

Education at a Glance 2011

OECD Indicators

DOI: <http://dx.doi.org/10.1787/eag-2011-en>

© OECD 2011



Under embargo until 13 September, at 11:00 Paris time

COUNTRY NOTE – KOREA

Questions can be directed to: Andreas Schleicher, Head of the Indicators and Analysis Division, e-mail: Andreas.Schleicher@OECD.org Tel: +33607385464.

Consult our website: www.oecd.org/edu/eag2011

Korea has made a remarkable journey in providing education to its people...

Some 98% of 25-34 year-olds now complete an upper secondary education – the highest proportion among OECD countries and a remarkable increase over the past three decades, compared to only 43% of 55-64 year-olds who attained the same level of education (Table A1.2a).

This expansion of access to education is mirrored in tertiary graduation rates, where 63% of 25-34 year-olds in Korea now complete this higher level of education – again, the highest proportion among OECD countries (Table A1.3a).

...and access to tertiary education is likely to expand in the coming years.

Trend data on entry rates at the tertiary level also suggest that this expansion will continue in the near future. Since 1995, there has been a 30 percentage-point increase in the entry rate at the tertiary level.

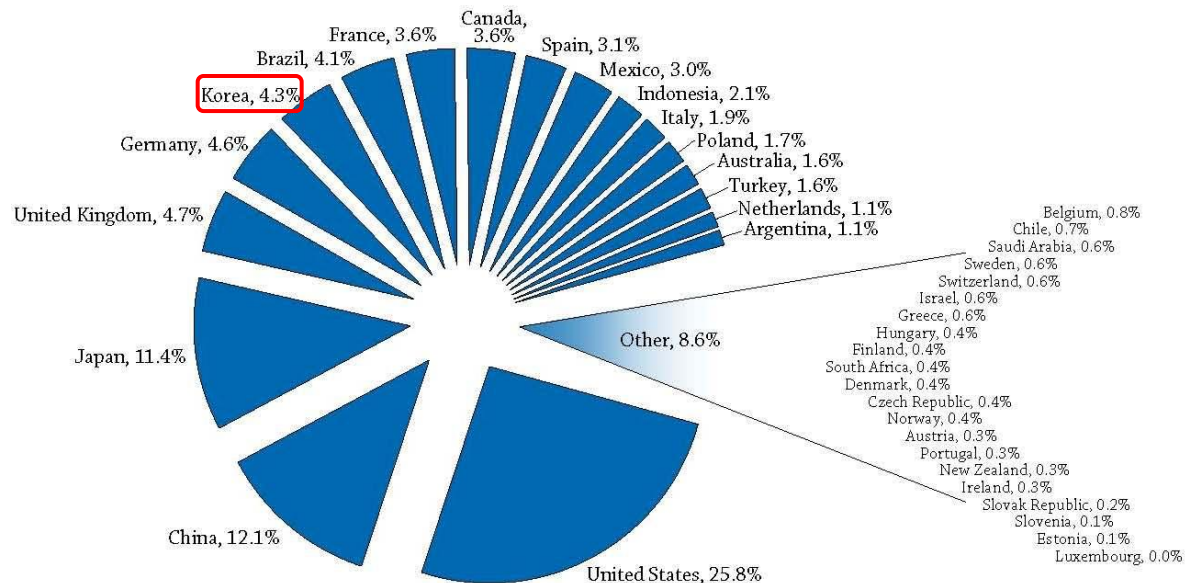
The entry rate into tertiary-type A (longer, largely theory-based) programmes was 71% in 2009, well above the OECD average of 59%.

In addition, the entry rate for tertiary-type B programmes (shorter and vocationally oriented) also increased by 9 percentage points since 1995, from 27% to 36% in 2009. This is higher than the OECD average of 19%, and the fourth highest after Belgium, Chile and New Zealand (Tables C2.2).

But as the global talent pool changes, Korea's contribution is shrinking.

With the changes in the global talent pool resulting from the inclusion of emerging economies like China, Korea's share of the almost 200 million 25-64 year-old tertiary-educated adults worldwide has diminished from 5.4% (the fourth largest) in 2008 to 4.3% (the sixth largest) in 2009 (Chart A1.4 below and Table A1.3a).

