 400	(115)	4 030	(68)	4 680	(63)	5 120	(101)
	Poland	1 800	(200)	1 950	(106)	2 210	(85)	2 420	(118)	1 300	(59)	1 480	(53)	1 850	(57)	2 250	(99)
	Slovak Republic	c	c	1 890	(137)	2 320	(120)	2 770	(335)	1 150	(68)	1 430	(42)	1 740	(48)	2 170	(155)
	Spain	2 720	(202)	3 090	(107)	3 250	(88)	3 680	(194)	2 080	(59)	2 430	(53)	2 900	(64)	3 560	(178)
	Sweden	2 810	(181)	3 240	(106)	3 750	(73)	3 920	(75)	2 640	(80)	3 010	(47)	3 430	(45)	3 770	(67)
	United States	4 180	(588)	4 980	(274)	5 960	(263)	7 370	(380)	2 940	(142)	3 770	(120)	5 180	(166)	6 860	(325)
	Sub-national entities																
	Flanders (Belgium)	c	c	4 160	(203)	4 500	(114)	4 910	(186)	3 110	(116)	3 570	(72)	4 090	(73)	4 690	(169)
	England (UK)	2 710	(391)	3 720	(263)	4 540	(158)	5 340	(202)	2 530	(127)	3 100	(102)	3 970	(108)	4 980	(173)
	Northern Ireland (UK)	c	c	3 420	(187)	3 670	(115)	4 400	(248)	2 160	(95)	2 670	(97)	3 400	(102)	4 170	(213)
	England/N. Ireland (UK)	2 710	(385)	3 710	(256)	4 510	(153)	5 320	(197)	2 520	(123)	3 080	(98)	3 950	(104)	4 960	(170)
	Average	3 030	(85)	3 440	(38)	3 970	(26)	4 400	(44)	2 490	(23)	2 910	(15)	3 500	(16)	4 120	(34)
Partners	**Russian Federation***	790	(60)	820	(38)	910	(28)	1 070	(69)	790	(55)	780	(34)	890	(37)	1 040	(63)

* See note on data for the Russian Federation in the *Methodology* section.

Notes: For below upper secondary education, literacy proficiency Level 4/5 are available only on line as for many countries there are too few observations to provide reliable estimates. The values of the means in this table have been rounded up to the nearest ten. Values not rounded up are available on line.

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

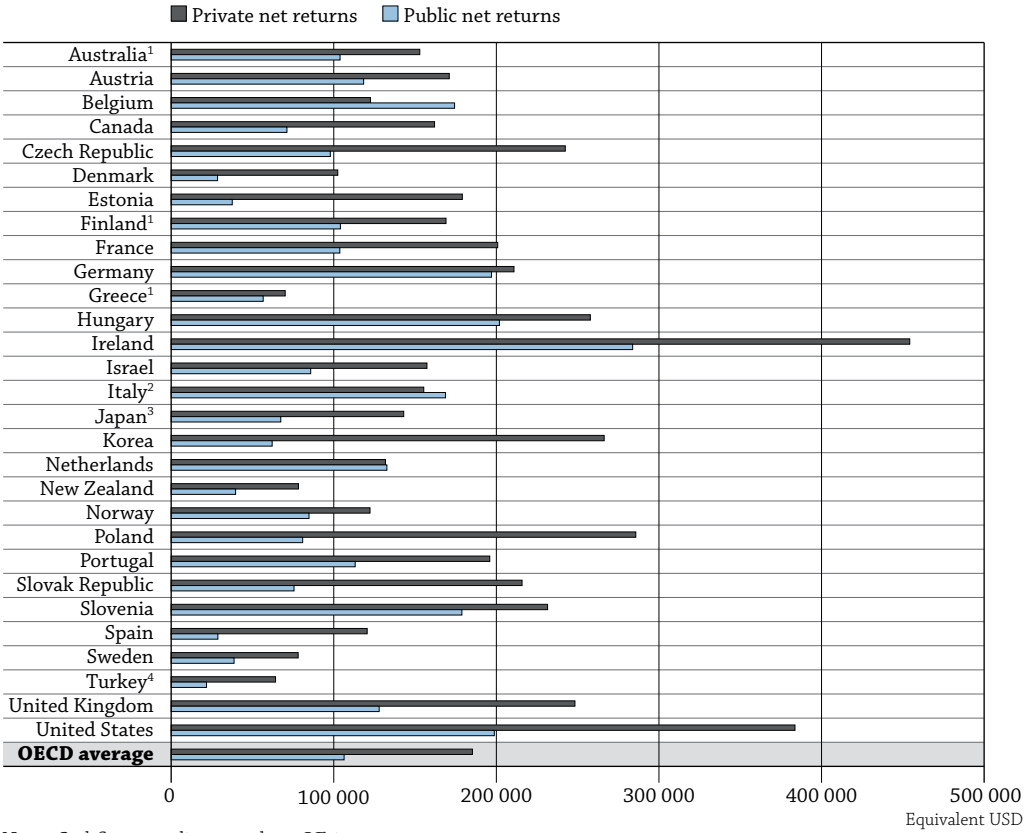
StatLink http://dx.doi.org/10.1787/888933116186

WHAT ARE THE INCENTIVES TO INVEST IN EDUCATION?

- Individuals completing tertiary education benefit from substantial returns on investment: they are more likely to be employed and earn more than individuals without tertiary education do.
- On average across OECD countries, the financial return for tertiary-educated people is around twice as large as for those with an upper secondary or post-secondary non-tertiary education.
- Not only does education pay off for individuals, but the public also benefits from a large proportion of tertiary-educated individuals through greater tax revenues and social contributions.
- The net public return on investment for a man with tertiary education is over USD 105 000 across OECD countries – almost three times the amount of public investment in his education. For a woman, the public return is over USD 60 000, which is almost twice the amount of public investment in her education.

Chart A7.1. Net private and public returns associated with a man attaining tertiary education (2010)

As compared with returns from upper secondary or post-secondary non-tertiary education



Note: Cashflows are discounted at a 3% interest rate.
1. Year of reference 2009.
2. Year of reference 2008.
3. Year of reference 2007.
4. Year of reference 2005.
Countries are shown in alphabetical order.
Source: OECD. Tables A7.3a and A7.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116452

Context

Higher educational achievement benefits both individuals and society, not only financially, but in the well-being with which it is also associated, such as better health outcomes and more civically engaged societies. For individuals, having a higher education improves chances for employment and reduces

the risk of unemployment. Better opportunities in the labour market (see Indicator A5) and higher earnings expectations (see Indicator A6) are strong incentives for individuals to invest in education and postpone consumption and earnings for future rewards. Society, in turn, benefits through reduced public expenditure on social welfare programmes and revenues earned through taxes paid once individuals enter the labour market.

It is crucial for policy makers to understand the economic incentives for individuals to invest in education. For instance, large increases in labour-market demand for more highly educated workers can drive up earnings and returns before supply catches up. That signals a need for additional investment in education. In countries with rigid labour laws and structures that tend to limit differences in wages across the board, this signal will be weaker.

An understanding of the returns from education is also relevant for policies that address access to education, taxes and the costs of further education for the individual. It is important, then, to consider the balance between private and public returns together with the information from other indicators in this publication. It is not sufficient to consider only the public rate of return to determine the optimal amount governments should invest in education (see Box A7.1 in *Education at a Glance 2013* [OECD, 2013a]).

In countries with lengthy tertiary programmes and relatively high incomes after upper secondary or post-secondary non-tertiary education, the effect of foregone earnings is considerable. The magnitude of this effect also depends on expected wage levels and the probability of finding a job with or without having tertiary qualifications. As the labour market for young adults worsens (see Indicator C5) the effect of foregone earnings is reduced, making tertiary education a less costly investment. Since more highly educated people tend to fare better in the labour market in times of economic hardship (see Indicator A5), larger earnings differentials add to the benefit to both the individual and society. Data from 2010 (used in this volume), when the effects of the global economic crisis were already strongly felt, show that both private and public returns are larger for individuals with tertiary education compared to those with upper secondary and post-secondary non-tertiary education.

It should be kept in mind that a host of education-related and contextual factors not reflected in this indicator affect the returns to education. These include, for example, the field of study, countries' specific economic situation, labour market context and institutional setting, as well as social and cultural factors.

Other findings

- **Gross earnings benefits from tertiary education**, compared with the income of a person with an upper secondary or post-secondary non-tertiary education, **are USD 350 000 for men and USD 250 000 for women across OECD countries**.
- **Gross earning benefits for an individual attaining an upper secondary or post-secondary non-tertiary degree**, compared to benefits for an individual who has not attained this level of education, **are particularly high in Austria, the Netherlands (for a woman), Norway and the United States**. In these countries, they amount to at least USD 260 000 for a man and USD 160 000 for a woman.
- On average across the 28 OECD countries with available data, **the public return** (net present value) **for a man who completed upper secondary or post-secondary non-tertiary education is about USD 39 000** compared with a man who did not complete that level of education. **For a woman, the public return is USD 24 000**.
- With few exceptions, **the net private returns related to attaining a tertiary education exceed those related to attaining upper secondary or post-secondary non-tertiary education**. Only in Norway and Sweden does upper secondary or post-secondary non-tertiary education bring higher returns to men.
- **Across OECD countries, individuals invest about USD 50 000 to earn a tertiary degree.** In Japan, the Netherlands and the United States, average investment exceeds USD 100 000 when direct and indirect costs are taken into account.

Analysis

Financial returns on investment in education

This indicator provides information on the costs and benefits of education and the incentives to invest in education. It assesses the economic benefits of education for an individual by estimating the earnings premiums of higher levels of education, taking into consideration the direct and indirect costs and benefits of attaining those levels of education. Besides higher earnings compared to individuals with lower education levels, the probability of finding work, expressed in monetary terms by the variable called the "unemployment effect", is also a benefit (see *Definitions* section below).

Costs include direct costs, notably tuition fees, and indirect costs due to higher income taxes, social contributions levies, loss of salary because of delayed entry into the labour market, and fewer entitlements to social transfers, such as housing allowances, family allowances or supplemental social welfare benefits. In addition, social contributions and income taxes account for a certain percentage of the income and tend to be higher for individuals with more advanced education because they tend to earn more.

The economic benefits and costs of tertiary education are compared to those of upper secondary or post-secondary non-tertiary education; for upper secondary or post-secondary non-tertiary education, below upper secondary education is used as a point of reference. In the calculations, women are benchmarked against women, and men against men. The calculations are done separately for men and women, and no average is computed to account for differences by gender in earnings differentials and unemployment rates.

To provide information on the costs and benefits of education and the incentives to invest in education is a difficult undertaking that involves some methodological and analytical considerations. Investing in education, by both individuals and governments, implies a complex interaction of factors and effects that are beyond those taken into account here. Thus, this indicator should be interpreted in the context of other indicators in this volume (and in *Education at a Glance 2013* [OECD, 2013a]) to better understand the results. The limitations of the calculations, and underlying concepts and assumptions, are presented in the *Methodology* section at the end of this chapter.

Incentives for individuals to invest in education

Upper secondary or post-secondary non-tertiary education

Across OECD countries, a man who invests in upper secondary or post-secondary non-tertiary education can expect a net gain of around USD 100 000 during his working life compared to a man who has attained below upper secondary education. However, the amount varies significantly among countries: in Ireland, the Slovak Republic and the United States, this level of education generates USD 160 000 or more over a man's working life (Table A7.1a).

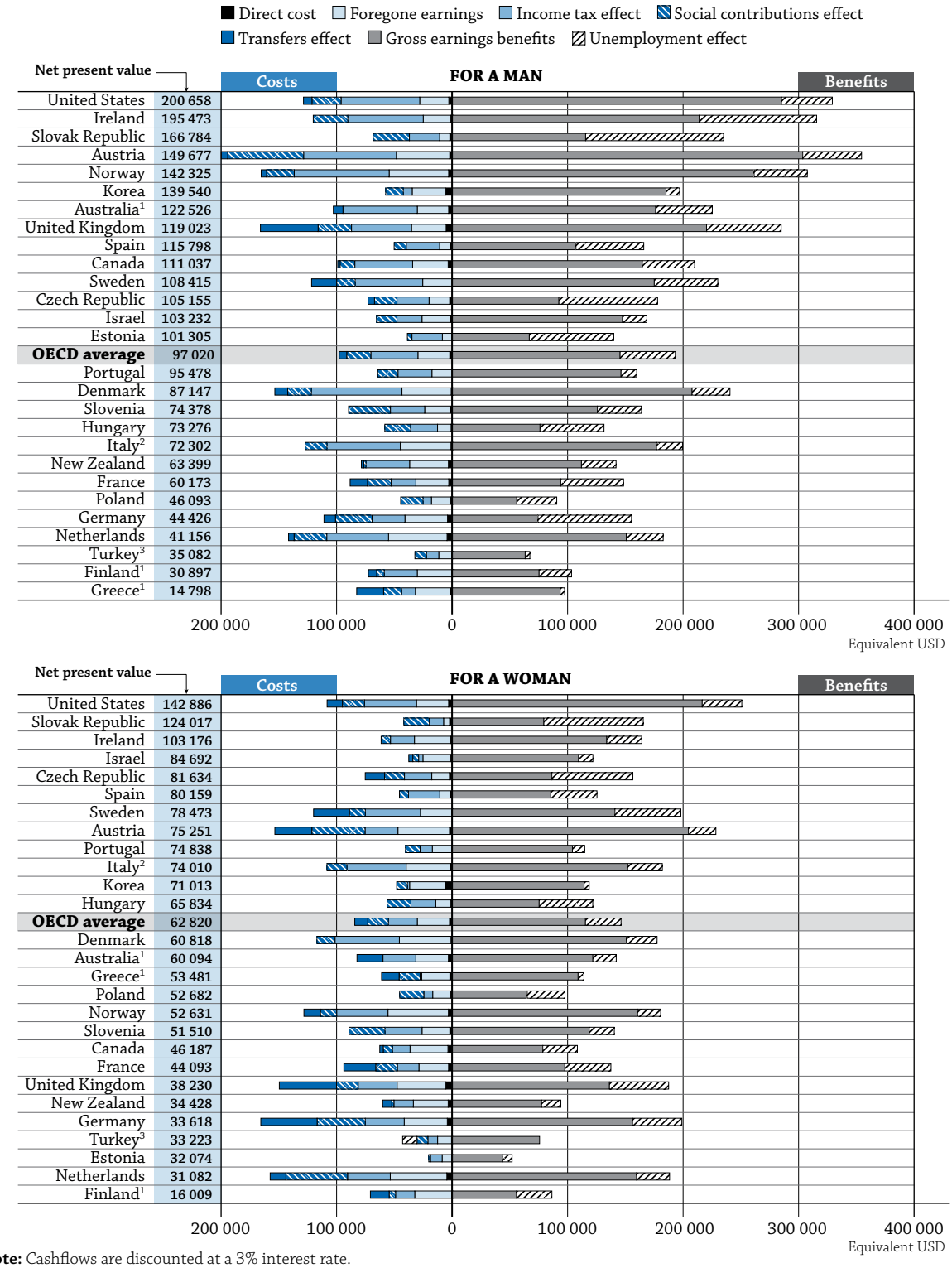
Benefits for an individual are generally based on gross earnings and reduced risk of unemployment. In all countries, men with an upper secondary or post-secondary non-tertiary education enjoy a significant earnings premium over those who have not attained that level of education. The value of reduced risk of unemployment can also be large. In the Czech Republic, Germany, Ireland and the Slovak Republic, the better labour market prospects for a man with this level of education are valued at USD 80 000 or more (Table A7.1a).

Direct costs, foregone earnings, income tax effects, social transfers and social contribution effects (see *Definitions* section below) are all considered part of the costs of education. The direct costs of education for a man and a woman are the same. The direct costs for an individual investing in an upper secondary or post-secondary non-tertiary education are negligible in all countries (representing, on average, less than 2% and a maximum of 6% of benefits). Therefore, the main investment cost is foregone earnings – what a student could potentially earn if not in school. Foregone earnings vary substantially among countries, depending on the length of education, earnings levels and earning differentials between individuals with upper secondary or post-secondary non-tertiary education and those without it (Tables A7.1a and A7.1b).

Good labour-market prospects for both men and women who have not attained upper secondary or post-secondary non-tertiary education increase the costs of further investment in education; so do smaller earnings differentials and longer upper secondary or post-secondary non-tertiary programmes. In Estonia, Hungary, the Slovak Republic, Spain and Turkey, foregone earnings are estimated at less than USD 13 000 for an individual (both women and men), while in Austria, Denmark, the Netherlands and Norway, they exceed USD 42 000 for an individual (both women and men) (Tables A7.1a and A7.1b).

Chart A7.2. Private costs and benefits for a man and for a woman attaining upper secondary or post-secondary non-tertiary education (2010)

As compared with costs and benefits for below upper secondary education



Note: Cashflows are discounted at a 3% interest rate.
1. Year of reference 2009.
2. Year of reference 2008.
3. Year of reference 2005.
Countries are ranked in descending order of the private net present value.
Source: OECD. Tables A7.1a and A7.1b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116471

Data on a man attaining upper secondary or post-secondary non-tertiary education show that countries with relatively high income tax effects (estimated at more than USD 65 000) are Austria, Denmark, Ireland, Norway and the United States. In Estonia, too, the impact of taxes represents almost 40% of the earnings premium for a man attaining upper secondary or post-secondary non-tertiary education. The income tax effect is less significant (estimated at less than USD 20 000) in Greece, Korea, Poland and Turkey. Austria, Germany, the Netherlands, the Slovak Republic and Slovenia, are the countries with largest proportions of social contributions (amount estimated at more than USD 22 000 for both man and woman) (Tables A7.1a and b). In Austria, Denmark, France, Greece, Sweden and the United Kingdom, indirect costs due to reduced rights to welfare and other social benefits (social transfers) amount to more than USD 10 000 for a man (Table A7.1a).

Men generally enjoy better financial returns than women after attaining upper secondary or post-secondary non-tertiary education, except in Greece, Italy and Poland. In these countries, the private net present value for women attaining upper secondary or post-secondary education is higher than that for men. On average across OECD countries, a woman can expect a net gain of USD 63 000 over her working life – about USD 34 000 less than a man. The gender gap in private net returns is particularly pronounced in Austria, Estonia, Ireland, Korea, Norway and the United Kingdom. The difference is largest in Ireland, where net benefits for a man attaining an upper secondary or post-secondary non-tertiary education are around USD 195 000, but only around half of that, USD 103 000, for a woman. The main reasons for this difference in private returns lie in differences in the unemployment effect between the genders, which, on average, benefits men more than women. This means that having an upper secondary or post-secondary non-tertiary education, compared to not having that credential, increases the chances of employment for men more than it does for women (Chart A7.2).

Tertiary education

Individuals who hold a tertiary degree can expect even higher net returns than individuals who invested only up to the upper secondary level of education. On average across OECD countries, the return for tertiary-educated people is USD 185 000 for a man and USD 130 000 for a woman as compared with a man/woman attaining upper secondary or post-secondary non-tertiary education. With few exceptions, the net private returns related to a tertiary education exceed those of upper secondary or post-secondary non-tertiary education.

The net private returns for investing in tertiary education are typically higher for men than for women. In Greece, New Zealand, Spain and Turkey, the returns are higher for women (Tables A7.3a and b).

The value of the gross earnings benefits for men and women with tertiary education is substantial: on average, USD 350 000 for men and USD 250 000 for women. But there are also significant variations between countries.

The Czech Republic, Hungary, Poland and Slovenia are among those countries where earning premiums are above the OECD average despite relatively lower overall costs and income levels compared to other OECD countries. This may be explained by the still relatively low tertiary attainment levels in the working-age population which, in turn, suggests a short supply of higher-educated individuals. This may have driven up wages and wage inequality between tertiary and lower-educated individuals over the years.

Compared with upper secondary or post-secondary non-tertiary education, the impact of unemployment benefits is less pronounced than the earnings differential, on average across OECD countries; but the effects of taxes, social contributions and social transfers, and the direct costs of education, are more substantial. In particular, people with tertiary education remain longer in education and thus lose a substantial amount of earnings (foregone earnings) that they could have received if they had joined the labour market earlier.

Private investment costs for tertiary education, including direct and indirect costs, are very high in some countries. Across OECD countries, individuals invest about USD 50 000 to earn a tertiary degree. The average investment exceeds USD 100 000 for a man in Japan and for an individual of either gender in the Netherlands and the United States. On average across OECD countries, direct costs, such as tuition fees, constitute about one-fifth of the total investment made by a tertiary graduate (estimated at USD 10 000 for an individual of either gender) (Tables A7.3a and b).

One way to increase weak labour-market returns is to provide higher education at lower costs to the individual. Apart from subsidising the direct costs of education, a number of countries also provide students with loans and grants to improve incentives and access to education. Whereas grants are transfers made in cash, goods or services for which no repayment is required, loans are transfers that require repayment. This indicator only takes grants into account; it does not report on loans (see Box A7.1 for the impact of loans in a limited number of countries).

The grants effect is particularly important in Denmark and the United States, where they cover around 35% (or USD 29 000) and 26% (or USD 27 000), respectively, of the total costs of tertiary education. In Austria, Finland, the Netherlands and Sweden, grants are estimated at USD 8 000 or more, about 15% of the total cost (Tables A7.3a and b).

Data show, however, that countries that have the highest direct costs of tertiary education, notably Australia, Canada, the United Kingdom and the United States, provide grants in small amounts compared to the direct costs. In Australia and Canada, grants cover less than 5% of the direct costs of tertiary education. In Japan and Korea, the direct costs of tertiary education are also among the highest, but there is no information about grants. However, many countries, including those offering only small grants, provide student loans, which must be repaid after graduation. Loan regulations, particularly when graduates have to start reimbursing their loans (e.g. once they earn above a certain income threshold, right after graduation, etc.) and the applicable interest rate, vary widely between countries. For most student loans, however, the total amount to be repaid and the amount to be repaid per period depend on employment status and actual income earned after graduation. The availability of student loans, coupled with adequate information and guidance on how they work, can encourage students, particularly those from socio-economically disadvantaged backgrounds, to pursue their studies. But because loans must be repaid after graduation – and thus subtracted from earnings benefits – they reduce the financial benefits of education.

Public rate of return on investments in education

Upper secondary or post-secondary non-tertiary education

As mentioned above, higher education levels tend to translate into higher income levels, on average (see Indicator A6). In this sense, investments in education generate public returns as tertiary-educated individuals pay higher income taxes and social insurance payments and require fewer social transfers. The public returns on investing in men's and women's upper secondary or post-secondary non-tertiary education are positive in most countries. On average across OECD countries, this level of education generates a net public return of USD 39 000 for a man and USD 24 000 for a women (Tables A7.2a and b).

On average, the public benefits are twice as large as the overall public costs of upper secondary or post-secondary non-tertiary education, for both men and women. In the United Kingdom, public benefits are nine times larger than the public costs for a man with this level of education and nearly ten times larger for a woman (Tables A7.2a and A7.2b).

Tertiary education

On average across OECD countries, public investment in an individual's tertiary education is USD 38 000 higher than that for an individual's upper secondary or post-secondary education (taking into account public direct spending and indirect costs). Public investment in an individual's tertiary education is highest (more than USD 50 000 higher than for an individual at the lower education level) in Austria, Denmark, Finland, Germany, the Netherlands, Sweden and the United States (Chart A7.3).

In most countries, the public returns from tertiary education are substantially higher than the public returns from upper secondary or post-secondary non-tertiary education. This is because of the higher taxes and social contributions that flow from the higher incomes of those with tertiary qualifications. On average across OECD countries, the public net return from an investment in tertiary education is over USD 105 000 for a man and over USD 60 000 for a woman. Taking into account direct costs, foregone earnings, and public grants, the public benefits from a man in tertiary education are four times higher than the public costs, and from a tertiary-educated woman, 2.5 times higher (Tables A7.4a and b).

Overall, differences in wages are the source of the differences in returns to both the individual and the public sector. Where the differences between wages are smaller, the returns to higher education are lower. This is particularly true in Denmark, New Zealand, Norway and Sweden. The Nordic countries have generally offset the effects of this weak reward structure by providing a higher-education system that is almost free of charge and by having a generous student-grant system (see Indicator B5).

Given that earnings premiums vary substantially among OECD countries, tax payments and benefits to the public sector also vary in ways that are somewhat counter-intuitive. Because earnings premiums are relatively low in the Nordic countries, average tertiary earnings typically fall below the income bracket where high marginal taxes are levied. The largest public gains in tax and social security benefits from higher education are most often found in countries where earnings differentials are large, or where average earnings reach high income-tax brackets.

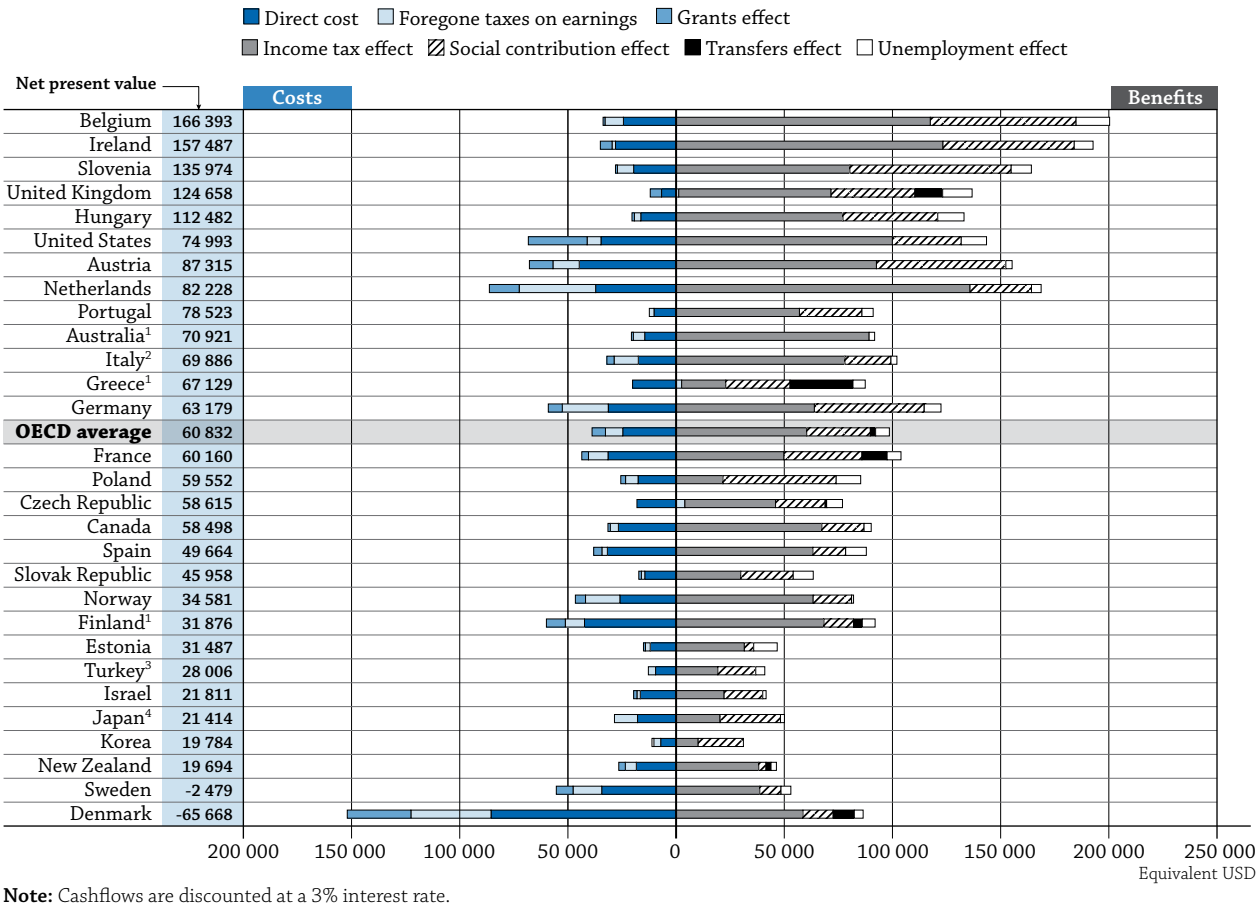
A7

In Austria, Belgium, Denmark, Germany, Hungary, Ireland, Italy, the Netherlands, Slovenia and the United States, tertiary-educated individuals pay considerably more in taxes and social contributions. In all these countries, earning premiums are above the OECD average and thus levies for social contribution are also higher.

A number of countries have tax policies that effectively lower the actual tax paid by individuals, particularly by those in high-income brackets. Tax relief for interest payments on mortgage debt has been introduced in many OECD countries to encourage homeownership. These benefits favour those with higher education and high marginal tax rates. The tax incentives for housing are particularly large in the Czech Republic, Denmark, Finland, Greece, the Netherlands, Norway, Sweden and the United States (Andrews et al., 2011).