Chart A1.4. Countries' share in the total 25-64 year-old population with tertiary education, percentage (2009)



Note: Argentina refers to year 2003, China refers to year 2000, Saudi Arabia refers to year 2004, Indonesia and South Africa refer to 2007.

Source: OECD, Table A1.3a. See Annex 3 for notes (www.oecd.org/edu/eag2011).

StatLink <http://dx.doi.org/10.1787/888932459888>

Korea has more tertiary graduates in science-related fields employed than any other OECD country...

Korea has the highest number of science graduates per 100 000 25-34 year-old employees among OECD countries, and this is true for both men and women. In 2009, 4 400 men and 2 300 women per 100 000 25-34 year-olds in employment graduated with a science-related degree, well above the OECD average of 2 300 for men and 1 200 for women (Table A4.6).

In tertiary-type A and advanced research programmes, some 23% of students graduated from the fields of engineering, manufacturing and construction –twice as many as the OECD average in these fields of education. About a quarter of students graduate from social sciences, business, law and services (24%) and another quarter from humanities, arts, and education (29%) (Table A4.3b).

Korea has a well-established system of performance and regulatory accountability.

Since 2001, Korea has used national assessments to provide formative feedback to improve instruction and determine the relative performance of students. The results of these assessments are shared with school administrators, teachers, parents, students and the media in addition to education authorities.

However, Korea does not use national examinations at any level of its school system, unlike the majority of countries with available data (Tables D5.1a, b, c and D5.2a, b, c, available online).

Fewer adults enrol in education after the end of their formal schooling.

The participation rate for all types of non-formal education is 26%, below the OECD average of 34%. For job-related non-formal education, the participation rate is 11%, less than half of the OECD average of 28%. Given that Korean workers have the longest annual working hours among the OECD countries; the ratio of hours in job-related non-formal education to annual working hours is only 0.2, half of the OECD average. On the other hand, those who participate in job-related non-formal education spend almost twice as many hours as the OECD average (Table C5.1a).

More foreign students are choosing to study in Korea...

Over the past nine years, Korea has been successful in attracting foreign students to its tertiary education. In 2009, 50 000 foreign students enrolled in tertiary programmes in Korea, almost 15 times more than in 2000. Its international education market share is also rising, from 0.2% in 2000 to 1.4% in 2009, one of the fastest expansion rates among OECD countries (Chart C3.3). Overall, 95% (48 000) of foreign students in Korea come from Asia, particularly from eastern Asian countries such as China and Mongolia (Table C3.6, available on line). Considering that Korea offers only some programmes in English and charges the same tuition fees to international students (Korea charged the 2nd highest tuition fees among 24 OECD countries in the academic year 2008-2009), the proportion of foreign students is high (Box C3.2 and 3).

...while the proportion of Korean students who choose to study abroad is highest among OECD countries.

Some 13% of Korean tertiary students study abroad – proportionately more than in any other OECD country. In 2009, more than 127 000 Korean students were studying abroad, out of which almost 74 000 students (58%) chose to go to the US, around 25 000 students (20%) chose Japan, some 6 800 students (5%) chose Australia and 5 300 students (4%) are studying in Germany (Table C.6, available online).

Employment rates have fallen since 1997...

Employment rates among 25-64 year-olds in virtually every educational attainment level in Korea have fallen since 1997. This decrease is most evident among those without an upper secondary education (5.9 percentage-point decrease) and those with a tertiary education (4.1 percentage-point decrease) compared to those with an upper secondary education (2.1 percentage-point decrease) (Table A7.3a).

On the other hand, unemployment rates increased only slightly, at an average of 1.4 percentage points, since 1997. Indeed, Korea had one of the lowest unemployment rates among OECD countries in 2009 (Table A7.4a).

...and the gender gap in employment is substantial...

Although Korean women are participating more in the labour market than in previous years, the gap in the level of employment between men and women, regardless of their education level, is enormous. In fact, the gender gap is wider among those with a tertiary education than among those with only pre-primary and primary-level education; and Korea is the only OECD country that shows such an effect.