Chart A7.3. Public costs and benefits for a woman attaining tertiary education (2010)

As compared with costs and benefits for upper secondary or post-secondary non-tertiary education



Note: Cashflows are discounted at a 3% interest rate.
1. Year of reference 2009.
2. Year of reference 2008.
3. Year of reference 2005.
4. Year of reference 2007.
Countries are ranked in descending order of the public net present value.
Source: OECD. Table A7.4b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116490

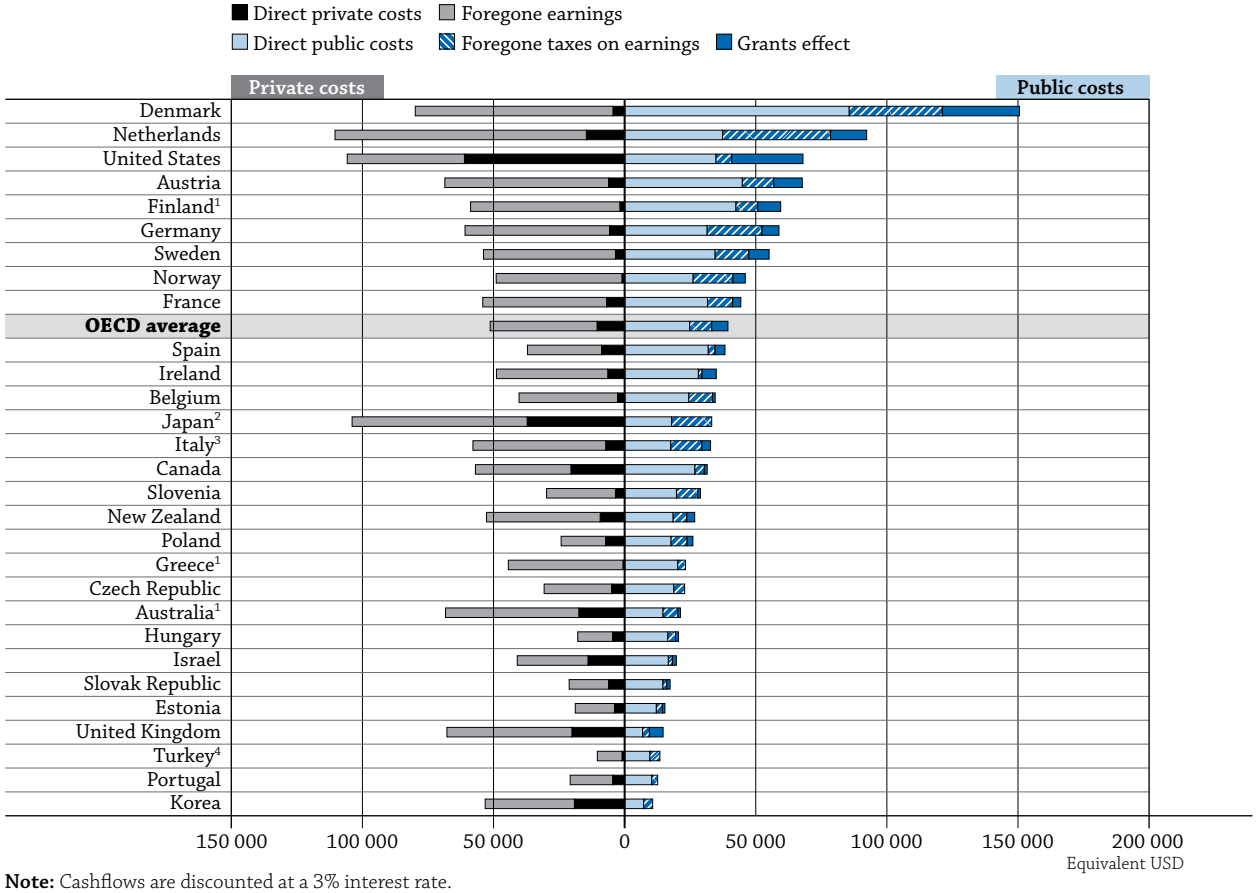
The distribution of costs for education between the public sector and individuals

Direct costs for education are in large part borne by the public sector. For instance, on average across OECD countries, the direct costs for a man attaining tertiary education are around 30% of the total private and public direct investment costs. Only in a few countries, notably Australia, Japan, Korea, the United Kingdom and the United States, do private direct costs, such as tuition fees, constitute more than 55% of the overall public and private direct investment costs for tertiary education. Some countries provide grants and loans to individuals to alleviate the financial burden of attaining tertiary education. Grants are awarded based on various criteria, such as outstanding performance or a student's socio-economic background, to encourage young individuals from less affluent families to pursue their studies.

Countries that offer particularly large grants are the Nordic countries of Denmark (USD 29 000), Finland (USD 9 000) and Sweden (USD 8 000), as well as Austria (USD 11 000), the Netherlands (USD 14 000) and the United States (USD 27 000). Interestingly, the available data show no relationship between direct costs and grants. Countries where grants are higher do not have always the highest private direct costs. Conversely, among the five countries where direct costs are the highest (about USD 20 000 or more), only the United Kingdom and the United States provide substantial grants to students (USD 5 000 in the United Kingdom). But there are other government-funded schemes besides grants, including subsidised student loans (Box A7.1) and discounted tuition rates for less economically advantaged students, that can help lower the private cost of accessing tertiary education (Tables A7.3a and A7.4a).

Chart A7.4. Public versus private costs for a man attaining tertiary education (2010)

As compared with costs from upper secondary or post-secondary non-tertiary education



Note: Cashflows are discounted at a 3% interest rate.
1. Year of reference 2009.
2. Year of reference 2007.
3. Year of reference 2008.
4. Year of reference 2005.
Countries are ranked in descending order of the total public costs.
Source: OECD. Tables A7.3a and A7.4a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116509

Box A7.1. Going further in estimating returns to education

Apart from the earnings differentials, which are related to labour market conditions, the major components of the returns to education relate to policy decisions regarding access to education, taxes and the costs of education for the individual. The net present value analysis can be extended in a number of ways, subject to data availability. For instance, the analysis in this chapter takes into account student grant systems and excludes loan systems.

...

A7

This box goes a step further and presents the first attempt to quantify the impact of student loans for tertiary programmes on returns to education, based on information on loans collected through an *ad hoc* survey from the OECD Labour and Social Outcomes of Education (LSO) Network for the 14 countries shown in the chart below (tables available on line).

In this box, the impact of student loans on net present value of attaining tertiary education varies according:

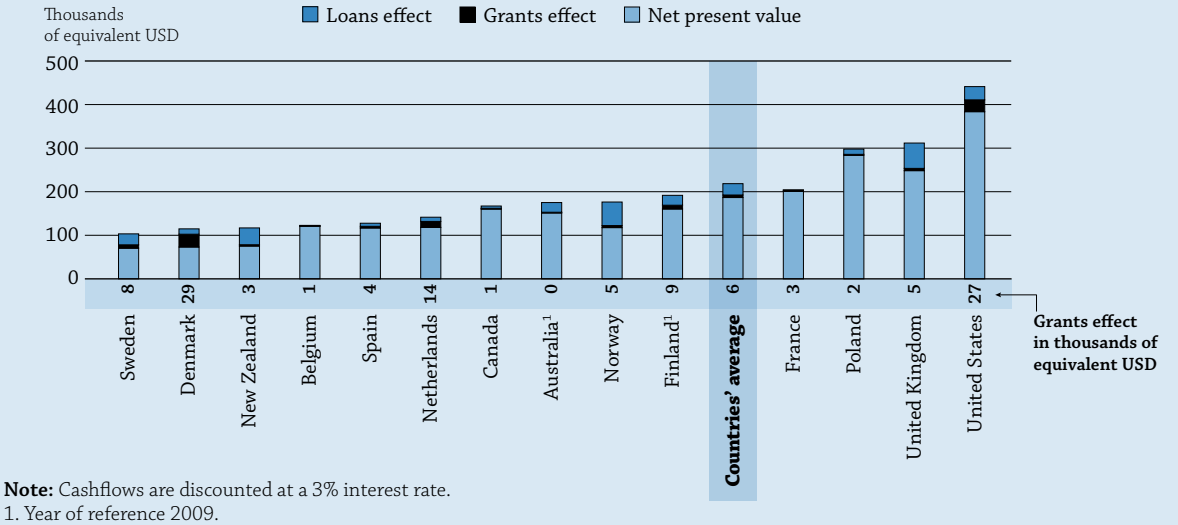
- Access to loans or the percentage of students receiving loans;
- The average amount of a typical student loan;
- The cost or interest rate charged; and
- Remission/forgiveness and default payments, i.e. overall expected proportion of an average loan to be written off/irrecoverable.

There are two broad types of student loans: fixed repayment (also referred to as mortgage-style) loans and income-contingent loans. Both systems imply some costs for the government that guarantees the loan repayment or/and subsidises the interest rates. In theory, the prevalence of income-contingent or fixed-repayment systems should affect the net returns of education, as the remission rate is larger with income-contingent systems (implying larger costs for government but larger benefits for students) (see Box B5.1).

Following the approach to estimating the financial returns to education, based on the investment theory from the finance literature, both the average loan per student per year (based on the percentage of students receiving a loan and the average amount of these loans) and the average interest rate on these loans have been taken into account. The basis for integrating the interest rate on loans is to consider that there is more than one source of financing, and the weight for each element is proportional to its market value. The result is the weighted average cost of capital (WACC), a weighted combination of the loan interest rate and the discount rate (i.e. the interest rate at which banks may borrow funds from the central bank). The WACC allows for calculating a net present value with the gains expressed in monetary units. The remission/forgiveness due to completion of studies on time (or other performance-based incentives) or the default payments for loans guaranteed by the government are integrated into the calculation of the impact of loans on net present values, with a positive effect on net present value. The loans effect presented in this box is therefore a combination of the above components.

Chart A7.a. The contribution of grants and loans on the private net present value for a man attaining tertiary education (2010)

As compared with a man attaining upper secondary or post-secondary non-tertiary education, in thousands of equivalent USD, converted using PPPs for GDP



Note: Cashflows are discounted at a 3% interest rate.
1. Year of reference 2009.
Countries are ranked in ascending order of the private net present value.
Source: OECD. Table A7.5a, available on line. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116528

...

The results of the survey show that, among the 14 countries with available data, the impact of loans on the net present value indicator is greater in New Zealand, Norway, Sweden, the United Kingdom and the United States than in Canada and the Netherlands, although all of these countries report well-developed student support systems.

This chart also shows the large differences among countries in the average tuition fees charged by tertiary-type A institutions for full-time national students in first-degree programmes, and in the financial support to these students. Australia, Canada, the Netherlands, New Zealand, the United Kingdom and the United States have comparatively high levels of tuition fees and well-developed student loan systems. Denmark, Finland, Norway and Sweden have comparatively low levels of tuition fees and well-developed student support systems (see Indicator B5).

In the Netherlands, grants or scholarships have a larger impact on the private net present value than loans, because grants are more widely accessible than loans – more than two in three students receive a grant (compared with one in three students who take advantage of loans) – and because the average amount of a grant is larger than the average amount of a loan. The average cost of loans in the Netherlands is higher than in other countries, but this estimate does not account for specific financial rules, like fiscal deductibility of some education costs, etc.

In Canada, students benefit from relatively high remission rates, i.e. a large proportion of the average loan is expected to be written off if studies are completed. The overall benefit from loans is nonetheless counterbalanced by the relatively high average cost of loans (i.e. the high interest rate that is charged on the loan after studies are completed).

Not surprisingly, the impact of loans is negligible in Belgium, France and Spain, as these countries have comparatively low tuition fees and less-developed student support systems.

Definitions

Adults refers to 25-64 year-olds.

Direct costs are a reflection of how much is spent on students per year from all sources (public, private and households), and are relative to the length of schooling.

Foregone earnings while in education depend largely on the level of earnings that a non-student can expect to receive and the duration of studies. The individual's foregone earnings are net of taxes, social contributions and social transfers.

Foregone taxes on earnings include the taxes, social contributions and social transfers not received by the public sector.

Gross earnings benefits are estimates of the earnings an individual will receive when in the labour market.

The **income tax effect** is the estimated amount received by the public sector from taxes. It is usually the main source of public revenue from investments made in education. It is more pronounced at the tertiary level of education because of progressive income taxes.

The **internal rate of return** indicates at what real interest rate the investment breaks even.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED levels 3A, 3B, 3C long programmes, and ISCED level 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

The **net present value** is the difference between the discounted benefits and the discounted investment costs, and represents the additional value that education produces over and above the 3% real interest that is charged on these cash flows.

The **social contribution effect** in the calculations only concerns those paid by individuals and not those paid by employers. The latter are an additional source of public income. In most OECD countries individuals pay social contributions on a flat rate and, as such, differences between education levels are smaller and proportional to earnings levels.

The **transfers effect** concerns the social transfers related to a given level of earnings.

The **unemployment effect** is translated into monetary gains by using the level of earnings for different education categories over the working life.

Methodology

This indicator builds on information collected in other chapters of *Education at a Glance 2013* (OECD, 2013a), with one exception: to be able to calculate public returns and examine net benefits for individuals, information from the OECD Taxing Wages database is used. The earnings data used are from the earnings data collection database, compiled by the LSO (Labour Market and Social Outcomes of Learning) Network (available as relative earnings in *Education at a Glance 2013,* Indicator A6). The data on direct costs of education are from Indicators B1 and B3. Data for the probability of finding a job (unemployment rates for different educational categories and age groups) are from Indicator A5. The minimum wage is used as an approximation for what a student could potentially earn if not in school in calculating the foregone earnings at the upper secondary or post-secondary non-tertiary level of education. See Annex 3 (*www.oecd.org/edu/eag.htm*) for additional information.

In calculating the returns to education, the approach taken here is the net present value (NPV) of the investment. In this framework, lifetime costs and benefits are transferred back to the start of the investment. This is done by discounting all cash flows back to the beginning of the investment with a set rate of interest (discount rate). The choice of interest rate is difficult, as it should reflect not only the overall time horizon of the investment, but also the cost of borrowing or the perceived risk of the investment. To keep things simple, and to make the interpretation of results easier, the same discount rate is applied across all OECD countries.

To arrive at a reasonable discount rate, long-term government bonds have been used as a benchmark. The average long-term interest rate across OECD countries was approximately 4.4% in 2010 (OECD Finance Database [OECD, 2013b]). Assuming that countries' central banks have succeeded in anchoring inflation expectations at or below 2% per year, this implies a real interest rate of 2% to 3%. The 3% real discount rate used in this indicator reflects the fact that calculations are made in constant prices. The change in the discount rate has a substantial impact on the net present value of education.

Discounting the costs and benefits to the present value with this interest rate makes the financial returns on the overall investment and values of the different components comparable across time and countries. Using the same unit of analysis also has the advantage of making it possible to add or subtract components across different education levels or between the private and public sectors to understand how different factors interact.

NPV calculations are based on the same method as internal rate of return (IRR) calculations. The main difference between the two methods lies in how the interest rate is set. For calculations developed within the IRR framework, the interest rate is raised to the level at which the economic benefits equal the cost of the investment. It pinpoints the discount rate at which the investment breaks even.

In calculating the private NPV, investment costs include after-tax foregone earnings adjusted for the probability of finding a job (unemployment rate) and direct private expenditures on education. Both of these investment streams take into account the duration of studies. On the benefits side, age-earnings profiles are used to calculate the earnings differential between different education levels. These gross earnings differentials are adjusted for differences in income taxes, social contributions and social transfers, including housing benefits and social assistance related to earnings level, to arrive at net earnings differentials. The cash flows are further adjusted for probability of finding a job. The calculations are done separately for men and women to account for differences in earnings differentials and unemployment rates.

In calculating the public NPV, public costs include lost tax receipts during the years of schooling (income tax and social contributions) and public expenditures, taking into account the duration of studies. Lost tax receipts are low in some countries because young individuals earn less. Public expenditures on education include direct expenditures, such as teachers' salaries or spending for the construction of school buildings, purchase of textbooks, etc., and public-private transfers, such as public subsidies to households for scholarships and other grants, and to other private entities for

providing training at the workplace, etc. The benefits for the public sector are additional tax and social contribution receipts associated with higher earnings and savings on transfers, i.e. housing benefits and social assistance that the public sector does not have to pay because of higher earnings.

It is important to consider some of the broad conceptual limitations on the estimates of financial returns discussed here. For instance:

- To calculate returns over the lifetime, 64 is used as the upper age limit in all countries. However, the age of eligibility for pensions varies widely between countries. A few years more or less in the labour market can make a substantial difference in the returns to education for an individual and the public. Thus, it is likely that in countries where the retirement age deviates significantly from 64, return rates are over- or underestimated.
- As earnings generally increase with educational attainment, individuals with higher levels of education typically consume more goods and services, and thus pay additional value-added taxes (VAT) on their consumption. Public returns are thus underestimated in this indicator.
- Individuals with higher earnings also tend to pay more into their pensions and, after leaving the labour force, will have a further income advantage that is not taken into account in the calculations here. Better-educated individuals also tend to live longer, entailing additional public costs that are also not taken into account here. In addition, in countries where a substantial part of the pension system is financed by employers through employer contributions added to salaries, the returns to higher education are typically underestimated compared to countries where pensions are paid by the individual.
- Many governments have programmes that provide loans to students at low interest rates. Loans can provide a strong incentive for individuals to pursue their studies and reduce the costs of attaining higher education. Yet, as loans have to be repaid later, they also reduce the financial benefits of education. These subsidies can often make a substantial difference in the returns to education for the individual, but they are not included here.
- In some countries, unemployment compensation is quite generous, while in others unemployed individuals have to rely on social benefits.
- Direct costs are most notably tuition fees, but also costs for educational materials or daily expenses that are associated with a change in residence required to pursue a specific educational programme. These are not taken into consideration.
- The data reported are accounting-based values only. The results no doubt differ from econometric estimates that would use the same data on the micro level (i.e. data from household or individual surveys) rather than a lifetime stream of earnings derived from average earnings.
- For upper secondary or post-secondary non-tertiary education, caution is required when interpreting foregone earnings, as the minimum wage is used as an approximation.

Given these factors, the returns on education in different countries should be assessed with caution.

The approach used here estimates future earnings for individuals with different levels of education, based on knowledge of how average present gross earnings vary by level of attainment and age. However, the relationship between different levels of educational attainment and earnings may differ in the future, as technological, economic and social changes may all alter how wage levels relate to education levels.

Differences in returns across countries partly reflect different institutional and non-market conditions that bear on earnings, such as institutional conditions that limit flexibility in relative earnings.

In estimating benefits, the effect of education on the likelihood of finding employment when an individual wants to work is taken into account. However, this also makes the estimate sensitive to the stage in the economic cycle at which the data are collected. As more highly educated individuals typically have a stronger attachment to the labour market, the value of education generally increases in times of slow economic growth.

The calculations also involve a number of restrictive assumptions needed for international comparability. For calculating the investments in education, foregone earnings have been standardised at the level of the legal minimum wage or the equivalent in countries in which earnings data include part-time work. When no national minimum wage was available, the wage was selected from wages set in collective agreements. This assumption aims to counterbalance the very low earnings recorded for 15-24 year-olds that led to excessively high estimates in earlier editions of *Education at a Glance*. In the Czech Republic, Hungary, Japan, the Netherlands, Portugal and the United Kingdom, actual earnings are used in calculating foregone earnings, as part-time work is excluded in these earnings data collections.

Costs and benefits for upper secondary or post-secondary non-tertiary education cannot be computed for Belgium because upper secondary or post-secondary non-tertiary education is compulsory in both countries. The fact that upper secondary education is compulsory in these countries prevents a consistent application of the methodology for this indicator, because it uses an investment approach. The investment approach assumes that individuals make a choice to invest in a given level of education in order to obtain the benefits. In countries where a particular level of education is compulsory, individuals do not face this choice, therefore by making the methodology is inapplicable in these instances.

For further information on methodology, please see OECD, 2011, and Annex 3 at *www.oecd.org/edu/eag.htm*.

Note regarding data from Israel

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

References

Andrews, D., A. Caldera Sánchez and Å. Johansson (2011), "Housing markets and structural policies in OECD countries", *OECD Economics Department Working Papers*, No. 836, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kgk8t2k9vf3-en*.

OECD (2013a), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2013-en*.

OECD (2013b), "Exchange rates (USD monthly averages)", Monthly Monetary and Financial Statistics (MEI) (database), *http://stats.oecd.org/Index.aspx?QueryId=169*.

OECD (2011), "A User's Guide to Indicator A9: Incentives to Invest in Education" (available at *www.oecd.org/edu/eag2011*).

Tables of Indicator A7

StatLink http://dx.doi.org/10.1787/888933116281

	Table A7.1a	Private costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2010)
	Table A7.1b	Private costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2010)
	Table A7.2a	Public costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2010)
	Table A7.2b	Public costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2010)
	Table A7.3a	Private costs and benefits for a man attaining tertiary education (2010)
	Table A7.3b	Private costs and benefits for a woman attaining tertiary education (2010)
	Table A7.4a	Public costs and benefits for a man attaining tertiary education (2010)
	Table A7.4b	Public costs and benefits for a woman attaining tertiary education (2010)
WEB	Table A7.5a	Private net present value including grants and loans for a man attaining tertiary education (2010)
WEB	Table A7.5b	Private net present value including grants and loans for a woman attaining tertiary education (2010)
WEB	Table A7.6a	Public net present value including grants and loans for a man attaining tertiary education (2010)
WEB	Table A7.6b	Public net present value including grants and loans for a woman attaining tertiary education (2010)

Table A7.1a. Private costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2010)

As compared with a man attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 3 019	- 27 156	**- 30 175**	176 400	- 64 407	0	- 8 303	49 011	**152 701**	**122 526**	19.9%
	Austria	2010	- 2 084	- 46 210	**- 48 294**	303 737	- 80 357	- 65 732	- 10 652	50 975	**197 971**	**149 677**	12.1%
	Belgium[1]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Canada	2010	- 3 424	- 30 793	**- 34 217**	164 771	- 50 060	- 13 432	- 1 362	45 338	**145 254**	**111 037**	13.3%
	Chile		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 2 130	- 17 846	**- 19 976**	92 549	- 27 793	- 19 496	- 5 574	85 445	**125 131**	**105 155**	18.2%
	Denmark	2010	- 797	- 42 671	**- 43 468**	207 899	- 78 437	- 20 515	- 11 164	32 831	**130 615**	**87 147**	11.7%
	Estonia	2010	- 249	- 8 196	**- 8 445**	66 894	- 26 383	- 3 919	0	73 157	**109 750**	**101 305**	39.5%
	Finland	2009	- 178	- 30 022	**- 30 201**	75 381	- 28 532	- 6 632	- 7 202	28 082	**61 097**	**30 897**	7.8%
	France	2010	- 2 904	- 28 503	**- 31 407**	94 133	- 21 451	- 20 444	- 15 050	54 391	**91 579**	**60 173**	10.6%
	Germany	2010	- 3 973	- 36 901	**- 40 874**	74 406	- 28 450	- 31 726	- 9 942	81 012	**85 299**	**44 426**	7.5%
	Greece	2009	- 1 780	- 30 044	**- 31 824**	93 624	- 11 870	- 15 658	- 23 320	3 845	**46 622**	**14 798**	4.1%
	Hungary	2010	- 878	- 11 766	**- 12 644**	76 171	- 23 298	- 22 368	0	55 414	**85 919**	**73 276**	19.3%
	Iceland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 1 084	- 23 927	**- 25 011**	214 036	- 65 316	- 29 965	0	101 729	**220 484**	**195 473**	30.3%
	Israel	2010	- 1 215	- 24 905	**- 26 120**	147 712	- 21 659	- 17 721	0	21 021	**129 352**	**103 232**	12.6%
	Italy	2008	- 986	- 43 886	**- 44 872**	177 073	- 63 514	- 18 903	0	22 519	**117 174**	**72 302**	8.1%
	Japan[2]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Korea	2010	- 5 756	- 28 830	**- 34 587**	185 305	- 7 688	- 15 277	0	11 785	**174 126**	**139 540**	13.1%
	Luxembourg		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 4 358	- 50 747	**- 55 105**	150 870	- 53 510	- 28 296	- 4 801	31 999	**96 261**	**41 156**	5.7%
	New Zealand	2010	- 3 213	- 33 613	**- 36 827**	112 064	- 37 790	- 2 839	- 1 172	29 961	**100 226**	**63 399**	8.7%
	Norway	2010	- 3 023	- 51 519	**- 54 543**	261 645	- 82 184	- 23 995	- 4 680	46 082	**196 868**	**142 325**	13.0%
	Poland	2010	- 1 276	- 16 640	**- 17 916**	56 062	- 7 234	- 19 415	0	34 594	**64 008**	**46 093**	11.6%
	Portugal	2010	0	- 17 510	**- 17 510**	146 361	- 29 407	- 17 538	0	13 572	**112 987**	**95 478**	12.0%
	Slovak Republic	2010	- 2 007	- 8 802	**- 10 809**	115 675	- 26 205	- 31 402	0	119 524	**177 592**	**166 784**	35.1%
	Slovenia	2010	- 1 833	- 21 943	**- 23 776**	125 817	- 29 689	- 36 241	0	38 266	**98 153**	**74 378**	12.8%
	Spain	2010	- 1 613	- 9 225	**- 10 838**	107 297	- 28 928	- 10 463	0	58 730	**126 636**	**115 798**	35.3%
	Sweden	2010	- 16	- 25 456	**- 25 473**	175 142	- 58 469	- 16 085	- 21 705	55 004	**133 887**	**108 415**	16.5%
	Switzerland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 336	- 11 218	**- 11 554**	63 318	- 10 584	- 10 115	0	4 017	**46 637**	**35 082**	9.5%
	United Kingdom	2010	- 5 195	- 30 014	**- 35 209**	220 438	- 51 976	- 28 912	- 49 957	64 640	**154 232**	**119 023**	18.2%
	United States	2010	- 2 853	- 25 225	**- 28 078**	285 333	- 68 131	- 25 197	- 7 344	44 074	**228 736**	**200 658**	19.4%
	OECD average		- 2 081	- 27 169	**- 29 250**	147 041	- 40 123	- 20 455	- 6 749	46 556	**126 270**	**97 020**	15.8%
	EU21 average		- 1 755	- 26 332	**- 28 087**	135 451	- 38 990	- 23 353	- 8 388	52 933	**117 653**	**89 566**	16.7%
Partners	Argentina		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Colombia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Latvia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Data for Belgium are not included in the table because upper secondary education is compulsory.

2. Data at lower and upper secondary levels of education are not broken down.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116300

A7

Table A7.1b. Private costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2010)

As compared with a woman attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 3 019	- 28 198	**- 31 217**	122 044	- 28 457	0	- 22 467	20 190	**91 311**	**60 094**	12.7%
	Austria	2010	- 2 084	- 44 642	**- 46 726**	204 709	- 28 457	- 46 030	- 32 029	23 784	**121 977**	**75 251**	9.0%
	Belgium[1]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Canada	2010	- 3 424	- 32 817	**- 36 241**	78 654	- 15 117	- 8 057	- 3 002	29 950	**82 428**	**46 187**	7.1%
	Chile		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 2 130	- 15 299	**- 17 429**	86 525	- 23 652	- 17 196	- 16 740	70 127	**99 064**	**81 634**	19.3%
	Denmark	2010	- 797	- 44 663	**- 45 460**	151 000	- 55 719	- 15 607	0	26 604	**106 278**	**60 818**	9.1%
	Estonia	2010	- 249	- 8 187	**- 8 436**	43 751	- 10 151	- 1 455	0	8 365	**40 510**	**32 074**	31.6%
	Finland	2009	- 178	- 31 990	**- 32 168**	55 774	- 16 608	- 5 546	- 16 226	30 783	**48 177**	**16 009**	5.5%
	France	2010	- 2 904	- 25 642	**- 28 546**	97 781	- 18 674	- 18 682	- 27 615	39 828	**72 639**	**44 093**	8.1%
	Germany	2010	- 3 973	- 37 300	**- 41 272**	156 387	- 33 692	- 41 680	- 48 767	42 644	**74 891**	**33 618**	6.4%
	Greece	2009	- 1 780	- 24 381	**- 26 160**	109 244	- 1 304	- 18 230	- 15 164	5 096	**79 641**	**53 481**	7.8%
	Hungary	2010	- 878	- 13 082	**- 13 960**	75 548	- 21 486	- 20 637	0	46 369	**79 794**	**65 834**	15.8%
	Iceland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 1 084	- 31 344	**- 32 428**	134 069	- 20 768	- 8 056	0	30 359	**135 604**	**103 176**	15.0%
	Israel	2010	- 1 215	- 23 860	**- 25 076**	109 731	- 3 747	- 5 003	- 3 505	12 291	**109 768**	**84 692**	13.0%
	Italy	2008	- 986	- 38 624	**- 39 610**	152 167	- 51 238	- 17 293	0	29 983	**113 620**	**74 010**	8.4%
	Japan[2]		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Korea	2010	- 5 756	- 30 875	**- 36 631**	114 418	- 1 830	- 9 342	0	4 399	**107 644**	**71 013**	11.3%
	Luxembourg		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 4 358	- 48 974	**- 53 332**	159 683	- 36 998	- 53 343	- 13 638	28 711	**84 414**	**31 082**	5.1%
	New Zealand	2010	- 3 213	- 30 148	**- 33 362**	77 579	- 16 827	- 1 872	- 7 825	16 735	**67 790**	**34 428**	7.7%
	Norway	2010	- 3 023	- 52 322	**- 55 345**	160 744	- 44 395	- 14 122	- 14 220	19 969	**107 976**	**52 631**	6.9%
	Poland	2010	- 1 276	- 15 341	**- 16 618**	65 215	- 7 681	- 20 906	0	32 672	**69 299**	**52 682**	11.7%
	Portugal	2010	0	- 16 952	**- 16 952**	104 322	- 10 554	- 12 633	0	10 654	**91 790**	**74 838**	11.3%
	Slovak Republic	2010	- 2 007	- 5 179	**- 7 187**	79 613	- 12 302	- 22 099	0	85 991	**131 204**	**124 017**	43.8%
	Slovenia	2010	- 1 833	- 24 045	**- 25 877**	118 868	- 32 045	- 31 131	0	21 694	**77 387**	**51 510**	8.8%
	Spain	2010	- 1 613	- 8 881	**- 10 494**	85 625	- 27 101	- 7 802	0	39 931	**90 653**	**80 159**	16.5%
	Sweden	2010	- 16	- 27 231	**- 27 247**	141 055	- 47 672	- 13 857	- 30 949	57 144	**105 720**	**78 473**	11.5%
	Switzerland		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 336	- 12 058	**- 12 394**	75 879	- 8 395	- 9 432	0	- 12 434	**45 618**	**33 223**	9.2%
	United Kingdom	2010	- 5 195	- 42 268	**- 47 464**	136 400	- 33 662	- 18 761	- 49 494	51 211	**85 693**	**38 230**	6.7%
	United States	2010	- 2 853	- 27 807	**- 30 659**	216 685	- 44 957	- 19 154	- 13 250	34 220	**173 546**	**142 886**	16.7%
	OECD average		- 2 081	- 27 486	**- 29 566**	115 314	- 24 203	- 16 960	- 11 663	29 899	**92 386**	**62 820**	12.5%
	EU21 average		- 1 755	- 26 528	**- 28 282**	113 565	- 25 777	- 20 576	- 13 191	35 892	**89 913**	**61 631**	13.2%
Partners	Argentina		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Colombia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Latvia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Data for Belgium are not included in the table because upper secondary education is compulsory.
2. Data at lower and upper secondary levels of education are not broken down.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116319

Table A7.2a. Public costs and benefits for a man attaining upper secondary or post-secondary non-tertiary education (2010)

As compared with a man attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	2009	- 15 955	- 3 020	**- 18 975**	55 053	0	8 303	9 355	**72 710**	**53 735**	17.1%
	Austria	2010	- 43 971	- 8 869	**- 52 840**	73 918	56 580	10 652	15 590	**156 741**	**103 901**	9.5%
	Belgium[1]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Canada	2010	- 27 754	- 2 945	**- 30 700**	43 075	10 028	1 322	8 540	**62 965**	**32 266**	6.4%
	Chile		m	m	**m**	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 21 080	2 849	**- 18 231**	18 550	10 152	5 574	18 586	**52 862**	**34 631**	10.2%
	Denmark	2010	- 32 430	- 20 100	**- 52 530**	69 942	16 687	11 164	12 323	**110 115**	**57 585**	7.6%
	Estonia	2010	- 19 081	- 1 241	**- 20 323**	13 696	1 879	0	14 726	**30 301**	**9 978**	5.5%
	Finland	2009	- 21 711	- 4 391	**- 26 103**	23 424	4 855	7 202	6 884	**42 366**	**16 263**	6.5%
	France	2010	- 33 511	- 5 799	**- 39 310**	15 415	13 033	15 050	13 446	**56 945**	**17 635**	5.9%
	Germany	2010	- 27 953	- 13 996	**- 41 949**	17 205	15 268	9 942	27 703	**70 119**	**28 170**	6.8%
	Greece	2009	- 22 045	2 032	**- 20 013**	11 723	15 045	23 320	760	**50 848**	**30 835**	6.0%
	Hungary	2010	- 15 696	- 2 625	**- 18 321**	16 503	12 994	0	16 168	**45 666**	**27 345**	8.5%
	Iceland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 25 625	- 794	**- 26 419**	55 056	23 939	0	16 285	**95 281**	**68 862**	10.8%
	Israel	2010	- 14 670	- 1 409	**- 16 079**	20 681	16 468	0	2 231	**39 380**	**23 301**	6.7%
	Italy	2008	- 32 919	- 10 264	**- 43 183**	59 003	16 776	0	6 638	**82 418**	**39 235**	6.0%
	Japan[2]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Korea	2010	- 21 051	- 2 923	**- 23 974**	7 529	14 366	0	1 069	**22 965**	**- 1 009**	2.8%
	Luxembourg		m	m	**m**	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 28 879	- 2 153	**- 31 032**	50 757	20 313	4 801	10 736	**86 607**	**55 575**	9.8%
	New Zealand	2010	- 22 264	- 4 017	**- 26 281**	32 780	2 243	1 172	5 605	**41 800**	**15 519**	5.1%
	Norway	2010	- 38 967	- 16 326	**- 55 292**	73 242	20 424	4 680	12 512	**110 859**	**55 566**	7.6%
	Poland	2010	- 19 278	- 5 994	**- 25 272**	4 952	12 024	0	9 673	**26 648**	**1 377**	3.3%
	Portugal	2010	- 26 371	- 2 429	**- 28 800**	28 325	16 055	0	2 565	**46 945**	**18 145**	4.7%
	Slovak Republic	2010	- 14 722	- 874	**- 15 596**	17 620	15 479	0	24 507	**57 606**	**42 011**	12.3%
	Slovenia	2010	- 19 303	- 6 815	**- 26 119**	25 987	27 826	0	12 116	**65 930**	**39 811**	9.0%
	Spain	2010	- 18 107	- 843	**- 18 950**	23 289	6 766	0	9 336	**39 391**	**20 441**	6.1%
	Sweden	2010	- 29 675	- 6 505	**- 36 180**	46 649	12 257	21 705	15 648	**96 259**	**60 079**	14.3%
	Switzerland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 4 776	- 4 551	**- 9 327**	9 997	9 514	0	1 188	**20 699**	**11 371**	6.4%
	United Kingdom	2010	- 19 434	4 949	**- 14 485**	44 222	24 322	49 957	12 344	**130 846**	**116 361**	27.1%
	United States	2010	- 34 048	- 3 381	**- 37 429**	61 984	21 854	7 344	9 490	**100 671**	**63 242**	9.1%
	OECD average		- 24 121	- 4 535	**- 28 656**	34 095	15 450	6 748	10 964	**67 257**	**38 601**	8.6%
	EU21 average		- 24 831	- 4 414	**- 29 245**	32 433	16 961	8 388	12 949	**70 731**	**41 486**	8.9%
Partners	Argentina		m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	**m**	**m**	m
	Colombia		m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	**m**	**m**	m
	Latvia		m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Data for Belgium are not included in the table because upper secondary education is compulsory.
2. Data at lower and upper secondary levels of education are not broken down.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116338

A7

Table A7.2b. Public costs and benefits for a woman attaining upper secondary or post-secondary non-tertiary education (2010)

As compared with a woman attaining lower secondary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OECD	Australia	2009	- 15 955	- 3 136	**- 19 091**	26 218	0	22 467	2 239	**50 924**	**31 833**	18.4%
	Austria	2010	- 43 971	- 8 568	**- 52 539**	28 045	41 879	32 029	4 562	**106 516**	**53 977**	8.2%
	Belgium[1]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Canada	2010	- 28 587	- 3 233	**- 31 820**	13 613	6 115	3 002	3 447	**26 176**	**- 5 644**	2.3%
	Chile		m	m	**m**	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 21 080	2 442	**- 18 638**	17 417	9 532	16 740	13 901	**57 589**	**38 951**	10.5%
	Denmark	2010	- 32 430	- 21 038	**- 53 468**	49 505	12 177	0	9 644	**71 326**	**17 858**	4.8%
	Estonia	2010	- 19 081	- 1 240	**- 20 321**	8 914	1 223	0	1 469	**11 606**	**- 8 715**	0.2%
	Finland	2009	- 21 711	- 4 679	**- 26 390**	12 075	3 607	16 226	6 472	**38 380**	**11 989**	6.6%
	France	2010	- 33 511	- 5 217	**- 38 728**	15 257	13 296	27 615	8 802	**64 970**	**26 243**	5.6%
	Germany	2010	- 27 953	- 14 147	**- 42 100**	30 323	33 057	48 767	11 993	**124 140**	**82 040**	13.7%
	Greece	2009	- 22 045	1 649	**- 20 396**	1 347	17 423	15 164	764	**34 699**	**14 303**	4.8%
	Hungary	2010	- 15 696	- 2 918	**- 18 614**	16 259	12 802	0	13 062	**42 123**	**23 509**	7.5%
	Iceland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 25 625	- 1 040	**- 26 665**	19 850	7 690	0	1 284	**28 824**	**2 159**	3.3%
	Israel	2010	- 14 670	- 1 350	**- 16 020**	3 668	4 543	3 505	539	**12 254**	**- 3 766**	1.8%
	Italy	2008	- 32 919	- 9 033	**- 41 952**	47 153	14 467	0	6 910	**68 530**	**26 578**	5.2%
	Japan[2]		m	m	**m**	m	m	m	m	**m**	**m**	m
	Korea	2010	- 21 051	- 3 130	**- 24 181**	1 797	9 001	0	374	**11 172**	**- 13 009**	-1.0%
	Luxembourg		m	m	**m**	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 28 879	1 113	**- 27 766**	35 228	46 047	13 638	9 066	**m**	**76 213**	14.6%
	New Zealand	2010	- 22 264	- 3 603	**- 25 867**	14 529	1 540	7 825	2 630	**26 524**	**657**	3.1%
	Norway	2010	- 38 967	- 16 580	**- 55 547**	41 576	12 582	14 220	4 360	**72 737**	**17 190**	4.8%
	Poland	2010	- 19 278	- 5 526	**- 24 804**	5 740	13 937	0	8 910	**28 588**	**3 784**	3.6%
	Portugal	2010	- 26 371	- 2 352	**- 28 722**	10 290	11 473	0	1 424	**23 187**	**- 5 536**	2.3%
	Slovak Republic	2010	- 14 722	- 514	**- 15 236**	9 428	10 668	0	14 305	**34 401**	**19 165**	7.8%
	Slovenia	2010	- 19 303	- 7 468	**- 26 771**	30 404	26 364	0	6 407	**63 175**	**36 404**	7.4%
	Spain	2010	- 18 107	- 811	**- 18 919**	25 096	5 301	0	4 506	**34 904**	**15 985**	5.2%
	Sweden	2010	- 29 675	- 6 959	**- 36 633**	36 329	9 895	30 949	15 306	**92 478**	**55 845**	13.6%
	Switzerland		m	m	**m**	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 4 776	- 4 892	**- 9 668**	10 025	11 264	0	- 3 463	**17 827**	**8 159**	5.8%
	United Kingdom	2010	- 19 434	8 961	**- 10 473**	27 379	15 059	49 494	9 985	**101 917**	**91 444**	19.3%
	United States	2010	- 34 048	- 3 727	**- 37 775**	41 313	16 564	13 250	6 233	**77 360**	**39 585**	7.5%
	OECD average		- 24 152	- 4 333	**- 28 485**	21 436	13 611	11 663	6 116	**50 859**	**24 341**	6.9%
	EU21 average		- 24 831	- 4 071	**- 28 902**	22 423	16 100	13 191	7 830	**57 075**	**30 642**	7.6%
Partners	Argentina		m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	**m**	**m**	m
	Colombia		m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	**m**	**m**	m
	Latvia		m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained an upper secondary or post-secondary non-tertiary education compared with those who have not attained that level of education.

1. Data for Belgium are not included in the table because upper secondary education is compulsory.
2. Data at lower and upper secondary levels of education are not broken down.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116357

Table A7.3a. Private costs and benefits for a man attaining tertiary education (2010)

As compared with a man attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Grants effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2009	- 17 528	- 50 814	**- 68 342**	339 977	- 124 441	0	0	5 363	335	**221 234**	**152 892**	9.0%
	Austria	2010	- 6 199	- 62 401	**- 68 600**	396 272	- 132 408	- 53 634	0	18 521	10 877	**239 629**	**171 029**	10.1%
	Belgium	2010	- 2 780	- 37 528	**- 40 307**	348 982	- 155 156	- 53 464	0	21 666	862	**162 891**	**122 584**	11.9%
	Canada	2010	- 20 529	- 36 423	**- 56 952**	293 058	- 96 272	- 6 355	0	27 401	1 103	**218 935**	**161 982**	10.2%
	Chile		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 5 029	- 25 719	**- 30 748**	365 437	- 70 726	- 41 771	0	20 181	m	**273 121**	**242 373**	18.6%
	Denmark	2010	- 4 509	- 75 357	**- 79 866**	314 158	- 143 348	- 26 897	- 8 763	17 765	29 411	**182 326**	**102 460**	8.4%
	Estonia	2010	- 3 924	- 14 951	**- 18 875**	207 579	- 46 145	- 6 453	0	42 224	730	**197 934**	**179 059**	20.6%
	Finland	2009	- 1 873	- 56 911	**- 58 784**	343 119	- 138 956	- 24 568	0	39 479	8 730	**227 803**	**169 020**	11.9%
	France	2010	- 6 963	- 47 182	**- 54 145**	380 704	- 95 841	- 51 427	- 691	19 109	3 103	**254 957**	**200 812**	11.4%
	Germany	2010	- 5 813	- 55 093	**- 60 906**	462 289	- 166 502	- 89 273	0	58 741	6 472	**271 727**	**210 821**	13.4%
	Greece	2009	- 690	- 43 715	**- 44 405**	182 193	- 35 679	- 29 437	- 8 700	6 156	m	**114 533**	**70 128**	7.5%
	Hungary	2010	- 4 664	- 13 268	**- 17 932**	459 159	- 147 118	- 75 232	0	37 773	1 135	**275 718**	**257 785**	28.5%
	Iceland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 6 478	- 42 453	**- 48 931**	684 820	- 259 751	- 58 952	0	131 625	5 412	**503 154**	**454 224**	29.9%
	Israel	2010	- 14 023	- 26 963	**- 40 987**	285 448	- 69 772	- 35 702	0	16 788	1 528	**198 291**	**157 304**	11.8%
	Italy	2008	- 7 285	- 50 608	**- 57 893**	408 011	- 159 562	- 41 835	0	3 295	3 330	**213 239**	**155 346**	8.1%
	Japan	2007	- 37 215	- 66 750	**- 103 965**	326 614	- 64 523	- 36 039	0	20 931	m	**246 983**	**143 018**	7.4%
	Korea	2010	- 19 211	- 34 019	**- 53 231**	379 884	- 47 160	- 25 602	0	12 407	m	**319 528**	**266 298**	12.8%
	Luxembourg		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 14 646	- 95 834	**- 110 480**	442 661	- 197 999	- 26 901	0	10 736	13 770	**242 267**	**131 787**	7.2%
	New Zealand	2010	- 9 384	- 43 347	**- 52 731**	193 910	- 62 325	- 3 875	- 86	358	3 039	**131 021**	**78 290**	7.3%
	Norway	2010	- 1 086	- 47 946	**- 49 032**	274 357	- 107 528	- 23 197	0	23 000	4 690	**171 321**	**122 289**	8.2%
	Poland	2010	- 7 343	- 16 928	**- 24 270**	376 155	- 30 873	- 75 986	0	38 492	2 228	**310 015**	**285 745**	24.6%
	Portugal	2010	- 4 627	- 16 181	**- 20 808**	324 887	- 89 461	- 36 243	0	17 564	m	**216 746**	**195 937**	18.3%
	Slovak Republic	2010	- 6 183	- 15 019	**- 21 202**	290 121	- 51 866	- 40 961	0	38 465	1 226	**236 985**	**215 783**	21.4%
	Slovenia	2010	- 3 564	- 26 242	**- 29 806**	447 946	- 110 866	- 96 037	0	19 992	259	**261 294**	**231 488**	17.1%
	Spain	2010	- 8 864	- 28 219	**- 37 083**	178 900	- 52 903	- 14 033	0	41 874	3 791	**157 629**	**120 546**	11.2%
	Sweden	2010	- 3 560	- 50 291	**- 53 851**	209 467	- 84 430	- 9 281	0	8 454	7 735	**131 945**	**78 094**	7.4%
	Switzerland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 1 061	- 9 402	**- 10 463**	106 985	- 18 682	- 16 424	0	2 761	m	**74 640**	**64 177**	19.3%
	United Kingdom	2010	- 20 162	- 47 655	**- 67 817**	413 163	- 89 124	- 49 107	- 4 303	40 284	5 225	**316 138**	**248 322**	14.3%
	United States	2010	- 61 135	- 44 678	**- 105 813**	628 922	- 210 898	- 55 768	0	100 046	27 162	**489 463**	**383 649**	15.4%
	OECD average		- 10 563	- 40 755	**- 51 318**	347 075	- 105 528	- 38 085	- 777	29 016	6 181	**236 602**	**185 284**	13.9%
	EU21 average		- 6 258	- 41 078	**- 47 335**	361 801	- 112 936	- 45 075	- 1 123	31 620	6 135	**239 503**	**192 167**	15.1%
Partners	Argentina		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Colombia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Latvia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116376

A7

Table A7.3b. Private costs and benefits for a woman attaining tertiary education (2010)

As compared with a woman attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone earnings	Total costs	Gross earnings benefits	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Grants effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD	Australia	2009	- 17 528	- 52 120	**- 69 648**	253 308	- 91 641	0	0	13 021	335	**175 023**	**105 374**	8.9%
	Austria	2010	- 6 199	- 63 316	**- 69 515**	331 700	- 93 938	- 61 225	0	8 104	10 877	**195 518**	**126 003**	9.0%
	Belgium	2010	- 2 780	- 35 428	**- 38 207**	310 555	- 127 305	- 72 908	0	40 296	862	**151 500**	**113 293**	13.7%
	Canada	2010	- 20 529	- 37 837	**- 58 366**	261 335	- 69 368	- 20 695	0	16 627	1 103	**189 002**	**130 636**	11.4%
	Chile		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 4 882	- 24 979	**- 29 862**	208 439	- 45 919	- 26 193	- 688	29 891	m	**165 530**	**135 668**	15.3%
	Denmark	2010	- 4 509	- 78 578	**- 83 087**	175 082	- 61 404	- 15 158	- 9 772	10 710	29 411	**128 869**	**45 782**	6.5%
	Estonia	2010	- 3 924	- 15 754	**- 19 678**	153 829	- 40 802	- 5 839	0	54 649	730	**162 567**	**142 889**	29.7%
	Finland	2009	- 1 873	- 60 589	**- 62 461**	211 875	- 72 749	- 15 039	- 4 079	21 742	8 730	**150 480**	**88 019**	8.8%
	France	2010	- 6 963	- 44 369	**- 51 332**	263 248	- 52 801	- 39 383	- 11 640	24 882	3 103	**187 409**	**136 077**	10.9%
	Germany	2010	- 5 813	- 55 984	**- 61 797**	247 459	- 67 041	- 55 248	- 17	22 124	6 472	**153 749**	**91 952**	8.5%
	Greece	2009	- 690	- 36 674	**- 37 363**	186 037	- 21 786	- 33 976	- 29 066	26 865	m	**128 074**	**90 710**	9.6%
	Hungary	2010	- 4 664	- 13 164	**- 17 828**	257 527	- 83 602	- 49 345	0	32 818	1 135	**158 533**	**140 705**	24.6%
	Iceland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 6 478	- 48 135	**- 54 612**	456 714	- 129 055	- 63 508	0	39 212	5 412	**308 775**	**254 163**	21.0%
	Israel	2010	- 14 023	- 27 428	**- 41 451**	151 423	- 22 840	- 18 663	0	12 245	1 528	**123 692**	**82 240**	8.6%
	Italy	2008	- 7 285	- 47 826	**- 55 111**	223 811	- 79 954	- 21 986	0	7 563	3 330	**132 764**	**77 652**	6.9%
	Japan	2007	- 37 215	- 49 265	**- 86 481**	231 306	- 20 848	- 29 117	0	9 951	m	**191 293**	**104 812**	7.8%
	Korea	2010	- 19 211	- 35 087	**- 54 298**	268 211	- 10 077	- 20 463	0	- 5 570	m	**232 101**	**177 802**	11.0%
	Luxembourg		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Mexico		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 14 646	- 90 283	**- 104 929**	353 759	- 137 587	- 30 982	0	11 955	13 770	**210 915**	**105 985**	7.0%
	New Zealand	2010	- 9 384	- 42 595	**- 51 980**	167 699	- 40 316	- 3 622	- 2 329	13 769	3 039	**138 239**	**86 260**	10.3%
	Norway	2010	- 1 086	- 50 062	**- 51 148**	227 688	- 63 403	- 17 791	0	785	4 690	**151 970**	**100 822**	9.6%
	Poland	2010	- 7 343	- 16 014	**- 23 356**	243 941	- 24 419	- 60 782	0	39 454	2 228	**200 423**	**177 066**	21.6%
	Portugal	2010	- 4 627	- 15 481	**- 20 108**	262 280	- 59 602	- 31 363	0	22 688	m	**194 001**	**173 893**	22.0%
	Slovak Republic	2010	- 6 183	- 15 551	**- 21 734**	181 063	- 33 609	- 29 678	0	40 616	1 226	**159 618**	**137 884**	18.5%
	Slovenia	2010	- 3 564	- 26 170	**- 29 734**	343 115	- 84 277	- 79 783	0	24 076	259	**203 390**	**173 657**	15.3%
	Spain	2010	- 8 864	- 27 626	**- 36 490**	237 736	- 69 735	- 18 075	0	46 399	3 791	**200 115**	**163 625**	14.5%
	Sweden	2010	- 3 560	- 51 796	**- 55 356**	140 237	- 42 057	- 10 883	0	15 631	7 735	**110 663**	**55 306**	7.1%
	Switzerland		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 1 061	- 8 185	**- 9 246**	116 530	- 21 267	- 19 627	0	14 075	m	**89 711**	**80 466**	19.2%
	United Kingdom	2010	- 20 162	- 47 080	**- 67 241**	351 526	- 79 076	- 43 645	- 12 831	55 550	5 225	**276 748**	**209 506**	12.3%
	United States	2010	- 61 135	- 47 732	**- 108 867**	416 147	- 107 923	- 35 416	0	47 389	27 162	**347 358**	**238 491**	12.9%
	OECD average		- 10 558	- 40 176	**- 50 734**	249 434	- 63 945	- 32 082	- 2 428	24 052	6 181	**179 932**	**129 198**	13.2%
	EU21 average		- 6 250	- 40 740	**- 46 990**	256 997	- 70 336	- 38 250	- 3 405	28 761	6 135	**178 982**	**131 992**	14.1%
Partners	Argentina		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Brazil		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	China		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Colombia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	India		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Latvia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	South Africa		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m
	G20 average		m	m	**m**	m	m	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116395

Table A7.4a. Public costs and benefits for a man attaining tertiary education (2010)

As compared with a man attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Grants effect	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 14 588	- 5 652	- 335	**- 20 575**	123 233	0	0	1 208	**124 441**	**103 866**	12.9%
	Austria	2010	- 44 819	- 11 977	- 10 877	**- 67 673**	128 843	50 561	0	6 637	**186 041**	**118 368**	8.0%
	Belgium	2010	- 24 413	- 9 051	- 862	**- 34 326**	149 431	50 456	0	8 733	**208 619**	**174 293**	15.1%
	Canada	2010	- 26 735	- 3 589	- 1 103	**- 31 427**	91 254	4 772	0	6 602	**102 627**	**71 201**	8.9%
	Chile		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 18 717	4 105	m	**- 14 612**	67 727	39 580	0	5 191	**112 497**	**97 885**	17.6%
	Denmark	2010	- 85 578	- 35 496	- 29 411	**- 150 485**	137 397	25 140	8 763	7 708	**179 007**	**28 522**	3.8%
	Estonia	2010	- 12 037	- 2 264	- 730	**- 15 032**	38 729	5 313	0	8 557	**52 599**	**37 567**	10.5%
	Finland	2009	- 42 400	- 8 324	- 8 730	**- 59 454**	128 733	22 053	0	12 738	**163 525**	**104 071**	8.3%
	France	2010	- 31 533	- 9 599	- 3 103	**- 44 236**	92 737	48 871	691	5 660	**147 960**	**103 724**	8.7%
	Germany	2010	- 31 421	- 20 896	- 6 472	**- 58 789**	153 573	78 113	0	24 090	**255 776**	**196 987**	11.9%
	Greece	2009	- 20 179	2 956	m	**- 17 223**	34 885	28 464	8 700	1 766	**73 816**	**56 593**	11.6%
	Hungary	2010	- 16 393	- 2 960	- 1 135	**- 20 489**	138 343	69 279	0	14 727	**222 349**	**201 861**	23.0%
	Iceland		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 28 066	- 1 409	- 5 412	**- 34 887**	231 031	49 600	0	38 072	**318 703**	**283 816**	26.9%
	Israel	2010	- 16 613	- 1 526	- 1 528	**- 19 666**	67 496	34 209	0	3 768	**105 474**	**85 807**	11.4%
	Italy	2008	- 17 538	- 11 836	- 3 330	**- 32 704**	157 696	41 484	0	2 217	**201 397**	**168 693**	10.1%
	Japan	2007	- 17 897	- 15 254	m	**- 33 151**	62 285	33 612	0	4 665	**100 562**	**67 411**	8.4%
	Korea	2010	- 7 198	- 3 449	m	**- 10 648**	46 494	24 687	0	1 581	**72 762**	**62 115**	12.3%
	Luxembourg		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Mexico		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 37 254	- 41 204	- 13 770	**- 92 227**	195 349	25 117	0	4 433	**224 900**	**132 673**	7.2%
	New Zealand	2010	- 18 444	- 5 180	- 3 039	**- 26 663**	61 879	3 868	86	453	**66 286**	**39 623**	7.0%
	Norway	2010	- 26 059	- 15 194	- 4 690	**- 45 942**	102 100	21 412	0	7 213	**130 725**	**84 783**	7.1%
	Poland	2010	- 17 653	- 6 097	- 2 228	**- 25 978**	28 162	68 381	0	10 316	**106 860**	**80 882**	12.4%
	Portugal	2010	- 10 295	- 2 245	m	**- 12 540**	85 300	34 368	0	6 036	**125 705**	**113 164**	16.1%
	Slovak Republic	2010	- 14 559	- 1 492	- 1 226	**- 17 276**	47 313	36 008	0	9 505	**92 826**	**75 550**	13.8%
	Slovenia	2010	- 19 698	- 8 151	- 259	**- 28 108**	107 113	91 799	0	7 991	**206 903**	**178 795**	15.4%
	Spain	2010	- 31 833	- 2 577	- 3 791	**- 38 201**	46 168	11 387	0	9 381	**66 936**	**28 735**	5.6%
	Sweden	2010	- 34 448	- 12 852	- 7 735	**- 55 035**	82 130	8 756	0	2 826	**93 711**	**38 676**	5.2%
	Switzerland		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 9 567	- 3 814	m	**- 13 381**	18 209	16 010	0	886	**35 106**	**21 724**	9.3%
	United Kingdom	2010	- 6 798	- 2 591	- 5 225	**- 14 615**	82 483	45 366	4 303	10 381	**142 534**	**127 919**	26.1%
	United States	2010	- 34 787	- 5 989	- 27 162	**- 67 937**	189 603	48 143	0	28 922	**266 667**	**198 730**	10.8%
	OECD average		- 24 742	- 8 400	- 6 181	**- 38 044**	99 852	35 062	777	8 699	**144 390**	**106 346**	11.9%
	EU21 average		- 27 282	- 9 198	- 6 135	**- 41 694**	106 657	41 505	1 123	9 848	**159 133**	**117 439**	12.9%
Partners	Argentina		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Colombia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Latvia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between men who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116414

A7

Table A7.4b. Public costs and benefits for a woman attaining tertiary education (2010)

As compared with a woman attaining upper secondary or post-secondary non-tertiary education, in equivalent USD converted using PPPs for GDP

		Year	Direct costs	Foregone taxes on earnings	Grants effect	Total costs	Income tax effect	Social contribution effect	Transfers effect	Unemployment effect	Total benefits	Net present value	Internal rate of return
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
OECD	Australia	2009	- 14 588	- 5 797	- 335	**- 20 720**	89 111	0	0	2 530	**91 641**	**70 921**	13.5%
	Austria	2010	- 44 819	- 12 152	- 10 877	**- 67 849**	92 488	59 772	0	2 903	**155 164**	**87 315**	7.0%
	Belgium	2010	- 24 413	- 8 544	- 862	**- 33 820**	117 399	67 323	0	15 490	**200 212**	**166 393**	19.0%
	Canada	2010	- 26 735	- 3 728	- 1 103	**- 31 566**	67 254	19 517	0	3 293	**90 064**	**58 498**	9.5%
	Chile		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Czech Republic	2010	- 18 172	3 987	m	**- 14 185**	41 879	22 919	688	7 315	**72 800**	**58 615**	14.6%
	Denmark	2010	- 85 578	- 37 013	- 29 411	**- 152 002**	58 528	13 964	9 772	4 069	**86 334**	**- 65 668**	0.4%
	Estonia	2010	- 12 037	- 2 386	- 730	**- 15 153**	31 454	4 315	0	10 872	**46 641**	**31 487**	12.9%
	Finland	2009	- 42 400	- 8 862	- 8 730	**- 59 992**	68 219	13 657	4 079	5 912	**91 868**	**31 876**	5.2%
	France	2010	- 31 533	- 9 027	- 3 103	**- 43 664**	49 775	35 999	11 640	6 409	**103 824**	**60 160**	8.4%
	Germany	2010	- 31 421	- 21 234	- 6 472	**- 59 127**	63 819	50 751	17	7 718	**122 306**	**63 179**	6.9%
	Greece	2009	- 20 179	2 480	m	**- 17 699**	20 386	29 703	29 066	5 673	**84 828**	**67 129**	11.7%
	Hungary	2010	- 16 393	- 2 937	- 1 135	**- 20 465**	77 014	43 784	0	12 149	**132 947**	**112 482**	17.3%
	Iceland		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Ireland	2010	- 28 066	- 1 598	- 5 412	**- 35 076**	123 230	60 647	0	8 686	**192 563**	**157 487**	17.5%
	Israel	2010	- 16 613	- 1 552	- 1 528	**- 19 692**	22 108	17 839	0	1 557	**41 503**	**21 811**	6.4%
	Italy	2008	- 17 538	- 11 185	- 3 330	**- 32 053**	77 919	21 270	0	2 750	**101 940**	**69 886**	8.0%
	Japan	2007	- 17 897	- 10 654	m	**- 28 551**	20 218	27 924	0	1 822	**49 965**	**21 414**	6.2%
	Korea	2010	- 7 198	- 3 557	m	**- 10 756**	10 123	20 892	0	- 474	**30 540**	**19 784**	8.0%
	Luxembourg		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Mexico		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Netherlands	2010	- 37 254	- 35 318	- 13 770	**- 86 341**	135 724	28 393	0	4 453	**168 569**	**82 228**	6.5%
	New Zealand	2010	- 18 444	- 5 090	- 3 039	**- 26 573**	38 104	3 348	2 329	2 486	**46 267**	**19 694**	6.5%
	Norway	2010	- 26 059	- 15 864	- 4 690	**- 46 613**	63 264	17 730	0	199	**81 193**	**34 581**	5.8%
	Poland	2010	- 17 653	- 5 768	- 2 228	**- 25 648**	21 556	52 341	0	11 304	**85 200**	**59 552**	10.5%
	Portugal	2010	- 10 295	- 2 148	m	**- 12 443**	56 914	28 879	0	5 172	**90 966**	**78 523**	14.9%
	Slovak Republic	2010	- 14 559	- 1 544	- 1 226	**- 17 329**	29 789	24 260	0	9 238	**63 287**	**45 958**	11.1%
	Slovenia	2010	- 19 698	- 8 128	- 259	**- 28 085**	80 209	74 531	0	9 320	**164 060**	**135 974**	13.1%
	Spain	2010	- 31 833	- 2 523	- 3 791	**- 38 147**	63 118	15 146	0	9 546	**87 811**	**49 664**	7.5%
	Sweden	2010	- 34 448	- 13 236	- 7 735	**- 55 420**	38 592	9 798	0	4 551	**52 940**	**- 2 479**	2.8%
	Switzerland		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Turkey	2005	- 9 567	- 3 320	m	**- 12 887**	19 194	17 528	0	4 171	**40 894**	**28 006**	9.1%
	United Kingdom	2010	- 6 798	1 128	- 5 225	**- 10 895**	70 396	38 718	12 831	13 607	**135 553**	**124 658**	36.4%
	United States	2010	- 34 787	- 6 398	- 27 162	**- 68 347**	99 860	31 811	0	11 668	**143 339**	**74 993**	7.4%
	OECD average		- 24 723	- 7 999	- 6 181	**- 37 624**	60 264	29 405	2 428	6 358	**98 456**	**60 832**	10.5%
	EU21 average		- 27 254	- 8 800	- 6 135	**- 41 270**	65 920	34 809	3 405	7 857	**111 991**	**70 721**	11.6%
Partners	Argentina		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Brazil		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	China		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Colombia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	India		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Indonesia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Latvia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Russian Federation		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	Saudi Arabia		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	South Africa		m	m	m	**m**	m	m	m	m	**m**	**m**	m
	G20 average		m	m	m	**m**	m	m	m	m	**m**	**m**	m

Note: Values are based on the difference between women who attained a tertiary education compared with those who have attained an upper secondary or post-secondary non-tertiary education.