In particular, while in most OECD countries the employment rate for women increases dramatically as women attain higher levels of education (on average, by 31 percentage points from lower secondary education to tertiary-type A education), in Korea, the employment rate for women with a tertiary-type A degree is only 1.8 percentage points higher than for women with lower secondary education (Table A7.1a).

... although more Korean women were employed in 2009 than in 1997.

Despite lower employment rates among Korean women, the decline in employment rates is deeper for men than for women. More women were employed in 2009 than in 1997, especially women with an upper secondary (a 5.9 percentage-point increase) or tertiary education (a 2.6 percentage-point increase). In contrast, employment rates among Korean men without an upper secondary education have fallen by 9.6 percentage points, among men with an upper secondary education they have fallen by 6.3 percentage points, and among men with a tertiary degree they have fallen by 4.3 percentage points since 1997 (Table A7.3b and c, available online).

Meanwhile, since 1997 the rise in the unemployment rate has been less pronounced for women (an average 0.9 percentage-point increase) than men (an average 1.8 percentage-points increase), while the opposite is true in most other OECD countries (Table A7.4b and c, available online).

Employers pay a higher price for qualified labour while Korean employers pay lower labour costs.

Labour costs increase substantially as workers' education levels increase. Korean employers pay approximately USD 11 000 more per year to hire a tertiary graduate over an upper secondary graduate and USD 20 000 more to hire a tertiary graduate over someone without an upper secondary education

(Table A10.1). The data also show that qualification outweighs experience in terms of labour costs and annual income (Tables A10.2 and A10.4).

However, Korean employers pay much lower labour costs than employers in other OECD countries. Korean employers pay only 56% of the OECD average labour cost for a 25-64 year-old worker without an upper secondary diploma, 66% of the OECD average for a worker with an upper secondary degree, and 61% of the OECD average for a worker with a tertiary degree (Table A10.1).

Despite lower labour costs, Korean workers in all education levels have comparatively greater purchasing power than the OECD average (Table A10.1).

The earnings advantage of completing tertiary education is below the OECD average, but varies substantially among workers...

Graduates of tertiary-type A and advanced research programmes earn 43% more than workers with an upper secondary degree but less than the OECD average of 63% more (Table A8.1).

The earnings advantage is more pronounced among older workers. A 55-64 year-old with an advanced degree earns an average of 61% more than someone with an upper secondary degree, while a 25-34 year-old with an advanced degree earns only 30% more. This might suggest that since more than half of 25-34 year-old Koreans had a tertiary qualification in 2009, the highest proportion among OECD countries (26 percentage points higher than the OECD average), Korea has a relatively lower earnings premium for tertiary-educated workers than other OECD countries. In other words, given the large influx of young tertiary graduates into the labour market, the comparative earnings advantage that accrues to tertiary graduates might have fallen behind the OECD average. Yet, the earnings premium for an experienced Korean worker with a university-level education is still 20 percentage points less than the OECD average among individuals with the same experience and education (Table A8.1).

Differences in earnings between Korean men and women are the largest among OECD countries. On average, a Korean woman receives only 61% of a Korean man's salary, a woman without an upper secondary education earns 62% of the salary of a comparably educated man, and a woman with a tertiary degree receives 67% of the salary of a similarly educated man (Table A8.3a).

...and individual returns to tertiary education are high due to lower income tax and social contributions.

After direct and indirect costs are taken into account, the earnings and employment benefits that accrue over the working life of a Korean man with a tertiary education amount to a net present value of USD 300 000 – the fourth highest value among OECD countries, USD 126 000 more than the OECD average of USD 175 000. Although the returns on education are smaller for Korean women than for Korean men, they exceed the OECD average by USD 80 000 – the third highest value among OECD countries. Despite higher direct costs for a tertiary education among OECD countries, private returns to tertiary education are high due to higher gross earnings benefits and lower income tax and social contributions than the OECD average (Chart A9.3 below, Table A9.3).