Source: OECD. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

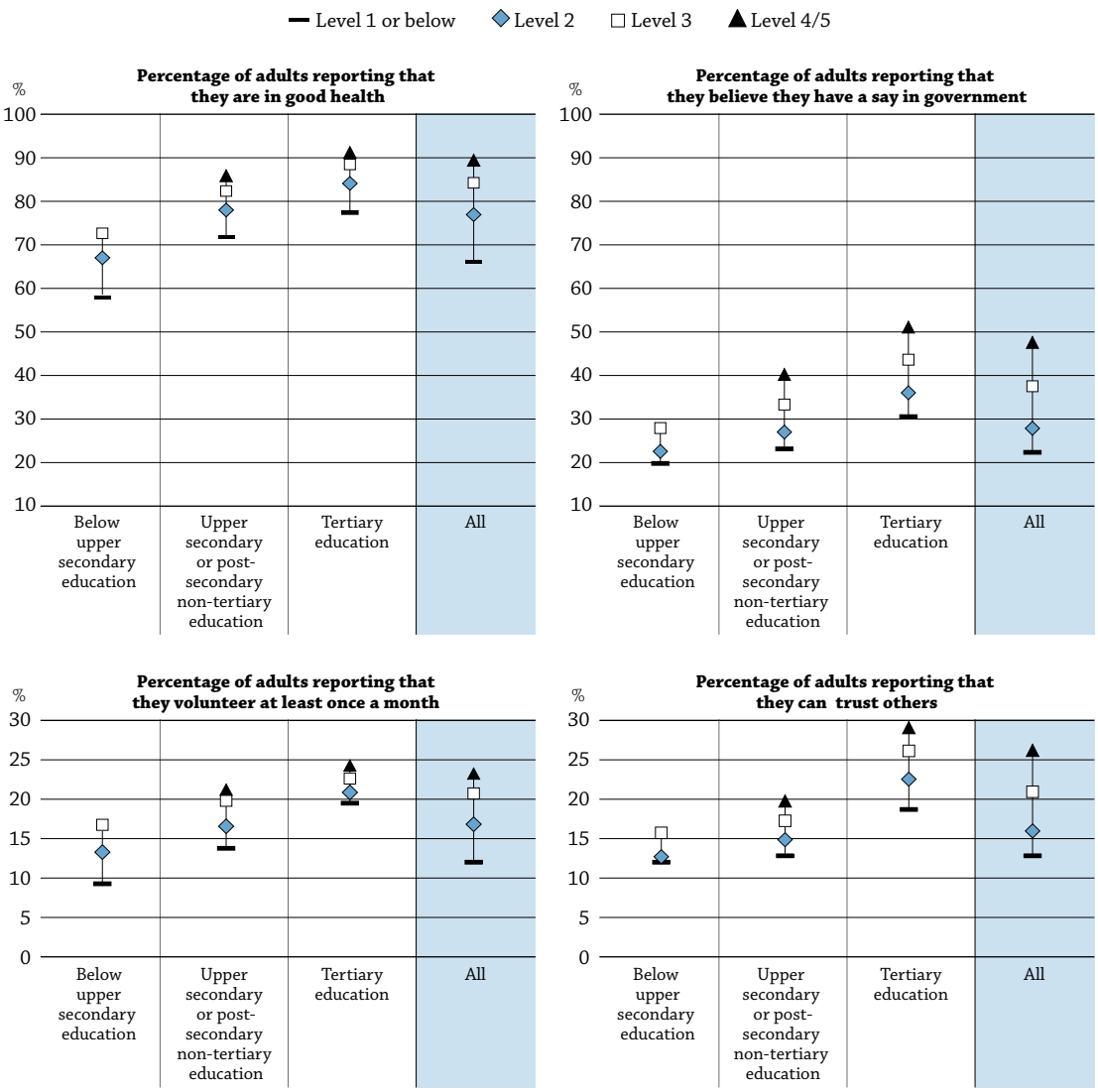
StatLink http://dx.doi.org/10.1787/888933116433

WHAT ARE THE SOCIAL OUTCOMES OF EDUCATION?

- Both educational attainment and literacy proficiency are associated with higher levels of social outcomes including self-reported health status, volunteering, interpersonal trust and political efficacy. Among individuals with the same level of educational attainment, those with higher levels of literacy proficiency have higher levels of social outcomes.
- There is a particularly strong relationship between literacy proficiency and political efficacy among tertiary graduates. On average across 20 OECD countries, the gap in the proportion of adults reporting that they believe they have a say in government between tertiary graduates with the highest and lowest literacy proficiency is 21 percentage points.
- There is a strong relationship between literacy proficiency and volunteering among those who have not attained upper secondary education. On average across 21 OECD countries, the difference in the proportion of adults reporting that they volunteer at least once a month between low-educated adults with the highest and lowest literacy proficiency is 8 percentage points.

Chart A8.1. Social outcomes of learning in OECD countries (2012)

Survey of Adult Skills, average, 25-64 year-olds



Source: OECD. Tables A8.1a (L), A8.2a (L), A8.3a (L) and A8.4a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116642

Context

Improving health is a key policy objective for all OECD countries. This is reflected in high levels of public expenditure on health, which in 2009 amounted to 6.9% of GDP in OECD countries (OECD, 2011a). This amount is much higher than the public expenditure on education of 5.0% in the same year (OECD, 2011b). Although the significant resources spent on healthcare have generally helped people live longer, the nature of health problems has changed, with recent increases in chronic debilitating conditions such as heart disease, diabetes and depression. Efforts to combat these trends depend in part on altering individuals' lifestyle choices which may be improved by raising cognitive and socio-emotional skills through education (OECD, 2013a).

Social cohesion, often reflected in levels of civic and social engagement, is also of high concern in OECD countries. Countries generally perceive that levels of civic participation, political efficacy and interpersonal trust are inadequate thus posing a challenge for the maintenance of well-functioning democratic institutions and political processes. Education may play an important role in ensuring social cohesion by fostering literacy, self-efficacy and resilience that underlie social and political interaction.

Other findings

- **The differences in social outcomes between those in the highest and the lowest literacy proficiency level are generally comparable to the differences in social outcomes between those who have not attained upper secondary education and those who have attained tertiary education.** For example, the gap in those reporting being in good health between adults with high and low levels of education is 23 percentage points. The gap in those reporting being in good health between adults with the highest and lowest literacy proficiency is the same at 23 percentage points.
- **Women seem to benefit more from improving skills in terms of reporting being in better health and having greater trust in others.** For example, the gap in those reporting that they can trust others between women with the highest and lowest literacy proficiency is 19 percentage points. A similar figure for men is 15 percentage points.

A8

Analysis

This year's social outcomes of education (and skills) indicator includes measures of self-reported health, volunteering, interpersonal trust and political efficacy, assessed in the Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC). These four social outcomes measures are considered among the key indicators of individual and national well-being (OECD, 2013a).

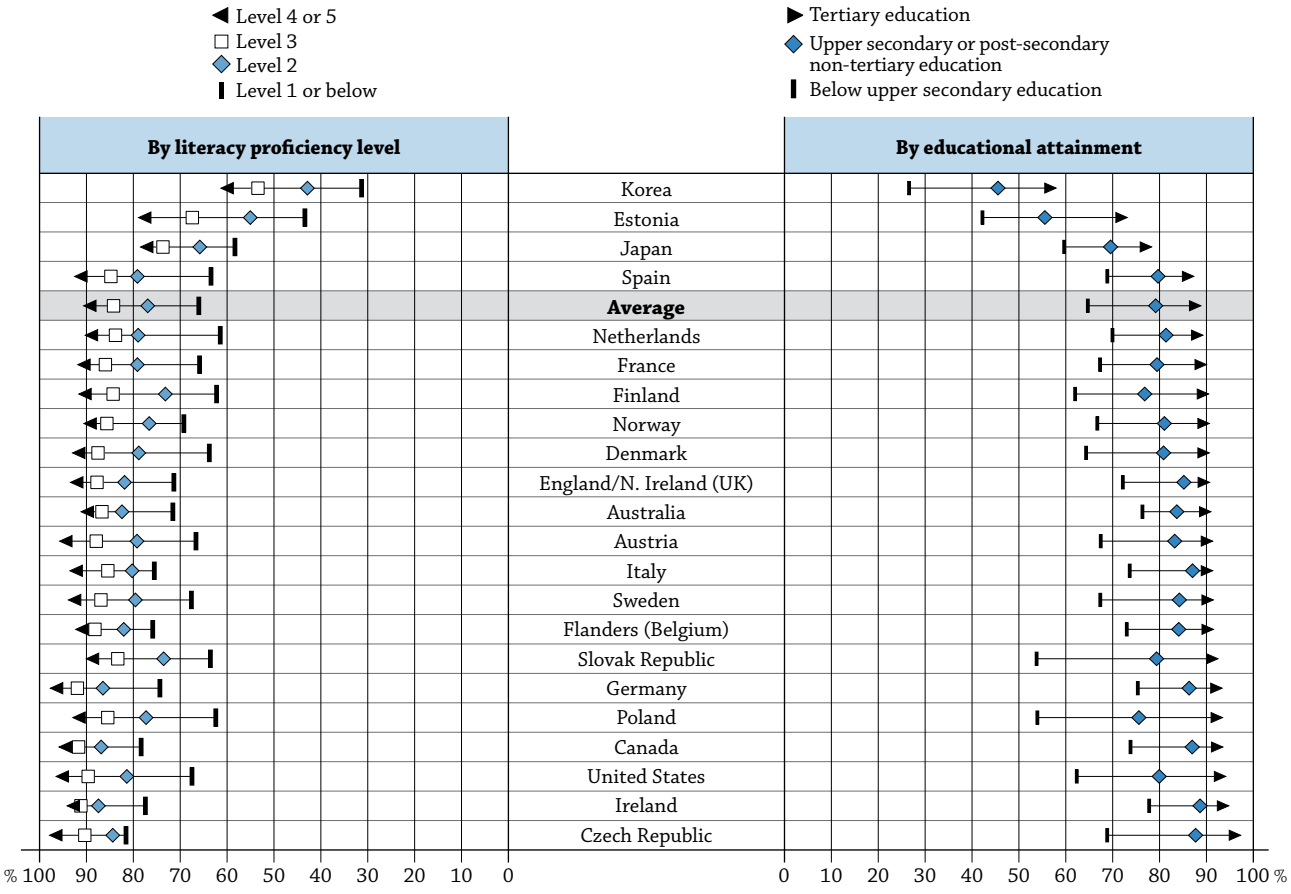
Both educational attainment and literacy proficiency are positively associated with these social outcome measures (Charts A8.2, A8.3, A8.4 and A8.5, Tables A8.1, A8.2, A8.3 and A8.4). Differences in outcomes across those with different literacy or educational attainment are sometimes substantial. Although country-specific patterns can vary, the overall results and strength of the relationships are similar when using numeracy scales (Tables A8.1a [N], A8.2a [N], A8.3a [N] and A8.4a [N]).

Self-reported health

On average, across 22 OECD countries, the difference in the proportion of adults reporting that they are "in good health" between those with high (i.e. tertiary) and low (i.e. below upper secondary) education is 23 percentage points (Chart A8.2 and Table A8.1a [L]). Particularly large differences are observed in Poland (38 percentage points) and Slovak Republic (37 percentage points). Similarly, the difference in self-reported health between those with the highest and lowest literacy proficiency, as measured by the Survey of Adult Skills, is 23 percentage points, on average across these countries (Chart A8.2 and Table A8.1a [L]). Estonia has a large difference of 34 percentage points.

Chart A8.2. Percentage of adults reporting that they are in good health, by educational attainment and literacy proficiency level (2012)

Survey of Adult Skills, 25-64 year-olds



Countries are ranked in ascending order of the proportion of people with tertiary education reporting that they are in good health.

Source: OECD. Table A8.1a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

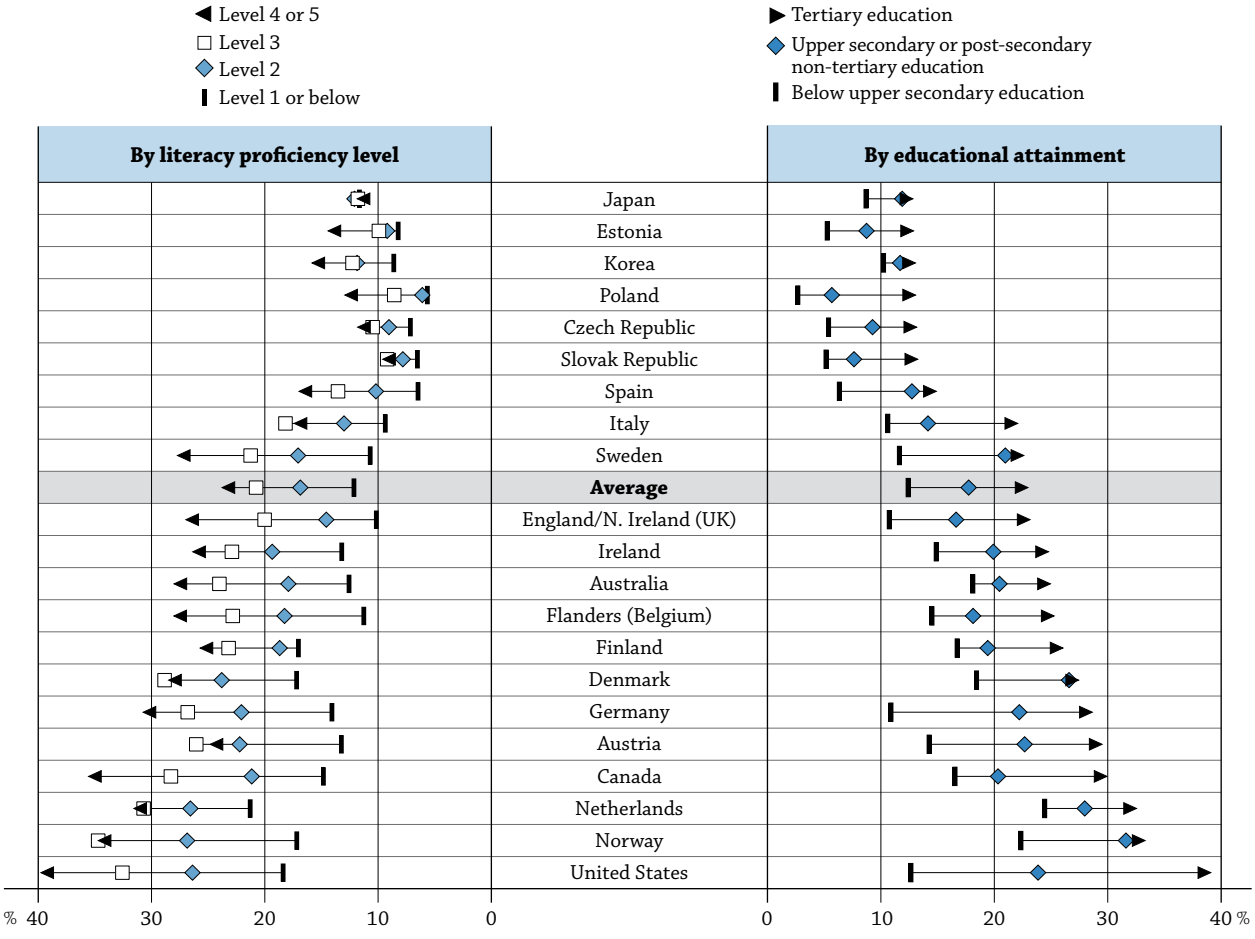
StatLink http://dx.doi.org/10.1787/888933116661

Volunteering

The difference in the proportion of adults reporting that they participate in volunteer activities between those with high and low education is 10 percentage points, on average across 21 OECD countries (Chart A8.3 and Table A8.2a [L]). Particularly large differences are observed in the United States (26 percentage points) and Germany (17 percentage points). Similarly, differences in self-reported participation in volunteer activities between those with the highest and lowest literacy proficiency is 11 percentage points, on average across these countries (Chart A8.3 and Table A8.2a [L]). Particularly large differences are observed in the United States (21 percentage points) and Canada (20 percentage points).

Chart A8.3. Percentage of adults reporting that they volunteer at least once a month, by educational attainment and literacy proficiency level (2012)

Survey of Adult Skills, 25-64 year-olds



Countries are ranked in ascending order of the proportion of people with tertiary education reporting that they volunteer at least once a month.

Source: OECD. Table A8.2a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116680

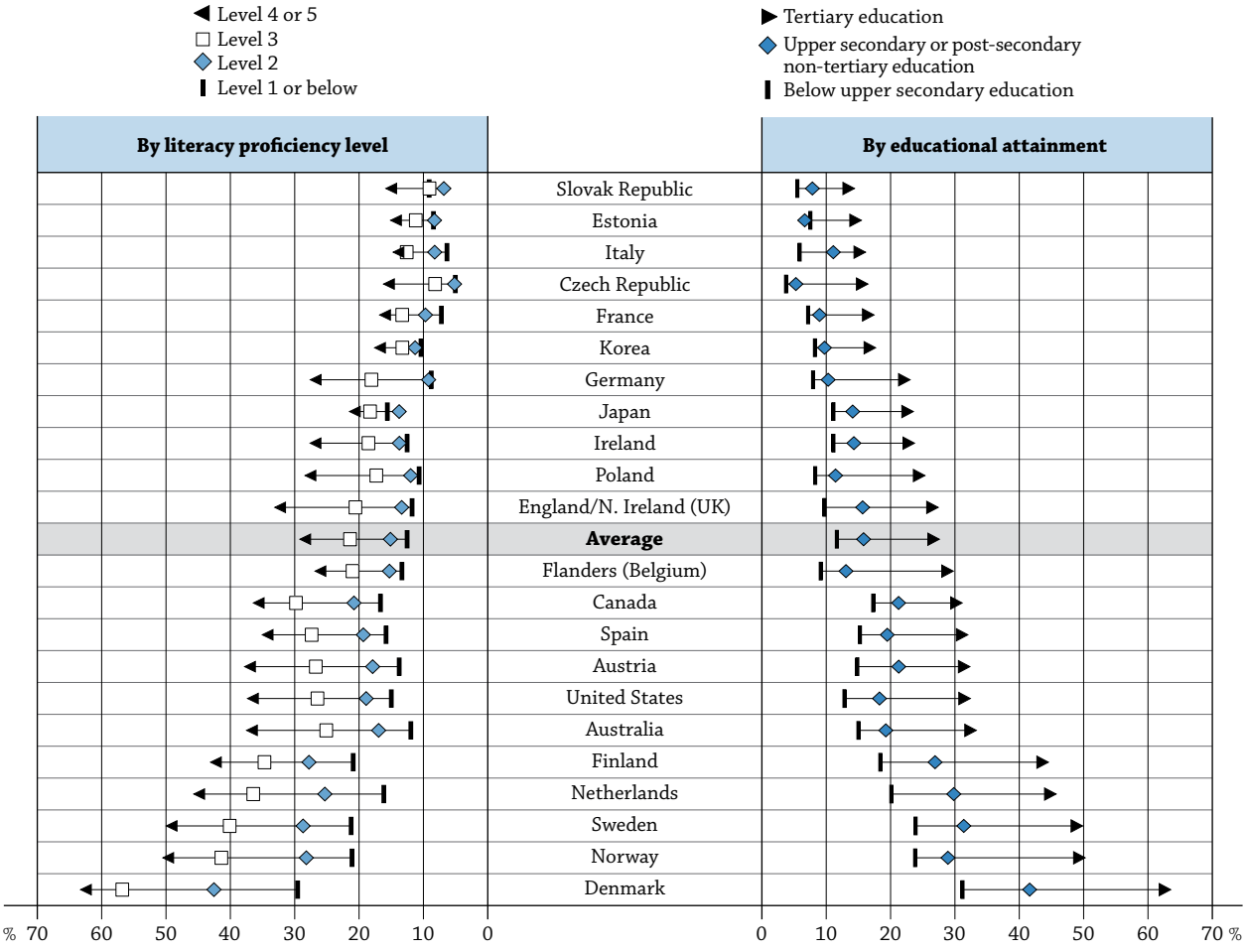
Interpersonal trust

Differences in the proportion of adults reporting that they "can trust others" between those with high and low education is 16 percentage points, on average across 22 OECD countries (Chart A8.4 and Table A8.3c [L]). Particularly large differences are observed in Denmark (31 percentage points) and the Netherlands (25 percentage points). Similarly, the differences in self-reported interpersonal trust between those with the highest and lowest literacy proficiency is 17 percentage points, on average across these countries (Chart A8.4 and Table A8.3c [L]). Particularly large differences are seen in Denmark (33 percentage points) and Norway (29 percentage points).

A8

Chart A8.4. Percentage of adults reporting that they trust others, by educational attainment and literacy proficiency level (2012)

Survey of Adult Skills, 25-64 year-olds



Countries are ranked in ascending order of the proportion of people with tertiary education reporting that they trust others.
Source: OECD. Table A8.3a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116699

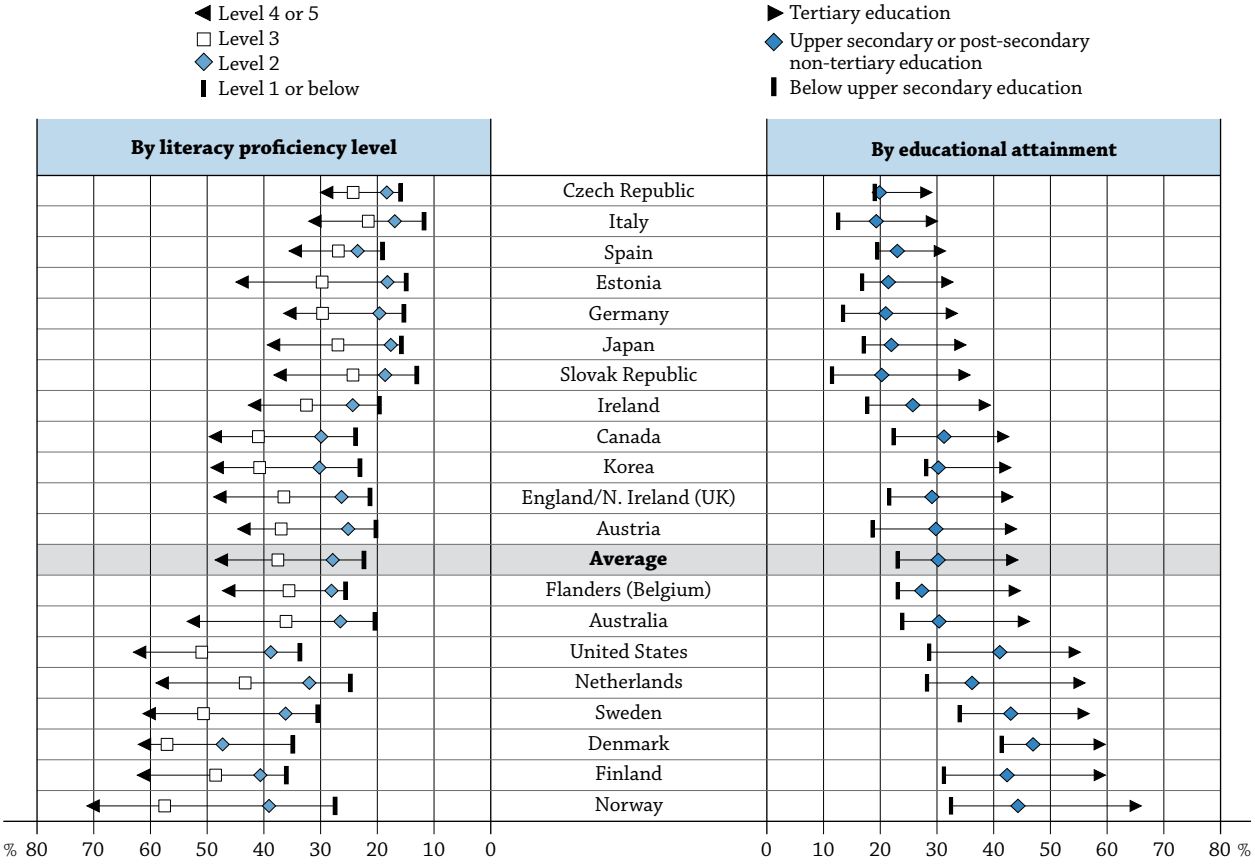
Political efficacy

On average across 20 OECD countries, the difference in the proportion of adults between high and low education reporting that they "believe they have a say in government" is 20 percentage points (Chart A8.5 and Table A8.4a [L]). Particularly large differences are seen in the Netherlands (27 percentage points) and Norway (33 percentage points). Across these countries, the gap in self-reported political efficacy between adults with the highest and lowest literacy proficiency is 25 percentage points, on average (Chart A8.5 and Table A8.4a [L]). A particularly large difference of 43 percentage points is observed in Norway.

The differences in social outcomes between those with the highest and the lowest literacy proficiency level are generally comparable to the differences in social outcomes between those who have not attained upper secondary education and those who have attained tertiary education (Charts A8.1, A8.2, A8.3, A8.4 and A8.5, and Tables A8.1, A8.2, A8.3 and A8.4). Note that the percentage of adults scoring at the lowest and highest literacy proficiency levels are 12% and 16%, respectively (OECD, 2013b). In contrast, adults who have not attained upper secondary and those who have attained teriary education are 24% and 33%, respectively. This may imply that the relationship between educational attainment and social outcomes is stronger than the relationship between literacy proficiency and social outcomes. Similarly, OECD (2013b, p. 232) suggests that the relationship between literacy proficiency and wages is generally much stronger than the relationship between years of education and wages.

Chart A8.5. Percentage of adults reporting that they believe they have a say in government, by educational attainment and literacy proficiency level (2012)

Survey of Adult Skills, 25-64 year-olds



Countries are ranked in ascending order of the proportion of people with tertiary education reporting that they have a say in government.

Source: OECD. Table A8.4a (L). See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

StatLink http://dx.doi.org/10.1787/888933116718

Causal effects

Other studies using longitudinal data suggest that the associations presented in Charts A8.1, A8.2, A8.3, A8.4 and A8.5 may reflect causal effects of education and skills on social outcomes. For instance, Conti, Heckman and Urzua (2010), using the British Cohort Study (BCS) 1970, show that a considerable proportion of the relationship between educational attainment and health outcomes reflects causal effects. Heckman et al. (2014) also show, using the National Longitudinal Study of Youth (NLSY), that cognitive and socio-emotional skills exhibit causal effects on a variety of labour market and social outcomes. Moreover, Heckman and Kautz (2013), using evidence from experimental studies, argue that a number of early childhood and school-based programmes exhibit positive impact on educational, labour market and social outcomes by enhancing cognitive and socio-emotional skills.

Relationship between literacy proficiency and social outcomes, by educational attainment

Chart A8.1 shows the relationship between literacy proficiency and four social outcome measures separately for three levels of educational attainment, namely below upper secondary, upper secondary or post-secondary non-tertiary, and tertiary education. This chart suggests that the strength of the relationships varies across education levels. For instance, there is a strong relationship between literacy proficiency and political efficacy, particularly among tertiary graduates. Tertiary education may give students better access to public decision making and politics, and literacy proficiency may improve one's capacity to contribute to this process. The power of literacy proficiency increases as individuals receive more opportunities to demonstrate such skills. Moreover, there is a strong relationship between literacy proficiency and volunteering, particularly among those who have not attained upper secondary education.

Those with a lower level of education may have relatively limited access to volunteering activities, but the data are consistent with the argument that high literacy proficiency may more than compensate for that by improving their capability to understand the benefits of volunteering activities for themselves as well as for the society, and to gain access to the most appropriate ones. The above analysis also suggests that education may have a direct (or, independent) effect on social outcomes over and above the indirect effects through raising literacy proficiency.

The role of gender

Women are more likely to benefit more from improving skills in terms of being in better health and having greater trust in others. On average across 22 OECD countries, the gap between women with the highest and lowest levels of literacy proficiency who report that they are "in good health" is 25 percentage points (Table A8.1b). Comparing similarly educated men, the difference is 22 percentage points. Moreover, the gap between women with the highest and lowest levels of skills who report that they "can trust others" is 19 percentage points (Table A8.3b). Comparing similarly educated men, the difference is 15 percentage points. In contrast, women are less likely to benefit more than men from improving educational attainment in terms of reporting being in better health, volunteering and believing they have a say in government.

Definitions

Age groups: **adults** refers to 25-64 year-olds.

Interpersonal trust, i.e. can trust others is defined as those who strongly disagree or disagree that there are only few people you can trust completely.

Levels of education: below upper secondary corresponds to ISCED levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to ISCED levels 3A, 3B, 3C long programmes and ISCED level 4; and **tertiary** corresponds to ISCED levels 5A, 5B and 6. See the Reader's Guide at the beginning of the book for a presentation of all ISCED levels.

Political efficacy, i.e. believe they have a say in government is defined as those who strongly disagree or disagree with the statement: "People like me don't have any say about what the government does".

Self-reported health, i.e. good health is defined as those who report that they are in excellent, very good or good health.

Volunteering is defined as those who report that they volunteer at least once a month.