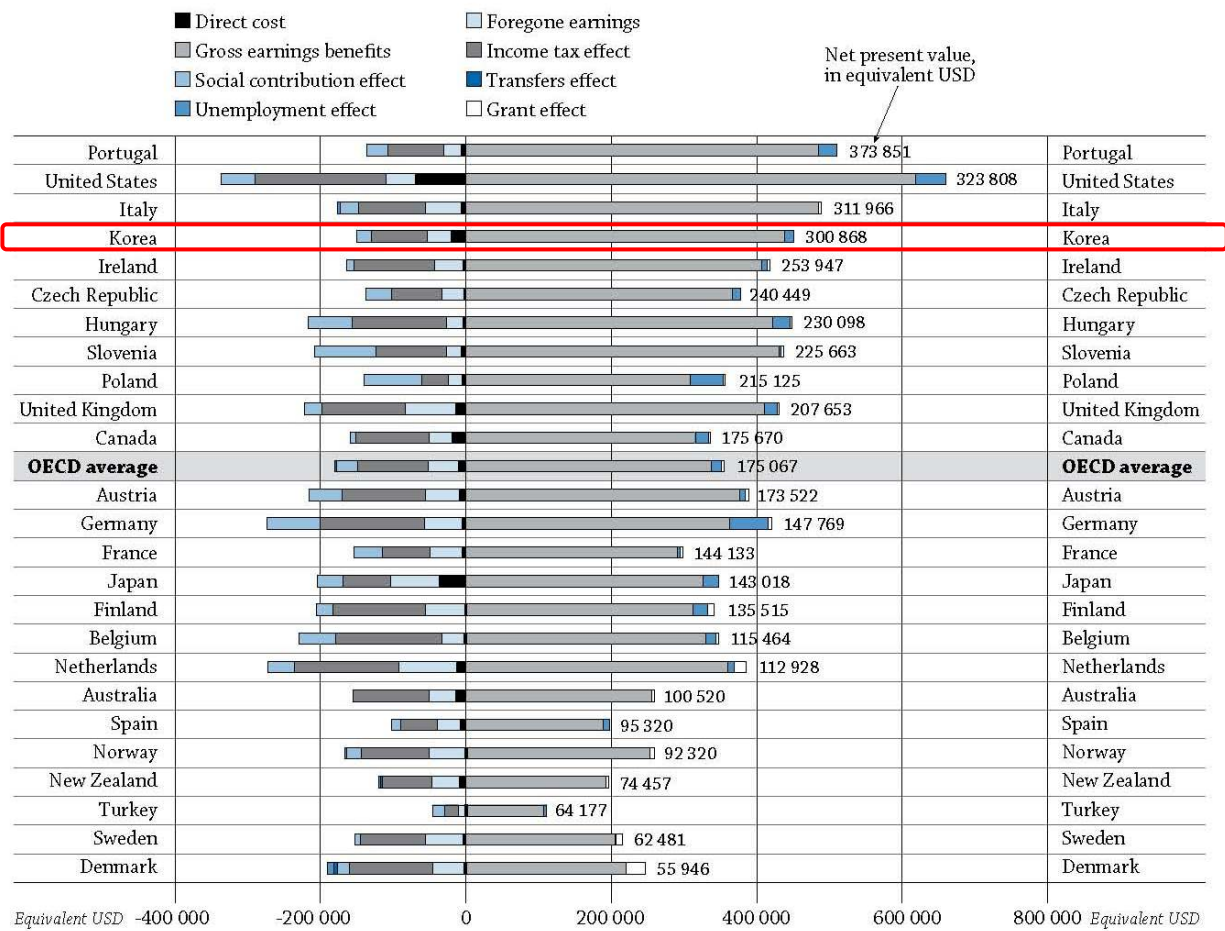
In Korea, the public benefit that tertiary graduates generate through higher income tax and social contributions outweighs the public costs. As a result, a Korean taxpayer gains USD 89 000 per man and USD 51 000 per woman with a tertiary qualification, slightly lower than the OECD average (Table A9.4).

Koreans without an upper secondary qualification participate in elections to a greater degree than their more educated peers, but are less satisfied with life.

Among OECD countries, Korea is the only country where a greater proportion of those without an upper secondary degree participate in elections (82%) compared to those with upper secondary (69%) or tertiary education (69%). That share is 8 percentage points higher than the OECD average of 74%. Meanwhile, among upper secondary and tertiary graduates in Korea, smaller proportions than the OECD averages (10 percentage-points lower and 18 percentage-points lower, respectively) participate in elections.

Those who have not attained an upper secondary education are less satisfied with life than those with upper secondary and tertiary qualifications. Only 34% of Koreans without an upper secondary education are satisfied with their lives, compared with the OECD average of 58% among similarly educated individuals. In Korea, life satisfaction increases as educational attainment does, but 23 percentage points less than the OECD averages among upper secondary and tertiary graduates.

Chart A9.3. Components of the private net present value for a man obtaining tertiary education, ISCED 5/6 (2007 or latest available year)



Notes: Australia, Belgium and Turkey refer to 2005; Italy, the Netherlands, Poland, Portugal and the United Kingdom refer to 2006. All other countries refer to 2007.

Cashflows are discounted at a 3% interest rate.

Countries are ranked in descending order of the net present value.

Source: OECD, Table A9.3. See Annex 3 for notes (www.oecd.org/edu/eag2011).

StatLink <http://dx.doi.org/10.1787/888932460648>

Workers without baseline qualifications have difficulty entering the labour market.

Individuals without an upper secondary qualification earn 31% less than a worker with an upper secondary education, much lower than the OECD average (Table A8.1). In addition, employment rates among those who have not completed upper secondary education are some 11 percentage points lower than those among individuals who have completed this level of education (Table A7.3a).

Socio-economic background has an impact on some students' performance.

Korea does not show a strong link between students' socio-economic background and their performance compared to the OECD average. In Korea, one unit increase in the *PISA Index of economic,*

social and cultural status (ESCS) is associated with a 32-point increase in PISA reading scores, 6 points less than the OECD average (Table A5.1). In addition, Korea also has the highest percentage of resilient students (14%) among OECD countries. These are students who come from a disadvantaged socio-economic background, relative to other students in their country, and attain high scores by international standards (Table A5.3).

That said, Korea still has room for improvement, especially among a particular group of students. Although only 21% of 15-year-old Korean students scored below PISA reading proficiency Level 3 in 2009, less than half the OECD average of 43%, the risk of not reaching Level 3 was more than twice (2.26) as likely for students from socio-economically disadvantaged backgrounds. If education policy can help to reduce the risk of low reading scores among socio-economically disadvantaged students to the same level as that for advantaged students in Korea, the overall effect would decrease by 24% (Table D6.3).

Korea devotes a large proportion of its national wealth to education...

At 7.6%, the percentage of its GDP that Korea spends on educational institutions, from both public and private sources, is more than the OECD average (5.9%). In fact, Korea devotes the second-largest proportion of GDP to education after Iceland (Table B2.2).

In addition, between 2000 and 2008, expenditure per student in primary and secondary education increased by 75% in Korea. That is significantly more than the OECD average increase of 34% over the same period. Meanwhile, the increase in spending per tertiary student rose by 47% between 2000 and 2008, largely because the 62% increase in spending outpaced the 10% increase in enrolment (Table B1.5).

...with high levels of private funding for educational institutions.

Between 2000 and 2008, the private share of funding for primary and lower secondary education in Korea increased by 3 percentage points to 22% – the highest proportion of private funding among OECD countries and 13 percentage points higher than the OECD average. In contrast, the proportion of public funding at these levels of education is, at 77.8%, the lowest among OECD countries (the OECD average is 91%) (Table B3.2a).

Korea shows the second-lowest proportion of public spending on tertiary education after Chile, standing at one-third of the OECD average of 22%, while the proportion of private expenditure on tertiary education (78%) is almost 47 percentage points higher than the OECD average of 31% (Table B3.2b).

Smaller shares of the public budget, but more than the OECD average, are devoted to education.

The share of public expenditure that is devoted to education, including subsidies paid to households, decreased between 2000 and 2008 at all levels of education, from 16.6% to 15.8%. Yet, Korea's public expenditure on education remains above the OECD average of 12.9% (Table B4.1).

Korea spends less per student than the OECD average.

Korea spends less per student than the OECD average at all levels of education, except for upper secondary education, where expenditure per student is around the OECD average. On average, spending per student across all levels of education, excluding pre-primary education, is around USD 7 400, which is less than the OECD average of USD 8 800. The difference is most pronounced in tertiary education, where Korea spends USD 9 100 per student – 66% of the OECD average of USD 13 700 (Table B1.1a).