Methodology

All data are based on the Survey of Adult Skills (PIAAC) (2012). PIAAC is the OECD Programme for the International Assessment of Adult Competencies. See *About the Survey of Adult Sills* at the beginning of this publication and Annex 3 (*www.oecd.org/edu/eag.htm*) for additional information.

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, forthcoming).

References

Conti, G., J.J. Heckman and S. Urzúa (2010), "The education-health gradient", *American Economic Review: Papers & Proceedings* 100, May 2010, pp. 234-248.

Heckman, J.J., J.E. Humphries, G. Veramendi and S. Urzúa (2014), "Education, health and wages", *NBER Working Paper*, No. 19971, National Bureau of Economic Research, March 2014.

Heckman, J.J. and T. Kautz (2013), "Fostering and measuring skills: Interventions that improve character and cognition", *NBER Working Paper*, No. 19656, National Bureau of Economic Research, November 2013.

OECD (2013a), *How's Life? 2013: Measuring Well-being*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201392-en*.

OECD (2013b), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264204256-en*.

OECD (2011a), *Health at a Glance 2011: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/health_glance-2013-en*.

OECD (2011b), *Education at a Glance 2011: OECD Indicators*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eag-2011-en*.

OECD (2010), *Improving Health and Social Cohesion through Education,* Educational Research and Innovation, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264086319-en*.

Tables of Indicator A8

StatLink http://dx.doi.org/10.1787/888933116547

Table A8.1a (L)	**Percentage of adults reporting that they are in good health, by educational attainment and literacy proficiency level (2012)**
WEB Table A8.1a (N)	Percentage of adults reporting that they are in good health, by educational attainment and numeracy proficiency level (2012)
WEB Table A8.1b (L)	Percentage of adults reporting that they are in good health, by educational attainment, literacy proficiency level and gender (2012)
WEB Table A8.1b (N)	Percentage of adults reporting that they are in good health, by educational attainment, numeracy proficiency level and gender (2012)
Table A8.2a (L)	**Percentage of adults reporting that they volunteer at least once a month, by educational attainment and literacy proficiency level (2012)**
WEB Table A8.2a (N)	Percentage of adults reporting that they volunteer at least once a month, by educational attainment and numeracy proficiency level (2012)
WEB Table A8.2b (L)	Percentage of adults reporting that they volunteer at least once a month, by educational attainment, literacy proficiency level and gender (2012)
WEB Table A8.2b (N)	Percentage of adults reporting that they volunteer at least once a month, by educational attainment, numeracy proficiency level and gender (2012)
Table A8.3a (L)	**Percentage of adults reporting that they trust others, by educational attainment and literacy proficiency level (2012)**
WEB Table A8.3a (N)	Percentage of adults reporting that they trust others, by educational attainment and numeracy proficiency level (2012)
WEB Table A8.3b (L)	Percentage of adults reporting that they trust others, by educational attainment, literacy proficiency level and gender (2012)
WEB Table A8.3b (N)	Percentage of adults reporting that they trust others, by educational attainment, numeracy proficiency level and gender (2012)
WEB Table A8.3c (L)	Percentage of adults reporting that others do not take advantage of them, by educational attainment and literacy proficiency level (2012)
WEB Table A8.3c (N)	Percentage of adults reporting that others do not take advantage of them, by educational attainment and numeracy proficiency level (2012)
WEB Table A8.3d (L)	Percentage of adults reporting that others do not take advantage of them, by educational attainment, literacy proficiency level and gender (2012)
WEB Table A8.3d (N)	Percentage of adults reporting that others do not take advantage of them, by educational attainment, numeracy proficiency level and gender (2012)
Table A8.4a (L)	**Percentage of adults reporting that they believe they have a say in government, by educational attainment and literacy proficiency level (2012)**
WEB Table A8.4a (N)	Percentage of adults reporting that they believe they have a say in government, by educational attainment and numeracy proficiency level (2012)
WEB Table A8.4b (L)	Percentage of adults reporting that they believe they have a say in government, by educational attainment, literacy proficiency level and gender (2012)
WEB Table A8.4b (N)	Percentage of adults reporting that they believe they have a say in government, by educational attainment, numeracy proficiency level and gender (2012)

A8

Table A8.1a (L). [1/2] Percentage of adults reporting that they are in good health, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Below upper secondary education								Upper secondary or post-secondary non-tertiary education									
		Level 0/1		Level 2		Level 3		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	**National entities**																		
	Australia	67	(3.2)	79	(2.7)	82	(3.0)	76	(1.2)	77	(3.5)	82	(1.9)	86	(1.6)	85	(2.5)	84	(1.1)
	Austria	60	(3.5)	69	(3.2)	75	(5.3)	68	(1.7)	71	(2.8)	81	(1.4)	88	(1.2)	93	(2.8)	83	(0.6)
	Canada	69	(2.2)	76	(2.6)	87	(3.6)	74	(1.7)	82	(1.8)	87	(1.2)	89	(1.1)	91	(3.3)	87	(0.6)
	Czech Republic	73	(7.0)	66	(6.7)	68	(9.3)	69	(3.6)	84	(3.5)	86	(1.9)	90	(1.9)	95	(3.7)	88	(0.9)
	Denmark	54	(2.9)	68	(3.1)	78	(3.9)	64	(1.5)	69	(3.0)	80	(1.8)	85	(1.7)	89	(4.7)	81	(0.9)
	Estonia	37	(3.6)	42	(3.4)	47	(5.3)	42	(1.8)	43	(3.3)	52	(1.7)	62	(1.8)	69	(4.7)	56	(0.9)
	Finland	58	(4.2)	60	(4.2)	70	(5.6)	62	(1.8)	62	(4.5)	74	(2.1)	81	(1.5)	84	(3.2)	77	(1.0)
	France	61	(2.1)	72	(2.2)	78	(3.9)	67	(1.0)	71	(2.7)	80	(1.5)	83	(1.9)	85	(4.7)	80	(0.8)
	Germany	71	(4.3)	80	(4.7)	82	(8.2)	75	(2.5)	76	(2.3)	87	(1.4)	90	(1.4)	96	(2.6)	86	(0.8)
	Ireland	71	(2.4)	82	(2.4)	85	(4.0)	78	(1.3)	88	(2.7)	89	(1.5)	89	(1.6)	88	(5.3)	89	(0.8)
	Italy	72	(2.2)	75	(2.2)	75	(4.1)	74	(1.3)	87	(2.7)	86	(1.8)	88	(1.9)	91	(5.0)	87	(1.1)
	Japan	53	(6.2)	55	(4.8)	68	(5.4)	60	(2.5)	63	(6.2)	67	(2.5)	72	(1.9)	70	(4.5)	70	(1.3)
	Korea	22	(2.6)	28	(2.7)	35	(5.2)	27	(1.4)	41	(3.8)	44	(2.0)	49	(2.5)	52	(9.5)	46	(1.3)
	Netherlands	59	(3.2)	77	(2.6)	72	(3.4)	70	(1.3)	64	(5.6)	81	(2.0)	84	(1.6)	85	(3.5)	81	(1.0)
	Norway	61	(4.4)	65	(3.4)	75	(3.3)	67	(1.9)	73	(4.1)	79	(2.2)	84	(1.8)	88	(4.0)	81	(1.0)
	Poland	45	(4.1)	59	(4.1)	66	(7.9)	54	(2.3)	66	(2.4)	76	(1.5)	82	(2.1)	86	(6.0)	76	(0.9)
	Slovak Republic	51	(3.6)	52	(4.1)	62	(5.9)	54	(2.2)	75	(3.5)	77	(1.5)	82	(1.2)	86	(4.2)	79	(0.7)
	Spain	60	(1.7)	76	(1.7)	81	(3.3)	69	(1.2)	73	(3.9)	81	(2.6)	81	(3.1)	92	(6.1)	80	(1.4)
	Sweden	59	(4.1)	71	(3.9)	75	(5.9)	67	(2.3)	75	(3.9)	82	(2.3)	86	(1.5)	92	(2.6)	84	(0.9)
	United States	57	(4.2)	70	(6.3)	78	(10.1)	62	(2.7)	71	(2.6)	79	(2.1)	85	(2.1)	90	(4.2)	80	(1.4)
	Sub-national entities																		
	Flanders (Belgium)	68	(2.6)	77	(2.5)	76	(4.6)	73	(1.6)	83	(2.5)	82	(1.6)	87	(1.8)	90	(4.1)	84	(0.8)
	England (UK)	60	(2.8)	76	(2.5)	83	(3.9)	72	(1.4)	82	(3.4)	83	(2.0)	87	(1.8)	92	(2.7)	85	(1.0)
	Northern Ireland (UK)	62	(3.5)	70	(3.0)	73	(4.4)	68	(1.8)	77	(4.4)	82	(2.6)	85	(2.5)	89	(5.1)	83	(1.4)
	England/N. Ireland (UK)	60	(2.7)	76	(2.4)	83	(3.8)	72	(1.3)	82	(3.3)	83	(2.0)	87	(1.8)	92	(2.7)	85	(1.0)
	OECD average	59	(0.8)	67	(0.8)	73	(1.2)	65	(0.4)	72	(0.8)	78	(0.4)	82	(0.4)	86	(1.0)	79	(0.2)
Partners	Russian Federation*	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116566

A8

Table A8.1a (L). [2/2] Percentage of adults reporting that they are in good health, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Tertiary education										All levels of education									
		Level 0/1		Level 2		Level 3		Level 4/5		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
OECD	**National entities**																				
	Australia	80	(5.4)	89	(2.3)	89	(1.3)	92	(1.3)	90	(0.8)	72	(2.2)	82	(1.4)	87	(0.9)	90	(1.1)	84	(0.5)
	Austria	77	(8.8)	85	(2.8)	91	(1.4)	96	(1.7)	90	(1.0)	67	(2.2)	79	(1.3)	88	(1.1)	95	(1.7)	82	(0.6)
	Canada	85	(2.3)	90	(1.2)	93	(0.7)	96	(0.8)	92	(0.4)	78	(1.2)	87	(0.8)	92	(0.5)	95	(0.9)	88	(0.3)
	Czech Republic	c	c	95	(2.8)	96	(1.6)	98	(1.2)	96	(0.9)	82	(3.1)	84	(1.9)	90	(1.5)	97	(1.8)	88	(0.7)
	Denmark	79	(4.1)	85	(2.0)	91	(0.9)	94	(1.6)	89	(0.6)	64	(1.7)	79	(1.1)	88	(0.9)	92	(1.8)	81	(0.6)
	Estonia	52	(4.9)	65	(2.0)	75	(1.4)	82	(2.3)	72	(0.8)	43	(2.1)	55	(1.2)	67	(1.1)	78	(2.2)	61	(0.5)
	Finland	77	(6.7)	82	(2.2)	90	(1.2)	93	(1.0)	89	(0.7)	62	(2.7)	73	(1.4)	84	(1.1)	90	(1.2)	80	(0.6)
	France	74	(5.0)	85	(1.8)	90	(0.9)	93	(1.7)	89	(0.6)	66	(1.6)	79	(1.0)	86	(1.0)	91	(1.7)	79	(0.5)
	Germany	77	(5.8)	88	(2.1)	94	(1.0)	97	(1.4)	92	(0.7)	74	(1.9)	86	(1.1)	92	(1.0)	97	(1.4)	87	(0.6)
	Ireland	87	(5.0)	93	(1.5)	94	(0.9)	94	(1.4)	94	(0.6)	77	(1.9)	87	(1.0)	91	(0.9)	93	(1.6)	87	(0.5)
	Italy	88	(4.9)	88	(3.1)	91	(2.2)	94	(2.9)	90	(1.3)	76	(1.8)	80	(1.4)	85	(1.7)	92	(3.1)	81	(0.9)
	Japan	c	c	74	(3.6)	76	(1.4)	80	(1.8)	77	(0.9)	58	(4.4)	66	(1.9)	74	(1.2)	77	(1.6)	72	(0.8)
	Korea	53	(9.4)	52	(2.4)	58	(1.8)	62	(3.8)	57	(1.1)	31	(2.0)	43	(1.2)	53	(1.3)	60	(3.4)	47	(0.7)
	Netherlands	76	(8.3)	80	(3.6)	89	(1.2)	91	(1.6)	88	(0.8)	61	(2.5)	79	(1.5)	84	(1.1)	89	(1.5)	81	(0.6)
	Norway	84	(4.7)	86	(2.2)	90	(1.1)	91	(1.5)	89	(0.7)	69	(2.6)	77	(1.5)	86	(1.0)	89	(1.8)	82	(0.7)
	Poland	88	(5.3)	91	(2.2)	92	(1.6)	94	(1.9)	92	(0.8)	62	(1.9)	77	(1.2)	85	(1.2)	92	(2.2)	78	(0.6)
	Slovak Republic	c	c	89	(2.6)	92	(1.3)	92	(3.0)	91	(1.0)	64	(2.8)	74	(1.4)	83	(0.9)	89	(2.6)	78	(0.6)
	Spain	79	(4.2)	83	(2.4)	88	(1.6)	91	(2.6)	86	(1.1)	63	(1.5)	79	(1.2)	85	(1.3)	91	(2.4)	77	(0.7)
	Sweden	77	(5.9)	85	(3.0)	91	(1.3)	94	(1.3)	90	(0.7)	68	(2.5)	80	(1.7)	87	(1.1)	93	(1.4)	83	(0.7)
	United States	81	(5.0)	90	(1.6)	94	(1.0)	97	(1.1)	93	(0.6)	68	(1.9)	81	(1.6)	90	(1.0)	95	(1.2)	83	(0.8)
	Sub-national entities																				
	Flanders (Belgium)	80	(5.6)	88	(2.5)	91	(1.2)	92	(1.6)	90	(0.8)	76	(1.7)	82	(1.2)	88	(0.9)	91	(1.5)	85	(0.5)
	England (UK)	82	(5.7)	87	(2.3)	90	(1.3)	93	(1.6)	89	(0.8)	71	(2.1)	82	(1.3)	88	(1.2)	92	(1.4)	84	(0.6)
	Northern Ireland (UK)	86	(5.4)	84	(3.2)	91	(1.5)	95	(1.5)	90	(0.9)	68	(2.7)	77	(1.7)	86	(1.4)	93	(1.7)	80	(0.9)
	England/N. Ireland (UK)	82	(5.6)	87	(2.2)	90	(1.3)	93	(1.6)	89	(0.8)	71	(2.0)	82	(1.2)	88	(1.1)	92	(1.4)	84	(0.6)
	OECD average	78	(1.3)	84	(0.5)	88	(0.3)	91	(0.4)	88	(0.2)	66	(0.5)	77	(0.3)	84	(0.2)	89	(0.4)	79	(0.1)
Partners	**Russian Federation***	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116566

A8

Table A8.2a (L). [1/2] Percentage of adults reporting that they volunteer at least once a month, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Below upper secondary education								Upper secondary or post-secondary non-tertiary education									
		Level 0/1		Level 2		Level 3		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	**National entities**																		
	Australia	12	(2.6)	17	(2.3)	24	(2.4)	18	(1.2)	11	(3.4)	17	(2.1)	24	(2.3)	27	(3.9)	20	(1.1)
	Austria	7	(2.1)	17	(3.0)	21	(5.1)	14	(1.4)	17	(2.5)	22	(1.6)	25	(1.5)	23	(4.5)	23	(0.8)
	Canada	15	(1.8)	16	(2.2)	23	(4.2)	17	(1.2)	13	(1.8)	18	(1.2)	24	(1.5)	32	(3.7)	20	(0.8)
	Czech Republic	4	(2.7)	7	(3.5)	c	c	5	(1.9)	8	(3.0)	9	(1.5)	10	(1.5)	12	(4.0)	9	(1.0)
	Denmark	12	(1.8)	21	(2.8)	25	(4.4)	18	(1.1)	23	(2.9)	25	(2.0)	30	(2.2)	28	(6.4)	27	(1.2)
	Estonia	6	(1.6)	5	(1.3)	5	(2.0)	5	(0.7)	8	(1.6)	9	(1.0)	8	(1.1)	13	(3.4)	9	(0.7)
	Finland	11	(2.9)	17	(3.0)	21	(4.1)	17	(1.8)	19	(3.4)	17	(1.7)	21	(1.7)	20	(3.1)	19	(1.0)
	France	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w
	Germany	7	(2.5)	14	(4.0)	19	(8.4)	11	(1.7)	16	(2.4)	21	(1.7)	26	(2.0)	28	(4.8)	22	(1.0)
	Ireland	12	(1.7)	16	(2.1)	20	(3.8)	15	(1.2)	12	(2.5)	20	(1.8)	23	(2.0)	24	(6.2)	20	(0.9)
	Italy	9	(1.5)	12	(1.9)	13	(3.5)	11	(1.1)	10	(2.3)	13	(1.5)	18	(2.1)	15	(7.0)	14	(1.0)
	Japan	6	(2.8)	10	(2.5)	10	(2.7)	9	(1.3)	13	(5.2)	12	(1.9)	12	(1.3)	10	(2.5)	12	(0.9)
	Korea	7	(1.6)	13	(2.0)	12	(3.6)	10	(1.0)	10	(2.3)	11	(1.2)	13	(1.6)	17	(7.0)	12	(0.7)
	Netherlands	21	(2.6)	26	(2.4)	27	(3.1)	24	(1.3)	21	(4.5)	26	(2.5)	30	(1.9)	31	(3.5)	28	(1.1)
	Norway	16	(3.2)	21	(2.8)	28	(4.1)	22	(1.6)	19	(3.3)	28	(2.7)	38	(2.4)	33	(7.8)	32	(1.3)
	Poland	2	(1.4)	3	(1.7)	3	(2.5)	3	(0.9)	6	(1.3)	5	(0.8)	7	(1.2)	6	(4.1)	6	(0.5)
	Slovak Republic	4	(1.3)	5	(1.5)	8	(3.2)	5	(1.0)	7	(1.8)	8	(1.1)	8	(0.9)	7	(2.3)	8	(0.5)
	Spain	5	(0.8)	7	(1.0)	10	(2.2)	6	(0.6)	11	(3.1)	13	(1.9)	13	(2.4)	19	(8.6)	13	(1.2)
	Sweden	5	(2.1)	15	(2.8)	16	(4.2)	12	(1.4)	15	(3.0)	18	(2.2)	22	(1.9)	31	(5.2)	21	(1.1)
	United States	11	(2.4)	15	(4.0)	c	c	13	(1.6)	20	(2.7)	24	(2.2)	26	(2.5)	27	(5.8)	24	(1.2)
	Sub-national entities																		
	Flanders (Belgium)	c	c	c	c	c	c	15	(1.3)	c	c	18	(1.9)	20	(2.1)	c	c	18	(1.0)
	England (UK)	7	(1.6)	10	(1.8)	16	(3.4)	11	(1.2)	13	(3.0)	16	(2.0)	18	(2.2)	21	(4.3)	17	(1.1)
	Northern Ireland (UK)	9	(2.3)	8	(2.1)	13	(4.3)	9	(1.4)	18	(5.3)	16	(2.7)	18	(2.6)	24	(6.2)	17	(1.5)
	England/N. Ireland (UK)	7	(1.5)	10	(1.8)	16	(3.3)	11	(1.1)	13	(3.0)	16	(1.9)	18	(2.2)	22	(4.2)	17	(1.1)
	OECD average	9	(0.5)	13	(0.6)	17	(0.9)	12	(0.3)	14	(0.7)	17	(0.4)	20	(0.4)	21	(1.2)	18	(0.2)
Partners	Russian Federation*	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116585

A8

Table A8.2a (L). [2/2] Percentage of adults reporting that they volunteer at least once a month, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Tertiary education										All levels of education									
		Level 0/1		Level 2		Level 3		Level 4/5		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
OECD	**National entities**																				
	Australia	17	(4.7)	21	(2.8)	24	(2.0)	28	(2.2)	24	(1.2)	13	(2.0)	18	(1.3)	24	(1.3)	27	(1.7)	21	(0.6)
	Austria	21	(8.3)	32	(3.6)	30	(2.6)	26	(3.5)	29	(1.6)	13	(1.6)	22	(1.4)	26	(1.3)	24	(2.7)	22	(0.7)
	Canada	17	(2.4)	26	(1.6)	31	(1.2)	36	(2.1)	29	(0.7)	15	(1.1)	21	(0.9)	28	(0.9)	35	(1.8)	25	(0.5)
	Czech Republic	c	c	11	(6.0)	14	(3.0)	11	(4.3)	13	(2.0)	7	(2.3)	9	(1.5)	10	(1.3)	11	(3.0)	10	(0.8)
	Denmark	19	(4.0)	24	(2.1)	29	(1.6)	28	(2.7)	27	(0.9)	17	(1.5)	24	(1.4)	29	(1.3)	28	(2.5)	25	(0.6)
	Estonia	13	(3.6)	12	(1.6)	12	(1.2)	14	(2.1)	12	(0.6)	8	(1.1)	9	(0.7)	10	(0.8)	14	(1.8)	10	(0.4)
	Finland	26	(5.4)	22	(2.7)	25	(1.7)	27	(1.9)	26	(1.0)	17	(2.2)	19	(1.5)	23	(1.2)	25	(1.6)	22	(0.6)
	France	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w
	Germany	20	(5.9)	27	(2.7)	28	(2.1)	31	(3.1)	28	(1.2)	14	(1.7)	22	(1.3)	27	(1.5)	30	(2.8)	23	(0.8)
	Ireland	24	(6.5)	23	(2.6)	24	(2.0)	27	(3.4)	24	(1.0)	13	(1.4)	19	(1.3)	23	(1.4)	26	(2.9)	20	(0.7)
	Italy	17	(6.1)	21	(4.0)	23	(3.1)	20	(6.5)	22	(2.0)	9	(1.2)	13	(1.2)	18	(1.7)	17	(4.5)	13	(0.8)
	Japan	27	(12.2)	14	(2.9)	12	(1.2)	12	(1.4)	12	(0.7)	12	(3.0)	12	(1.5)	12	(0.8)	11	(1.2)	12	(0.5)
	Korea	15	(6.5)	13	(1.6)	12	(1.2)	15	(2.5)	12	(0.7)	9	(1.5)	12	(0.9)	12	(0.9)	15	(2.4)	12	(0.5)
	Netherlands	26	(8.8)	29	(4.2)	33	(2.1)	32	(2.5)	32	(1.2)	21	(2.2)	27	(1.5)	31	(1.2)	31	(2.1)	28	(0.6)
	Norway	c	c	31	(3.4)	34	(1.9)	34	(2.6)	33	(1.2)	17	(2.0)	27	(1.8)	35	(1.5)	34	(2.7)	30	(0.8)
	Poland	15	(7.7)	12	(2.5)	12	(1.6)	15	(3.0)	12	(1.0)	6	(1.1)	6	(0.7)	9	(0.9)	12	(2.4)	7	(0.4)
	Slovak Republic	24	(11.5)	12	(2.9)	13	(1.8)	12	(4.2)	13	(1.2)	6	(1.2)	8	(1.0)	9	(0.8)	9	(2.4)	8	(0.5)
	Spain	9	(2.8)	14	(1.9)	15	(1.7)	16	(3.3)	14	(1.0)	6	(0.8)	10	(0.8)	13	(1.2)	16	(2.9)	10	(0.4)
	Sweden	16	(5.0)	19	(3.0)	21	(2.0)	26	(2.4)	22	(1.2)	11	(1.6)	17	(1.5)	21	(1.3)	27	(2.2)	20	(0.7)
	United States	31	(5.8)	37	(3.1)	38	(2.0)	43	(3.0)	39	(1.0)	18	(2.0)	26	(1.8)	33	(1.5)	39	(2.7)	29	(0.7)
	Sub-national entities																				
	Flanders (Belgium)	20	(6.9)	21	(2.9)	24	(1.6)	29	(2.8)	25	(1.1)	11	(1.6)	18	(1.4)	23	(1.3)	28	(2.6)	20	(0.8)
	England (UK)	c	c	18	(2.2)	23	(1.7)	29	(2.8)	22	(1.0)	10	(1.5)	15	(1.1)	20	(1.2)	26	(2.3)	18	(0.6)
	Northern Ireland (UK)	16	(6.9)	23	(4.1)	29	(2.7)	30	(3.8)	27	(1.5)	12	(2.0)	14	(1.4)	22	(1.7)	28	(3.3)	18	(0.8)
	England/N. Ireland (UK)	14	(4.2)	18	(2.2)	23	(1.7)	29	(2.7)	23	(1.0)	10	(1.5)	15	(1.1)	20	(1.2)	26	(2.3)	18	(0.6)
	OECD average	19	(1.5)	21	(0.7)	23	(0.4)	24	(0.7)	22	(0.3)	12	(0.4)	17	(0.3)	21	(0.3)	23	(0.6)	18	(0.1)
Partners	**Russian Federation***	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116585

A8

Table A8.3a (L). [1/2] Percentage of adults reporting that they trust others, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Below upper secondary education								Upper secondary or post-secondary non-tertiary education									
		Level 0/1		Level 2		Level 3		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	**National entities**																		
	Australia	10	(1.7)	14	(1.9)	20	(2.1)	15	(0.9)	14	(3.1)	15	(1.8)	21	(2.1)	30	(4.6)	19	(1.1)
	Austria	13	(2.7)	15	(2.4)	17	(3.8)	15	(1.3)	14	(2.5)	18	(1.4)	25	(1.4)	34	(4.6)	21	(0.9)
	Canada	14	(1.8)	18	(2.5)	26	(6.4)	17	(1.3)	18	(1.7)	18	(1.3)	25	(1.8)	28	(4.8)	21	(0.7)
	Czech Republic	4	(1.8)	c	c	c	c	4	(1.1)	6	(2.3)	5	(1.3)	5	(1.1)	6	(2.6)	5	(0.6)
	Denmark	22	(2.2)	31	(3.1)	49	(4.8)	31	(1.5)	33	(3.0)	39	(2.0)	47	(2.2)	48	(6.3)	42	(1.3)
	Estonia	9	(1.9)	8	(1.9)	5	(2.5)	8	(0.9)	7	(1.4)	6	(0.8)	7	(1.0)	9	(2.5)	7	(0.5)
	Finland	12	(3.0)	21	(3.6)	22	(4.4)	18	(1.9)	23	(3.4)	26	(2.0)	28	(1.8)	30	(3.6)	27	(1.0)
	France	7	(1.0)	7	(1.2)	7	(2.3)	7	(0.6)	7	(1.2)	9	(0.9)	9	(1.2)	11	(4.5)	9	(0.6)
	Germany	9	(2.6)	8	(2.7)	c	c	8	(1.6)	7	(1.6)	7	(1.1)	14	(1.5)	21	(4.2)	10	(0.7)
	Ireland	11	(2.0)	10	(1.7)	12	(3.2)	11	(1.0)	14	(3.2)	14	(1.7)	15	(1.9)	15	(5.6)	14	(0.9)
	Italy	5	(1.1)	6	(1.2)	7	(2.9)	6	(0.7)	9	(2.2)	11	(1.8)	12	(2.0)	12	(4.2)	11	(1.1)
	Japan	13	(4.0)	10	(2.7)	11	(3.2)	11	(1.5)	18	(5.1)	13	(1.9)	14	(1.5)	13	(3.4)	14	(0.9)
	Korea	9	(1.8)	8	(1.5)	7	(2.8)	8	(1.0)	11	(2.2)	9	(1.0)	10	(1.2)	13	(5.4)	10	(0.6)
	Netherlands	14	(1.9)	18	(2.1)	29	(3.0)	20	(1.2)	21	(3.9)	28	(2.7)	32	(2.1)	34	(4.1)	30	(1.0)
	Norway	21	(3.6)	20	(2.9)	29	(4.0)	24	(1.7)	18	(3.6)	26	(2.5)	33	(2.0)	35	(5.0)	29	(1.1)
	Poland	10	(2.5)	7	(2.6)	4	(2.9)	8	(1.2)	10	(1.5)	10	(1.4)	13	(1.8)	20	(5.6)	11	(0.8)
	Slovak Republic	9	(2.0)	4	(1.3)	3	(1.9)	6	(0.9)	8	(2.0)	7	(0.9)	8	(0.9)	12	(3.7)	8	(0.5)
	Spain	14	(1.2)	16	(1.4)	17	(3.1)	15	(0.7)	21	(3.5)	17	(2.3)	20	(3.0)	29	(10.3)	19	(1.5)
	Sweden	20	(3.7)	23	(3.4)	31	(5.1)	24	(1.8)	23	(3.6)	27	(2.2)	35	(2.1)	38	(4.9)	31	(1.2)
	United States	13	(3.1)	12	(3.8)	14	(8.7)	13	(2.2)	15	(2.0)	17	(1.9)	21	(2.3)	28	(5.4)	18	(1.1)
	Sub-national entities																		
	Flanders (Belgium)	10	(2.1)	10	(2.2)	6	(2.6)	9	(1.2)	14	(2.3)	12	(1.5)	13	(1.6)	15	(5.5)	13	(0.8)
	England (UK)	10	(2.1)	8	(1.6)	13	(2.9)	10	(1.0)	10	(2.5)	12	(2.0)	17	(2.2)	27	(5.4)	16	(1.1)
	Northern Ireland (UK)	10	(1.9)	8	(1.7)	10	(3.0)	9	(1.1)	16	(5.1)	17	(2.4)	17	(3.1)	18	(7.9)	17	(1.4)
	England/N. Ireland (UK)	10	(2.0)	8	(1.6)	12	(2.8)	10	(0.9)	10	(2.4)	12	(1.9)	17	(2.2)	27	(5.2)	16	(1.0)
	OECD average	12	(0.5)	13	(0.5)	16	(0.9)	13	(0.3)	14	(0.6)	16	(0.4)	19	(0.4)	23	(1.1)	18	(0.2)
Partners	Russian Federation*	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116604

A8

Table A8.3a (L). [2/2] Percentage of adults reporting that they trust others, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Tertiary education										All levels of education									
		Level 0/1		Level 2		Level 3		Level 4/5		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
OECD	**National entities**																				
	Australia	17	(5.3)	23	(2.8)	32	(2.0)	41	(2.1)	32	(1.0)	12	(1.5)	17	(1.2)	25	(1.3)	37	(1.8)	23	(0.7)
	Austria	18	(7.3)	21	(3.3)	34	(2.9)	40	(4.5)	31	(1.6)	14	(1.7)	18	(1.1)	27	(1.3)	37	(3.5)	22	(0.7)
	Canada	18	(2.5)	24	(1.4)	33	(1.2)	37	(2.1)	30	(0.7)	17	(1.1)	21	(0.9)	30	(1.0)	36	(2.1)	26	(0.5)
	Czech Republic	c	c	7	(4.4)	16	(3.6)	22	(5.1)	16	(2.2)	5	(1.6)	5	(1.1)	8	(1.4)	15	(3.7)	7	(0.7)
	Denmark	46	(4.5)	58	(2.3)	65	(1.5)	67	(2.9)	63	(1.0)	30	(1.7)	43	(1.2)	57	(1.2)	63	(2.6)	48	(0.7)
	Estonia	11	(2.7)	12	(1.6)	16	(1.4)	17	(2.1)	15	(0.7)	8	(1.1)	8	(0.7)	11	(0.8)	14	(1.5)	10	(0.4)
	Finland	40	(7.6)	37	(3.0)	43	(1.8)	47	(2.1)	44	(1.1)	21	(2.3)	28	(1.5)	35	(1.3)	42	(1.9)	33	(0.7)
	France	7	(2.6)	14	(1.8)	18	(1.3)	18	(2.2)	17	(0.8)	7	(0.7)	10	(0.7)	13	(0.8)	16	(1.9)	11	(0.4)
	Germany	18	(5.5)	14	(2.3)	23	(1.9)	30	(2.7)	22	(1.0)	9	(1.4)	9	(1.0)	18	(1.2)	27	(2.3)	14	(0.6)
	Ireland	18	(5.5)	18	(2.1)	23	(1.7)	30	(2.7)	23	(1.0)	13	(1.7)	14	(0.9)	19	(1.1)	27	(2.6)	16	(0.6)
	Italy	13	(5.5)	12	(3.2)	18	(2.6)	16	(5.6)	15	(1.4)	6	(0.9)	8	(0.9)	13	(1.3)	14	(3.7)	9	(0.6)
	Japan	c	c	17	(2.8)	23	(1.4)	24	(1.7)	23	(0.9)	16	(3.1)	14	(1.4)	18	(1.0)	21	(1.4)	18	(0.6)
	Korea	21	(6.6)	17	(1.6)	16	(1.1)	18	(2.9)	17	(0.7)	10	(1.3)	11	(0.7)	13	(0.8)	17	(2.6)	12	(0.4)
	Netherlands	19	(8.8)	38	(4.1)	45	(2.2)	50	(2.6)	45	(1.3)	16	(1.7)	25	(1.7)	36	(1.3)	45	(2.2)	32	(0.6)
	Norway	28	(5.6)	42	(3.8)	51	(2.0)	54	(2.7)	49	(1.2)	21	(2.3)	28	(1.9)	41	(1.3)	50	(2.4)	36	(0.8)
	Poland	17	(6.3)	21	(3.3)	24	(2.4)	30	(3.6)	24	(1.3)	11	(1.3)	12	(1.1)	17	(1.3)	28	(3.1)	15	(0.6)
	Slovak Republic	c	c	11	(2.7)	12	(1.5)	19	(4.1)	13	(1.1)	9	(1.6)	7	(0.8)	9	(0.8)	15	(3.0)	9	(0.4)
	Spain	23	(4.8)	27	(2.3)	34	(2.0)	36	(4.6)	31	(1.2)	16	(1.2)	19	(1.1)	27	(1.5)	34	(4.2)	21	(0.6)
	Sweden	22	(5.6)	41	(4.1)	50	(2.1)	55	(2.4)	49	(1.3)	21	(2.3)	29	(1.6)	40	(1.5)	49	(2.3)	36	(0.8)
	United States	20	(6.4)	26	(2.8)	32	(1.7)	39	(2.9)	31	(1.2)	15	(2.1)	19	(1.5)	26	(1.5)	37	(2.7)	23	(0.8)
	Sub-national entities																				
	Flanders (Belgium)	30	(7.9)	29	(4.2)	29	(2.1)	29	(2.7)	29	(1.2)	13	(1.7)	15	(1.3)	21	(1.2)	26	(2.5)	19	(0.6)
	England (UK)	21	(5.6)	21	(2.8)	25	(2.0)	36	(3.1)	27	(1.2)	12	(1.6)	13	(1.3)	21	(1.4)	32	(2.8)	19	(0.7)
	Northern Ireland (UK)	10	(6.3)	18	(3.4)	24	(2.4)	30	(4.1)	23	(1.6)	11	(1.9)	14	(1.5)	19	(1.8)	26	(4.0)	16	(0.8)
	England/N. Ireland (UK)	20	(5.5)	21	(2.7)	25	(1.9)	36	(3.1)	26	(1.2)	12	(1.6)	13	(1.3)	21	(1.4)	32	(2.8)	18	(0.7)
	OECD average	21	(1.3)	24	(0.6)	30	(0.4)	34	(0.7)	29	(0.3)	14	(0.4)	17	(0.3)	24	(0.3)	31	(0.6)	21	(0.1)
Partners	**Russian Federation***	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116604

A8

Table A8.4a (L). [1/2] Percentage of adults reporting that they believe they have a say in government, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Below upper secondary education								Upper secondary or post-secondary non-tertiary education									
		Level 0/1		Level 2		Level 3		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
OECD	**National entities**																		
	Australia	18	(2.6)	21	(2.3)	30	(3.1)	24	(1.3)	23	(3.5)	26	(2.3)	32	(2.3)	43	(4.3)	30	(1.1)
	Austria	15	(3.0)	18	(2.5)	25	(4.2)	19	(1.6)	23	(2.6)	26	(1.6)	35	(1.9)	40	(4.9)	30	(1.0)
	Canada	20	(2.1)	21	(2.5)	35	(6.0)	22	(1.4)	24	(2.1)	28	(1.5)	37	(1.7)	37	(4.9)	31	(0.9)
	Czech Republic	19	(6.3)	19	(5.3)	17	(6.9)	19	(3.0)	15	(3.8)	17	(2.0)	24	(2.4)	22	(7.6)	20	(1.2)
	Denmark	33	(3.1)	42	(3.3)	55	(4.9)	41	(1.6)	37	(2.8)	46	(2.3)	51	(2.8)	54	(8.0)	47	(1.2)
	Estonia	17	(2.4)	16	(2.2)	17	(3.0)	17	(1.2)	12	(1.8)	17	(1.2)	27	(1.6)	38	(4.0)	21	(0.8)
	Finland	27	(4.4)	32	(3.6)	33	(4.9)	31	(2.4)	42	(3.8)	39	(2.7)	42	(2.3)	51	(4.3)	42	(1.2)
	France	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w
	Germany	12	(2.9)	15	(3.9)	13	(8.2)	13	(2.1)	17	(2.3)	18	(1.5)	26	(1.9)	31	(5.0)	21	(0.8)
	Ireland	18	(2.3)	16	(2.3)	19	(4.3)	18	(1.4)	16	(2.9)	25	(1.8)	28	(2.2)	37	(7.0)	26	(1.2)
	Italy	11	(1.7)	13	(2.0)	16	(4.0)	12	(1.3)	13	(2.5)	19	(1.8)	22	(2.2)	26	(7.1)	19	(1.1)
	Japan	14	(4.2)	14	(3.4)	22	(4.0)	17	(1.8)	14	(4.4)	16	(1.9)	23	(1.6)	34	(3.7)	22	(1.0)
	Korea	21	(2.4)	31	(2.7)	39	(5.6)	28	(1.5)	24	(3.4)	27	(1.7)	35	(2.1)	40	(7.8)	30	(1.2)
	Netherlands	22	(2.6)	28	(2.2)	35	(3.0)	28	(1.5)	33	(4.6)	30	(2.4)	36	(2.2)	50	(4.3)	36	(1.3)
	Norway	24	(4.0)	28	(3.1)	43	(4.2)	32	(1.8)	29	(4.0)	39	(2.8)	50	(2.6)	59	(5.9)	44	(1.6)
	Poland	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w
	Slovak Republic	9	(2.1)	12	(2.3)	14	(3.6)	11	(1.1)	16	(2.8)	20	(1.5)	20	(1.5)	27	(4.5)	20	(0.8)
	Spain	18	(1.6)	21	(1.8)	20	(2.7)	19	(0.9)	21	(3.8)	23	(2.7)	23	(2.8)	29	(12.2)	23	(1.4)
	Sweden	27	(4.0)	34	(4.2)	41	(5.7)	34	(2.5)	30	(4.7)	34	(2.4)	49	(2.2)	56	(4.8)	43	(1.2)
	United States	29	(3.2)	28	(6.6)	28	(12.7)	29	(2.4)	37	(2.5)	37	(2.1)	47	(2.9)	58	(6.1)	41	(1.2)
	Sub-national entities																		
	Flanders (Belgium)	22	(2.7)	22	(2.6)	27	(4.4)	23	(1.4)	28	(3.2)	26	(2.0)	27	(2.2)	32	(5.8)	27	(1.0)
	England (UK)	18	(2.8)	20	(2.5)	29	(4.3)	22	(1.5)	21	(3.9)	27	(2.6)	31	(2.4)	41	(5.3)	29	(1.4)
	Northern Ireland (UK)	14	(2.1)	15	(2.1)	14	(3.8)	15	(1.0)	17	(4.8)	19	(2.7)	23	(3.0)	32	(7.0)	21	(1.5)
	England/N. Ireland (UK)	18	(2.6)	20	(2.4)	29	(4.1)	21	(1.5)	20	(3.8)	27	(2.6)	31	(2.3)	40	(5.2)	29	(1.3)
	OECD average	20	(0.7)	23	(0.7)	28	(1.2)	23	(0.4)	24	(0.8)	27	(0.5)	33	(0.5)	40	(1.4)	30	(0.3)
Partners	Russian Federation*	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116623

A8

Table A8.4a (L). [2/2] Percentage of adults reporting that they believe they have a say in government, by educational attainment and literacy proficiency level (2012)

Literacy proficiency level in the Survey of Adult Skills, 25-64 year-olds

		Tertiary education										All levels of education									
		Level 0/1		Level 2		Level 3		Level 4/5		Total		Level 0/1		Level 2		Level 3		Level 4/5		Total	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
		(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
OECD	**National entities**																				
	Australia	24	(6.9)	36	(2.9)	43	(2.2)	57	(2.6)	45	(1.2)	20	(1.9)	27	(1.5)	36	(1.4)	53	(2.0)	34	(0.6)
	Austria	32	(10.4)	35	(3.9)	46	(2.6)	47	(4.4)	43	(1.6)	20	(2.0)	25	(1.3)	37	(1.5)	44	(2.9)	30	(0.8)
	Canada	29	(2.6)	35	(1.7)	43	(1.4)	51	(2.1)	42	(0.8)	24	(1.3)	30	(1.0)	41	(1.1)	49	(1.9)	36	(0.5)
	Czech Republic	c	c	25	(6.4)	27	(4.0)	34	(4.9)	28	(2.4)	16	(3.2)	18	(2.0)	24	(2.2)	29	(3.9)	21	(1.1)
	Denmark	36	(4.8)	54	(2.6)	61	(1.8)	63	(3.1)	59	(1.1)	35	(1.9)	47	(1.5)	57	(1.6)	61	(3.1)	51	(0.8)
	Estonia	18	(3.5)	21	(1.9)	34	(1.6)	47	(2.8)	32	(1.0)	15	(1.4)	18	(1.0)	30	(1.0)	44	(2.4)	25	(0.5)
	Finland	41	(7.4)	51	(3.6)	57	(2.2)	66	(2.0)	59	(1.1)	36	(2.8)	41	(1.9)	49	(1.5)	61	(2.0)	48	(0.8)
	France	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w
	Germany	17	(5.1)	27	(2.9)	35	(2.0)	38	(3.1)	33	(1.3)	15	(1.8)	20	(1.2)	30	(1.3)	35	(2.5)	24	(0.7)
	Ireland	35	(6.6)	34	(2.9)	39	(1.9)	44	(3.5)	38	(1.2)	20	(1.8)	24	(1.2)	32	(1.4)	42	(3.3)	28	(0.7)
	Italy	26	(7.4)	31	(4.5)	26	(3.3)	37	(8.3)	29	(2.2)	12	(1.4)	17	(1.4)	22	(1.8)	31	(5.4)	17	(0.9)
	Japan	c	c	24	(3.3)	32	(1.5)	41	(2.0)	34	(1.0)	16	(3.2)	18	(1.6)	27	(1.1)	38	(1.8)	27	(0.6)
	Korea	30	(8.0)	34	(2.2)	44	(1.8)	51	(3.9)	42	(1.3)	23	(2.0)	30	(1.2)	41	(1.4)	48	(3.6)	35	(0.8)
	Netherlands	28	(10.0)	46	(4.5)	54	(2.2)	62	(2.6)	55	(1.5)	25	(2.4)	32	(1.6)	43	(1.5)	58	(2.3)	41	(0.9)
	Norway	36	(5.6)	52	(3.5)	67	(2.0)	74	(2.5)	65	(1.1)	27	(2.5)	39	(1.8)	57	(1.5)	70	(2.3)	50	(0.8)
	Poland	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w
	Slovak Republic	c	c	23	(3.8)	36	(2.8)	48	(6.4)	35	(2.0)	13	(2.0)	19	(1.2)	24	(1.4)	37	(3.6)	22	(0.7)
	Spain	24	(5.3)	28	(2.7)	31	(2.2)	37	(4.3)	30	(1.2)	19	(1.6)	23	(1.2)	27	(1.6)	35	(3.9)	24	(0.6)
	Sweden	44	(6.5)	45	(4.2)	56	(2.3)	62	(2.4)	56	(1.4)	30	(2.9)	36	(1.8)	51	(1.5)	60	(2.1)	46	(0.9)
	United States	32	(6.3)	47	(2.8)	55	(2.0)	63	(3.2)	54	(1.5)	34	(1.8)	39	(1.7)	51	(1.7)	62	(3.0)	45	(1.0)
	Sub-national entities																				
	Flanders (Belgium)	33	(9.3)	39	(3.9)	43	(2.1)	50	(2.8)	44	(1.3)	26	(1.9)	28	(1.4)	36	(1.4)	46	(2.5)	33	(0.8)
	England (UK)	33	(6.7)	33	(3.2)	43	(2.4)	52	(3.2)	42	(1.4)	21	(2.3)	27	(1.8)	37	(1.6)	48	(2.7)	33	(0.9)
	Northern Ireland (UK)	23	(8.2)	31	(4.6)	35	(2.9)	47	(4.5)	36	(1.9)	16	(2.0)	20	(1.8)	27	(1.8)	42	(3.8)	24	(0.8)
	England/N. Ireland (UK)	33	(6.6)	33	(3.1)	43	(2.3)	52	(3.1)	42	(1.4)	21	(2.2)	26	(1.7)	36	(1.5)	48	(2.6)	32	(0.9)
	OECD average	30	(1.7)	36	(0.8)	44	(0.5)	51	(0.9)	43	(0.3)	22	(0.5)	28	(0.3)	38	(0.3)	48	(0.7)	33	(0.2)
Partners	**Russian Federation***	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

* See note on data for the Russian Federation in the *Methodology* section.

Note: Columns showing data for literacy proficiency Level 4/5 and below upper secondary education (i.e. columns 7 and 8) are available for consultation on line (see *StatLink* below).

Source: OECD. Survey of Adult Skills (PIAAC) (2012). PIAAC refers to the OECD Programme for the International Assessment of Adult Competencies. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).

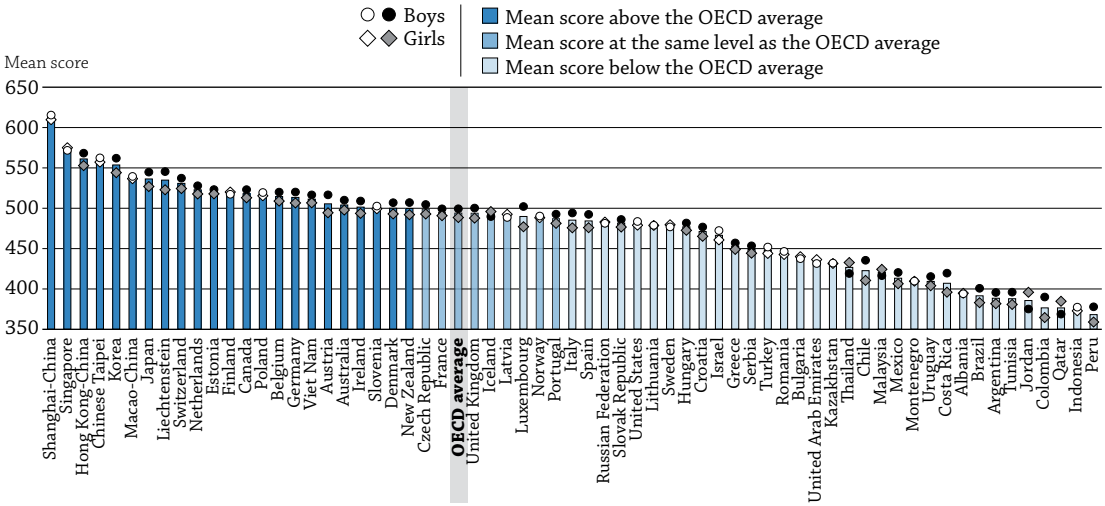
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink http://dx.doi.org/10.1787/888933116623

HOW ARE STUDENT PERFORMANCE AND EQUITY IN EDUCATION RELATED?

- Shanghai-China performs the highest in mathematics of all countries and economies that participated in PISA 2012, with a mean score of 613 points – 119 points, or the equivalent of nearly three years of schooling, above the OECD average. Singapore, Hong Kong-China, Chinese Taipei, Korea, Macao-China, Japan, Liechtenstein, Switzerland and the Netherlands, in descending order of their scores, round out the top ten performers in mathematics.
- Boys perform better than girls in mathematics in 37 of the 64 countries that participated in PISA 2012, and girls outperform boys in five countries.
- Australia, Canada, Estonia, Finland, Hong Kong-China, Japan, Korea, Liechtenstein, the Netherlands and Macao-China combine high levels of performance with equity in education opportunities as assessed in PISA 2012.

Chart A9.1. Student performance in mathematics, by gender, PISA 2012



Note: Gender differences that are statistically significant are marked in a darker tone.
Countries and economies are ranked in descending order of the mean score in mathematics.
Source: OECD. Table A9.1a. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116813

Context

With mathematics as its primary focus, the Programme for International Student Assessment (PISA) 2012 survey measured 15-year-olds' capacity to reason mathematically and use mathematical concepts, procedures, facts and tools to describe, explain and predict phenomena. The triennial survey, which assesses student performance in reading, mathematics, science and problem-solving, does not just ascertain whether students can reproduce what they have learned; it also examines how well they can extrapolate from what they have learned and apply that knowledge in unfamiliar settings, both in and outside of school. This approach reflects the fact that modern societies reward individuals not for what they know, but for what they can do with what they know.

PISA results reveal what is possible in education by showing what students in the highest-performing and most rapidly improving education systems can do. The findings allow policy makers around the world to gauge the knowledge and skills of students in their own countries in comparison with those in other countries, set policy targets against measurable goals achieved by other education systems, and learn from policies and practices applied elsewhere.

In analysing results of the PISA assessment in the context of various demographic and social characteristics of students and schools, such as gender, socio-economic status and immigrant background, PISA also shows how equitably participating countries are providing education opportunities and realising education outcomes – an indication of the level of equity in the society, as a whole.

Other findings

- On average across OECD countries, **13% of students are top performers in mathematics** (Level 5 or 6). At the same time, 23% of students in OECD countries, and 32% of students in all participating countries, are low performers in mathematics (i.e. they did not reach the baseline Level 2).
- **In only six countries is the gap in mathematics scores between boys and girls – in favour of boys – larger than the equivalent of half a year of formal schooling**.
- Across OECD countries, **15% of the difference in performance among students is explained by disparities in students' socio-economic status**. In countries where this relationship is strong, students from disadvantaged families are less likely to beat the odds against them and achieve high levels of performance. Even more telling, **some 39 score points – the equivalent of around one year of formal schooling –** separate the mathematics performance of those students who are considered socio-economically advantaged and those whose socio-economic status is close to the OECD average.

Trends

- Of the 64 countries and economies with trend data between 2003 and 2012, 25 improved in mathematics performance, 25 showed no change, and 14 deteriorated.
- Among the countries that showed some improvement between 2003 and 2012, Italy, Poland and Portugal reduced the proportion of low performers and increased the proportion of high performers.
- Of the 39 countries and economies that participated in both PISA 2003 and 2012, Mexico, Turkey and Germany improved both their mathematics performance and their levels of equity in education during the period.

A9

Analysis

Results from PISA 2012

PISA-participating countries and economies can be divided into three broad groups, as shown in Chart A9.1: those whose mean scores are statistically around the OECD average (highlighted in medium blue), those whose mean scores are above the OECD average (highlighted in dark blue), and those whose mean scores are below the OECD average (highlighted in light blue). Across OECD countries, the average score in mathematics in PISA 2012 is 494 points.

Among the 64 participating countries and economies that participated in PISA 2012, 23 perform above, seven score around, and 34 score below the OECD average.

The difference between the highest- and the lowest-scoring country/economy is 245 points. Among OECD countries, that difference is 140 points. To gauge the magnitude of these score differences, 41 score points corresponds to the equivalent of one year of formal schooling (see Table A1.2 in Volume I of *PISA 2012 Results*).

Gender differences in mathematics performance

On average across OECD countries, boys outperform girls in mathematics by 11 score points. Despite the stereotype that boys are better than girls at mathematics, boys show an advantage in only 37 out of the 64 countries and economies that participated in PISA 2012, and in only six countries is the gender gap – in favour of boys – larger than the equivalent of half a year of school.

Among the 23 highest performing countries and economies, only in Shanghai-China, Singapore, Chinese Taipei, Macao-China, Finland, Poland and Slovenia boys perform as well as girls in mathematics; in the other countries and economies among this group, boys outperform girls.

The largest difference in scores between boys and girls is seen in Chile, Colombia and Luxembourg: a difference of around 25 points. In Austria, Costa Rica and Liechtenstein, this difference is between 22 and 24 points.

In contrast, in only five countries do girls outperform boys in mathematics. The largest difference is seen in Jordan, where girls score around 21 points higher than boys. Girls also outperform boys in Iceland, Malaysia, Qatar and Thailand.

Trends in average mathematics performance

Trends in average performance indicate how and whether school systems are improving. Trends in mathematics are available for the 64 countries and economies that participated in PISA 2012. Thirty-eight of these have data on mathematics performance from 2012 and the three previous PISA assessments (2003, 2006 and 2009); 17 have data from 2012 and two prior assessments, and nine have data from 2012 and one previous assessment. To better understand a country's/economy's trends and maximise the number of countries used in the comparisons, this indicator focuses on the annualised change in student performance (see the *Definitions* and *Methodology* sections at the end of this indicator). For countries and economies that participated in all four PISA assessments, the annualised change takes into account all four time points; for those countries that have valid data for fewer assessments, it only takes into account the valid and available information.

As shown in Chart A9.2, performance has remained broadly unchanged, but more countries have improved than deteriorated in their mathematics performance. Of the 64 countries and economies with trend data up to 2012, 25 show an average annual improvement in mathematics performance, while 14 show an average deterioration in performance between 2003 and 2012. For the remaining 25 countries and economies, there is no change in mathematics performance during the period. Albania, Kazakhstan, Malaysia, Qatar and the United Arab Emirates (excluding Dubai) show an average improvement in mathematics performance of more than five score points per year. Among OECD countries, improvements in mathematics performance are observed in Israel (with an average improvement of more than four score points per year), Mexico and Turkey (more than three score points per year), Italy, Poland and Portugal (more than two score points per year), and Chile, Germany and Greece (more than one score point per year). Among countries that have participated in every assessment since 2003, Brazil, Italy, Mexico, Poland, Portugal, Tunisia and Turkey show an average improvement in mathematics performance of more than 2.5 points per year (Table A9.1c).

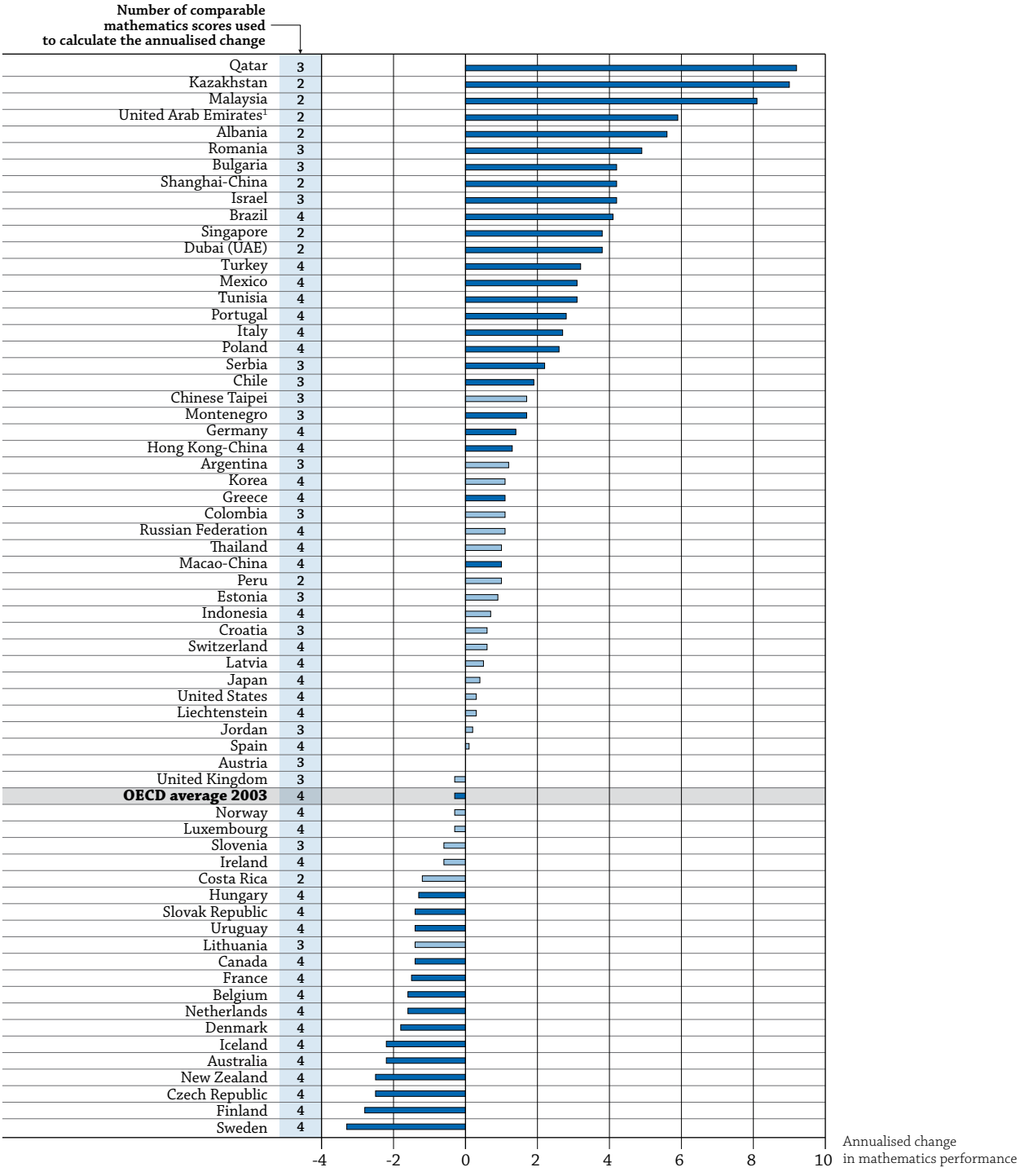
Top and low performers in mathematics in PISA 2012

Results from the PISA 2012 assessment show that nurturing top performance and tackling low performance need not be mutually exclusive. Some high-performing countries in PISA 2012, like Estonia and Finland, also show small variations in student scores.

A9

Chart A9.2. Annualised change in mathematics performance throughout participation in PISA

Mathematics score-point difference associated with one calendar year



Note: Statistically significant score-point changes are marked in a darker tone.
The annualised change is the average annual change in PISA score points from a country's/economy's earliest participation in PISA to PISA 2012. It is calculated taking into account all country's/economy's participation in PISA.
OECD average 2003 compares only OECD countries with comparable mathematics scores since 2003.
1. Excluding Dubai. In the United Arab Emirates, Dubai took the PISA 2009 assessment in 2009 and the rest of the United Arab Emirates in 2010 as part of PISA 2009+. Results are thus reported separately.
Countries and economies are ranked in descending order of the annualised change in mathematics performance.
Source: OECD. Table A9.1c. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116832

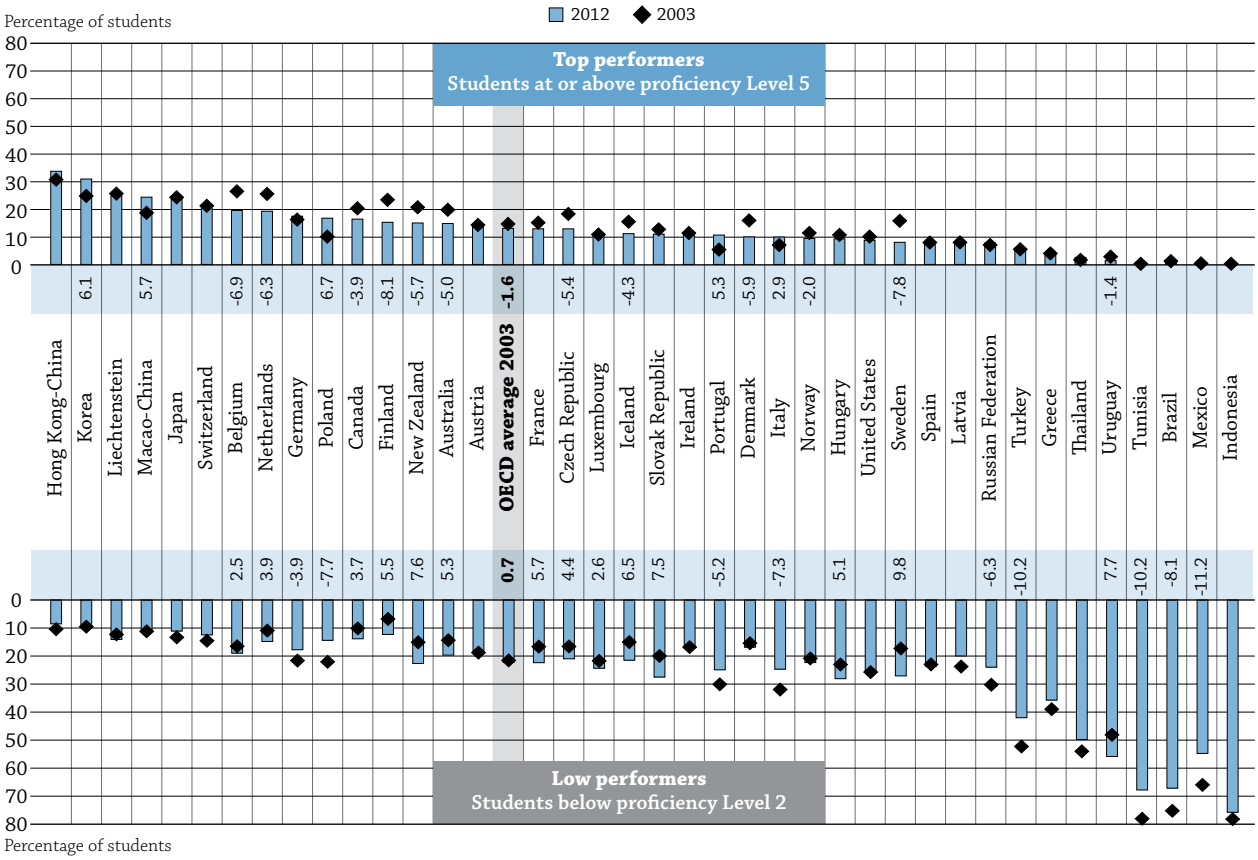
A9

Almost one in three Korean students is a top performer in mathematics, meaning that they score at Level 5 or 6 of the assessment (for a description of the proficiency levels attained by top and low performers, see the *Definitions* and *Methodology* sections at the end of this indicator). This proportion is the largest among all OECD countries. While far larger than the 13% OECD average, this proportion falls short of that found in Shanghai-China, where more than 50% of students are top performers (Table A9.1a).