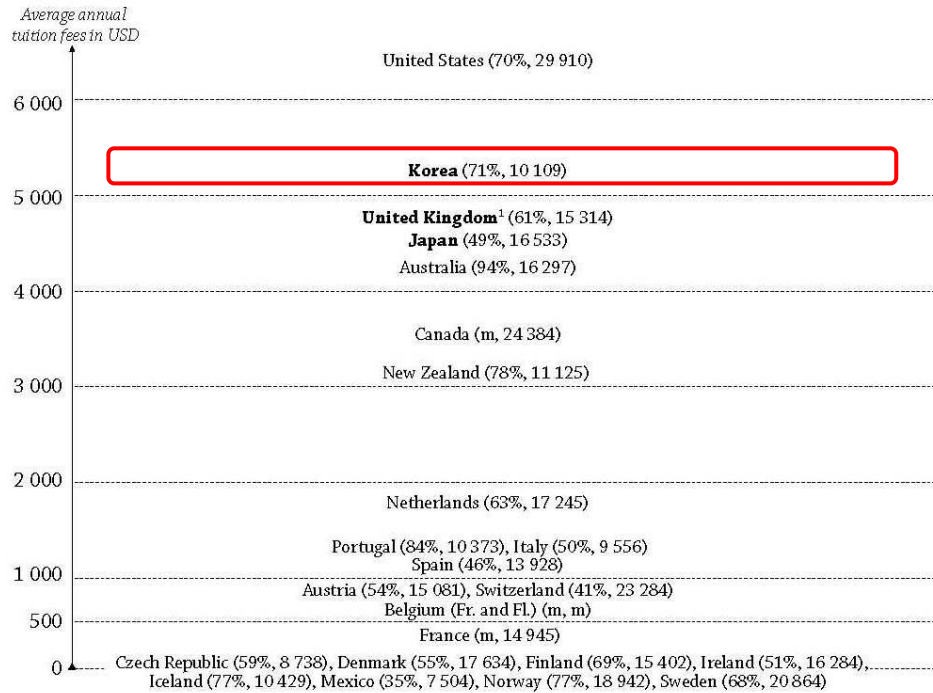
Tertiary-type A institutions in Korea charged relatively higher tuition fees among the OECD countries during 2008-09.

During the academic year 2008-09, Korean students' paid the 2nd highest annual tuition fees among 24 OECD countries with available data: USD 5 315 for public institutions and USD 9 586 for independent private institutions (Chart B5.2 below, Table B5.1).

Public subsidies to households and other private entities are usually provided to ease the financial burden on students and their families and to encourage students from disadvantaged backgrounds to participate in education. Korea spends around 15% (6 percentage points less than the OECD average) of its total public expenditure on education for public subsidies, representing 0.1% of its GDP, the 5th lowest proportion among OECD countries (Table B5.3).

In comparison, while some 76% of university students in Korea are enrolled in independent private institutions, only 32% of students are enrolled in these types of institutions in the US, which devotes more than 20% of public expenditure to subsidies. This suggests that although Korea has the 2nd highest annual tuition fees after the US with available data, the proportion of tertiary students who pay high tuition fees is greater in Korea than in the US (Table B5.1 and B5.3).

Chart B5.2. Average annual tuition fees charged by tertiary-type A public institutions for full-time national students, in USD converted using PPPs (academic year 2008-09)




Note: This chart does not take into account grants, subsidies or loans that partially or fully offset the student's tuition fees.

1. Public institutions do not exist at this level of education and almost all students are enrolled in government-dependent private institutions.

Source: OECD. Tables B1.1a, B5.1 and Indicator C2. See Annex 3 for notes (www.oecd.org/edu/eag2011).

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

StatLink  <http://dx.doi.org/10.1787/888932461218>

How to read this chart

This chart shows the annual tuition fees charged in equivalent USD converted using PPPs. Countries in bold indicate that tuition fees refer to public institutions but more than two-thirds of students are enrolled in private institutions. The net entry rate and expenditure per student (in USD) in tertiary-type A programmes (2008) are added next to country names.