Among countries with similar mean scores in PISA, there are notable differences in the percentage of top-performing students. For example, Denmark has a mean score of 500 points in mathematics in PISA 2012 and 10% of students in that country are top performers in mathematics, a smaller proportion than the OECD average of around 13%. New Zealand has a similar mean mathematics score of 500 points, but 15% of its students attain the highest levels of proficiency.

More than 40% of students in 21 countries and economies, including the OECD countries Chile and Mexico, fail to reach the baseline level of proficiency in mathematics (Level 2). At best, these students can only extract relevant information from a single source and use basic algorithms, formulae, procedures or conventions to solve problems involving whole numbers. The proportion of 15-year-old students at this level varies widely across countries, from fewer than one student in ten in four countries and economies, to the majority of students in 15 countries. Most students who score below Level 2 in mathematics are unlikely to continue with education beyond compulsory schooling, and therefore risk facing difficulties using mathematics concepts throughout their lives.

Chart A9.3. Percentage of top performers and low performers in mathematics, PISA 2003 and 2012



Note: The chart shows only countries and economies that participated in both PISA 2003 and PISA 2012 assessments.
The change between PISA 2003 and PISA 2012 in the share of students performing below Level 2 in mathematics is shown below the country/economy name. The change between PISA 2003 and PISA 2012 in the share of students performing at or above Level 5 in mathematics is shown above the country/economy name. Only statistically significant changes are shown.
OECD average 2003 compares only OECD countries with comparable mathematics scores since 2003.
Countries and economies are ranked in descending order of the percentage of students at or above proficiency Level 5 in mathematics in 2012.
Source: OECD. Tables A9.1a, A9.1b and A9.1c. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116851

To increase the share of top-performing students, countries and economies need to look at the barriers to success posed by social background (examined in Volume II of *PISA 2012 Results*), the relationship between performance and students' attitudes towards learning (examined in Volume III of *PISA 2012 Results*), and schools' organisation, resources and learning environments (examined in Volume IV of *PISA 2012 Results*).

Trends in the proportions of top and low performers

When considering changes in the proportions of top and low performers between PISA 2003 and PISA 2012, certain patterns emerge. Countries/economies can then be classified according to how these two groups have evolved during the period.

- **Moving everyone up: reductions in the share of low performers and increases in that of top performers**
  Countries that have reduced the proportion of students scoring below Level 2 and increased the proportion of students scoring above Level 5 are those that have been able to spread the improvements in their education systems across all levels of performance. Between 2003 and 2012 this was observed in Italy, Poland and Portugal (Chart A9.3).
- **Reducing underperformance: reductions in the share of low performers but no change in that of top performers**
  Other countries have concentrated change among those students who did not meet the baseline proficiency level. These countries saw significant improvements in the performance of low-performing students who now have the basic skills to fully participate in society. Between 2003 and 2012, Brazil, Germany, Mexico, the Russian Federation, Tunisia and Turkey saw a reduction in the share of students scoring below proficiency Level 2 in mathematics (Chart A9.3).
- **Nurturing top performance: increase in the share of top performers but no change in that of low performers**
  Some countries increased the proportion of students performing at or above Level 5. These are students who can handle complex mathematical content and processes. Between 2003 and 2012, Korea and Macao-China saw around a six percentage-point increase in the share of students performing at this level (Chart A9.3).
- **Increasing the share of low performers or decreasing that of top performers**
  In 16 countries, the proportion of students who do not reach the baseline proficiency level increased or the proportion of students who reach the highest levels of proficiency decreased between PISA 2003 and PISA 2012 (Chart A9.3).

Performance and equity

Equity in education means providing all students, regardless of their socio-economic status, with opportunities to benefit from education. Defined in this way, equity does not imply that everyone will have the same outcomes from education. It does mean, however, that students' socio-economic status has little or no impact on their performance, and that all students, regardless of their background, are offered access to quality educational resources and opportunities to learn.

Although poor performance in school does not automatically stem from socio-economic disadvantage, the socio-economic background of students and schools does appear to have a powerful influence on learning outcomes. Because advantaged families are better able to reinforce and enhance the effect of schools, because students from advantaged families attend higher-quality schools, or because schools are simply better equipped to nurture and develop young people from advantaged backgrounds, in many countries schools tend to reproduce existing patterns of socio-economic advantage, rather than create a more equitable distribution of learning opportunities and outcomes.

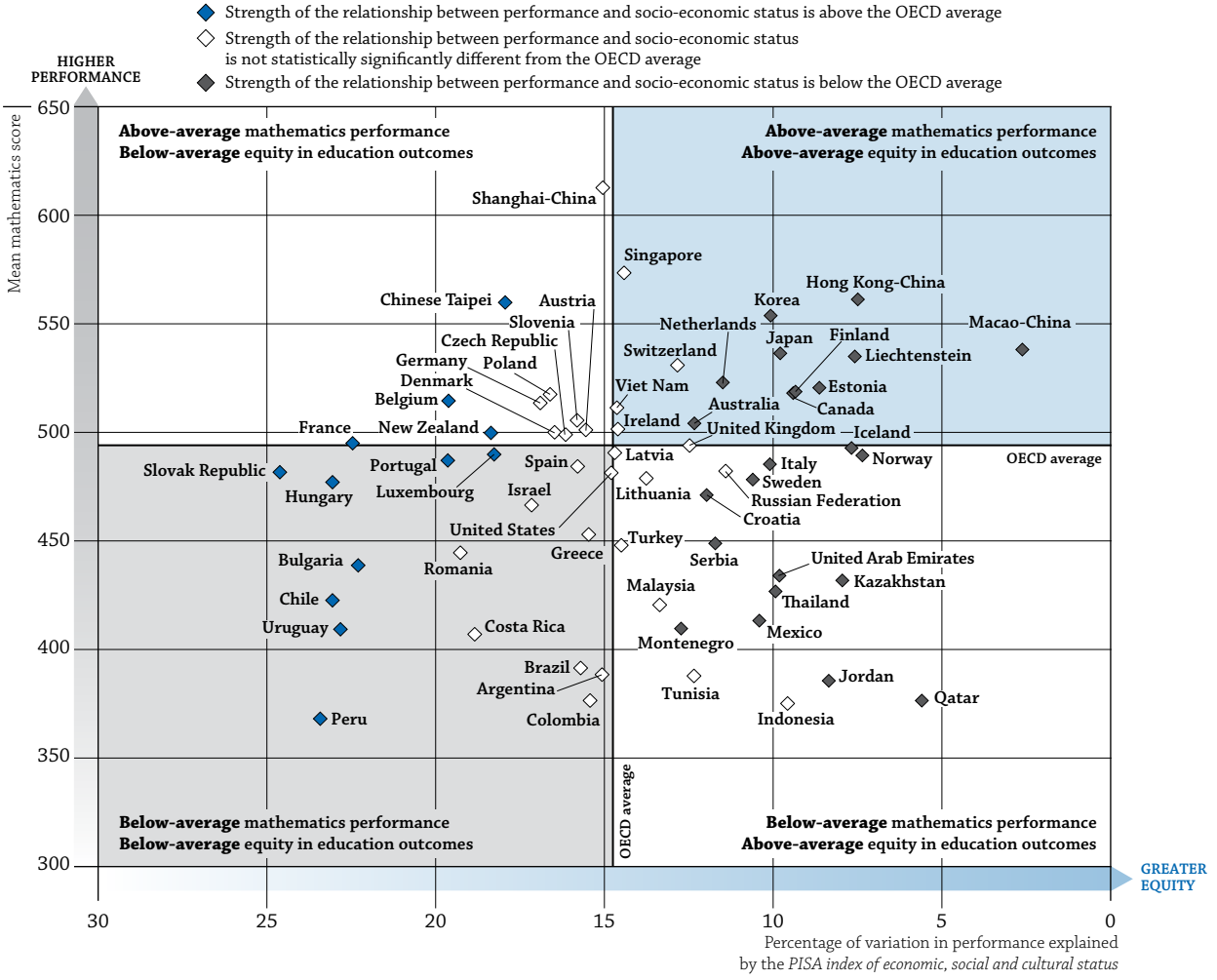
Students' socio-economic background is measured with the *PISA index of economic, social and cultural status*, which is based on information provided by students about their parents' education and occupations and their home possessions, such as a desk to use for studying and the number of books in the home (see the *Definitions* and *Methodology* sections at the end of this indicator).

PISA identifies two main measures of equity in education outcomes: the proportion of the variation in performance attributed to socio-economic status (the strength of the socio-economic gradient) and the average magnitude of the differences in performance across socio-economic groups (the slope of the socio-economic gradient).

The proportion of the variation in performance explained by socio-economic status, together with performance differences across the socio-economic spectrum, are useful indicators to help determine whether efforts to improve student performance should be targeted mainly at students who perform poorly or come from socio-economically disadvantaged backgrounds. Thus there is an important distinction between the strength of the social gradient,

which is associated with how closely students conform to predictions of performance based on their socio-economic status, and its slope, which refers to the average size of the performance gap associated with a given difference in socio-economic status.

Chart A9.4. Student performance and equity



Source: OECD. Tables A9.1a and A9.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116870

Students' socio-economic status

Across OECD countries, 15% of the variation in student performance in mathematics is attributed to differences in students' socio-economic status. Among high-performing countries and economies, this proportion ranges from 3% in Macao-China to 20% in Belgium. In contrast, in Bulgaria, Chile, France, Hungary, Peru, the Slovak Republic and Uruguay, more than 20% of the difference in student performance can be attributed to students' socio-economic status. In countries where this proportion is large, students from disadvantaged families are less likely to achieve high levels of performance.

As Chart A9.4 shows, of the 23 school systems that scored above the OECD average in PISA 2012, the strength of the relationship between performance and socio-economic status is weaker than average in ten countries and economies: Australia, Canada, Estonia, Finland, Hong Kong-China, Japan, Korea, Liechtenstein, Macao-China and the Netherlands. In another ten (Austria, Denmark, Germany, Ireland, Poland, Shanghai-China, Singapore, Slovenia, Switzerland and Viet Nam), the strength of this relationship is about average. Only in three high-performing countries and economies – Belgium, New Zealand and Chinese Taipei – is the relationship between performance and socio-economic status stronger than average.

On average across OECD countries, the slope of the socio-economic gradient is 39 points, meaning that a change of one unit on the *PISA index of economic, social and cultural status* is associated with a difference of 39 score points in mathematics. Advantaged students (those with a value of 1 on the index) are expected to score, on average, 39 points higher than a student with average socio-economic status (with a value of 0 on the index), and 78 points higher than a disadvantaged student (with a value of -1 on the index).

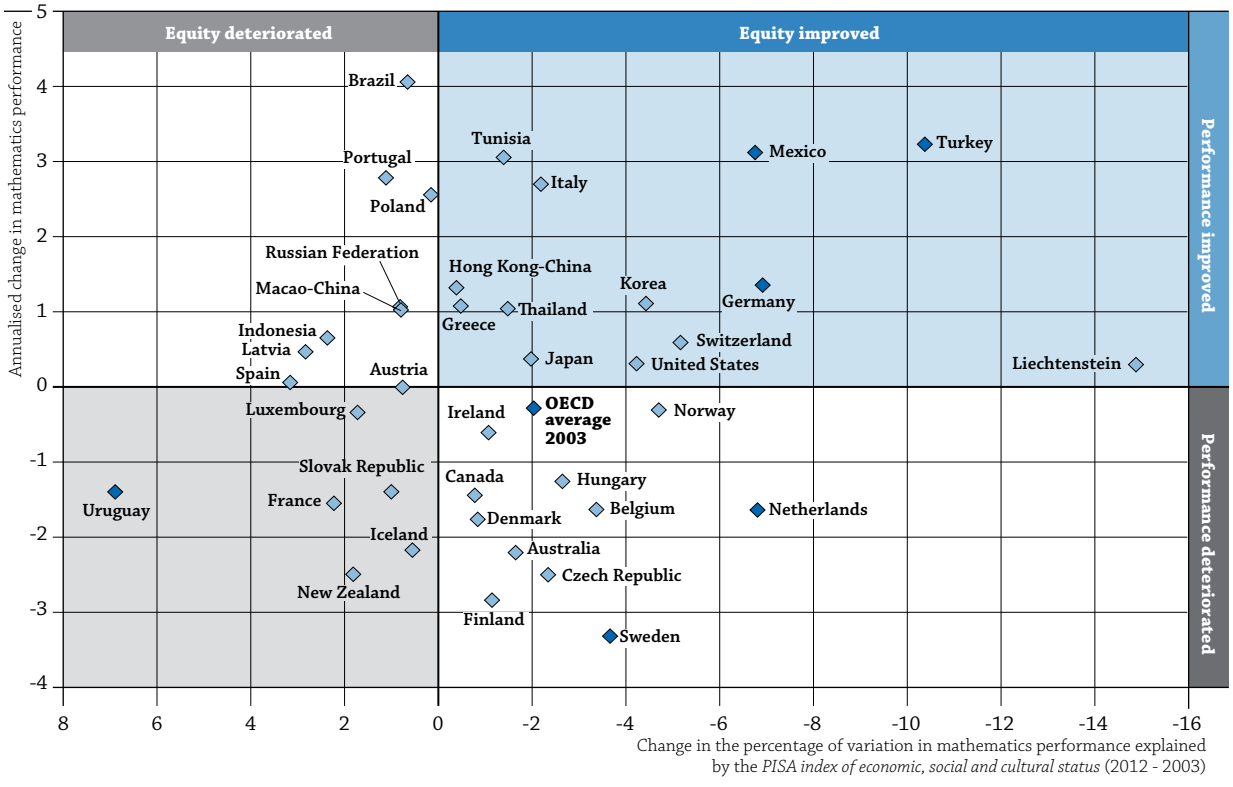
Among the 23 highest-performing countries and economies, performance differences related to socio-economic status are narrower than average in Canada, Estonia, Finland, Hong Kong-China, Macao-China and Viet Nam, about average in 12 countries and economies, and wider than average in five.

In countries with relatively flat gradients, i.e. where performance differences related to socio-economic status are small, policies that specifically target students from disadvantaged backgrounds would not, by themselves, address the needs of many of the country's low-performing students. In this case, targeting low achievers may prove more effective than targeting disadvantaged students.

Trends in equity between PISA 2003 and PISA 2012

By analysing data across different PISA assessments, it is possible to identify the countries that have moved towards a more equitable school system.

Chart A9.5. Change between 2003 and 2012 in student performance and equity



Notes: Changes in both equity and performance between 2003 and 2012 that are statistically significant are indicated in a darker tone.
The annualised change is the average annual change in PISA score points from a country's/economy's earliest participation in PISA to PISA 2012. It is calculated taking into account all of a country's/economy's participation in PISA.
Only countries and economies with comparable data from PISA 2003 and PISA 2012 are shown.
For comparability over time, PISA 2003 values on the *PISA index of economic, social and cultural status* have been rescaled to the PISA 2012 scale of the index. PISA 2003 results reported in this chart may thus differ from those presented in *Learning for Tomorrow's World: First Results from PISA 2003* (OECD, 2004).
OECD average 2003 considers only those countries with comparable mathematics scores and values on the *PISA index for economic, social and cultural status* since PISA 2003.
Source: OECD. Tables A9.1c and A9.2. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933116889

Between 2003 and 2012, the average difference in mathematics performance related to a one-unit change in the *PISA index of economic, social and cultural status* remained at 39 score points, but the degree to which students' socio-economic status predicted performance in mathematics decreased from 17% to 15%. In other words, by 2012 it was somewhat easier than it was in 2003 for students to confound predictions about their performance based on their socio-economic status.

Turkey and Mexico moved towards greater equity by reducing both the slope and the strength of the socio-economic gradient, while improving overall performance. This means that, in both of these countries, it was easier for students in 2012 than for students in 2003 to confound expectations about performance, given their socio-economic status, and that the average difference in performance between advantaged and disadvantaged students shrank. In Germany, the performance gap between socio-economically advantaged and disadvantaged students remained unchanged; however, a larger proportion of students performed better than would be predicted by their socio-economic status. Most important, in these three countries, the improvement in equity was combined with an improvement in mathematics performance (Chart A9.5 and Table A9.2).

Other countries and economies that improved mathematics performance (Brazil, Greece, Hong Kong-China, Italy, Macao-China, Poland and Tunisia) maintained their equity levels; only in Portugal were improvements in performance accompanied by a reduction in equity (Table A9.2). These results highlight how, for most countries and economies, improvements in performance need not come at the expense of equity (see Volume II of *the PISA 2012 Results*).

Definitions

The annualised change is the average rate of change at which a country's or economy's average mathematics scores has changed throughout its participation in PISA assessments. Thus, a positive annualised change of x points indicates that the country or economy has improved in performance by x points per year since its earliest comparable PISA results. For countries that have participated in only two assessments, the annualised change is equal to the difference between the two assessments, divided by the number of years that passed between the assessments.

Low performers in mathematics are those students who do not reach the baseline Level 2 on the PISA assessment. At Level 2, students can interpret and recognise situations in contexts that require no more than direct inference; extract relevant information from a single source and make use of a single representational mode; employ basic algorithms, formulae, procedures or conventions to solve problems involving whole numbers; and make literal interpretations of the results.

Top performers in mathematics are students who score at Level 5 or 6 on the PISA assessment. They can develop and work with models for complex situations, identifying constraints and specifying assumptions; select, compare, and evaluate appropriate problem-solving strategies for dealing with complex problems related to these models; work strategically using broad, well-developed thinking and reasoning skills, appropriate linked representations, symbolic and formal characterisations, and insight pertaining to these situations; and begin to reflect on their work and formulate and communicate their interpretations and reasoning.

Methodology

The **annualised change** is a robust measure of a country's progress in education outcomes as it is based on information available from all assessments. It is thus less sensitive to abnormal measurements that may alter a country's PISA trends if results are compared only between two assessments. The annualised change is calculated as the best-fitting line throughout a country's participation in PISA. The year that individual students participated in PISA is regressed on their PISA scores, yielding the annualised change. The annualised change also takes into account the fact that, for some countries, the period between PISA assessments is less than three years (for further information, see Volume I of *PISA 2012 Results*).

The ***PISA index of economic, social and cultural status*** (ESCS) was derived from the following three indices: *highest occupational status of parents* (HISEI), *highest education level of parents* in years of education according to ISCED (PARED), and *home possessions* (HOMEPOS). In PISA 2012, students reported the availability of 14 household items at home. In addition, countries added three specific household items that were seen as appropriate measures of family wealth within the country's context. The *index of home possessions* (HOMEPOS) was derived from these household items and also included the variable indicating the number of books at home. However, the home possessions scale for PISA 2012 was computed differently than in the previous cycles for the purpose of enabling a trend study. For more details, please refer to the section on trends in ESCS in the *PISA 2012 Technical Report* (OECD, forthcoming).

The ESCS scores were obtained as component scores for the first principal component with zero being the score of an average OECD student and one being the standard deviation across equally weighted OECD countries. For partner countries, ESCS scores were obtained as:

$$ESCS = \frac{ß_1 HISEI' + ß_2 PARED' + ß_3 HOMEPOS'}{\varepsilon_f}$$

where $ß_1$, $ß_2$ and $ß_3$ are the OECD factor loadings, *HISEI'*, *PARED'* and *HOMEPOS'* the "OECD-standardised" variables and ε_f is the eigenvalue of the first principal component. For further information on ESCS, please refer to the *PISA 2012 Technical Report* (OECD, forthcoming).

Note regarding data from Israel

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

References

OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris. *http://dx.doi.org/10.1787/9789264208780-en.*

OECD (2013), *PISA 2012 Results: Excellence Through Equity (Volume II): Giving Every Student the Chance to Succeed,* PISA, OECD Publishing, Paris. *http://dx.doi.org/10.1787/9789264201132-en.*

Tables of Indicator A9

StatLink http://dx.doi.org/10.1787/888933116737

	Table A9.1a	Student performance in mathematics, PISA 2012
WEB	Table A9.1b	Student performance in mathematics, PISA 2003
	Table A9.1c	Change between 2003 and 2012 in student performance in mathematics
	Table A9.2	Relationship between performance in mathematics and socio-economic status

A9

Table A9.1a. Student performance in mathematics, PISA 2012

		PISA 2012													
		All students				Gender differences						Proficiency levels			
		Mathematics performance		Standard deviation		Boys		Girls		Difference (B - G)		Below Level 2 (less than 420.07 score points)		Level 5 or above (above 606.99 score points)	
		Mean score	S.E.	S.D.	S.E.	Mean score	S.E.	Mean score	S.E.	Score dif.	S.E.	%	S.E.	%	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD	Australia	504	(1.6)	96	(1.2)	510	(2.4)	498	(2.0)	**12**	(3.1)	19.7	(0.6)	14.8	(0.6)
	Austria	506	(2.7)	92	(1.7)	517	(3.9)	494	(3.3)	**22**	(4.9)	18.7	(1.0)	14.3	(0.9)
	Belgium	515	(2.1)	102	(1.4)	520	(2.9)	509	(2.6)	**11**	(3.4)	19.0	(0.8)	19.5	(0.8)
	Canada	518	(1.8)	89	(0.8)	523	(2.1)	513	(2.1)	**10**	(2.0)	13.8	(0.5)	16.4	(0.6)
	Chile	423	(3.1)	81	(1.5)	436	(3.8)	411	(3.1)	**25**	(3.6)	51.5	(1.7)	1.6	(0.2)
	Czech Republic	499	(2.9)	95	(1.6)	505	(3.7)	493	(3.6)	**12**	(4.6)	21.0	(1.2)	12.9	(0.8)
	Denmark	500	(2.3)	82	(1.3)	507	(2.9)	493	(2.3)	**14**	(2.3)	16.8	(1.0)	10.0	(0.7)
	Estonia	521	(2.0)	81	(1.2)	523	(2.6)	518	(2.2)	**5**	(2.6)	10.5	(0.6)	14.6	(0.8)
	Finland	519	(1.9)	85	(1.2)	517	(2.6)	520	(2.2)	-3	(2.9)	12.3	(0.7)	15.3	(0.7)
	France	495	(2.5)	97	(1.7)	499	(3.4)	491	(2.5)	**9**	(3.4)	22.4	(0.9)	12.9	(0.8)
	Germany	514	(2.9)	96	(1.6)	520	(3.0)	507	(3.4)	**14**	(2.8)	17.7	(1.0)	17.5	(0.9)
	Greece	453	(2.5)	88	(1.3)	457	(3.3)	449	(2.6)	**8**	(3.2)	35.7	(1.3)	3.9	(0.4)
	Hungary	477	(3.2)	94	(2.4)	482	(3.7)	473	(3.6)	**9**	(3.7)	28.1	(1.3)	9.3	(1.1)
	Iceland	493	(1.7)	92	(1.3)	490	(2.3)	496	(2.3)	**-6**	(3.0)	21.5	(0.7)	11.2	(0.7)
	Ireland	501	(2.2)	85	(1.3)	509	(3.3)	494	(2.6)	**15**	(3.8)	16.9	(1.0)	10.7	(0.5)
	Israel	466	(4.7)	105	(1.8)	472	(7.8)	461	(3.5)	12	(7.6)	33.5	(1.7)	9.4	(1.0)
	Italy	485	(2.0)	93	(1.1)	494	(2.4)	476	(2.2)	**18**	(2.5)	24.7	(0.8)	9.9	(0.6)
	Japan	536	(3.6)	94	(2.2)	545	(4.6)	527	(3.6)	**18**	(4.3)	11.1	(1.0)	23.7	(1.5)
	Korea	554	(4.6)	99	(2.1)	562	(5.8)	544	(5.1)	**18**	(6.2)	9.1	(0.9)	30.9	(1.8)
	Luxembourg	490	(1.1)	95	(0.9)	502	(1.5)	477	(1.4)	**25**	(2.0)	24.3	(0.5)	11.2	(0.4)
	Mexico	413	(1.4)	74	(0.7)	420	(1.6)	406	(1.4)	**14**	(1.2)	54.7	(0.8)	0.6	(0.1)
	Netherlands	523	(3.5)	92	(2.1)	528	(3.6)	518	(3.9)	**10**	(2.8)	14.8	(1.3)	19.3	(1.2)
	New Zealand	500	(2.2)	100	(1.2)	507	(3.2)	492	(2.9)	**15**	(4.3)	22.6	(0.8)	15.0	(0.9)
	Norway	489	(2.7)	90	(1.3)	490	(2.8)	488	(3.4)	2	(3.0)	22.3	(1.1)	9.4	(0.7)
	Poland	518	(3.6)	90	(1.9)	520	(4.3)	516	(3.8)	4	(3.4)	14.4	(0.9)	16.7	(1.3)
	Portugal	487	(3.8)	94	(1.4)	493	(4.1)	481	(3.9)	**11**	(2.5)	24.9	(1.5)	10.6	(0.8)
	Slovak Republic	482	(3.4)	101	(2.5)	486	(4.1)	477	(4.1)	**9**	(4.5)	27.5	(1.3)	11.0	(0.9)
	Slovenia	501	(1.2)	92	(1.0)	503	(2.0)	499	(2.0)	3	(3.1)	20.1	(0.6)	13.7	(0.6)
	Spain	484	(1.9)	88	(0.7)	492	(2.4)	476	(2.0)	**16**	(2.2)	23.6	(0.8)	8.0	(0.4)
	Sweden	478	(2.3)	92	(1.3)	477	(3.0)	480	(2.4)	-3	(3.0)	27.1	(1.1)	8.0	(0.5)
	Switzerland	531	(3.0)	94	(1.5)	537	(3.5)	524	(3.1)	**13**	(2.7)	12.4	(0.7)	21.4	(1.2)
	Turkey	448	(4.8)	91	(3.1)	452	(5.1)	444	(5.7)	8	(4.7)	42.0	(1.9)	5.9	(1.1)
	United Kingdom	494	(3.3)	95	(1.7)	500	(4.2)	488	(3.8)	**12**	(4.7)	21.8	(1.3)	11.8	(0.8)
	United States	481	(3.6)	90	(1.3)	484	(3.8)	479	(3.9)	5	(2.8)	25.8	(1.4)	8.8	(0.8)
	OECD average	494	(0.5)	92	(0.3)	499	(0.6)	489	(0.5)	**11**	(0.6)	23.0	(0.2)	12.6	(0.1)
	OECD average 2003[1]	496	(0.5)	92	(0.3)	502	(0.6)	491	(0.6)	**11**	(0.6)	22.2	(0.2)	13.1	(0.2)
Partners	Albania	394	(2.0)	91	(1.4)	394	(2.6)	395	(2.6)	-1	(3.3)	60.7	(1.0)	0.8	(0.2)
	Argentina	388	(3.5)	77	(1.7)	396	(4.2)	382	(3.4)	**14**	(2.9)	66.5	(2.0)	0.3	(0.1)
	Brazil	391	(2.1)	78	(1.6)	401	(2.2)	383	(2.3)	**18**	(1.8)	67.1	(1.0)	0.8	(0.2)
	Bulgaria	439	(4.0)	94	(2.2)	438	(4.7)	440	(4.2)	-2	(4.1)	43.8	(1.8)	4.1	(0.6)
	Colombia	376	(2.9)	74	(1.7)	390	(3.4)	364	(3.2)	**25**	(3.2)	73.8	(1.4)	0.3	(0.1)
	Costa Rica	407	(3.0)	68	(1.8)	420	(3.6)	396	(3.1)	**24**	(2.4)	59.9	(1.9)	0.6	(0.2)
	Croatia	471	(3.5)	88	(2.5)	477	(4.4)	465	(3.7)	**12**	(4.1)	29.9	(1.4)	7.0	(1.1)
	Hong Kong-China	561	(3.2)	96	(1.9)	568	(4.6)	553	(3.9)	**15**	(5.7)	8.5	(0.8)	33.7	(1.4)
	Indonesia	375	(4.0)	71	(3.3)	377	(4.4)	373	(4.3)	5	(3.4)	75.7	(2.1)	0.3	(0.2)
	Jordan	386	(3.1)	78	(2.7)	375	(5.4)	396	(3.1)	**-21**	(6.3)	68.6	(1.5)	0.6	(0.4)
	Kazakhstan	432	(3.0)	71	(1.8)	432	(3.4)	432	(3.3)	0	(2.9)	45.2	(1.7)	0.9	(0.3)
	Latvia	491	(2.8)	82	(1.5)	489	(3.4)	493	(3.2)	-4	(3.6)	19.9	(1.1)	8.0	(0.8)
	Liechtenstein	535	(4.0)	95	(3.7)	546	(6.0)	523	(5.8)	**23**	(8.8)	14.1	(2.0)	24.8	(2.6)
	Lithuania	479	(2.6)	89	(1.4)	479	(2.8)	479	(3.0)	0	(2.4)	26.0	(1.2)	8.1	(0.6)
	Macao-China	538	(1.0)	94	(0.9)	540	(1.4)	537	(1.3)	3	(1.9)	10.8	(0.5)	24.3	(0.6)
	Malaysia	421	(3.2)	81	(1.6)	416	(3.7)	424	(3.7)	**-8**	(3.8)	51.8	(1.7)	1.3	(0.3)
	Montenegro	410	(1.1)	83	(1.1)	410	(1.6)	410	(1.6)	0	(2.4)	56.6	(1.0)	1.0	(0.2)
	Peru	368	(3.7)	84	(2.2)	378	(3.6)	359	(4.8)	**19**	(3.9)	74.6	(1.8)	0.6	(0.2)
	Qatar	376	(0.8)	100	(0.7)	369	(1.1)	385	(0.9)	**-16**	(1.4)	69.6	(0.5)	2.0	(0.2)
	Romania	445	(3.8)	81	(2.2)	447	(4.3)	443	(4.0)	4	(3.6)	40.8	(1.9)	3.2	(0.6)
	Russian Federation	482	(3.0)	86	(1.6)	481	(3.7)	483	(3.1)	-2	(3.0)	24.0	(1.1)	7.8	(0.8)
	Serbia	449	(3.4)	91	(2.2)	453	(4.1)	444	(3.7)	**9**	(3.9)	38.9	(1.5)	4.6	(0.7)
	Shanghai-China	613	(3.3)	101	(2.3)	616	(4.0)	610	(3.4)	6	(3.3)	3.8	(0.5)	55.4	(1.4)
	Singapore	573	(1.3)	105	(0.9)	572	(1.9)	575	(1.8)	-3	(2.5)	8.3	(0.5)	40.0	(0.7)
	Chinese Taipei	560	(3.3)	116	(1.9)	563	(5.4)	557	(5.7)	5	(8.9)	12.8	(0.8)	37.2	(1.2)
	Thailand	427	(3.4)	82	(2.1)	419	(3.6)	433	(4.1)	**-14**	(3.6)	49.7	(1.7)	2.6	(0.5)
	Tunisia	388	(3.9)	78	(3.1)	396	(4.3)	381	(4.0)	**15**	(2.7)	67.7	(1.8)	0.8	(0.4)
	United Arab Emirates[2]	434	(2.4)	90	(1.2)	432	(3.8)	436	(3.0)	-5	(4.7)	46.3	(1.2)	3.5	(0.3)
	Uruguay	409	(2.8)	89	(1.7)	415	(3.5)	404	(2.9)	**11**	(3.1)	55.8	(1.3)	1.4	(0.3)
	Viet Nam	511	(4.8)	86	(2.7)	517	(5.6)	507	(4.7)	**10**	(3.0)	14.2	(1.7)	13.3	(1.5)

Note: Differences that are statistically significant are indicated in bold.

1. OECD average 2003 compares only OECD countries with comparable mathematics scores since 2003.

2. In the United Arab Emirates, Dubai took the PISA 2009 assessment in 2009 and the rest of the United Arab Emirates in 2010 as part of PISA 2009+. Results are thus reported separately for the trends. Mathematics performance in 2012 for Dubai and the rest of United Arab Emirates are respectively: 464 (1.2) and 423 (3.2).

Source: OECD, PISA 2012 Database.

StatLink http://dx.doi.org/10.1787/888933116756

A9

Table A9.1c. Change between 2003 and 2012 in student performance in mathematics

		Change between 2003 and 2012 (PISA 2012 - PISA 2003)													
		All students				Gender differences						Proficiency levels			
		Mathematics performance		Annualised change in mathematics across PISA assessments[1]		Boys		Girls		Difference (B - G)		Below Level 2 (less than 420.07 score points)		Level 5 or above (above 606.99 score points)	
		Score dif.	S.E.	Annual change	S.E.	Score dif.	S.E.	Score dif.	S.E.	Score dif.	S.E.	% dif.	S.E.	% dif.	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD	Australia	**-20**	(3.3)	**-2.2**	(0.3)	**-17**	(4.3)	**-24**	(3.9)	7	(4.9)	**5.3**	(1.1)	**-5.0**	(1.1)
	Austria	0	(4.6)	0.0	(0.5)	7	(5.9)	-7	(5.5)	**15**	(7.3)	-0.1	(1.6)	0.0	(1.4)
	Belgium	**-15**	(3.7)	**-1.6**	(0.4)	**-13**	(4.9)	**-16**	(4.6)	4	(5.7)	**2.5**	(1.2)	**-6.9**	(1.3)
	Canada	**-14**	(3.2)	**-1.4**	(0.3)	**-18**	(3.5)	**-17**	(3.4)	-1	(3.0)	**3.7**	(0.9)	**-3.9**	(1.1)
	Chile	m	m	**1.9**	(0.9)	m	m	m	m	m	m	m	m	m	m
	Czech Republic	**-17**	(4.9)	**-2.5**	(0.5)	**-19**	(6.0)	**-16**	(6.0)	-3	(6.7)	**4.4**	(1.8)	**-5.4**	(1.5)
	Denmark	**-14**	(4.1)	**-1.8**	(0.4)	**-16**	(4.8)	**-13**	(4.2)	-3	(4.4)	1.4	(1.4)	**-5.9**	(1.2)
	Estonia	m	m	0.9	(0.7)	m	m	m	m	m	m	m	m	m	m
	Finland	**-26**	(3.3)	**-2.8**	(0.3)	**-31**	(4.1)	**-20**	(3.6)	**-10**	(4.0)	**5.5**	(0.9)	**-8.1**	(1.2)
	France	**-16**	(4.0)	**-1.5**	(0.4)	**-16**	(5.3)	**-16**	(4.3)	0	(5.6)	**5.7**	(1.5)	-2.2	(1.3)
	Germany	**11**	(4.8)	**1.4**	(0.5)	**12**	(5.4)	8	(5.5)	5	(5.3)	**-3.9**	(1.6)	1.2	(1.4)
	Greece	8	(5.0)	**1.1**	(0.5)	2	(6.1)	**13**	(5.0)	**-11**	(4.9)	-3.3	(2.5)	-0.1	(0.7)
	Hungary	**-13**	(4.7)	**-1.3**	(0.5)	**-12**	(5.4)	**-13**	(5.3)	1	(5.1)	**5.1**	(1.8)	-1.4	(1.5)
	Iceland	**-22**	(2.9)	**-2.2**	(0.3)	**-18**	(3.8)	**-27**	(3.7)	**9**	(4.4)	**6.5**	(1.1)	**-4.3**	(1.0)
	Ireland	-1	(3.8)	-0.6	(0.4)	-1	(4.8)	-2	(4.7)	1	(5.7)	0.1	(1.5)	-0.7	(1.0)
	Israel	m	m	**4.2**	(1.1)	m	m	m	m	m	m	m	m	m	m
	Italy	**20**	(4.2)	**2.7**	(0.4)	**19**	(5.5)	**19**	(4.8)	1	(6.7)	**-7.3**	(1.8)	**2.9**	(0.8)
	Japan	2	(5.7)	0.4	(0.6)	6	(7.7)	-3	(5.7)	9	(7.3)	-2.3	(1.6)	-0.6	(2.2)
	Korea	12	(5.9)	1.1	(0.6)	10	(7.5)	**16**	(7.7)	-5	(9.4)	-0.4	(1.3)	**6.1**	(2.4)
	Luxembourg	-3	(2.4)	-0.3	(0.3)	0	(3.1)	**-8**	(2.8)	**8**	(3.3)	**2.6**	(1.0)	0.4	(0.8)
	Mexico	**28**	(4.3)	**3.1**	(0.5)	**30**	(4.9)	**26**	(4.7)	3	(4.2)	**-11.2**	(2.2)	0.3	(0.1)
	Netherlands	**-15**	(5.1)	**-1.6**	(0.6)	**-12**	(5.7)	**-17**	(5.6)	5	(5.6)	**3.9**	(1.8)	**-6.3**	(1.9)
	New Zealand	**-24**	(3.7)	**-2.5**	(0.4)	**-24**	(4.7)	**-24**	(4.7)	1	(6.2)	**7.6**	(1.3)	**-5.7**	(1.2)
	Norway	-6	(4.1)	-0.3	(0.5)	-8	(4.4)	-4	(4.9)	-4	(4.4)	1.5	(1.6)	**-2.0**	(1.0)
	Poland	**27**	(4.8)	**2.6**	(0.5)	**27**	(5.5)	**28**	(5.1)	-2	(4.4)	**-7.7**	(1.5)	**6.7**	(1.6)
	Portugal	**21**	(5.5)	**2.8**	(0.6)	**20**	(6.2)	**21**	(5.6)	-1	(4.4)	**-5.2**	(2.4)	**5.3**	(1.0)
	Slovak Republic	**-17**	(5.2)	**-1.4**	(0.5)	**-21**	(6.0)	**-12**	(5.7)	-9	(5.3)	**7.5**	(2.0)	-1.7	(1.3)
	Slovenia	m	m	-0.6	(0.4)	m	m	m	m	m	m	m	m	m	m
	Spain	-1	(3.6)	0.1	(0.4)	3	(4.6)	-5	(3.5)	**8**	(3.8)	0.6	(1.4)	0.1	(0.9)
	Sweden	**-31**	(3.9)	**-3.3**	(0.4)	**-35**	(4.6)	**-26**	(4.4)	**-9**	(3.9)	**9.8**	(1.6)	**-7.8**	(1.0)
	Switzerland	4	(4.9)	0.6	(0.5)	3	(6.2)	7	(5.2)	-4	(5.2)	-2.1	(1.2)	0.2	(2.0)
	Turkey	**25**	(8.5)	**3.2**	(0.8)	**22**	(9.6)	**29**	(9.0)	-7	(8.0)	**-10.2**	(3.4)	0.4	(1.9)
	United Kingdom	m	m	-0.3	(0.6)	m	m	m	m	m	m	m	m	m	m
	United States	-2	(5.0)	0.3	(0.6)	-2	(5.4)	-1	(5.4)	-2	(3.9)	0.1	(2.0)	-1.3	(1.1)
	OECD average 2003[2]	**-3**	(0.9)	**-0.3**	(0.1)	**-3**	(1.0)	**-4**	(1.0)	0	(1.0)	**0.7**	(0.3)	**-1.6**	(0.3)
Partners	Albania	m	m	**5.6**	(1.7)	m	m	m	m	m	m	m	m	m	m
	Argentina	m	m	1.2	(1.3)	m	m	m	m	m	m	m	m	m	m
	Brazil	**35**	(5.6)	**4.1**	(0.6)	**36**	(6.7)	**34**	(5.3)	2	(4.8)	**-8.1**	(2.2)	-0.4	(0.5)
	Bulgaria	m	m	**4.2**	(1.3)	m	m	m	m	m	m	m	m	m	m
	Colombia	m	m	1.1	(0.9)	m	m	m	m	m	m	m	m	m	m
	Costa Rica	m	m	-1.2	(2.3)	m	m	m	m	m	m	m	m	m	m
	Croatia	m	m	0.6	(0.8)	m	m	m	m	m	m	m	m	m	m
	Hong Kong-China	11	(5.9)	**1.3**	(0.6)	16	(8.2)	5	(6.3)	11	(8.6)	-1.9	(1.4)	3.0	(2.2)
	Indonesia	**15**	(5.9)	0.7	(0.6)	**16**	(6.2)	**14**	(6.6)	1	(4.3)	-2.4	(2.8)	0.0	(0.2)
	Jordan	m	m	0.2	(0.8)	m	m	m	m	m	m	m	m	m	m
	Kazakhstan	m	m	**9.0**	(1.5)	m	m	m	m	m	m	m	m	m	m
	Latvia	7	(5.0)	0.5	(0.5)	4	(6.2)	**10**	(5.1)	-7	(4.7)	-3.8	(1.9)	0.0	(1.2)
	Liechtenstein	-1	(6.0)	0.3	(0.6)	-4	(9.6)	2	(8.7)	-6	(13.9)	1.8	(2.7)	-0.8	(4.4)
	Lithuania	m	m	-1.4	(0.8)	m	m	m	m	m	m	m	m	m	m
	Macao-China	**11**	(3.6)	**1.0**	(0.4)	1	(5.4)	**20**	(4.0)	**-18**	(6.4)	-0.4	(1.3)	**5.7**	(1.7)
	Malaysia	m	m	**8.1**	(2.1)	m	m	m	m	m	m	m	m	m	m
	Montenegro	m	m	**1.7**	(0.5)	m	m	m	m	m	m	m	m	m	m
	Peru	m	m	1.0	(2.1)	m	m	m	m	m	m	m	m	m	m
	Qatar	m	m	**9.2**	(0.4)	m	m	m	m	m	m	m	m	m	m
	Romania	m	m	**4.9**	(1.0)	m	m	m	m	m	m	m	m	m	m
	Russian Federation	**14**	(5.5)	1.1	(0.6)	8	(6.7)	**20**	(5.5)	**-12**	(5.3)	**-6.3**	(2.3)	0.8	(1.2)
	Serbia	m	m	**2.2**	(0.9)	m	m	m	m	m	m	m	m	m	m
	Shanghai-China	m	m	**4.2**	(1.7)	m	m	m	m	m	m	m	m	m	m
	Singapore	m	m	**3.8**	(1.0)	m	m	m	m	m	m	m	m	m	m
	Chinese Taipei	m	m	1.7	(0.9)	m	m	m	m	m	m	m	m	m	m
	Thailand	**10**	(5.0)	1.0	(0.6)	4	(5.7)	**14**	(5.6)	-10	(5.4)	-4.2	(2.6)	0.9	(0.6)
	Tunisia	**29**	(5.0)	**3.1**	(0.5)	**31**	(5.5)	**28**	(5.4)	3	(3.7)	**-10.2**	(2.3)	0.6	(0.4)
	United Arab Emirates[3]	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Uruguay	**-13**	(4.7)	**-1.4**	(0.5)	**-13**	(5.6)	**-12**	(5.2)	-1	(4.9)	**7.7**	(2.2)	**-1.4**	(0.5)
	Viet Nam	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: Differences that are statistically significant are indicated in bold.

1. The annualised change is the average annual change in PISA score points from a country's/economie's earliest participation in PISA to PISA 2012. For countries/economies with more than one available measurement, the annualised change is calculated with a linear regression model. This model considers that Costa Rica, Malaysia and the United Arab Emirates (with the exception of Dubai) implemented the PISA 2009 assessment in 2010 as part of PISA 2009+.

2. OECD average 2003 compares only OECD countries with comparable mathematics scores since 2003.

3. In the United Arab Emirates, Dubai took the PISA 2009 assessment in 2009 and the rest of the United Arab Emirates in 2010 as part of PISA 2009+. Results are thus reported separately. Annualised change for Dubai and the rest of United Arab Emirates are significant and are respectively: **3.8** (0.9) and **5.9** (2.6).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

Source: OECD, PISA 2012 Database.

StatLink http://dx.doi.org/10.1787/888933116775

A9

Table A9.2. Relationship between performance in mathematics and socio-economic status

Results based on students' self-reports

		PISA 2012										Change between 2003 and 2012 (PISA 2012 - PISA 2003)			
		PISA index of economic, social and cultural status (ESCS)		Variability in the ESCS		Mathematics performance adjusted by the mean ESCS		Strength of the relationship between mathematics performance and ESCS[1]		Slope of the socio-economic gradient for mathematics[1]		Strength of the relationship between ESCS and mathematics performance		Slope of the socio-economic gradient for mathematics[1]	
		Mean score	S.E.	S.D.	S.E.	Mean score	S.E.	Percentage of explained variance in mathematics performance	S.E.	Score-point difference in mathematics associated with one-unit increase in ESCS	S.E.	Change in the percentage of explained variance in mathematics performance	S.E.	Change in the score-point difference in mathematics associated with one-unit increase in ESCS	S.E.
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(23)	(24)	(25)	(26)
OECD	Australia	0.25	(0.01)	0.79	(0.01)	496	(1.6)	**12.3***	(0.8)	**42***	(1.3)	-1.6	(1.3)	2	(2.2)
	Austria	0.08	(0.02)	0.85	(0.01)	503	(2.5)	**15.8**	(1.5)	**43**	(2.2)	0.8	(2.1)	2	(3.1)
	Belgium	0.15	(0.02)	0.91	(0.02)	510	(1.8)	**19.6***	(1.4)	**49***	(1.7)	-3.4	(1.9)	-2	(2.6)
	Canada	0.41	(0.02)	0.86	(0.01)	508	(1.6)	**9.4***	(0.7)	**31***	(1.2)	-0.8	(1.1)	1	(1.8)
	Chile	-0.58	(0.04)	1.13	(0.02)	443	(2.7)	**23.1***	(1.9)	**34***	(1.6)	m	m	m	m
	Czech Republic	-0.07	(0.02)	0.75	(0.01)	503	(2.5)	**16.2**	(1.5)	**51***	(2.7)	-2.3	(2.0)	5	(3.4)
	Denmark	0.43	(0.02)	0.84	(0.01)	485	(1.7)	**16.5**	(1.4)	**39**	(1.7)	-0.8	(2.0)	1	(2.5)
	Estonia	0.11	(0.01)	0.81	(0.01)	518	(1.9)	**8.6***	(0.9)	**29***	(1.7)	m	m	m	m
	Finland	0.36	(0.02)	0.77	(0.01)	508	(1.9)	**9.4***	(0.9)	**33***	(1.8)	-1.1	(1.4)	**5**	(2.3)
	France	-0.04	(0.02)	0.80	(0.01)	500	(2.2)	**22.5***	(1.3)	**57***	(2.2)	2.2	(2.3)	**14**	(3.1)
	Germany	0.19	(0.02)	0.93	(0.01)	511	(2.6)	**16.9**	(1.4)	**43**	(2.0)	**-6.9**	(2.0)	-1	(2.5)
	Greece	-0.06	(0.03)	1.00	(0.01)	456	(1.9)	**15.5**	(1.5)	**34***	(1.8)	-0.5	(2.4)	-2	(2.8)
	Hungary	-0.25	(0.03)	0.96	(0.02)	490	(2.8)	**23.1***	(2.3)	**47***	(2.8)	-2.6	(2.9)	-3	(3.5)
	Iceland	0.78	(0.01)	0.81	(0.01)	470	(2.1)	**7.7***	(1.0)	**31***	(2.1)	0.6	(1.3)	5	(2.6)
	Ireland	0.13	(0.02)	0.85	(0.01)	497	(2.0)	**14.6**	(1.2)	**38**	(1.8)	-1.1	(1.9)	2	(2.5)
	Israel	0.17	(0.03)	0.85	(0.02)	460	(3.8)	**17.2**	(1.5)	**51***	(2.6)	m	m	m	m
	Italy	-0.05	(0.01)	0.97	(0.01)	487	(1.8)	**10.1***	(0.6)	**30***	(1.2)	-2.2	(1.4)	-1	(2.2)
	Japan	-0.07	(0.02)	0.71	(0.01)	541	(3.3)	**9.8***	(1.6)	**41**	(3.9)	-2.0	(2.6)	-2	(6.0)
	Korea	0.01	(0.03)	0.74	(0.01)	553	(3.9)	**10.1***	(1.4)	**42**	(3.3)	-4.4	(2.4)	5	(4.3)
	Luxembourg	0.07	(0.01)	1.10	(0.01)	488	(1.3)	**18.3***	(1.1)	**37***	(1.2)	1.7	(1.5)	2	(1.7)
	Mexico	-1.11	(0.02)	1.27	(0.01)	435	(1.4)	**10.4***	(0.8)	**19***	(0.8)	**-6.8**	(2.2)	**-11**	(2.0)
	Netherlands	0.23	(0.02)	0.78	(0.01)	515	(3.2)	**11.5***	(1.7)	**40**	(3.1)	**-6.8**	(2.4)	0	(3.8)
	New Zealand	0.04	(0.02)	0.82	(0.01)	500	(2.2)	**18.4***	(1.3)	**52***	(1.9)	1.8	(1.8)	**8**	(2.5)
	Norway	0.46	(0.02)	0.76	(0.01)	476	(2.8)	**7.4***	(1.0)	**32***	(2.4)	**-4.7**	(1.5)	**-8**	(3.1)
	Poland	-0.21	(0.03)	0.90	(0.01)	526	(3.2)	**16.6**	(1.7)	**41**	(2.4)	0.2	(2.0)	1	(2.9)
	Portugal	-0.48	(0.05)	1.19	(0.02)	506	(2.6)	**19.6***	(1.8)	**35***	(1.6)	1.1	(2.4)	**7**	(2.0)
	Slovak Republic	-0.18	(0.03)	0.92	(0.02)	492	(2.6)	**24.6***	(2.1)	**54***	(2.9)	1.0	(2.9)	6	(3.8)
	Slovenia	0.07	(0.01)	0.87	(0.01)	499	(1.3)	**15.6**	(1.0)	**42**	(1.5)	m	m	m	m
	Spain	-0.19	(0.03)	1.03	(0.01)	492	(1.6)	**15.8**	(1.0)	**34***	(1.1)	**3.2**	(1.6)	**6**	(1.8)
	Sweden	0.28	(0.02)	0.82	(0.01)	471	(1.9)	**10.6***	(1.1)	**36**	(1.9)	**-3.7**	(1.7)	-1	(2.7)
	Switzerland	0.17	(0.02)	0.89	(0.01)	525	(2.7)	**12.8**	(1.2)	**38**	(1.8)	**-5.2**	(1.8)	-3	(2.6)
	Turkey	-1.46	(0.04)	1.10	(0.02)	494	(6.6)	**14.5**	(1.8)	**32***	(2.4)	**-10.4**	(4.3)	**-18**	(5.6)
	United Kingdom	0.27	(0.02)	0.80	(0.01)	486	(2.6)	**12.5**	(1.2)	**41**	(2.4)	m	m	m	m
	United States	0.17	(0.04)	0.97	(0.02)	476	(2.7)	**14.8**	(1.3)	**35***	(1.7)	**-4.2**	(1.8)	**-7**	(2.2)
	OECD average	0.00	(0.00)	0.90	(0.00)	495	(0.5)	**14.8**	(0.2)	**39**	(0.4)	m	m	m	m
	OECD average 2003[2]	0.00	(0.00)	0.90	(0.00)	497	(0.5)	**14.7**	(0.3)	**39**	(0.4)	**-2.0**	(0.4)	0	(0.6)
Partners	Albania	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Argentina	-0.72	(0.04)	1.11	(0.02)	409	(3.0)	**15.1**	(1.5)	**26***	(1.7)	m	m	m	m
	Brazil	-1.17	(0.02)	1.17	(0.01)	423	(3.2)	**15.7**	(1.6)	**26***	(1.7)	0.7	(2.8)	-5	(3.2)
	Bulgaria	-0.28	(0.04)	1.05	(0.03)	451	(3.2)	**22.3***	(2.3)	**42**	(2.7)	m	m	m	m
	Colombia	-1.26	(0.04)	1.18	(0.02)	408	(3.6)	**15.4**	(1.8)	**25***	(1.7)	m	m	m	m
	Costa Rica	-0.98	(0.04)	1.24	(0.02)	431	(3.1)	**18.9**	(2.1)	**24***	(1.6)	m	m	m	m
	Croatia	-0.34	(0.02)	0.85	(0.01)	484	(3.7)	**12.0***	(1.4)	**36**	(2.6)	m	m	m	m
	Hong Kong-China	-0.79	(0.05)	0.97	(0.02)	584	(3.1)	**7.5***	(1.5)	**27***	(2.6)	-0.4	(2.0)	-3	(3.8)
	Indonesia	-1.80	(0.05)	1.10	(0.03)	411	(8.1)	**9.6**	(3.0)	**20***	(3.4)	2.4	(3.4)	-1	(4.3)
	Jordan	-0.42	(0.02)	1.02	(0.01)	397	(3.4)	**8.4***	(1.3)	**22***	(2.2)	m	m	m	m
	Kazakhstan	-0.32	(0.02)	0.75	(0.01)	440	(3.1)	**8.0***	(1.7)	**27***	(2.8)	m	m	m	m
	Latvia	-0.26	(0.03)	0.89	(0.01)	500	(2.5)	**14.7**	(1.7)	**35**	(2.1)	2.8	(2.2)	1	(2.9)
	Liechtenstein	0.30	(0.05)	0.91	(0.03)	528	(4.5)	**7.6***	(3.1)	**28**	(5.8)	**-14.9**	(5.1)	**-19**	(7.5)
	Lithuania	-0.13	(0.02)	0.92	(0.01)	484	(2.2)	**13.8**	(1.2)	**36**	(1.8)	m	m	m	m
	Macao-China	-0.89	(0.01)	0.87	(0.01)	555	(1.6)	**2.6***	(0.4)	**17***	(1.5)	0.8	(1.0)	5	(3.5)
	Malaysia	-0.72	(0.03)	0.99	(0.02)	442	(3.6)	**13.4**	(1.6)	**30***	(2.1)	m	m	m	m
	Montenegro	-0.25	(0.01)	0.89	(0.01)	419	(1.2)	**12.7***	(0.9)	**33***	(1.3)	m	m	m	m
	Peru	-1.23	(0.05)	1.23	(0.02)	409	(4.0)	**23.4***	(2.4)	**33***	(2.0)	m	m	m	m
	Qatar	0.44	(0.01)	0.89	(0.01)	367	(0.9)	**5.6***	(0.5)	**27***	(1.2)	m	m	m	m
	Romania	-0.47	(0.04)	0.94	(0.03)	463	(3.5)	**19.3**	(2.4)	**38**	(2.9)	m	m	m	m
	Russian Federation	-0.11	(0.02)	0.76	(0.01)	487	(3.0)	**11.4**	(1.7)	**38**	(3.2)	0.8	(2.1)	7	(3.7)
	Serbia	-0.30	(0.02)	0.90	(0.01)	459	(3.2)	**11.7***	(1.4)	**34***	(2.4)	m	m	m	m
	Shanghai-China	-0.36	(0.04)	0.96	(0.02)	627	(2.7)	**15.1**	(1.9)	**41**	(2.7)	m	m	m	m
	Singapore	-0.26	(0.01)	0.92	(0.01)	585	(1.2)	**14.4**	(0.9)	**44***	(1.4)	m	m	m	m
	Chinese Taipei	-0.40	(0.02)	0.84	(0.01)	583	(2.5)	**17.9***	(1.4)	**58***	(2.5)	m	m	m	m
	Thailand	-1.35	(0.04)	1.17	(0.02)	457	(4.9)	**9.9***	(2.2)	**22***	(2.4)	-1.5	(2.9)	-1	(3.2)
	Tunisia	-1.19	(0.05)	1.26	(0.02)	415	(5.7)	**12.4**	(2.4)	**22***	(2.6)	-1.4	(3.4)	-3	(3.5)
	United Arab Emirates	0.32	(0.02)	0.85	(0.01)	424	(2.0)	**9.8***	(1.0)	**33***	(1.9)	m	m	m	m
	Uruguay	-0.88	(0.03)	1.13	(0.02)	443	(2.8)	**22.8***	(1.9)	**37**	(1.8)	**6.9**	(2.5)	3	(2.6)
	Viet Nam	-1.81	(0.05)	1.12	(0.03)	565	(6.3)	**14.6**	(2.3)	**29***	(2.6)	m	m	m	m

Notes: Values and changes that are statistically significant are indicated in bold. Values that are statistically significantly different from the OECD average are indicated with an asterisk.

Columns 11-22 are available for consultation on line (see *StatLink* below).

1. Single-level bivariate regression of performance on the ESCS. The slope is the regression coefficient for ESCS and the strength is r-squared x 100.

2. OECD 2003 average compares only OECD countries with comparable data since PISA 2003.

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

Source: OECD, PISA 2012 Database.

StatLink http://dx.doi.org/10.1787/888933116794

Chapter

B

Financial and Human Resources Invested In Education

Classification of educational expenditure

Educational expenditure in this chapter is classified through three dimensions:

- The first dimension – represented by the horizontal axis in the diagram below – relates to the location where spending occurs. Spending on schools and universities, education ministries and other agencies directly involved in providing and supporting education is one component of this dimension. Spending on education outside these institutions is another.
- The second dimension – represented by the vertical axis in the diagram below – classifies the goods and services that are purchased. Not all expenditure on educational institutions can be classified as direct educational or instructional expenditure. Educational institutions in many OECD countries offer various ancillary services – such as meals, transport, housing, etc. – in addition to teaching services to support students and their families. At the tertiary level, spending on research and development can be significant. Not all spending on educational goods and services occurs within educational institutions. For example, families may purchase textbooks and materials themselves or seek private tutoring for their children.
- The third dimension – represented by the colours in the diagram below – distinguishes among the sources from which funding originates. These include the public sector and international agencies (indicated by light blue), and households and other private entities (indicated by medium-blue). Where private expenditure on education is subsidised by public funds, this is indicated by cells in the grey colour.

Public sources of funds | Private sources of funds | Private funds publicly subsidised

	Spending on educational institutions (e.g. schools, universities, educational administration and student welfare services)	**Spending on education outside educational institutions** (e.g. private purchases of educational goods and services, including private tutoring)
Spending on core educational services	e.g. public spending on instructional services in educational institutions	e.g. subsidised private spending on books
	e.g. subsidised private spending on instructional services in educational institutions	e.g. private spending on books and other school materials or private tutoring
	e.g. private spending on tuition fees	
Spending on research and development	e.g. public spending on university research	
	e.g. funds from private industry for research and development in educational institutions	
Spending on educational services other than instruction	e.g. public spending on ancillary services such as meals, transport to schools, or housing on the campus	e.g. subsidised private spending on student living costs or reduced prices for transport
	e.g. private spending on fees for ancillary services	e.g. private spending on student living costs or transport